



Air Conditioning Control System
Centralized Controller
AE-200A/AE-50A/EW-50A
AE-200E/AE-50E/EW-50E



Instruction Book
–Initial Settings–

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Before using the controller, please read this Instruction Book carefully to ensure proper operation.
Retain this manual for future reference.

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1. Safety precautions

- Observe these precautions carefully to ensure safety.
- After reading this manual, pass the manual on to the end user to retain for future reference.
- The user should keep this manual for future reference and refer to it as necessary. This manual should be made available to those who repair or relocate the units. Make sure that the manual is passed on to any future air conditioning system user.

 WARNING	: indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	: indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
CAUTION	: addresses practices not related to personal injury, such as product and/or property damage.

1-1. General precautions

WARNING

Do not install the controller in areas where large amounts of oil, steam, organic solvents, or corrosive gases (such as ammonia, sulfuric compounds, or acids), or areas where acidic/alkaline solutions or special chemical sprays are used frequently. These substances may significantly reduce the performance and corrode the internal parts, resulting in electric shock, malfunction, smoke, or fire.

To reduce the risk of short circuits, current leakage, electric shock, malfunction, smoke, or fire, do not wash the controller with water or any other liquid.

To reduce the risk of electric shock, malfunction, smoke, or fire, do not touch the electrical parts, USB memory, or touch panel with wet fingers.

To reduce the risk of injury or electric shock, before spraying a chemical around the controller, stop the operation and cover the controller.

To reduce the risk of injury, keep children away while installing, inspecting, or repairing the controller.

If you notice any abnormality (e.g., burning smell), stop the operation, turn off the controller, and consult your dealer. Continuing the operation may result in electric shock, malfunction, or fire.

Properly install all required covers to keep moisture and dust out of the controller. Dust accumulation and the presence of water may result in electric shock, smoke, or fire.

CAUTION

To reduce the risk of fire or explosion, do not place flammable materials or use flammable sprays around the controller.

To reduce the risk of electric shock or malfunction, do not touch the touch panel, switches, or buttons with a sharp object.

To avoid injury from broken glass, do not apply excessive force to the glass parts.

To reduce the risk of injury, electric shock, or malfunction, avoid contact with the sharp edges of certain parts.

Consult your dealer for the proper disposal of the controller. Improper disposal will pose a risk of environmental pollution.

1-2. Precautions for relocating or repairing the unit

WARNING

The controller must be repaired or moved only by qualified personnel. Do not disassemble or modify the controller. Improper installation or repair may result in injury, electric shock, or fire.

1-3. Additional precautions

CAUTION

To avoid discoloration, do not use benzene, thinner, or chemical rag to clean the controller. When the controller is heavily soiled, wipe the controller with a well-wrung cloth that has been soaked in water with mild detergent, and then wipe off with a dry cloth.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

2. Introduction

AE-200A/AE-50A/AE-200E/AE-50E is a centralized controller.

EW-50A/EW-50E is an LCD-less total management system.

Any connected air conditioning systems can be operated or monitored on the AE-200A/AE-50A/AE-200E/AE-50E's LCD or the Web browser.

Each AE-200A/AE-50A/EW-50A/AE-200E/AE-50E/EW-50E can control up to a total of 50 indoor units and other equipment. By connecting AE-200A/AE-200E (main controller) and AE-50A/AE-50E/EW-50A/EW-50E (sub controllers), up to 200 indoor units and other equipment can be controlled.

Additionally, by integrating AE-200A/AE-50A/EW-50A/AE-200E/AE-50E/EW-50E using the Integrated Centralized Control Web, up to 2,000 indoor units can be controlled.

This manual explains methods for configuring the necessary initial settings for when using the Air Conditioning Control System.

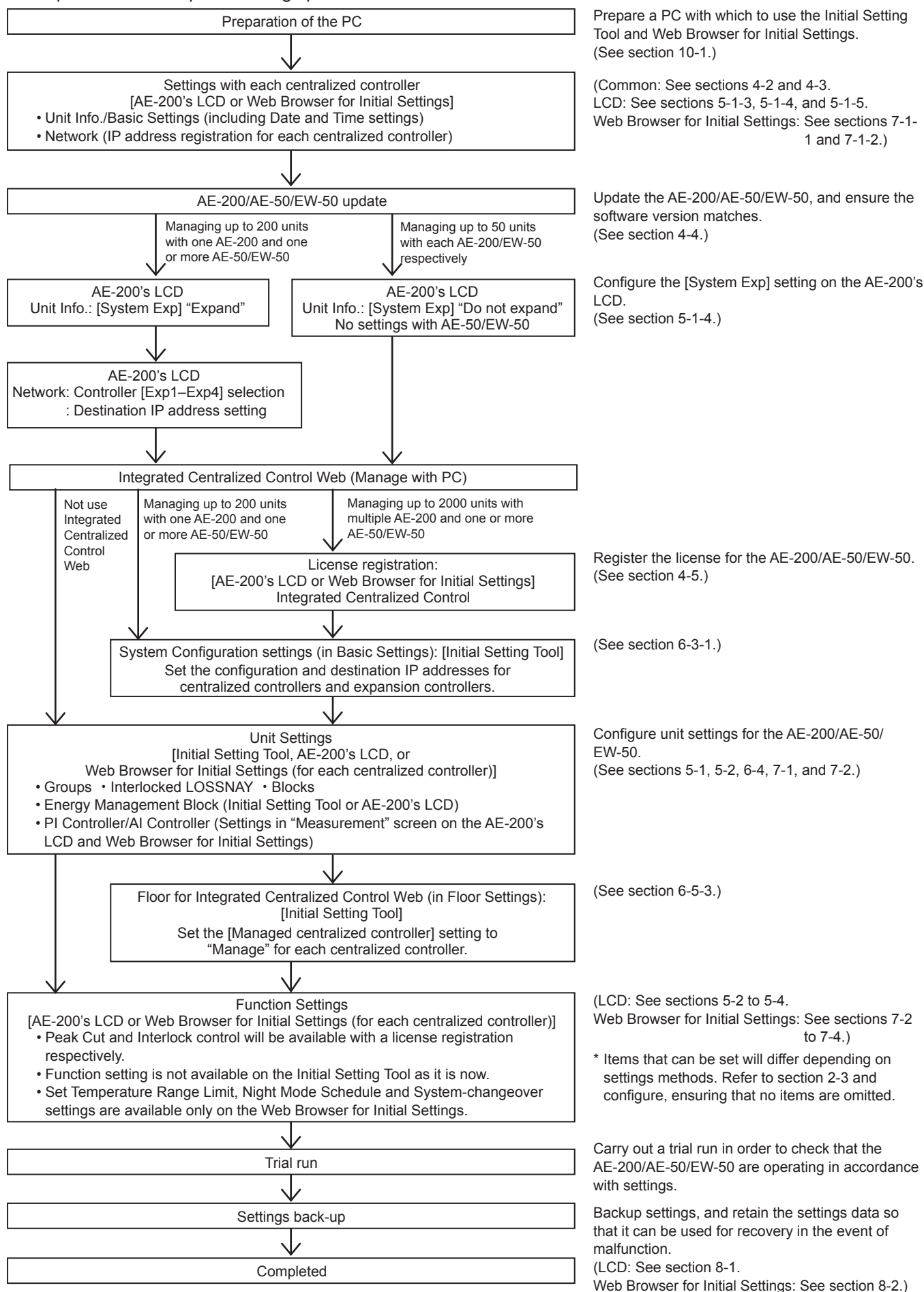
Flow of the initial settings and trial run are shown in section 2-2 "Flow of the initial settings and trial run".

2-1. Terms used in this manual

- "Centralized Controller AE-200A/AE-200E" is referred to as "AE-200."
- "Centralized Controller AE-50A/AE-50E" is referred to as "AE-50."
- "Centralized Controller EW-50A/EW-50E" is referred to as "EW-50."
- "Booster unit" and "Water HEX unit" are referred to as "Air To Water (PWFY) unit."
- "Advanced HVAC CONTROLLER" is referred to as "AHC."
- "Hot Water Heat Pump unit" is referred to as "HWHP (CAHV, CRHV) unit."

2-2. Flow of the initial settings and trial run

This explains one example of settings procedures.



* For dealers and contractors

Properly carry out initial settings and trial runs, and take care to ensure that no settings have been omitted or configured incorrectly.

Initial settings for AE-200/AE-50/EW-50 can be configured on the LCD, Initial Setting Tool, and Web Browser for Initial Settings.

Each has specific characteristics as below.

- LCD

Method for setting the AE-200/AE-50/EW-50 from the AE-200's LCD.

Configuration of initial settings for single AE-200 systems is possible.

Methods of setting from the LCD are explained in section 5 "Settings on the LCD".

Note: The EW-50 does not have an LCD, therefore it is necessary to configure settings from either the Initial Setting Tool or Web Browser for Initial Settings.

- Initial Setting Tool

The Initial Setting Tool is used for configuring settings from a PC.

This allows configuration of initial settings for multiple AE-200/EW-50 systems, and allows batch configuration of initial settings for up to a total of 40 AE-200/AE-50/EW-50 units.

The settings data created using the Initial Setting Tool is written from the PC to the AE-200/AE-50/EW-50 over a LAN connection. Additionally, settings data can be created beforehand at another location such as an office.

Methods of setting from the Initial Setting Tool are explained in section 6 "Settings using Initial Setting Tool".

Note: It is necessary to set the apportioned electricity billing function initial settings and Integrated Centralized Control Web function initial settings from the Initial Setting Tool.

Note: It is necessary to set the BACnet[®] connection function initial settings from the BACnet[®] Setting Tool.

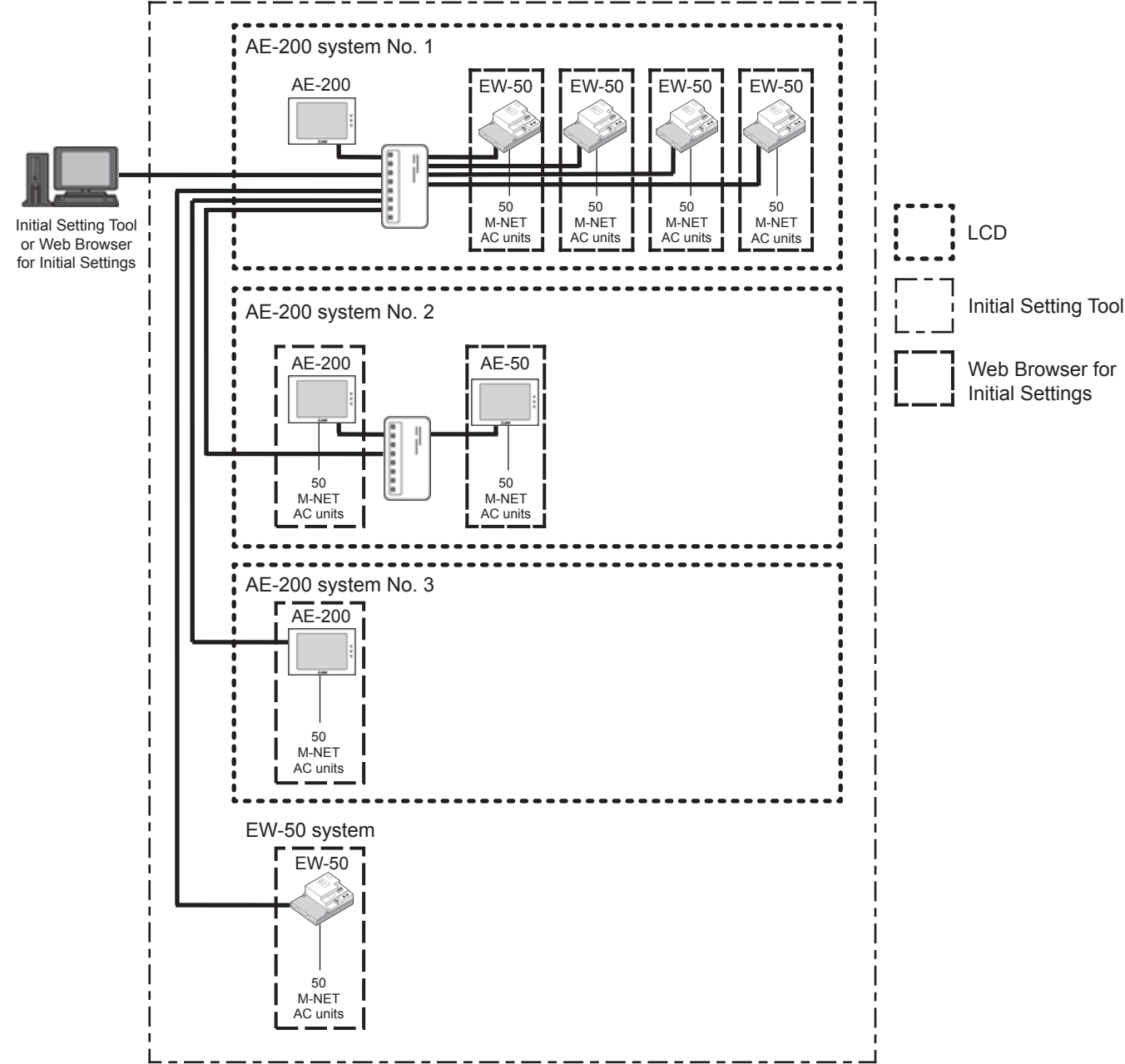
- Web Browser for Initial Settings

The Web Browser for Initial Settings is used for configuring settings from a PC Web browser.

This allows separate logins to a single AE-200/AE-50/EW-50, and configuration of initial settings.

Methods of setting from the Web Browser for Initial Settings are explained in section 7 "Settings using Web Browser for Initial Settings".

The settings ranges for each of these settings are as below.



2-3. Functions that can be set

The functions that can be set by using the LCD, Initial Setting Tool, and Web Browser for Initial Settings are different.

Depending on the function to use, it may be necessary to combine multiple initial settings methods.

Functions that can be set are as follows.

Setting item		Description	LCD	Initial Setting Tool	Web Browser for Initial Settings
Basic settings	Date and time settings	The current date/time and daylight savings time can be set.	✓		✓
	License registration	Licenses for optional functions can be registered.	✓		✓
	Unit information	Basic settings can be made.	✓	✓	✓
	Language	The language to be used for display can be set.	✓		
	M-NET	Whether or not to use an AE-200 M-NET can be selected.	✓		
	Expansion controller	Whether or not to use an expansion controller (AE-50/EW-50) can be selected.	✓		
	Billing function	Whether or not to use an AE-200 apportioned electricity billing function can be selected.	✓ *1		
	Advanced settings	"Time Master/Sub", "Schedule: Season setting", and "Old model compatibility mode" settings can be made.	✓	✓	✓
	Network settings	Settings for the network-related items can be made.	✓	✓	✓
	IP address of AE-200/AE-50/EW-50 *4	IP address of AE-200/AE-50/EW-50 can be set.	✓		✓
Unit settings	IP address of expansion controller	Destination IP address of an expansion controller (AE-50/EW-50) can be set with AE-200.	✓		
	Group settings	Air conditioning units, Air To Water (PWFY) units, LOSSNAY units, HWHP (CAHV, CRHV) units, general equipment, remote controllers, sub system controllers, and AHC can be registered to a group.	✓		
	Refrigerant system settings (for apportioned electricity billing function)	Set the refrigerant system connection information in the apportioned electricity billing function to distribute the outdoor unit electric energy to indoor units.		✓ *1	
Function settings	Interlocked LOSSNAY settings	The operation of indoor units and LOSSNAY units can be interlocked.	✓	✓	✓
	Block (operation block) settings	The groups can be registered to a block.	✓	✓	✓
	Energy management block settings	The groups can be registered to an energy management block.	✓	✓	
	PI controller settings	PI controller or Pulse Input (PI) settings such as "electricity meter" or "water supply meter" can be made.	✓	✓	✓
	AI controller settings	AI controller "temperature sensor" and "humidity sensor" settings can be made.	✓	✓	✓
	E-Mail	Error notification e-mail and e-mail alarm settings can be made.			✓
	Peak Cut	Peak Cut method and Peak Cut control details for each control level can be set.	✓ *5		✓ *5
	Energy Management settings	Set to use the energy management function to display graphs.	✓		✓
	Set Temperature Range Limit	Set to restrict the local remote controller set temperature range.			✓

Setting item		Description	LCD	Initial Setting Tool	Web Browser for Initial Settings
Function settings	Night Mode (quiet operation) Schedule	Set to switch outdoor units to quiet operation for a certain period of time.			V
	System-changeover	Set to automatically switch indoor unit operation mode (heating and cooling) based upon room temperature and set temperatures.			V
	External Temperature Interlock	Set to interlock the temperature differential between the set temperature and the outdoor air temperature to use automatic adjustment.	V		V
	Night Setback Control	Set to automatically cool or heat if the indoor temperature goes outside a set range at night.	V		V
	Interlock control	Set interlock restrictions for interlock operation when conditions have been met.			V *6
	AHC Port Name settings	Advanced HVAC CONTROLLER (AHC) port name can be set.			V
	Night purge	Set night purge to bring in cooler outside night air.	V		V
	BACnet® *2	BACnet® objects can be set.			
Floor settings	Floor settings	Set monitoring by displaying the floor layout using the LCD.	V	V	
	Floor settings for Integrated Centralized Control Web	Set monitoring by displaying the floor layout using the Integrated Centralized Control Web.		V	
Billing function settings	Billing Function settings	Apportioned electricity billing function settings can be made.		V *1	
	Outdoor Unit settings	Set outdoor unit parameters for electric energy apportionment.		V *1	
	Indoor Unit settings	Set indoor unit parameters for electric energy apportionment.		V *1	
	Measurement settings	Set connection relationship for electric energy apportionment metering devices and units.		V *1	
	Charges settings	Time period setting for the seasonal charges can be made.		V *1	
User settings	User settings for LCD	Set functions and passwords that can be used with the LCD. (Maintenance user/building manager)	V		
	User settings for Integrated Centralized Control Web *3	Set general user and tenant manager settings for Integrated Centralized Control Web.			
Maintenance	Data back-up/import	Save settings data to a USB memory device. Also, this can write settings data saved on a USB memory device to the AE-200/AE-50/EW-50 to restore status.	V		V
	Software update	Update AE-200/AE-50/EW-50 software.	V		V

*1 For details, refer to the Instruction Book (Apportioned Electricity Billing Function).

*2 Make the settings on the BACnet® Setting Tool. Refer to the Instruction Book (BACnet® Setting Tool).

*3 Make the settings on the Integrated Centralized Control Web. Refer to the Instruction Book (Integrated Centralized Control Web).

*4 LAN2 IP address (IPv4) for BACnet® can be set. IP address (IPv6) can be set only from the BACnet® Setting Tool.

*5 "Energy Management License Pack" is required. (AE-200E/AE-50E/EW-50E only)

*6 "Interlock control" license is required.

3. Parts to be used

This section explains parts required for initial settings.

Refer to the Installation Manual for parts required for installation of AE-200/AE-50/EW-50.

3-1. Separately sold parts

Item	Description	Qty		
		LCD	Initial Setting Tool *2	Web Browser for Initial Settings
License	Required to operate functions that require a license. Register for each of AE-200/AE-50/EW-50.	Required number		
AE-200 update file *1	Required to ensure that all AE-200/AE-50/EW-50 versions are the same. If versions do not match, then they will not operate.	1		
AE-50/EW-50 update file *1		1		
Initial Setting Tool *1	Use to carry out initial settings. Required when using Integrated Centralized Control Web and apportioned electricity billing functions. Depending on the version of AE-200/AE-50/EW-50, the version of the Initial Setting Tool that can be used will differ.	—	1	—

*1 Contact your dealer regarding the update files.

*2 When performing initial settings using the Initial Setting Tool, it is necessary to ensure that the AE-200/AE-50/EW-50 versions match, but allowable combinations are as below.

Initial Setting Tool version	AE-200/AE-50/EW-50 version	.NET Framework
Ver. 1.1	Ver. 7.2–7.3	Ver. 4.5.2 or later
Ver. 1.0	Ver. 7.2	Ver. 4.5 or later
Cannot be used.	Ver. 7.1	—

3-2. Commercially available parts

Item	Description	Qty		
		LCD	Initial Setting Tool	Web Browser for Initial Settings
PC	PC with which to use the Initial Setting Tool and Web Browser for Initial Settings.		1	1
USB memory	Required for backup of settings data.	1		
LAN cable	Required for connection of AE-200/AE-50/EW-50 and PC.		Required number	Required number
Switching HUB			Required number	Required number

3-3. PC requirements

The operating environment for the PC with which to use the Initial Setting Tool and Web Browser for Initial Settings is as below.

Item	Requirements
CPU	1 GHz or better (at least 2 GHz recommended)
Memory	1 GB
Screen resolution	1024 x 768 or better (at least 1366 x 768 recommended)
OS	Windows 7, Windows 8.1 (32bit/64bit)
Operating environment (only required for Initial Setting Tool)	.NET Framework 4.5.2 or later
Browser (only required for Web Browser for Initial Settings)	Microsoft® Internet Explorer 8.0 Microsoft® Internet Explorer 9.0 Microsoft® Internet Explorer 10.0 Microsoft® Internet Explorer 11.0 * Java execution environment is required. (Verified to run on Oracle® Java Plug-in Ver. 1.8.0_60.) * Install Oracle® Java Plug-in that is appropriate for your operating system. When using a 64-bit Internet Explorer, install a 64-bit Java Plug-in. * The version of the Oracle® Java Plug-in can be verified by clicking [Java] in the Control Panel.
Internal LAN port or LAN card	100 BASE-TX or better
Pointing device	Mouse, etc.

4. Preparation

4-1. Logging in to the Web Browser for Initial Settings

Check that the Web Browser for Initial Settings can be logged in.

- (1) Enter the web page address in the address field of the Web browser as follows:

http://[IP address of each AE-200, AE-50, or EW-50]/init/administrator.html

Press the [Enter] key. A login screen will appear.

Note: If the IP address of the AE-200/AE-50/EW-50 is [192.168.1.1], the web page address is [http://192.168.1.1/init/administrator.html].

Note: Default IP address of AE-200, AE-50, and EW-50 is [192.168.1.1].

When one or more AE-50/EW-50 controllers are connected, none of their IP addresses should overlap. The recommended IP address ranges are as follows.

AE-200: Between [192.168.1.1] and [192.168.1.40]

AE-50/EW-50 (when used for system expansion):

Between [192.168.1.211] and [192.168.1.249]

EW-50 (when used alone):

Between [192.168.1.1] and [192.168.1.40]

Refer to section 4-3 "IP address settings" for how to change the IP addresses.

Note: When one or more AE-50/EW-50 controllers are connected, log in to all AE-200, AE-50, and EW-50 Web browsers to make initial settings for AE-200, AE-50 and EW-50 respectively. The Web browser cannot be switched among the AE-200, AE-50, and EW-50.

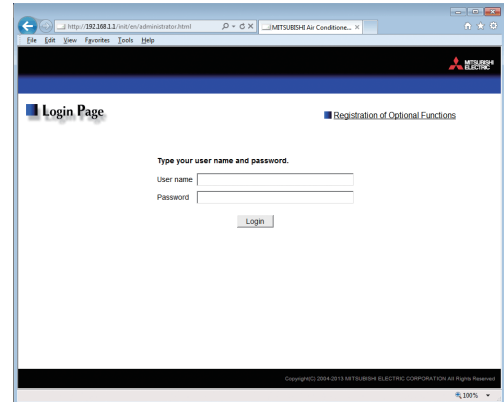
Note: If the login screen does not appear then take the steps explained in section 9-1 "Notes on connecting to Web browser" to delete the temporary files.

Note: The web page will be displayed in the same language as the operating system on the PC.

The web page can be displayed in other languages by entering the web page address as follows:

Chinese	http://[IP address of each AE-200, AE-50, or EW-50]/init/ zh /administrator.html
English	http://[IP address of each AE-200, AE-50, or EW-50]/init/ en /administrator.html
French	http://[IP address of each AE-200, AE-50, or EW-50]/init/ fr /administrator.html
German	http://[IP address of each AE-200, AE-50, or EW-50]/init/ de /administrator.html
Italian	http://[IP address of each AE-200, AE-50, or EW-50]/init/ it /administrator.html
Japanese	http://[IP address of each AE-200, AE-50, or EW-50]/init/ ja /administrator.html
Portuguese	http://[IP address of each AE-200, AE-50, or EW-50]/init/ pt /administrator.html
Russian	http://[IP address of each AE-200, AE-50, or EW-50]/init/ ru /administrator.html
Spanish	http://[IP address of each AE-200, AE-50, or EW-50]/init/ es /administrator.html

Note: You can add the web page address to your Favorites on the login screen for easy access in the future.



- (2) Enter the user name and the password in the login screen, and click [Login]. A setting screen will appear. The table below shows the default user names, passwords, and functions that are available for maintenance users and building managers.

User	Default user name	Default password	Available functions	
Maintenance user	initial	init	Initial Settings	Date and Time, Basic System, Groups, Interlocked LOSSNAY, Blocks
			Functions 1	E-Mail, Peak Cut, Measurement, Energy Management Settings
			Functions 2	Set Temperature Range Limit, Night Mode Schedule, System-changeover
			Functions 3	External Temperature Interlock, Night Setback Control, Interlock control, AHC Port Name Settings
			Ventilation Setting	Night purge
			User Settings	User Settings
			Utility	Back up/import settings data
Building manager	administrator	admin	Out of the functions listed above, the items to which access rights have been given on the User Settings screen are available.	

Note: A maintenance user can specify the functions to be made available for building managers. Refer to section 7-6 "User Settings" for details.

Note: It is recommended to change the default user name and password so that the users other than the maintenance users and building managers will not be able to change the settings.

Note: When one or more AE-50/EW-50 controllers are connected, log in to all AE-200, AE-50, and EW-50 Web browsers to make initial settings for AE-200, AE-50, and EW-50 respectively. The Web browser cannot be switched among the AE-200, AE-50, and EW-50.

Note: The user name and password for Integrated Centralized Control Web differ from the ones for the maintenance user and building manager above. Set the user name and password for Integrated Centralized Control Web on the Integrated Centralized Control Web.

(HTTPS connection)

AE-200/AE-50/EW-50 can encrypt communication data using HTTPS (SSL).

When connecting the AE-200/AE-50/EW-50 to the LAN that is accessible to the general public, it is recommended that the following settings be made so that the units are monitored and controlled on the encrypted web page.

Note: Depending on the operating system or the Java version, HTTPS encrypted communication may not be enabled properly. If this happens, use an HTTP connection as explained in the previous page.

- (1) Prefix the web address with [https], enter the rest of the address, and press the [Enter] key.

https://[IP address of each AE-200, AE-50, or EW-50]/init/administrator.html

Note: If the IP address of the AE-200/AE-50/EW-50 is [192.168.1.1], the web page address is [https://192.168.1.1/init/administrator.html].

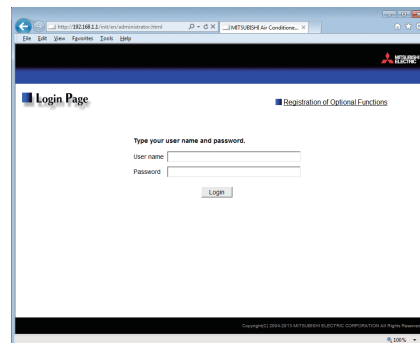
The encrypted data communication will begin, and the Login screen will appear.

When the first time the Web browser is accessed, a security certificate error page appears instead of the Login screen. Go to step (2) below.

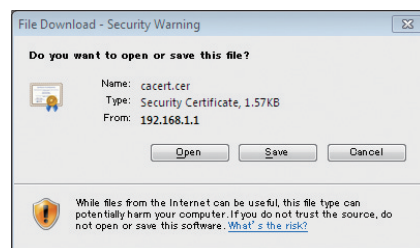
- (2) Enter the following web page address in the address field of the Web browser, and press the [Enter] key:

http://[IP address of each AE-200, AE-50, or EW-50]/cacert.cer

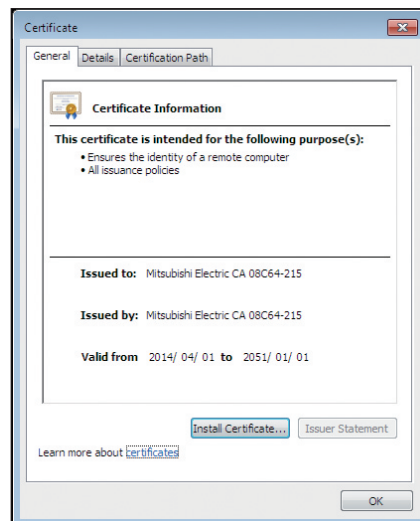
- (3) A notification bar or a window to confirm about file download will appear. Click [Open].



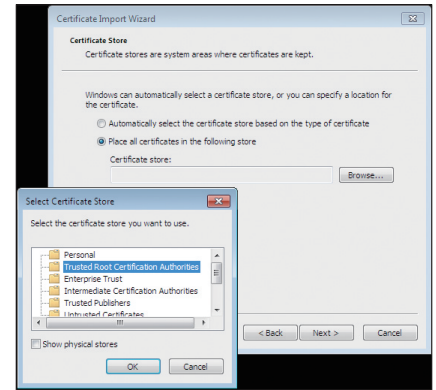
- (4) A certificate dialog will appear. Click [Install Certificate...].



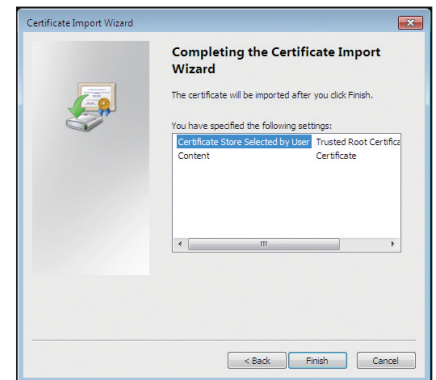
- (5) A Certificate Import Wizard window will appear. Click [Next].



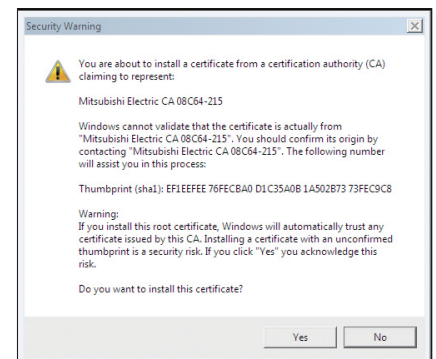
- (6) Choose [Place all certificates in the following store] and click the [Browse...] button. Select [Trusted Root Certification Authorities], click [OK], and then click [Next].



- (7) Click [Finish] on completing the Certificate Import Wizard.

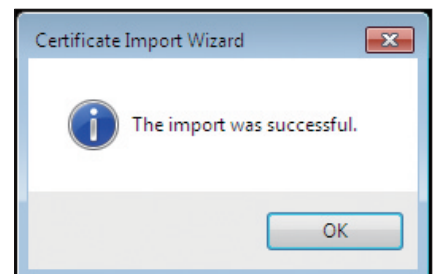


- (8) Click [Yes] on the security warning to install the certificate.



- (9) Certificate import process starts. A window will appear when the import completes successfully. Click [OK].

Note: The valid period of the certificate is from April 1st, 2014 to January 1st, 2051. The system date and time of the PC must be within the period.



4-2. Date and time setting

Set the date and time for the AE-200/AE-50/EW-50. There are two ways to set the date and time — from the AE-200's LCD, and individually from the AE-200/AE-50/EW-50 Web Browser for Initial Settings.

If an expansion controller is connected in an AE-200 system, connect the AE-200 to the expansion controller over a LAN, then set the date and time from the AE-200. Setting the date and time on the AE-200 will synchronize the date and time on the expansion controller with the AE-200, therefore setting the date and time on the expansion controller is not necessary.

Note: After the "Integrated Centralized Control Web" license is registered, the date and time can be set on the Integrated Centralized Control Web. For details, refer to [Settings] – [Initial settings] – [Date and Time Settings] in the Instruction Book (Integrated Centralized Control Web).

[1] When setting date and time on the AE-200's LCD

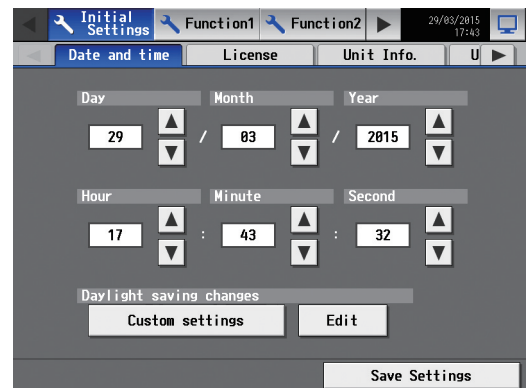
- (1) Touch the [Date and time] tab.

Referring to section 5-1-3 "Date and time", set the current date, current time, and daylight saving time, and then touch [Save Settings].

Note: The AE-200's current date and time will be synchronized to each AE-50/EW-50 and remote controllers.

Note: In order to synchronize the date and time with the AE-50/EW-50, it is necessary to set the date and time.

Note: The setting will not be saved until [Save Settings] is touched. Make sure to touch [Save Settings] after the setting is completed.



[2] When setting date and time on the AE-200/AE-50/EW-50's Web Browser for Initial Settings

Click [Initial Settings] in the menu bar, and then click [Date and Time] to access the date and time settings screen. Set the current date and time, and then click [Save Settings].

Note: The date and time settings may not be accessible if logged in as a building manager.

Note: The date and time settings made on this screen will be reflected on all the units in the M-NET system, all connected AE-50/EW-50 units, and the AE-200 units whose [Time Master] setting is set to [Sub].

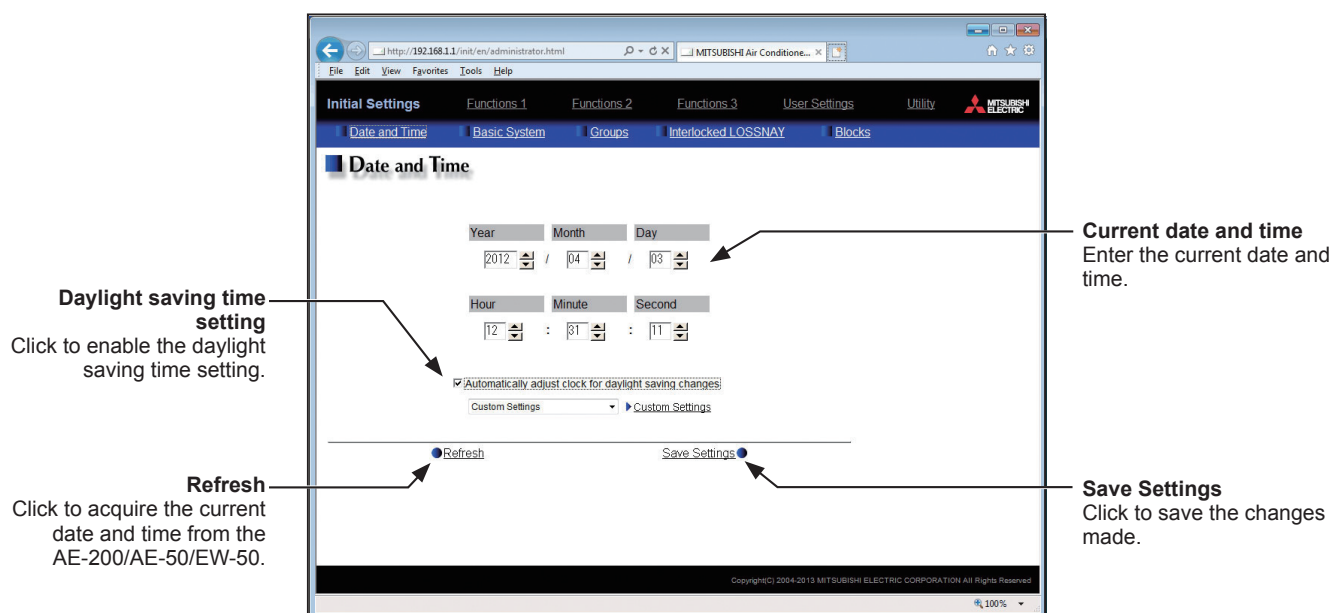
Note: The date and time cannot be set on this screen if the [Time Master] setting is set to [Sub].

Note: The daylight saving time setting is required only on the AE-200.

Note: Changing the date and/or time when the charging function is in use can affect the calculation of the charges.

Note: When AE-50/EW-50 controller, DIDO controller (PAC-YG66DCA), AI controller (PAC-YG63MCA), or PI controller (PAC-YG60MCA) is added to the system, set the current date and time on this screen to synchronize the date and time on the added controller.

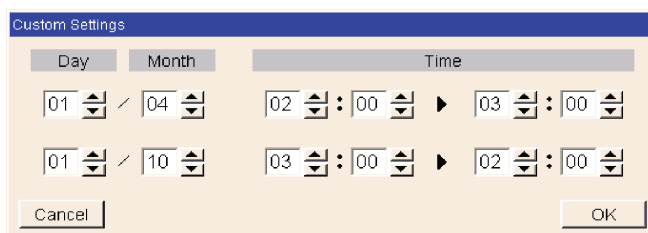
Note: Although date and time settings can be made on each AE-50/EW-50, the date and time synchronization from AE-200 is performed once a day. Make the date and time settings on the AE-50/EW-50 only after the AE-50/EW-50 is replaced.



- (1) Enter the current date and time.
- (2) To adjust the daylight saving time automatically, check the [Automatically adjust clock for daylight saving changes] checkbox, and select the applicable country in the pulldown menu.

If the applicable country is not in the pulldown menu, select [Custom Settings] instead. A [Custom Settings] button will appear on the right of the pulldown menu.

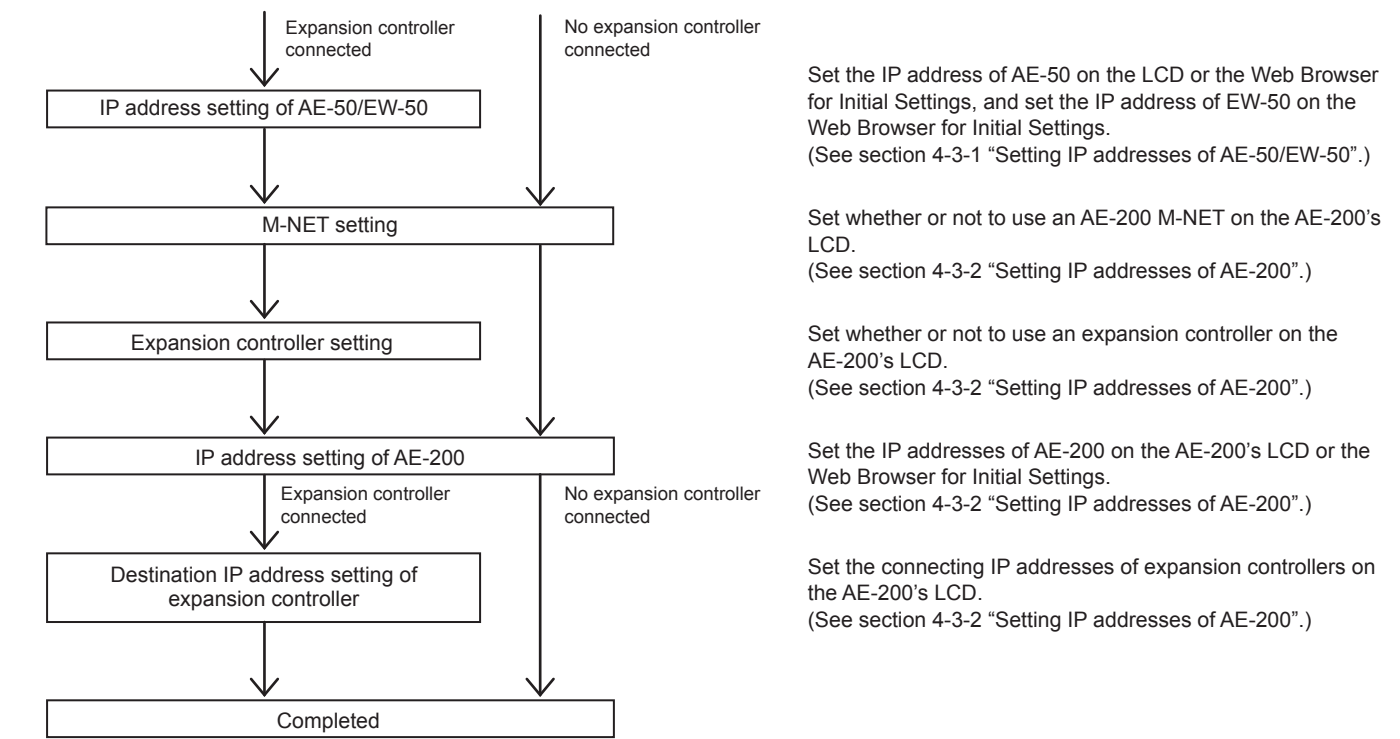
Click the [Custom Settings] button to open the Custom Settings screen, and configure the daylight saving time setting.



4-3. IP address settings

Set AE-200/AE-50/EW-50 IP addresses, and configure the expansion controller connection settings on the AE-200's LCD.

For an AE-200 system, set using the following procedure.



For an EW-50 system, set using the following procedure.



[1] Settings for connecting the AE-200/AE-50/EW-50 to a dedicated LAN

- (1) Enter the AE-200, AE-50, or EW-50's IP address in the [IP Address] field. If the LAN has been newly set up, allocate IP addresses to the AE-200 units in a sequential order starting with [192.168.1.1]. For example, the first AE-200 unit will have an IP address of [192.168.1.1], the second AE-200 unit will have an IP address of [192.168.1.2] and so on.

Allocate IP addresses to the AE-50/EW-50 units in a sequential order starting with [192.168.1.211].

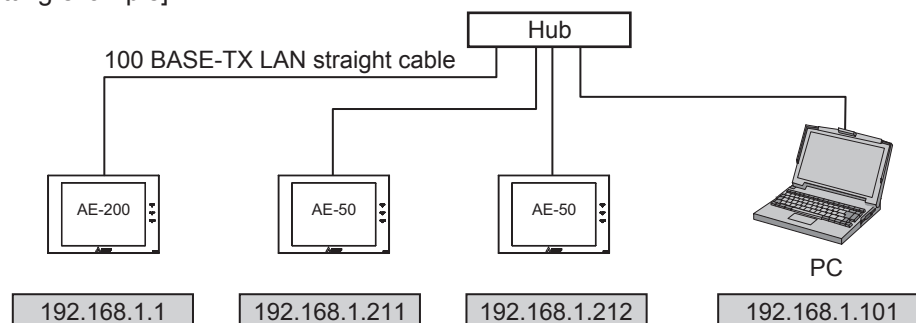
Note: The recommended IP address ranges are as follows.

AE-200: Between [192.168.1.1] and [192.168.1.40]

AE-50/EW-50: Between [192.168.1.211] and [192.168.1.249]

PC: Between [192.168.1.101] and [192.168.1.150]

[IP address setting example]

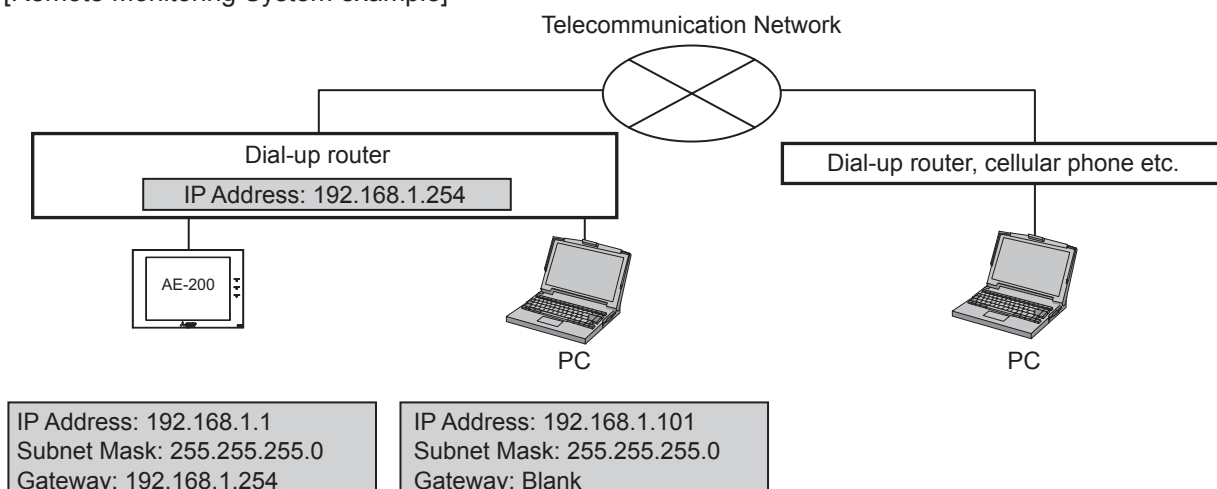


Note: Some hubs have dedicated ports for connection with another hub.

Connect the AE-200/AE-50/EW-50 and PC to the normal ports.

- (2) Enter [255.255.255.0] in the [Subnet Mask] field (unless otherwise specified).
- (3) When monitoring the system remotely or using e-mail function via a dial-up router, enter the router IP address in the [Gateway] field.
Leave the [Gateway] field blank when not connecting a dial-up router.

[Remote Monitoring System example]



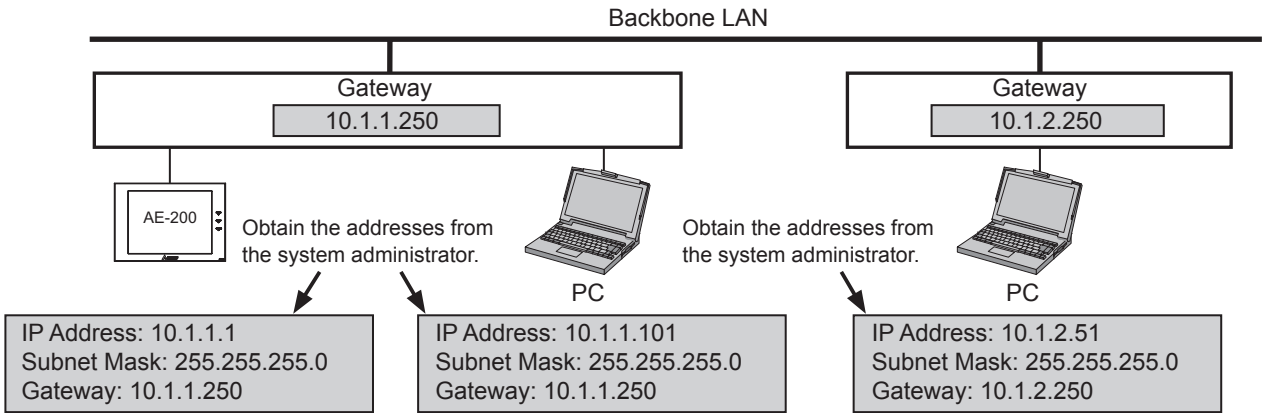
Note: [192.168.1.254] is recommended for use as the IP address of the dial-up router. Refer to the dial-up router instruction manual for details of how to set the IP address.

Note: The use of a dial-up router with no modem requires a modem (for analog or ISDN) to be connected between the router and the public phone line.

[2] Settings for connecting the AE-200/AE-50/EW-50 to an existing LAN

- (1) When connecting the AE-200/AE-50/EW-50 to an existing LAN, consult the system administrator to decide the IP, subnet mask, and gateway addresses.

[Existing LAN System example]



4-3-1. Setting IP addresses of AE-50/EW-50

Set the AE-50/EW-50 IP addresses. Settings screens will differ depending on the unit model.

AE-50: AE-50's LCD or AE-50's Web Browser for Initial Settings

EW-50: EW-50's Web Browser for Initial Settings

Note: Set IP address for "LAN1."

Note: "LAN2" is exclusively used for BACnet® function. To use the BACnet® function, configure the BACnet® settings on the BACnet® Setting Tool. Refer to the Instruction Book (BACnet® function) for the BACnet® function settings.

[1] When setting on the AE-50's LCD

- (1) After the power is turned on to the AE-50, a language selection screen will appear.

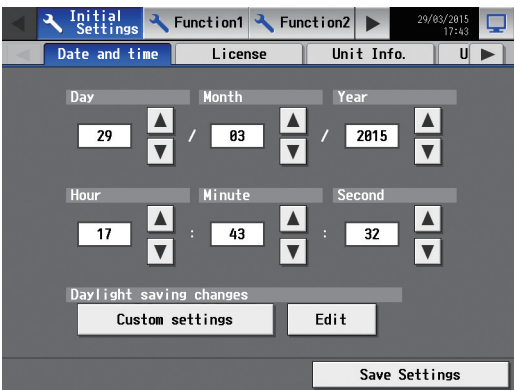
Select the language to be used for display, and then touch [OK].

Note: It will take approximately one minute for the display to appear after the power is turned on.

Note: Once the initial settings have been made, [Monitor/Operation] screen will appear after the power is turned on.



- (2) The [Date and time] screen will appear.



- (3) Touch the right triangle button to display the [Network] tab, and touch it.

Referring to section 5-1-5 "Network", set the AE-50's IP address, and then touch [Save Settings].

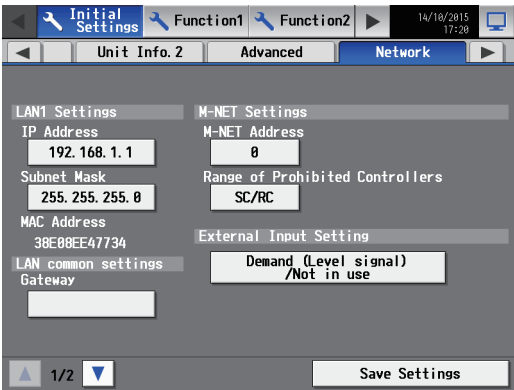
The AE-50 will reboot.

Note: When multiple AE-50 controllers are connected, set the IP addresses on all AE-50.

Note: The AE-200 and AE-50's IP addresses must have the same network address.

<Reference: Default IP address>

AE-200	192.168.1.1
AE-50	192.168.1.211



[2] When setting on the AE-200/AE-50's Web Browser for Initial Settings

Click [Initial Settings] in the menu bar, and then click [Basic System] to access the Basic System settings screen.

Note: The Basic System settings may not be accessible if logged in as a building manager.

The screenshot shows the 'Basic System' settings page. It includes sections for Unit Settings, Network Settings, System Configuration Settings, and Display Format. The 'Save Settings' button is highlighted with a red arrow and a callout box.

Unit Settings

Name	AE-200
Unit ID	000001 (6 figures)
SERIAL No.	23164-116
Software Version	7.10(1.00)

Network Settings

IP Address	192	168	1	1
Subnet Mask	255	255	255	0
Gateway				
MAC Address	00269241B94A			

System Configuration Settings

MA-NET Settings

MA-NET Address	0
Range of Prohibited Controllers	<input checked="" type="checkbox"/> SCRC <input type="checkbox"/> RC Only

External Input Setting

<input checked="" type="checkbox"/> Demand (Level signal) Not in use
<input type="checkbox"/> Emergency Stop (Level signal)
<input type="checkbox"/> ON/OFF (Level signal)
<input type="checkbox"/> ON/OFF/Prohibit/Permit (Pulse signal)

Display Format

Unit of Temperature	<input checked="" type="checkbox"/> °C <input type="checkbox"/> °F
Pressure unit of measure	<input type="checkbox"/> MPa <input checked="" type="checkbox"/> PSI <input type="checkbox"/> bar/kPa
Date Format	<input type="checkbox"/> 31/12/2012 <input type="checkbox"/> 12/31/2012 <input checked="" type="checkbox"/> 2012/12/31
Time Format	<input type="checkbox"/> 05:00 PM <input checked="" type="checkbox"/> 18:00
Group Names on Overview Monitor	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
Filter Sign Display	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF

Save Settings
Click to save the changes made.

Note: Although the settings for LAN1 (Network Settings) and LAN2 (Network Settings 2) will appear on the screen, only the settings for LAN1 is required. However, only when the LAN1 IP address is required to be set to [192.168.2.1], change the default LAN2 IP address to avoid address overlap.

Note: After the AE-200 IP address is changed, the AE-50/EW-50 power will be reset.

Note: After the AE-200 IP address is changed, the AE-50/EW-50 power will be reset.

The screenshot shows the 'Network Settings' and 'Network Settings 2' sections. The 'LAN1' section is highlighted with a red bracket, and the 'LAN2' section is highlighted with a red bracket.

Network Settings

IP Address	192	168	1	1
Subnet Mask	255	255	255	0
Gateway				
MAC Address	00269241B94A			

Network Settings 2

IP Address	192	168	2	1
Subnet Mask	255	255	255	0
MAC Address	00269241B94B			

4-3-2. Setting IP addresses of AE-200

Set the AE-200 IP address and the expansion controller connection.

[1] AE-200 initial start-up for a system without connection to an AE-50/EW-50 controller

- (1) After the power is turned on, a language selection screen will appear.

Select the language to be used for display, and then touch [OK].

Note: It will take approximately one minute for the display to appear after the power is turned on.

Note: Do not touch the LCD before any settings screen appears.

Note: Once the initial settings have been made, [Monitor/Operation] screen will appear after the power is turned on.

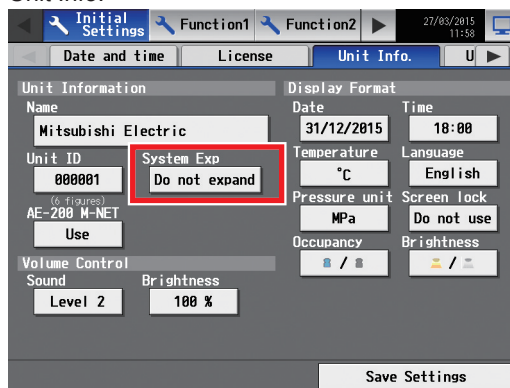


- (2) Touch the [Unit Info.] and [Unit Info. 2] tabs.
Referring to section 5-1-4 "Unit Information", make necessary basic settings, and then touch [Save Settings].

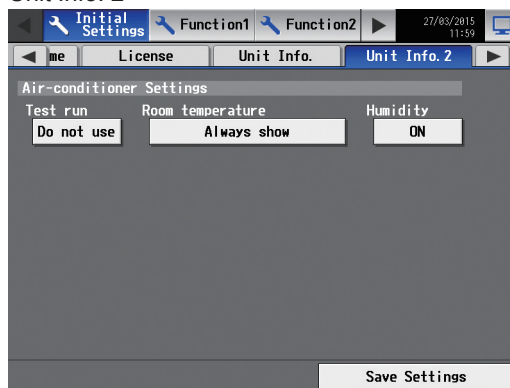
Note: Make sure to set the [System Exp] setting for the AE-200 to [Do not expand].

Note: Make sure to set the [AE-200 M-NET] setting to [Use].

Unit Info.



Unit Info. 2



[2] AE-200 initial start-up for a system with connection to one or more AE-50/EW-50 controllers

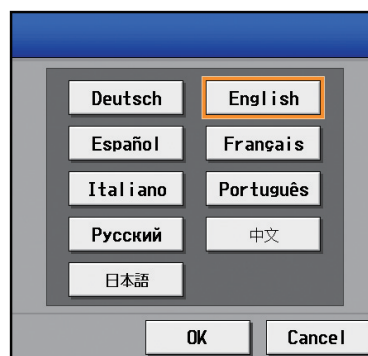
- (1) After the power is turned on to the AE-200, a language selection screen will appear.

Select the language to be used for display, and then touch [OK].

Note: It will take approximately one minute for the display to appear after the power is turned on.

Note: Do not touch the LCD before any settings screen appears.

Note: Once the initial settings have been made, [Monitor/Operation] screen will appear after the power is turned on.



- (2) Touch the [Unit Info.] and [Unit Info. 2] tabs.
Referring to section 5-1-4 “Unit Information”, make necessary basic settings, and then touch [Save Settings].

Note: Make sure to set the [System Exp] setting for the AE-200 to [Expand].

Note: The [AE-200 Apportion] setting will appear only when the “Charge” license has been registered.

Unit Info.

The screenshot shows the 'Unit Info.' screen with the following settings:

Unit Information		Display Format	
Name	Mitsubishi Electric	Date	31/12/2015
Unit ID	000001	Time	18:00
AE-200 M-NET	System Exp Expand	Temperature	°C
Use		Language	English
Volume Control		Pressure unit	MPa
Sound	Level 2	Screen lock	Do not use
Brightness	100 %	Occupancy	Brightness

Save Settings

Unit Info. 2

The screenshot shows the 'Unit Info. 2' screen with the following settings:

Air-conditioner Settings		
Test run	Room temperature	Humidity
Do not use	Always show	ON

Save Settings

- (3) Touch the right triangle button to display the [Network] tab, and touch it.

Referring to section 5-1-5 “Network”, make sure that [AE200] is selected as [Controller], set the AE-200’s IP address and subnet mask, and then touch [Save Settings].

The AE-200 will reboot.

When the reboot process is complete, log in to the Initial Settings menu.

Note: Refer to section 5-1-1 “Logging in to the Initial Settings menu” for how to log in.

Note: Do not touch the LCD during the reboot.

The screenshot shows the 'Network' screen for Controller AE200 with the following settings:

Controller AE200 Mitsubishi Electric	
LAN1 Settings	M-NET Settings
IP Address	M-NET Address
192.168.1.1	8
Subnet Mask	Range of Prohibited Controllers
255.255.255.0	SC/RC
MAC Address	External Input Setting
010203040506	ON/OFF/Prohibit/Permit (Pulse signal)
LAN common settings	
Gateway	

1/2 Save Settings

- (4) In the [Controller] section, select [1], [2], [3], or [4] to make settings for each AE-50/EW-50.

Referring to section 5-1-5 “Network”, set the IP address of each AE-50/EW-50 that is connected to the AE-200, and M-NET address, and then touch [Save Settings].

The screenshot shows the 'Network' screen for Controller Exp1 with the following settings:

Controller Exp1	
LAN Settings	M-NET Settings
Dstn IP address	M-NET Address
192.168.1.211	201
Version	Range of Prohibited Controllers
Ver. 7.30(1.05)	SC/RC
	External Input Setting
	Demand (Level signal) /Not in use

1/2 Save Settings

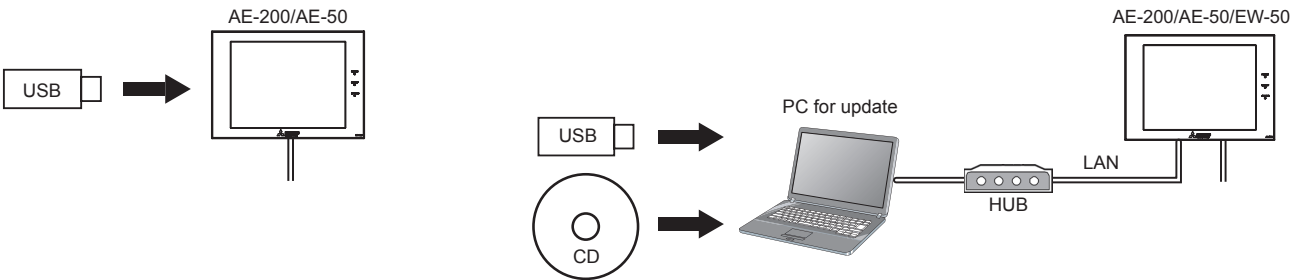
4-4. Software Update

Update AE-200/AE-50/EW-50 software. Prepare the update file so that all versions are standardized, without needing to load a previous software version.

The AE-200/AE-50/EW-50 software can be updated by either directly reading the update file in a USB memory device or by using a Web browser.

① Directly reading the update file in a USB memory device

② Using a Web browser



Update the AE-200/AE-50 software by either “Directly reading the update file in a USB memory device (①)” or “Using a Web browser (②),” and the EW-50 by “Using a Web browser (②).”

Caution:

Obtain an approval from the client for the following precautions as necessary.

1. The communication between AE-200/AE-50/EW-50 and the air conditioning units will stop while the software is being updated. Although the unit in operation may detect a communication error and an error sign may appear on the local remote controllers, the unit will continue its operation and be operable from the local remote controllers.

* Note that Mr. Slim indoor units or systems with no local remote controllers may detect a communication error and come to an abnormal stop.

2. Record the operation status of the air conditioning units immediately before updating the software. After the software update completes, check the operation status of the units, and manually operate the units as necessary.
3. Some operations and functions, such as scheduled operations, billing function, Peak Cut control, energy management function, will be disabled while the software is being updated. Check the setting details of these functions beforehand, and update the software when it does not affect these functions.
4. If the functions in the table below are used on the TG-2000A, avoid updating the software during the time period indicated in the right column.

TG-2000A function in use	Time period in which the update is prohibited
Electricity charge apportioning function	AM 4:05 – 4:35
Malfunction log backup	AM 0:05 – 0:15
Peak Cut data backup	AM 2:00 – 2:10
Measurement trend data backup	AM 1:05 – 1:15

5. CSV output data (e.g., energy management data) will lose up to 60-minute worth of data.
6. When a built-in Pulse Input (PI) is used, pulse signals cannot be input while the software is being updated.

4-4-1. Directly reading the update file in USB memory device

[1] Preparation

Store the update file (AExx_FW####_****.dat)*1 in the root folder of a USB memory device.

*1 “xx”: “200” (AE-200) or “50” (AE-50); “####_****”: software version
(For example, if the update file name is “AE200_FW0730_0105.dat”, the AE-200 software version is 7.30.)

[2] Update procedures

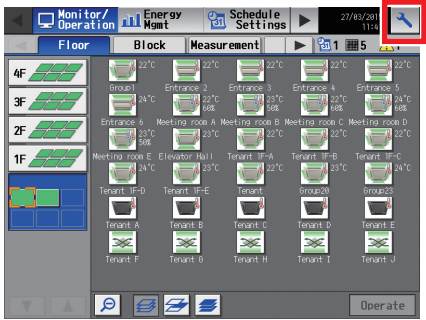
Note: The software cannot be downgraded to an earlier version.

- (1) Remove the controller cover, and insert a USB memory device in which the update file is stored to the USB port.

Note: Do not remove the USB memory device while the software is being updated.

Note: The USB memory device may not be recognized if you insert and remove it within a short time. If this happens, reset the AE-200/AE-50.

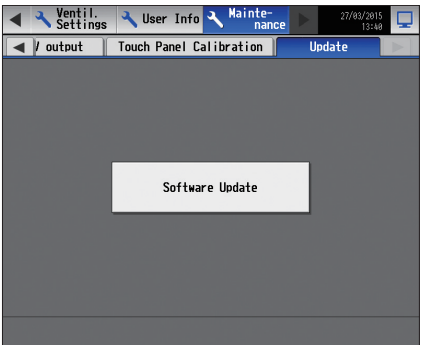
- (2) Touch [] to display the login window.



- (3) Enter the maintenance user name and the password in the login window, and touch [Login]. (Default user name: initial, Default password: init)



- (4) Touch [Maintenance] in the menu bar, and then touch [Update].
Touch [Software Update] to read the update file.

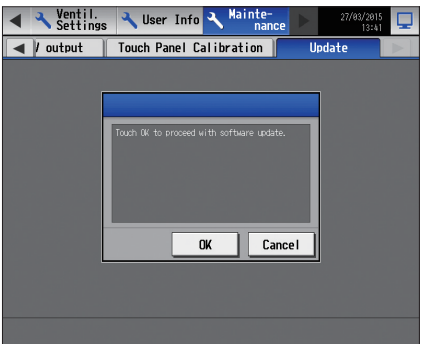



- (5) Touch [OK]. A software update process starts.

Note: It takes about four minutes to complete the update.

Note: The Status LED will blink in blue while the software is being updated.

Note: Do not turn off the power to the AE-200/AE-50 while the software is being updated.



- (6) The AE-200/AE-50 will reboot after the update is complete.
Disconnect the USB memory device.
- (7) Touch [] to display the login window.
Check that the version on the login window is the same as the version
of the update file (AExx_FW####_****.dat).
(For example, if the update file name is “AE200_FW0730_0105.dat”,
the AE-200 software version is 7.30.)



The image shows a software window titled "Login / Panel cleaning". It contains two input fields: "User name" and "Password". Below these fields, the text "AE-200A" and "Serial No. 00C64-215" is displayed. To the right of this text, the version "Ver. 7.30 (1.05)" is shown and highlighted with a red rectangular box. At the bottom of the window, there is a small icon of a hand pointing at a screen, and two buttons labeled "Login" and "Cancel".

[3] Software information

Detailed information about the open source software of the AE-200/AE-50/EW-50 can be checked by accessing the following address:

[https://\[IP address of each AE-200, AE-50, or EW-50\]/license/](https://[IP address of each AE-200, AE-50, or EW-50]/license/)

* Accessible only if logged in as a maintenance user.

4-4-2. Using a Web browser

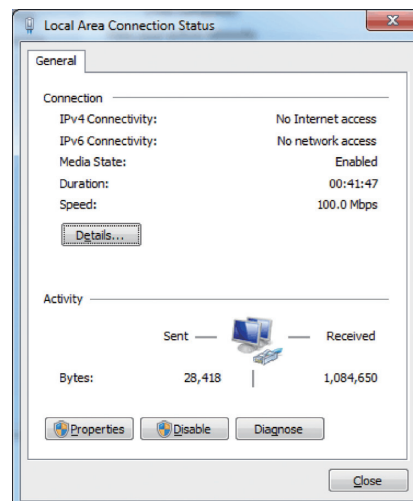
[1] Preparation

Follow the instructions below to change the IP address of the PC that is used for software update.

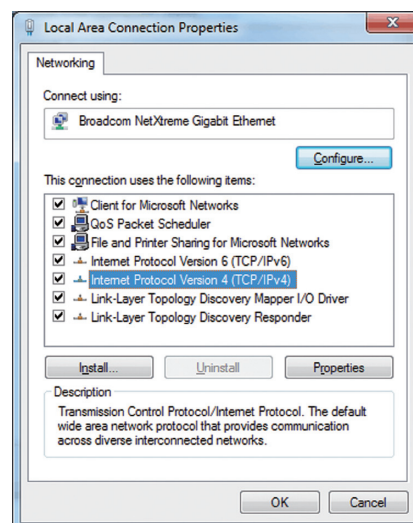
Note: When the system is connected to the existing LAN, ask the system administrator for permission before changing the IP address settings and updating the software.

- (1) Click [Control Panel] in the Start menu, and click [Network and Sharing Center]>[Local Area Setting].

In the [Local Area Connection Status] window, click [Properties].



- (2) Click [Internet Protocol Version 4 (TCP/IPv4)] to select it, and click [Properties].



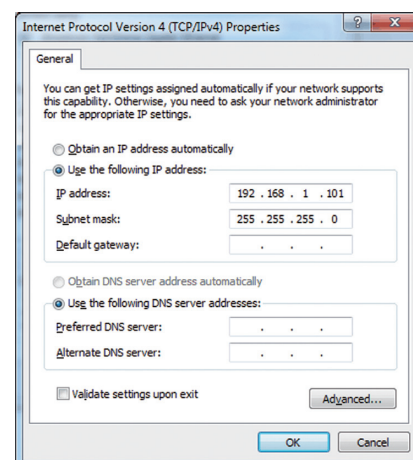
- (3) In the [Internet Protocol Version 4 (TCP/IPv4) Properties] window, check the radio button next to [Use the following IP address]. Enter [192.168.1.*] in the [IP address] field. (The number indicated with an asterisk must be different from the IP address of the AE-200/AE-50/EW-50 to be updated.)

Leave [255.255.255.0] in the [Subnet mask] field as it is.

Note: If the IP address of the AE-200/AE-50/EW-50 is [192.168.1.1], set the same 1st, 2nd, and 3rd numbers and different 4th number, such as [192.168.1.2].

Note: Default IP address of AE-200, AE-50, and EW-50 is [192.168.1.1].

Note: When performing an update on a PC that is already connected to the existing LAN, [255.255.255.0] may not appear in the [Subnet mask] field. When [255.255.0.0] appears, enter the same 1st and 2nd numbers (192.168) and different 3rd or 4th number of the IP address of the AE-200/AE-50/EW-50 in the [IP address] field.

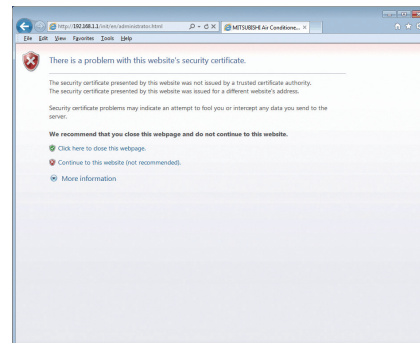


[2] Update procedures

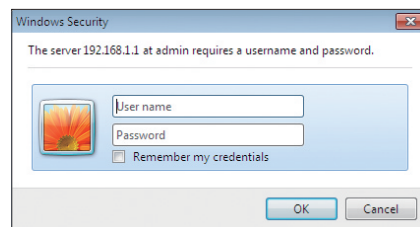
- (1) Make sure that the PC that has been set in [1] above and the AE-200/AE-50/EW-50 to be updated are connected with a LAN cable.
- (2) Turn on the power to the AE-200/AE-50/EW-50, and insert a CD or USB memory device in which the update file is stored to the PC.
- (3) Enter the web page address in the address field of the Web browser as follows:
https://[IP address of each AE-200, AE-50, or EW-50]/swupdate/Update.html
 Press the [Enter] key.

Note: If the IP address of the AE-200/AE-50/EW-50 is [192.168.1.1], the web page address is [https://192.168.1.1/swupdate/Update.html].

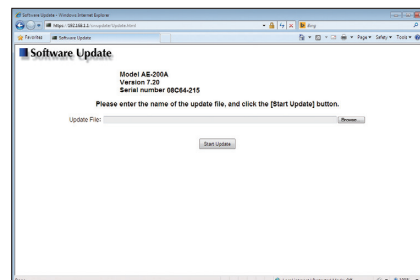
- (4) If the security certificate is invalid, a security certificate error page (as shown at right) will appear.
 Click [Continue to this website (not recommended)].



- (5) Enter the maintenance user name and the password in the login screen, and click [OK]. (Default user name: initial, Default password: init)

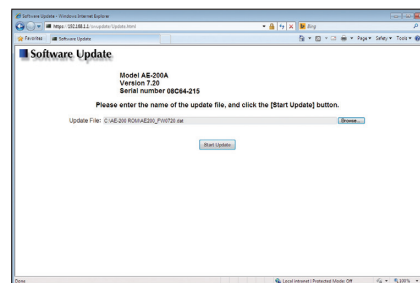
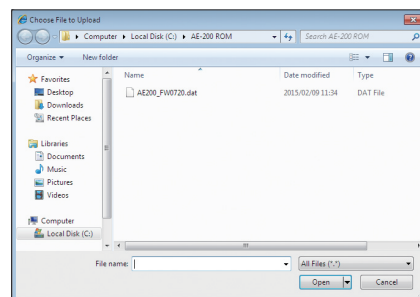


- (6) A software update screen will appear.



- (7) Click the [Browse...] button and select the update file (AExx_FW####_****.dat) stored in the CD or USB memory device, and click [Start Update].

Note: The software cannot be downgraded to an earlier version.

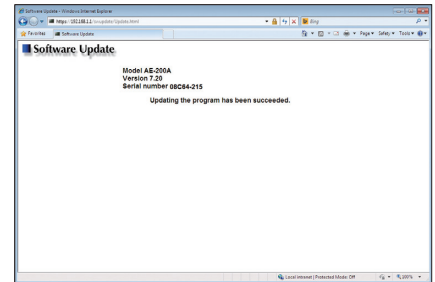


- (8) A software update process starts.

Note: It takes about ten minutes to complete the update.

Note: Do not disconnect the LAN cable or turn off the power to the AE-200/AE-50/EW-50 while the software is being updated.

- (9) The AE-200/AE-50/EW-50 will reboot after the update is complete. Check that the version that will appear on the screen is the same as the version of the update file. Also check that the version displayed on the login window of the AE-200/AE-50's LCD is also the same.



If the software update did not properly complete, update the software again. If the problem persists, the AE-200/AE-50/EW-50 may be damaged. Consult your dealer.

4-5. License registration for optional functions

There are two ways to register the license — from the AE-200's LCD, and individually from the AE-200/AE-50/EW-50 Web Browser for Initial Settings.

Please contact your dealer as regards optional functions and purchasing license numbers.

Note: After the "Integrated Centralized Control Web" license is registered, licenses can be registered on the Integrated Centralized Control Web. For details, refer to [Settings] – [Initial settings] – [License Registration] in the Instruction Book (Integrated Centralized Control Web).

[1] When registering a license on the AE-200's LCD

Touch [Initial Settings] in the menu bar, and then touch [License].

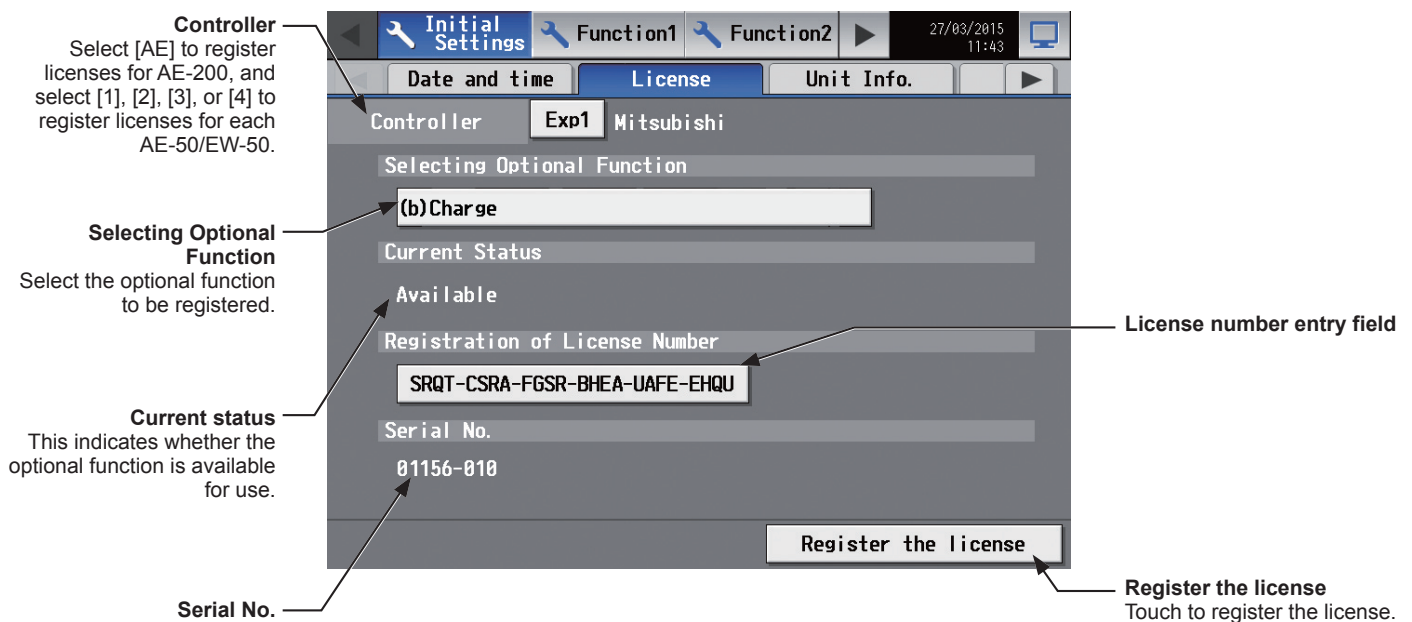
Note: The current date and time settings are required for license registration. Refer to section 5-1-3 "Date and time" for date and time settings.

Note: The license registration is required for each AE-200/AE-50/EW-50.

Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to register licenses for each AE-200, AE-50, and EW-50 individually.

Important

- When one or more AE-50/EW-50 controllers are connected, licenses for the AE-50/EW-50 must be registered with the AE-50/EW-50 properly connected to ensure proper settings.



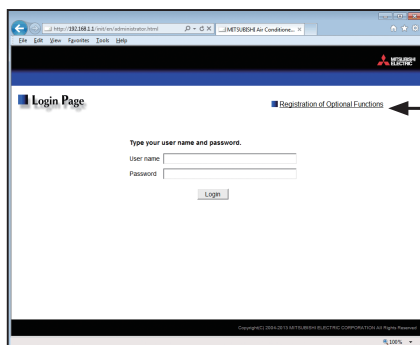
- In the [Selecting Optional Function] section, select the optional function to be registered. The current availability will appear in the [Current Status] section.
 - In the "License number entry field" button, enter the license number and touch [Register the license]. In the [Current Status] section, a word [Available] will appear.
- If the registration is unsuccessful, verify that the selected optional function and the license number are correct.
- Note: Alphabet "O" and "I" are not used for license number.

[2] When registering a license on the AE-200/AE-50/EW-50's Web Browser for Initial Settings

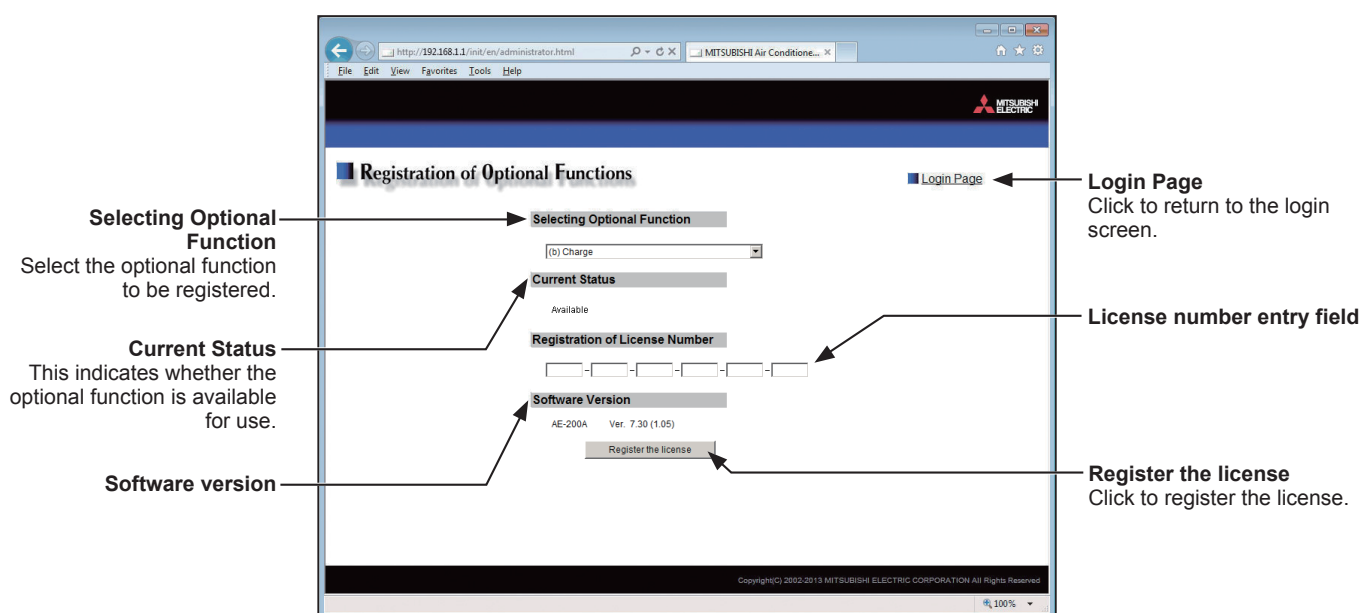
Note: The current date and time settings are required for license registration. Refer to section 7-1-1 "Date and Time" for date and time settings.

Note: The license registration is required for each AE-200/AE-50/EW-50.

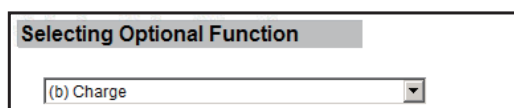
- (1) On the login screen, click [Registration of Optional Functions].



The [Registration of Optional Functions] screen will appear.

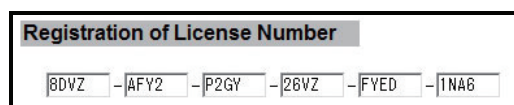


- (2) In the [Selecting Optional Function] section, select the optional function to be registered. The current availability will appear in the [Current Status] section.



- (3) In the [License number entry] field, enter the license number and click [Register the license].
In the [Current Status] section, a word "Available" will appear. If the registration is unsuccessful, verify that the selected optional function and the license number are correct.

Note: Alphabet "O" and "I" are not used for license number.

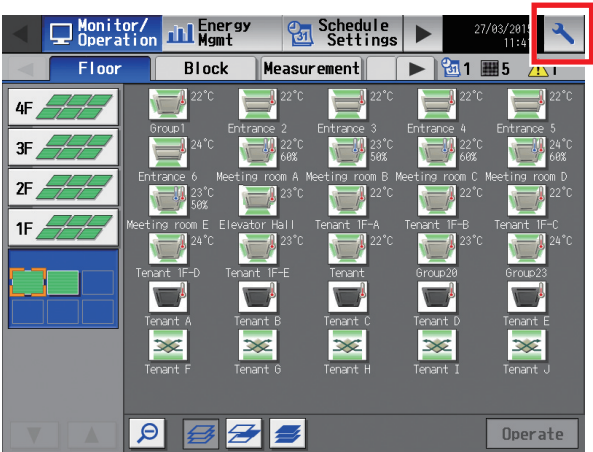


5. Settings on the LCD

5-1. Initial Settings

5-1-1. Logging in to the Initial Settings menu

(1) Touch [] to display the login window.



(2) Enter the user name and the password on the keyboard screen (See [1] “Keyboard screen”), and touch [Login].
[Initial Settings] menu screen will appear.
The table below shows the default user names, passwords, and functions that are available for maintenance users and building managers.


Login / Panel cleaning

User name

Password

AE-200A
Serial No. 08C64-215

Ver. 7.30 (1.05)



Login

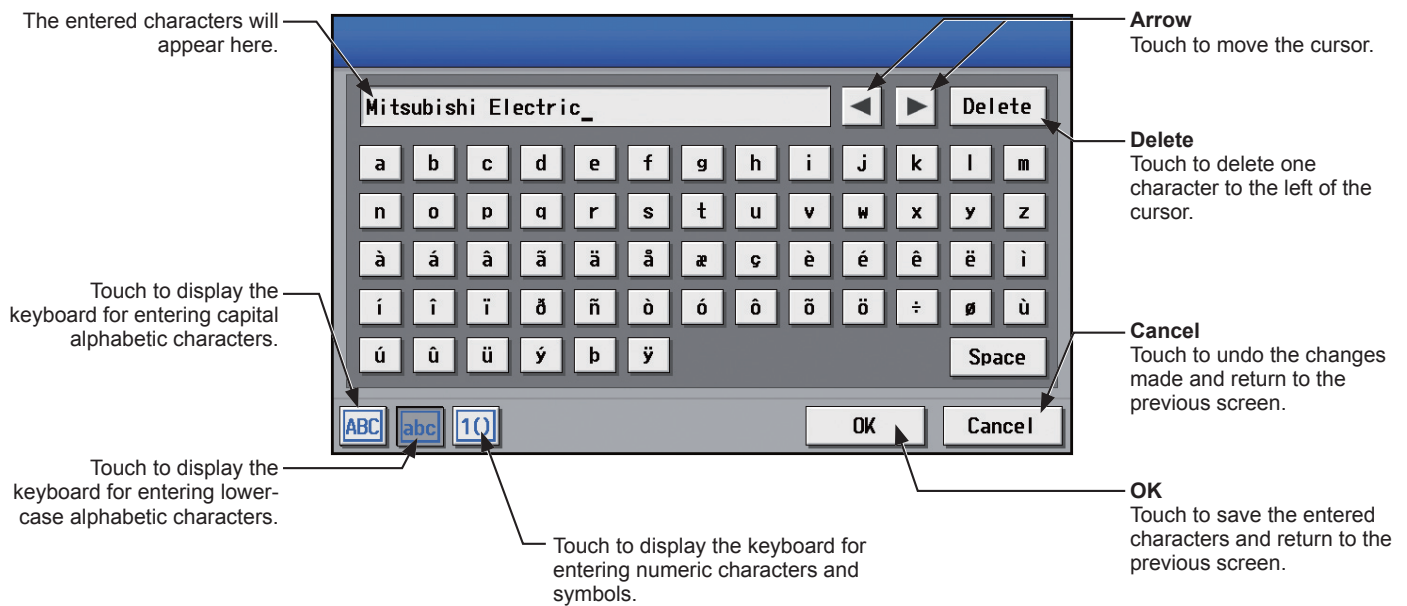
Cancel

User	Default user name	Default password	Available functions
Maintenance user	initial	init	All functions
Building manager	administrator	admin	The items to which access rights have been given on the [User Info] screen are available.

*1 A maintenance user can specify the functions to be made available for building managers. Refer to section 5-5 “User Information” for details.

*2 It is recommended to change the default user name and password so that the users other than the maintenance users and building managers will not be able to change the settings.

[1] Keyboard screen



5-1-2. Locking the screen


Locking the screen prevents unauthorized users from accessing.

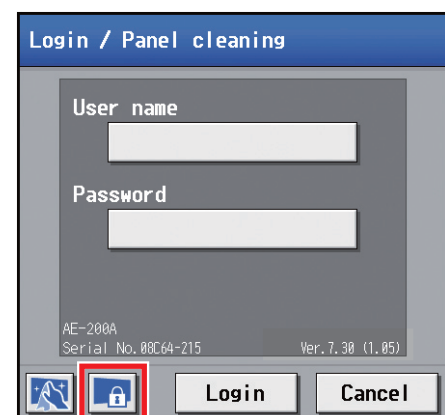
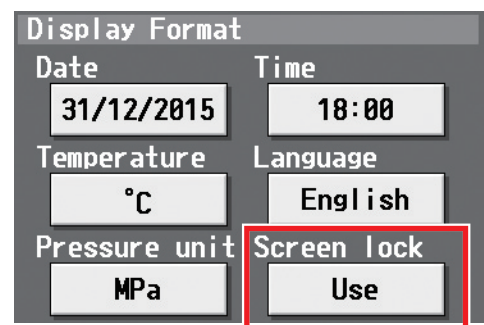
- (1) To activate the screen lock function, set the [Screen lock] setting to [Use] on the [Unit Info.] screen under the [Initial Settings] menu.

If the screen lock function is activated, the screen locks when the backlight turns off (after three minutes of not touching the screen).

Note: The default setting is [Do not use].

Note: The screen lock function will not be activated when any screen under the [Initial Settings] menu is open.

- (2) Touch [] on the login screen to lock the screen immediately.
To unlock the screen, enter the same user name and password used to log in.



5-1-3. Date and time

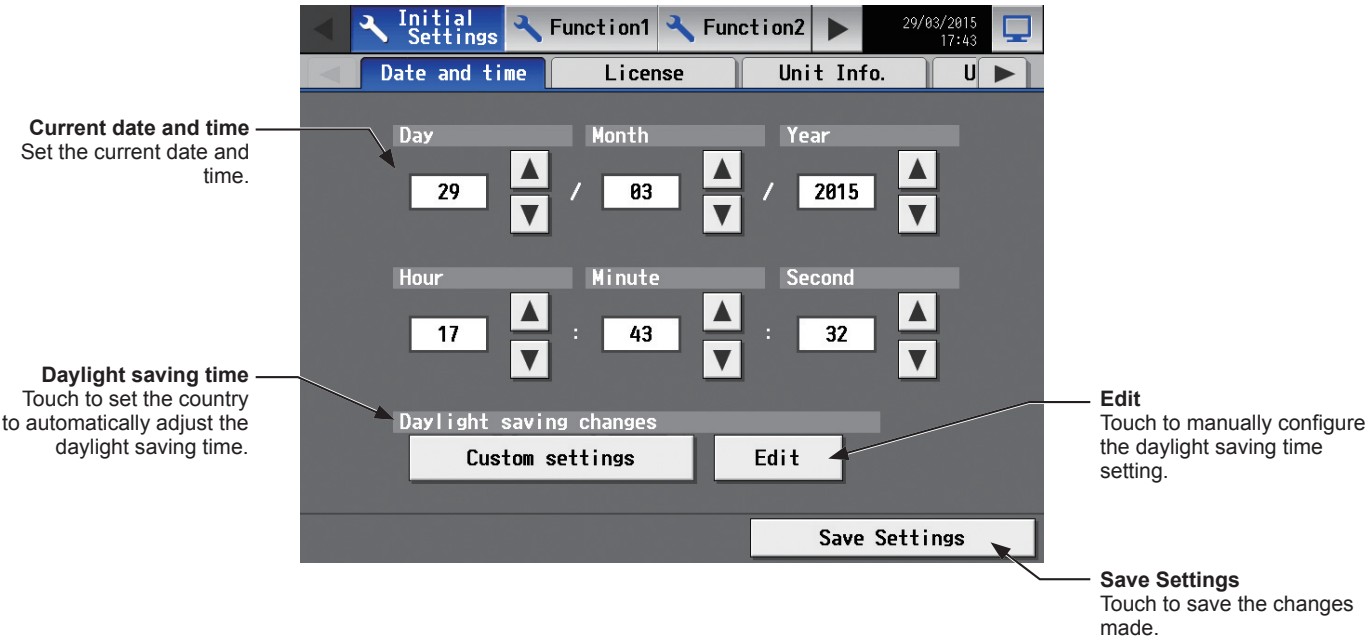
Touch [Initial Settings] in the menu bar, and then touch [Date and time].

Set the current date and time, and then touch [Save Settings].

- Note: The date and time settings may not be accessible if logged in as a building manager.
- Note: The date and time settings made on this screen will be reflected on all the units in the M-NET system, all connected AE-50/EW-50 units, and the AE-200 units whose [Time Master/Sub] setting is set to [Sub].
- Note: The date and time cannot be set on this screen if the [Time Master/Sub] setting is set to [Sub].
- Note: The daylight saving time setting is required only on the AE-200.
- Note: The date and time settings made on the AE-50/EW-50 unit whose [Time Master/Sub] setting is set to [Sub] will not be sent to the other AE-50/EW-50 units.
- Note: If the current time is moved forward while the scheduled operation is performed, the operation that was scheduled to take place during the time that was skipped will not be performed.
- Note: Changing the date and/or time when the charging function is in use can affect the calculation of the charges.
- Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.
- Note: When AE-50/EW-50 controller, DIDO controller (PAC-YG66DCA), AI controller (PAC-YG63MCA), or PI controller (PAC-YG60MCA) is added to the system, set the current date and time on this screen to synchronize the date and time on the added controller.
- Note: Although date and time settings can be made on each AE-50/EW-50, the date and time synchronization from AE-200 is performed once a day. Make the date and time settings on the AE-50/EW-50 only after the AE-50/EW-50 is replaced.

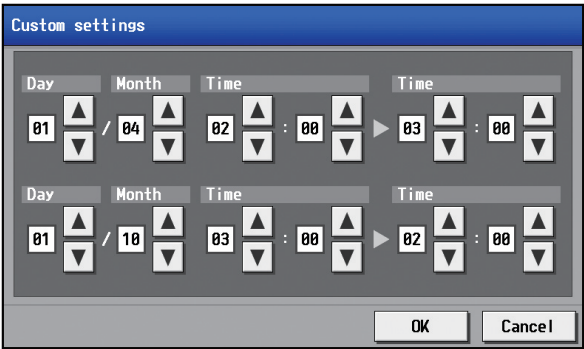
Important

- When one or more AE-50/EW-50 controllers are connected, the date and time settings must be made with the AE-50/EW-50 properly connected to ensure proper settings.



- (1) Set the current date and time.
- (2) To automatically adjust the daylight saving time, touch the “Daylight saving time” button. Touch the applicable country, and then touch [OK].

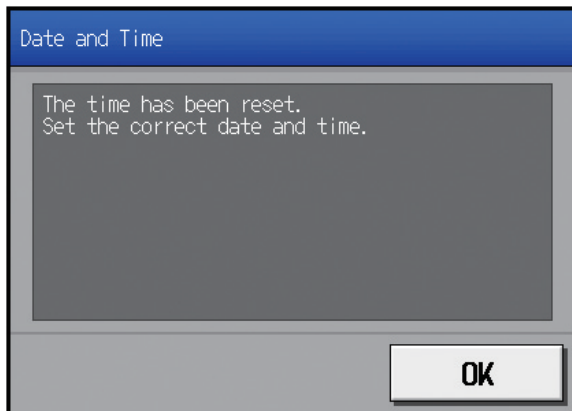
- Note: When not using the daylight saving time function, touch “----.”
- Note: If the applicable country is not found, touch [Custom settings] at the bottom, and touch [OK]. Then, touch [Edit] to open the screen below, and manually configure the daylight saving time setting.



Note

- Message that will appear when the date and time have been reset

If the power supply is cut off for a long time due to power failure or other reasons, the date and time will be reset, and the following popup message will appear when the power is turned on next. If this message appears, set the date and time again.



- * This message will appear periodically until the date and time setting is made.
- * If the controller is used without the date and time being set, the Schedule function or the Night Setback Control will not work properly.
- * If the [Time Master/Sub] setting for the given controller is set to [Sub], temporarily change the setting to [Master], set the current date and time, and then set the setting back to [Sub].

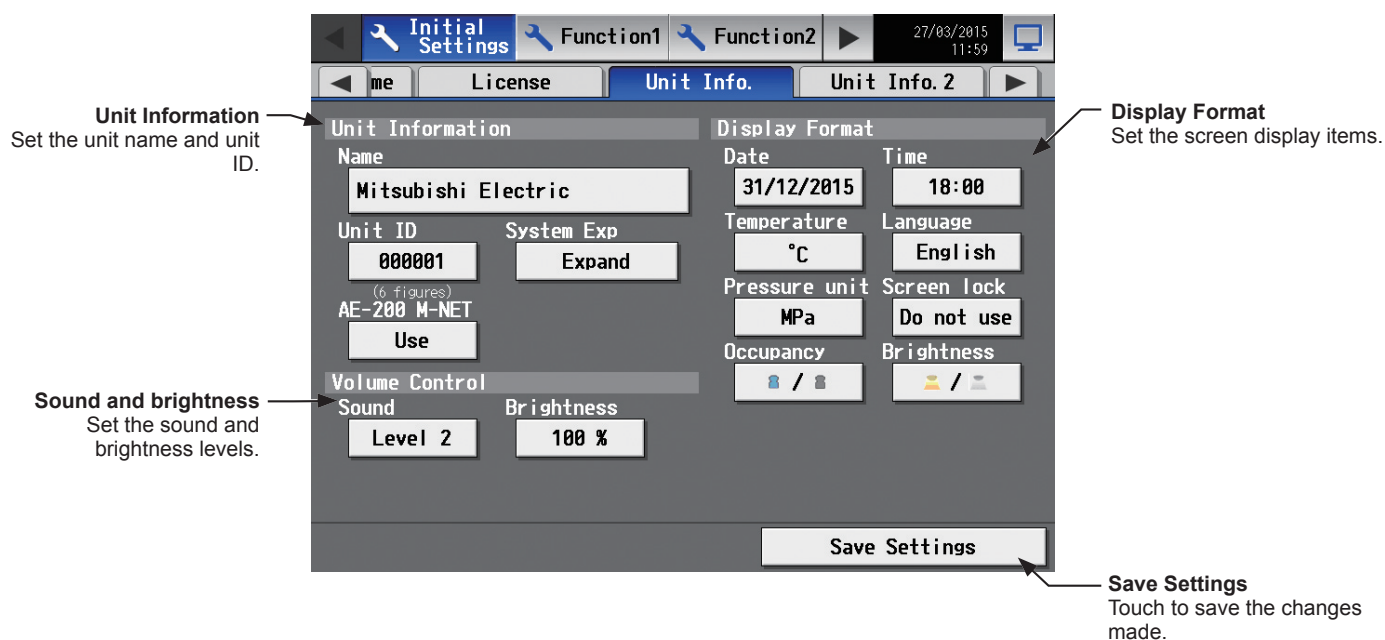
5-1-4. Unit Information

Touch [Initial Settings] in the menu bar, and then touch [Unit Info.] or [Unit Info. 2].

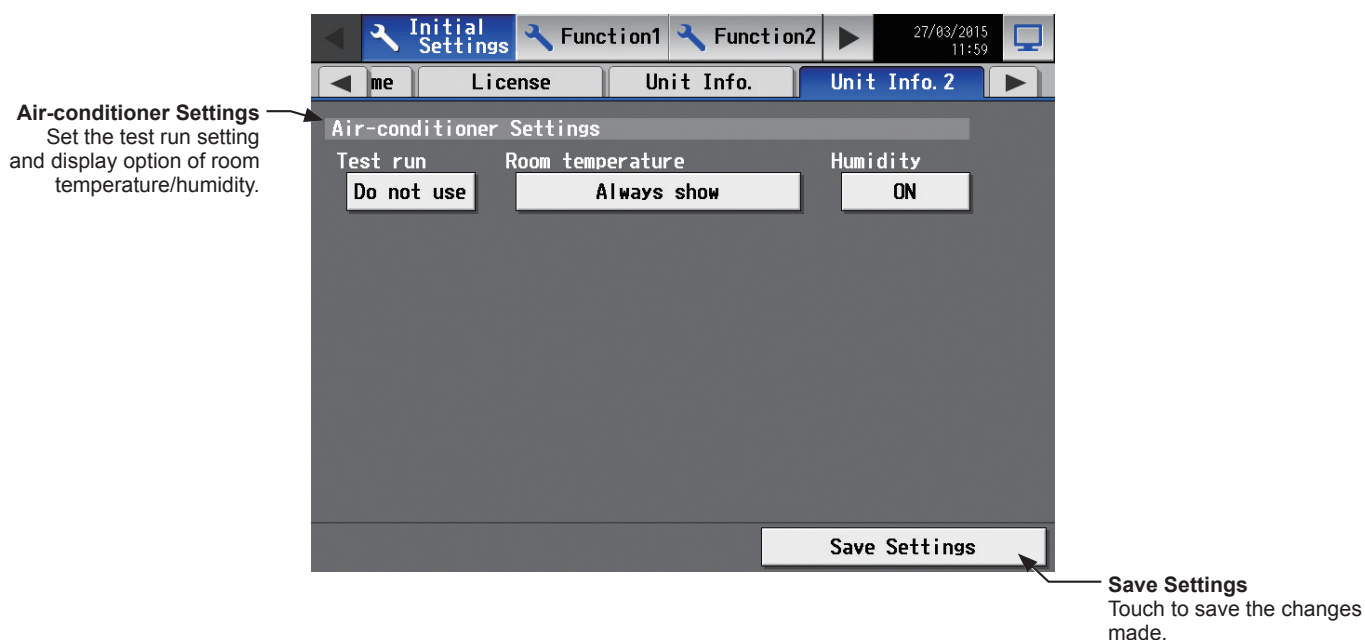
Make necessary basic system settings such as unit settings, display format, sound/brightness settings, use or non-use of test run, and display or non-display of room temperature/humidity, and then touch [Save Settings].

Note: The Unit Information settings may not be accessible if logged in as a building manager.

Unit Info.



Unit Info. 2



[1] Unit Information

Follow the instructions below to set the unit name, unit ID, and System Expansion setting.

- (1) Touch the [Name] button to display the keyboard. Enter the unit name in 40 alphanumeric or symbol characters or less. The name entered here will be used on the screen of the software that controls multiple AE-200 units and will also be used as a sender name in the error notification e-mail and e-mail alarm.

Note: The following characters cannot be used: <, >, &, ", or '.

- (2) Touch the [Unit ID] button to display the keyboard. Enter the unit ID in 6 figures. Use this setting to manage the multiple unit IDs. The unit ID entered here will be used on the screen of the software that controls multiple AE-200 units and will also be used as a sender ID in the error notification e-mail and e-mail alarm.
- (3) When connecting one or more AE-50/EW-50 controllers, set the [System Exp] setting to [Expand].

Note: The [System Exp] section does not appear on this screen on the AE-50.

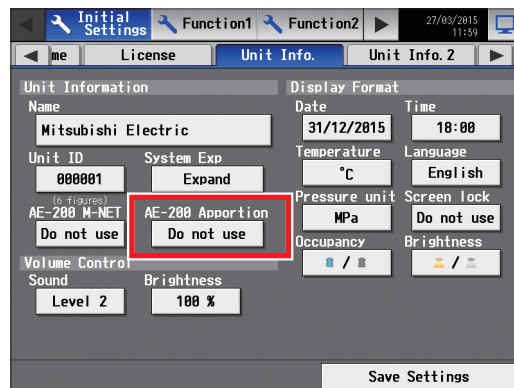
Note: When the [System Exp] setting is set to [Expand], make sure to make network settings for the AE-50/EW-50 controllers on the [Network] screen. (Refer to section 5-1-5 “Network” for details.)

Set the EW-50’s IP address on the Web Browser for Initial Settings. (Refer to section 4-3-1 “Setting IP addresses of AE-50/EW-50” for details.)
- (4) When using an AE-200 apportioned electricity billing function or when not using an AE-200 M-NET, set the [AE-200 M-NET] setting to [Do not use].

Note: When [Do not use] is selected, up to four AE-50/EW-50 controllers can be connected.

Note: The [AE-200 M-NET] section does not appear on this screen on the AE-50.

Note: The [AE-200 Apportion] section appears when “Charge” license is registered. To use an electricity charge apportioning function of TG-2000A, set the [AE-200 Apportion] setting to [Do not use].



[2] Sound and brightness

- (1) In the [Sound] section, select the volume (Level 0–3) of the buzzer that sounds when the screen is touched. (Level 0: No sound)


Note: Although the change will be reflected right away, it will not be saved until [Save Settings] is touched.
- (2) In the [Brightness] section, select the brightness (70%, 80%, 90%, 100%) of the screen. (The greater the value, the brighter the brightness.)


Note: Although the change will be reflected right away, it will not be saved until [Save Settings] is touched.



[3] Display Format

- (1) In the [Date] section, select the desired display format for year, month, and date.
- (2) In the [Time] section, select the desired display of time format.
- (3) In the [Temperature] section, select the desired temperature unit [°C] or [°F].
- (4) In the [Language] section, select the desired display language.
- (5) In the [Pressure unit] section, select [MPa], [PSI], or [kgf/cm²].
- (6) In the [Screen lock] section, select [Use] or [Do not use]. Select [Use] to activate the screen lock function. (Refer to section 5-1-2 “Locking the screen” for details.)
- (7) In the [Occupancy] section, make the Show/Hide setting for the occupancy/vacancy status that is detected by the built-in occupancy sensor on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA).

Select [Hide] not to display the occupancy/vacancy status on the [Floor] or [Block] display.

Select [] (blue) to display the occupancy icon when the sensor on the remote controller detects occupancy.


Select [] (gray) to display the vacancy icon when the sensor on the remote controller detects vacancy.


Select [ / ] (blue/gray) to display the occupancy or vacancy icon according to the occupancy status of the room.

Note: If the ME remote controller has no built-in occupancy sensor, the occupancy/vacancy icons will not be displayed on the [Floor] or [Block] display.

- (8) In the [Brightness] section, make the Show/Hide setting for the brightness/darkness status that is detected by the built-in brightness sensor on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA).

Select [Hide] not to display the brightness/darkness icons on the [Floor] or [Block] display.

Select [] (yellow) to display the brightness icon when the brightness level in the room reaches the predetermined brightness level.

Select [] (gray) to display the darkness icon when the darkness level in the room reaches the predetermined darkness level.

Select [] (yellow/gray) to display the brightness or darkness icon according to the brightness/darkness level of the room.

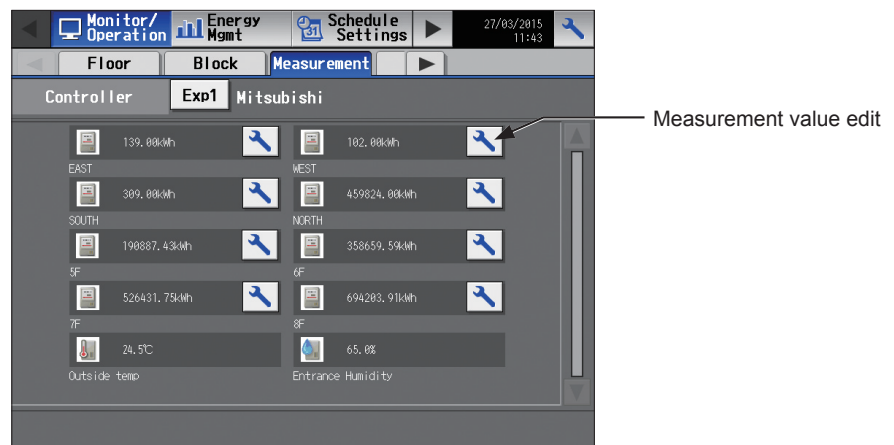
Note: If the ME remote controller has no built-in brightness sensor, the brightness/darkness icons will not be displayed on the [Floor] or [Block] display.

Note: The brightness/darkness detection thresholds are set on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA)

[4] Air-conditioner Settings

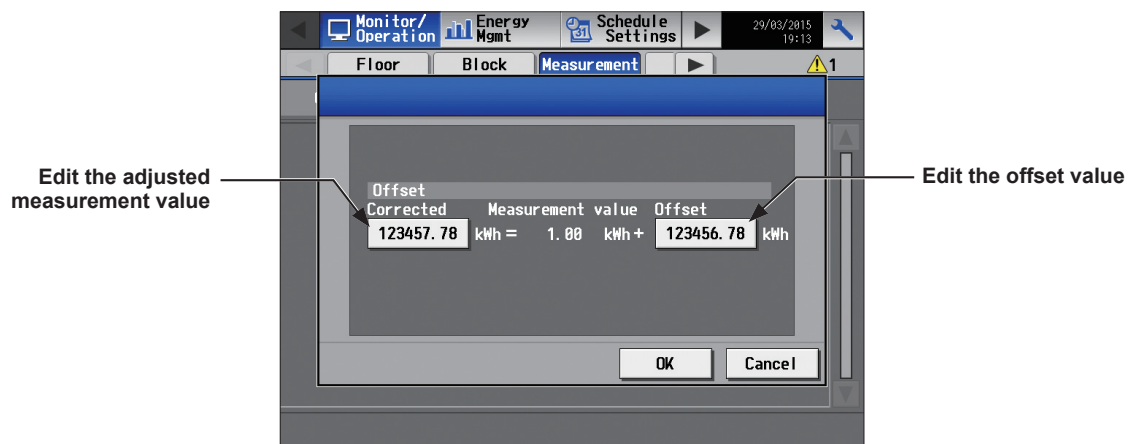
- (1) In the [Test run] section, select [Use] or [Do not use]. Select [Use] when performing a test run from the operation settings screen, or when editing the electricity meter reading value on the [Measurement] display.

Editing measurement values



1. Touch the “Measurement value edit” button to open the screen below.

Note: The “Measurement value edit” button will appear only when the [Test run] setting is set to [Use].



2. Touch the “Edit the adjusted measurement value” button. Enter the current electricity meter reading value, and then touch [OK].

Note: Set the setting back to [Do not use] after completing a test run.

Note: The setting will go back to [Do not use] when the time on the AE-200/AE-50 reaches 0:00 in the morning.

Note: Only the electric energy values on the [Measurement] display will change. This setting will not affect the energy-control-related screens.

Note: To reset the adjusted measurement value to the original cumulative value, touch the “Edit the offset value” button and set to “0”.

- (2) In the [Room temperature] section, select the desired temperature display option to be used on the [Floor] or [Block] display.

Select [Always show] to display the temperature at all times, [Show during operation] to display the temperature only during operation, and [Hide] not to display the temperature.

Note: This setting is effective only on the LCD and will not be reflected to the Web browser.

Note: Selecting [Show during operation] is recommended because the temperature shown may be higher than the actual temperature especially when the unit is stopped during the Heat mode.

- (3) In the [Humidity] section, make the Show/Hide setting for the humidity reading of the built-in humidity sensor on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA).

Select [ON] to display the humidity reading on the [Floor] or [Block] display.

5-1-5. Network

Touch [Initial Settings] in the menu bar, and then touch [Network].
Make necessary basic system settings such as LAN settings, M-NET settings, and external input settings for each AE-200, AE-50, and EW-50, and then touch [Save Settings]. A message will appear asking whether or not to restart the controller. Touch [OK] to restart the AE-200/AE-50 to reflect the changes.

- Note: The Network settings may not be accessible if logged in as a building manager.
- Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

Important

- Network settings for the AE-50/EW-50 must be made with the AE-50/EW-50 properly connected to ensure proper settings. Those settings made without the connection of AE-50/EW-50 will not be reflected.

1st page

Controller
Select [AE] to make settings for AE-200, and select [1], [2], [3], or [4] to make settings for each AE-50/EW-50.

LAN1 Settings
Set the IP address, subnet mask, and gateway address.

M-NET Settings
Set the M-NET address and range of prohibited controllers.

External Input Setting
Set the external signal input mode.

Save Settings
Touch to save the changes made.

2nd page

LAN2 Settings
Exclusively used for BACnet® function *1.

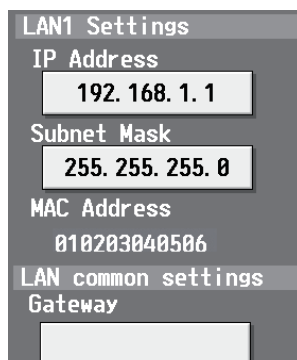
LAN common settings
Gateway

Save Settings

*1 BACnet® is a registered trademark of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, INC.).

[1] LAN1 Settings

LAN1 settings vary depending on whether the AE-200/AE-50 is connected to a dedicated LAN or an existing LAN. See the sections below for how to set the AE-200/AE-50 IP addresses, subnet mask, and gateway addresses. Although the settings for LAN1 and LAN2 will appear on the screen, only the settings for LAN1 is required if the BACnet[®] function is not used. Before making the settings, make sure that the LAN is connected to LAN1 port.



(1) LAN1 settings for connecting the AE-200/AE-50/EW-50 to a dedicated LAN

Settings for an AE-200

Note: See the procedures below when making LAN1 settings on the AE-50.

- (1) Make sure that [AE200] is selected in the [Controller] section.
- (2) Enter the AE-200's IP address in the [IP Address] field. If the LAN has been newly set up, allocate IP addresses to the AE-200 units in a sequential order starting with [192.168.1.1]. For example, the first AE-200 unit will have an IP address of [192.168.1.1], the second AE-200 unit will have an IP address of [192.168.1.2] and so on. (The same IP addresses cannot be used.)
Allocate IP addresses to the AE-50/EW-50 units in a sequential order starting with [192.168.1.211].

Note: The recommended IP address ranges are as follows.

AE-200: Between [192.168.1.1] and [192.168.1.40]

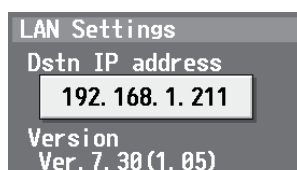
AE-50/EW-50: Between [192.168.1.211] and [192.168.1.249]

PC: Between [192.168.1.101] and [192.168.1.150]

Note: After the AE-200 IP address is changed, the AE-50/EW-50 power will be reset.

- (3) Enter [255.255.255.0] in the [Subnet Mask] field (only when the IP address is [192.168.1.*]).
Note: If [255.255.255.0] is entered, set the IP addresses of all AE-50 units to [192.168.1.*].
- (4) When monitoring the system remotely or using e-mail function via a dial-up router, enter the router IP address in the [Gateway] field.
Leave the [Gateway] field blank when not connecting a dial-up router.
[192.168.1.254] is recommended for use as the IP address of the dial-up router. Refer to the dial-up router instruction manual for details of how to set the IP address.
Note: [192.168.1.254] is recommended for use as the IP address of the dial-up router. Refer to the dial-up router instruction manual for details of how to set the IP address.
Note: The use of a dial-up router with no modem requires a modem (for analog or ISDN) to be connected between the router and the public phone line.

Settings for when connecting one or more AE-50/EW-50 controllers



- (1) Select [1], [2], [3], or [4] in the [Controller] section to make settings for each AE-50/EW-50.
- (2) Enter the IP address of the AE-50/EW-50 that is connected to the AE-200 in the [Dstn IP address] field.
A message that indicates that the connection information of the AE-50/EW-50 is being collected will appear for a few minutes.

Note: AE-50/EW-50 will not operate properly and the AE-50/EW-50 software version will not appear if the entered address does not match the ones that have been set on the AE-50/EW-50.

(2) LAN1 settings for connecting the AE-200/AE-50 to an existing LAN

- (1) When connecting the AE-200/AE-50 to an existing LAN, consult the system administrator to decide the IP addresses, subnet mask, and gateway addresses.

(3) LAN2 settings for connecting the AE-200/AE-50 to a dedicated LAN

- (1) Do not use the LAN2 port.
Note: Change the LAN2 IP address only when the LAN1 IP address is required to be set to [192.168.2.1].

(4) LAN2 settings for connecting the AE-200/AE-50 to an existing LAN

- (1) Do not use the LAN2 port.
Note: Change the LAN2 IP address only when the LAN1 IP address is required to be set to [192.168.2.1].

[2] LAN2 Settings

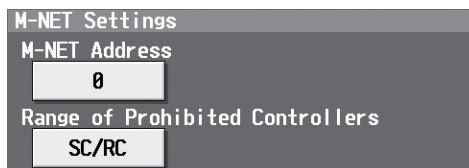
LAN2 port is exclusively used for BACnet[®] function.

For how to make BACnet[®] function settings, refer to the Instruction Book (BACnet[®] function).

Note: An IP address set using LAN1 should not be used as a LAN2 IP address.

[3] M-NET Settings

Note: Make the M-NET settings only on the AE-200.



M-NET Settings	
M-NET Address	0
Range of Prohibited Controllers	SC/RC

- (1) Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.
- (2) Enter [0] in the [M-NET Address] field (unless otherwise specified).
- (3) Select [SC/RC] to prohibit the operation from both the sub system controllers and the remote controllers. Select [RC Only] to prohibit the operation only from the remote controllers.

[4] External Input Setting

Using the external signal input function, the following types of collective operations can be performed for all connected air conditioning units: Demand level, Emergency stop, ON/OFF operation, and Prohibit/Permit local remote controller operation.

A separately-sold external input/output adapter (PAC-YG10HA-E) is required.

Note: Make the M-NET settings only on the AE-200.

Note: A separate license is required to activate the Peak Cut control using the external input function. Make sure that the required license has properly been registered on the [License] screen. (Refer to section 4-5 "License registration for optional functions" for details.)



External Input Setting	
ON/OFF/Prohibit/Permit (Pulse signal)	

- (1) Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.
- (2) Select [Demand (Level signal)/Not in use], [Emergency Stop (Level signal)], [ON/OFF (Level signal)], or [ON/OFF/Prohibit/Permit (Pulse signal)]. Refer to the Installation Manual for details.

Only when an AE-50/EW-50 is connected

By using a communication error detection function, communication errors between AE-200/AE-50/EW-50 can be displayed on the AE-50's LCD via AE-200.

The screenshot shows the 'Communication error detection' screen on the AE-50's LCD. The screen is divided into several sections: a top navigation bar with 'Initial Settings', 'Function1', and 'Function2'; a sub-navigation bar with '2', 'Advanced', 'Network', and 'Groups'; a controller selection bar with 'Controller', 'Exp1', and 'Mitsubishi'; and a main table for 'Communication error detection'. The table has two columns: 'IP Address' and 'Communication error'. The first row shows '192.168.1.1' and a 'Detect' button. Below the table are navigation arrows and a '2/2' indicator. At the bottom right is a 'Save Settings' button.

	IP Address	Communication error
1	192.168.1.1	Detect
2		
3		
4		
5		

IP address of AE-200

Detect communication error
Select whether "Detect" or "Do not detect" communication error for each IP address.

Save Settings
Touch to save the changes made.

Touch to go to the previous page.

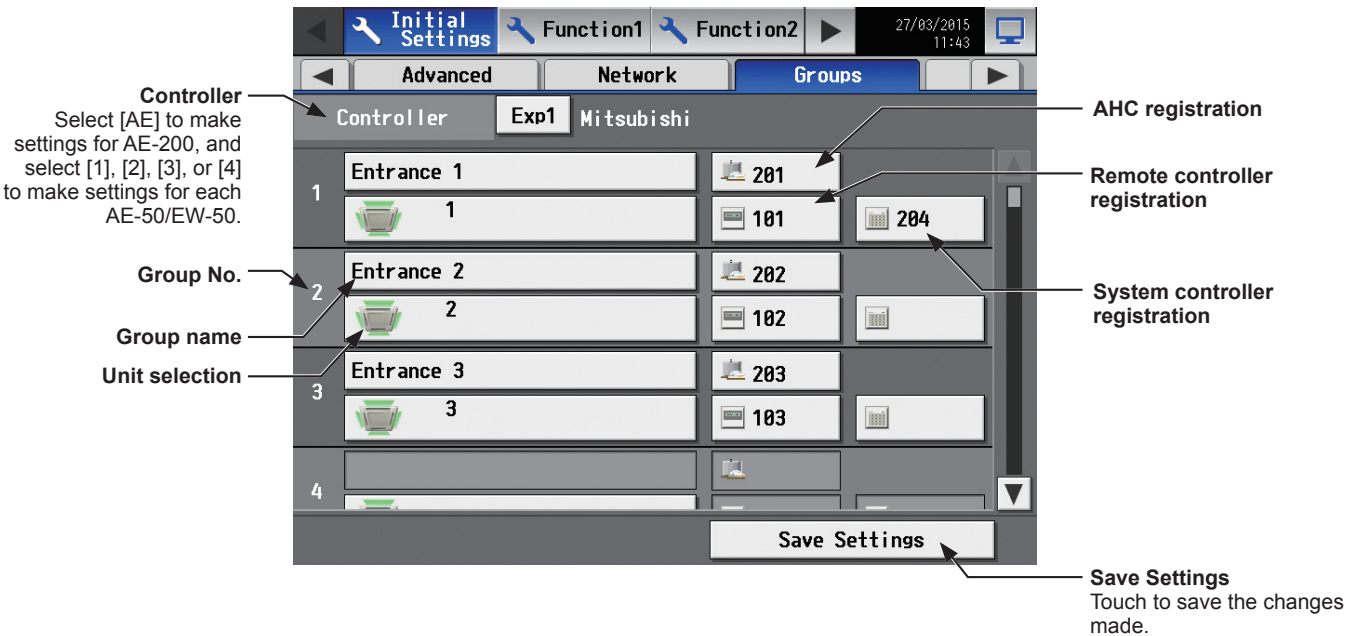
5-1-6. Groups

Touch [Initial Settings] in the menu bar, and then touch [Groups].
Register the groups of air conditioning units, LOSSNAY units (ventilators), Air To Water (PWFY) units, AHC, HWHP (CAHV, CRHV) units, or general equipment to be connected to the AE-200/AE-50/EW-50, and then touch [Save Settings].

- Note: Some settings may not be accessible if logged in as a building manager.
- Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.
- Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

Important

- Group settings for the AE-50/EW-50 must be made with the AE-50/EW-50 properly connected to ensure proper settings. Those settings made without the connection of AE-50/EW-50 will not be reflected.
- The units connected to AE-200 cannot be grouped together with the units connected to AE-50/EW-50.



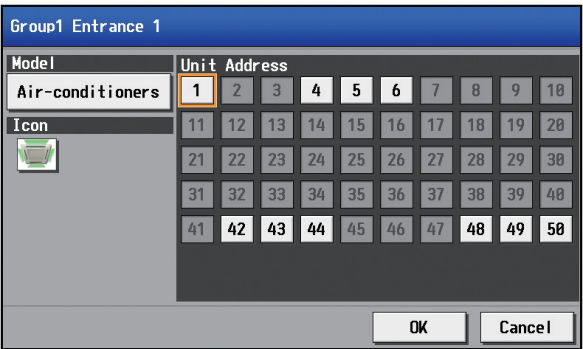
[1] Setting group names

- (1) Touch the "Group name" button to display the keyboard. Enter the group name in 20 alphanumeric or symbol characters or less.
Note: The following characters cannot be used: <, >, &, ", or '.

[2] Registering air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units to a group

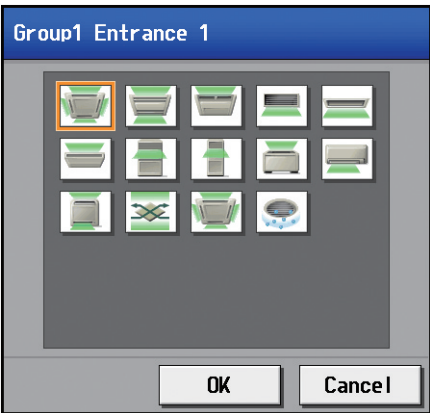
- (1) To register air conditioners, Air To Water (PWFY) units, LOSSNAY units, and HWHP (CAHV, CRHV) units to each group, touch the “Unit selection” button under the target group name. A screen to select the units will appear.

Select the group type in the [Model] section, and select the address numbers of the units to be registered. The selected unit addresses will appear with an orange frame. Touch again to deselect.



- Note: Each group can contain up to 16 air conditioners.
- Note: Air conditioners, Air To Water (PWFY) units, LOSSNAY units, and HWHP (CAHV, CRHV) units cannot be combined with general equipment in one group. To change the registered units to air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units in the group in which general equipment is registered, unregister the general equipment first.
- Note: The addresses of the units that have been registered to other groups will appear with a gray background and cannot be selected.

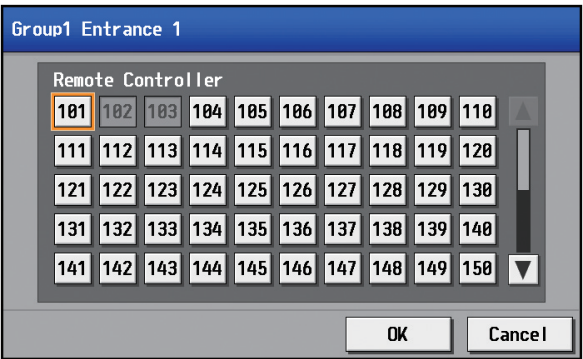
- (2) To change the unit icon to be used, touch the icon. A screen to select an icon will appear. Select an icon to be used, and touch [OK].



[3] Registering remote controllers to a group

- (1) To register remote controllers to a group, touch the “Remote controller registration” button under the target group name. A screen to select the units will appear.

Select the address numbers of the remote controllers to be registered. The selected unit addresses will appear with an orange frame. Touch again to deselect.



- Note: Each group can contain up to two remote controllers.
- Note: Each group can contain up to four remote and system controllers combined.
- Note: MA remote controllers do not need to be registered to a group.

[4] Registering system controllers to a group

- (1) To register system controllers to a group, touch the “System controller registration” button under the target group name. A screen to select the units will appear.

Select the address numbers of the system controllers to be registered.

The selected unit addresses will appear with an orange frame. Touch again to deselect.

Note: Each group can contain up to four remote and system controllers combined.

Group1 Entrance 1

System Controller

0	201	202	203	204	205	206	207	208	209	210
	211	212	213	214	215	216	217	218	219	220
	221	222	223	224	225	226	227	228	229	230
	231	232	233	234	235	236	237	238	239	240
	241	242	243	244	245	246	247	248	249	250

OK Cancel

[5] Registering AHC to a group

- (1) To register AHC to a group, touch the “AHC registration” button under the target group name. A screen to select the unit will appear.

Select the address number of the AHC to be registered.

The selected unit address will appear with an orange frame. Touch again to deselect.

Note: Each group can contain one AHC.

Note: AHC must be registered to a group in which air conditioners are registered. Do not register AHC to a group in which Air To Water (PWFY) units, LOSSNAY units, HWHP (CAHV, CRHV) units, or general equipment (via PAC-YG66DCA) are registered.

Group1 Entrance 1

AHC

201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250

OK Cancel

[6] Registering general equipment to a group

- (1) To register general equipment to a group, touch the “Unit selection” button under the target group name. A screen to select the units will appear.

Select [General Equipment (via PAC-YG66DCA)] in the [Model] section, and select the unit address of the DIDO controller (PAC-YG66DCA) that is connected to the general equipment to be registered.

The selected number will appear with a yellow-green frame.

Model	Unit Address
General Equipment (via PAC-YG66DCA)	1 2 3 4 5 6 7 8 9 10
	11 12 13 14 15 16 17 18 19 20
	21 22 23 24 25 26 27 28 29 30
	31 32 33 34 35 36 37 38 39 40
	41 42 43 44 45 46 47 48 49 50
Icon	
Allow Operations	
No operations (Monitor only)	
Monitor	
Output status	
Contact Points	1 2 3 4 5 6

Then, select contact points to which the general equipment are connected, and touch the address assigned to another unit to register the first selected item to the group. The yellow-green frame will change to an orange frame. (The item with a yellow-green frame is the currently selected unit, and the ones with an orange frame are the units that are already registered to a group.)

Touch again to deselect.

- Note: Each contact of DIDO controller counts as one unit.
- Note: Each group can contain up to 16 general equipment.
- Note: Up to six general equipment can be registered for each DIDO controller.
- Note: Air conditioners, Air To Water (PWFY) units, LOSSNAY units, and HWHP (CAHV, CRHV) units cannot be combined with general equipment in one group. To change the registered units to general equipment in the group to which air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units are registered, unregister the air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units first.
- Note: General equipment groups cannot include remote controllers or system controllers.

- (2) To change the unit icon to be used, touch the icon under the [Icon] section. A screen to select an icon will appear. Select an icon to be used, and then touch [OK].

- (3) In the [Allow Operations] section, make the setting to allow or disallow operation. Select [In batch and on individual group] to allow the operator to turn on or off the general equipment collectively or by the groups. Select [On individual group] to allow the operator to turn on or off the general equipment by the groups. Select [No operations (Monitor only)] to disallow the operator to turn on or off the general equipment.
- (4) In the [Monitor] section, select which status will be used to reflect the units' ON/OFF status to the unit icons on the [Monitor/Operation] menu screen. Select [Output status] to use the status that is sent to the general equipment, and [Input status] to use the status that is sent from the general equipment.

5-1-7. Interlocked LOSSNAY

The ON/OFF status of the LOSSNAY unit can be interlocked with the operation of indoor units. Touch [Initial Settings] in the menu bar, and then touch [Interlock]. Set the interlocking conditions for each AE-200, AE-50, and EW-50, and then touch [Save Settings].

- Note: The Interlocked LOSSNAY settings may not be accessible if logged in as a building manager.
- Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.
- Note: The ON/OFF status of the indoor units are not interlocked with the ON/OFF status of the LOSSNAY unit.
- Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

Important

- Interlock settings for the AE-50/EW-50 must be made with the AE-50/EW-50 properly connected to ensure proper settings. Those settings made without the connection of AE-50/EW-50 will not be reflected.
- The interlock settings between the units connected to the AE-200 and the AE-50/EW-50, as well as between the units connected to different AE-50 controllers, cannot be made.

Controller
Select [AE] to make settings for AE-200, and select [1], [2], [3], or [4] to make settings for each AE-50/EW-50.

Interlocked LOSSNAY unit registration
Touch to display the screen for registering the LOSSNAY unit.

Interlocked indoor unit registration
Touch to display the screen for registering the indoor units.

Save Settings
Touch to save the changes made.

- (1) Touch the “Interlocked LOSSNAY unit registration” button. A screen to select the units will appear. Select the address number of the LOSSNAY unit to be registered. The selected unit address will appear with an orange frame. Touch again to deselect.

Inter locked LOSSNAY

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

OK

Cancel

- (2) Touch the “Interlocked indoor unit registration” button. A screen to select the units will appear. Select the address numbers of the indoor units to which the selected LOSSNAY unit will be interlocked. The selected unit addresses will appear with an orange frame. Touch again to deselect.

Note: Each LOSSNAY unit can be interlocked with up to 16 indoor units.

Indoor Units

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

OK

Cancel

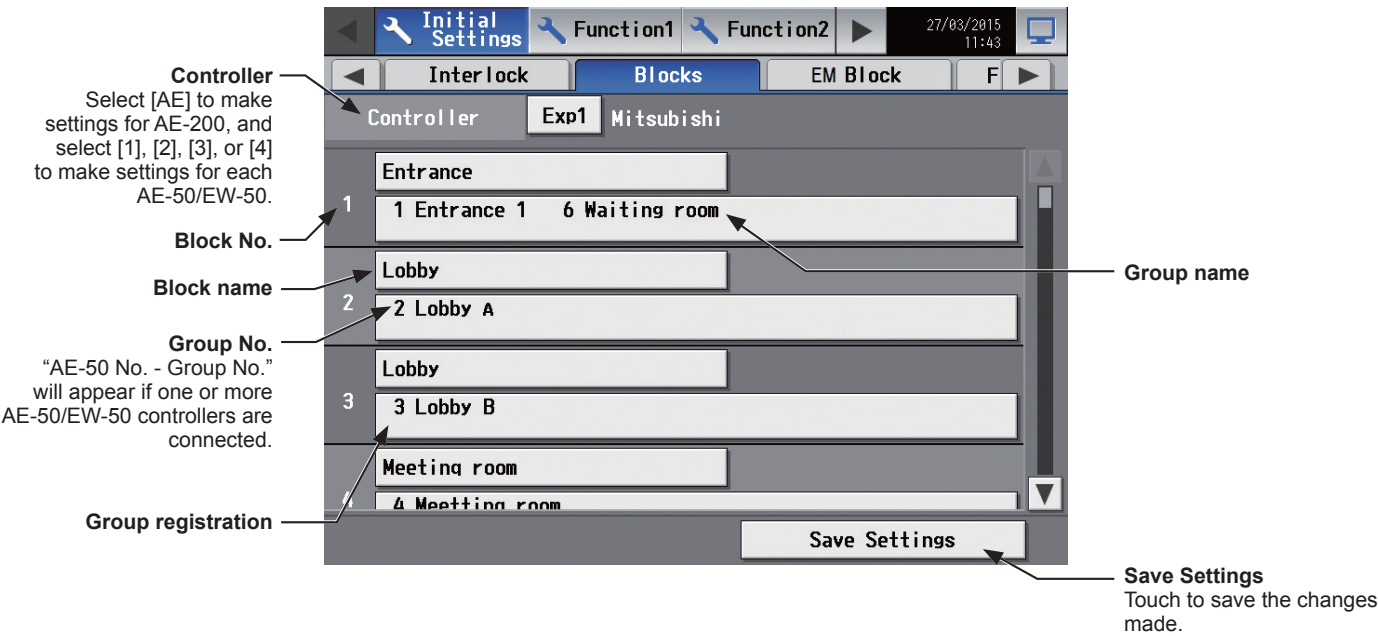
5-1-8. Blocks

By making block settings, multiple groups in a given block can be collectively monitored or operated.
Touch [Initial Settings] in the menu bar, and then touch [Blocks]. Register the groups to each block, and then touch [Save Settings].

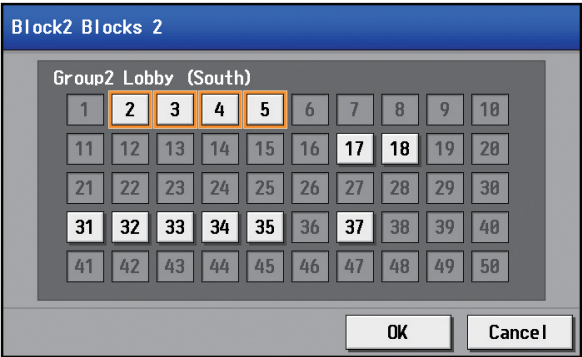
- Note: Some settings may not be accessible if logged in as a building manager.
- Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.
- Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

Important

- Block settings for the AE-50/EW-50 must be made with the AE-50/EW-50 properly connected to ensure proper settings. Those settings made without the connection of AE-50/EW-50 will not be reflected.



- Touch the "Block name" button to display the keyboard. Enter the group name in 20 alphanumeric or symbol characters or less.
Note: The following characters cannot be used: <, >, &, ", or '.
- Touch the "Group registration" button of the target block. A screen to select the groups will appear.
Touch the group numbers to be registered. (The name of the group that was touched last will appear.)
The selected group numbers will appear with an orange frame. Touch again to deselect.
Note: HWHP (CAHV, CRHV) unit groups cannot be registered to a block.

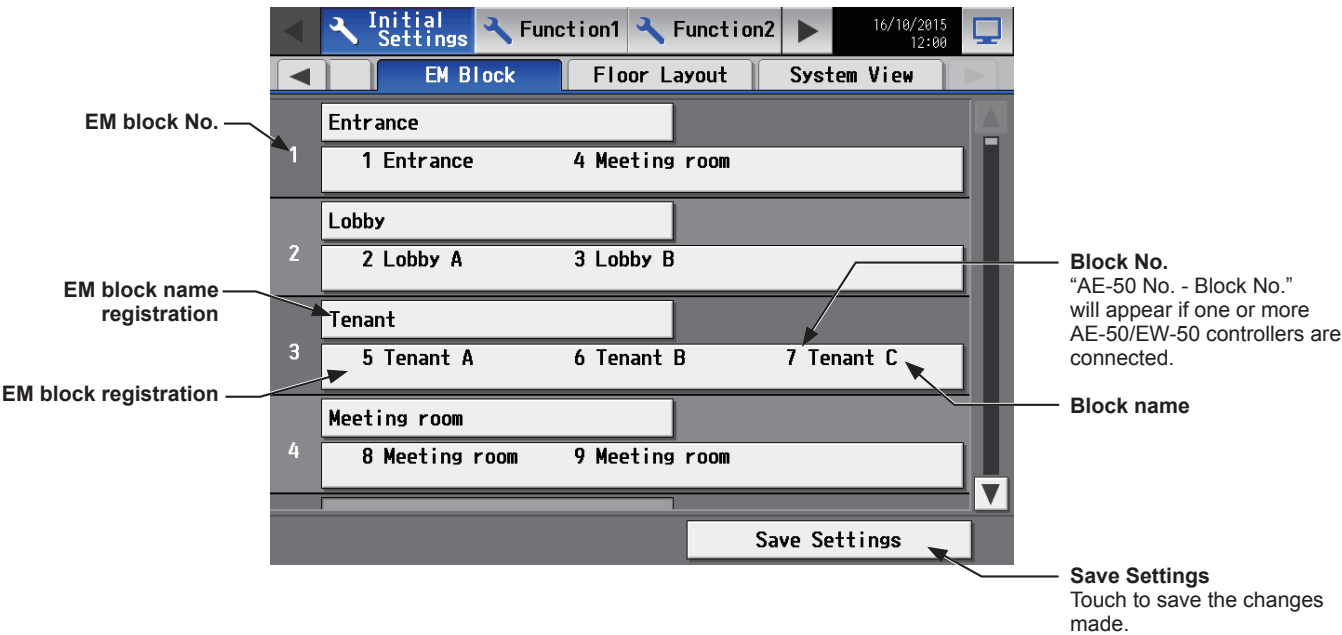


5-1-9. EM Blocks

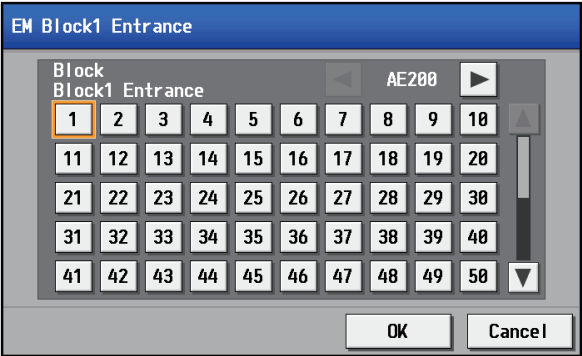
Carrying out EM block (energy management block) settings enables batch status monitoring and operation of multiple blocks covering AE-200/AE-50/EW-50.

Touch [Initial Settings] in the menu bar, and then touch [EM Blocks]. Register the blocks to each EM block, and then touch [Save Settings].

Note: Some settings may not be accessible if logged in as a building manager.



- (1) Touch the "EM block registration" button of the target EM block. A screen to select the blocks will appear.



- (2) Switch to the controllers ([AE200], [Exp1] through [Exp4]) to which the blocks to register belong.
- (3) Touch the block numbers to be registered. (The name of the block that was touched last will appear.) The selected block numbers will appear with an orange frame. Touch again to deselect.
Note: To select a LOSSNAY unit that is interlocked with indoor units, touch the ▼ button and select an address number.
Note: HWHP (CAHV, CRHV) unit groups cannot be registered to a block.
- (4) Touch the "EM block name registration" button to display the keyboard. Enter the EM block name in 20 alphanumeric or symbol characters or less.
Note: The following characters cannot be used: <, >, &, ", or '.

5-1-10. Floor Layout

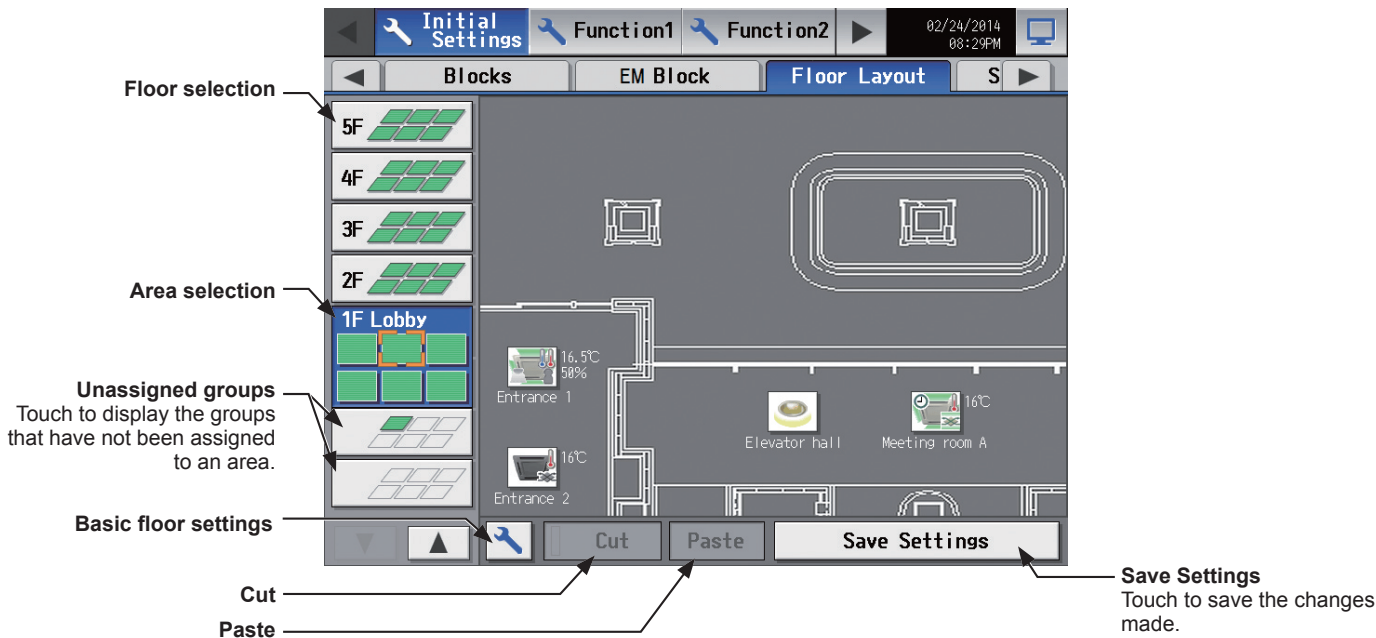
The floor layout on the [Floor] display under the [Monitor/Operation] menu can be changed, and the display position of the groups on the floor can be changed.

Touch [Initial Settings] in the menu bar, and then touch [Floor Layout]. All unit groups that are under the control of both AE-200 and AE-50 can be displayed on the Floor Layout screen of the AE-200.

- Note: Some settings may not be accessible if logged in as a building manager.
- Note: Up to 30 groups can be assigned to each area.

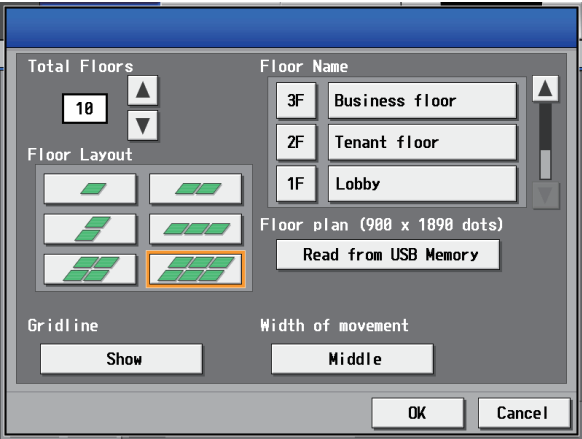
Important

- Although the Floor Layout settings can also be made on the AE-50's LCD, only the unit groups that are under the control of AE-50 controllers can be set on the AE-50's LCD.
- In independent EW-50 systems, setting of the floor layout using the Initial Setting Tool is possible. (Refer to section 6-5 "Floor Settings" for details.)

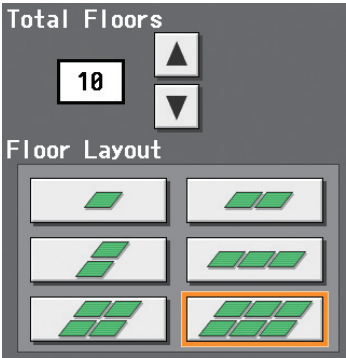


[1] Basic floor settings

- (1) Touch the "Basic floor settings" button to display the basic floor settings screen.



- (2) Touch to set the total number of floors, and select the floor layout to be used.
 - Note: If the total number of floors is set to "--," none of the floor layouts can be selected.
 - Note: Up to ten floors can be registered.



The display range of the area on the [Floor Layout] screen vary, depending on the selected floor layout.

Floor layout	Display area	Floor layout	Display area

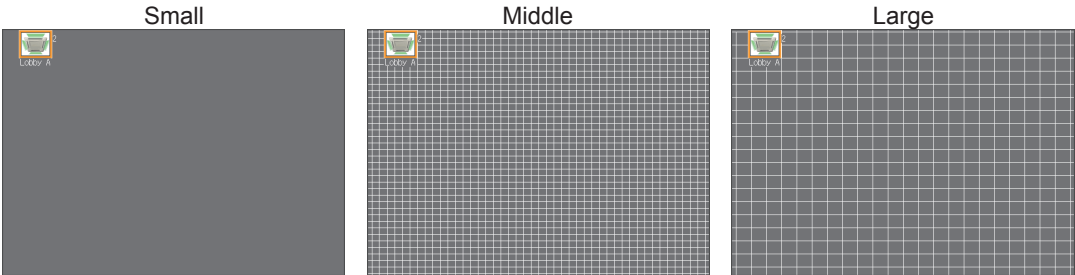
- (3) Touch the “Floor level name” button to display the keyboard. Enter the floor level name in 3 alphanumeric or symbol characters or less.

Then, touch the “Floor name” button to display the keyboard. Enter the floor name in 20 alphanumeric or symbol characters or less.

- (4) To read floor plan files from the USB memory, touch [Read from USB Memory]. Refer to [2] below for the restrictions on the floor plan files to be read.

- (5) To set the width of the gridlines on the floor layout screen, touch [Gridline], and switch between [Do not show] and [Show].

- (6) To change the icon movement width when moving icons on the floor layout screen, touch [Width of movement], and switch between [Small], [Middle], and [Large].



[2] Restrictions on the floor plan files to be read

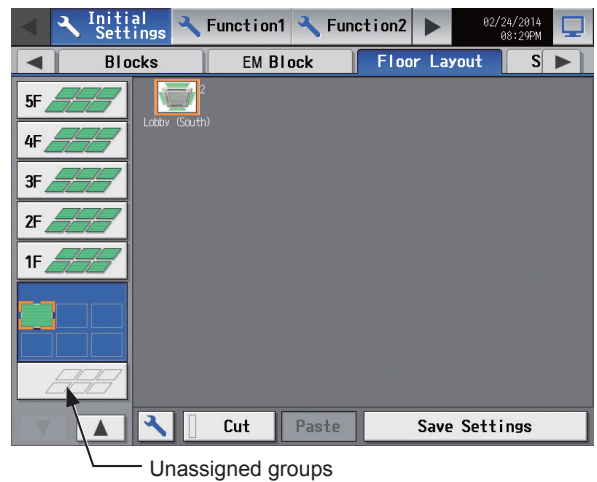
File size	<p>900 (height) × 1890 (width) dots for each floor plan</p> <p>Note: The file size must be 900 (height) × 1890 (width) dots regardless of the display range of the area. (Even when the floor layout shows only one display area, the file size must be 900 (height) × 1890 (width) dots. In this case, create a file plan only in the left top area.)</p>
File format	<p>gif</p> <p>Note: Files that contain extension data (metadata such as XMP, transparent GIF, interlace GIF, animated GIF) cannot be read.</p>

File name	Floor *1	File name	Floor *1	File name																																																																																																																																																																																																																																																																																																																																																																								
	1	floor_01.gif	6	floor_06.gif																																																																																																																																																																																																																																																																																																																																																																								
	2	floor_02.gif	7	floor_07.gif																																																																																																																																																																																																																																																																																																																																																																								
	3	floor_03.gif	8	floor_08.gif																																																																																																																																																																																																																																																																																																																																																																								
	4	floor_04.gif	9	floor_09.gif																																																																																																																																																																																																																																																																																																																																																																								
	5	floor_05.gif	10	floor_10.gif																																																																																																																																																																																																																																																																																																																																																																								
*1 The floor numbers in the table are not the actual floor level name, but the number counted from the bottom on the [Floor Layout] screen. Even if the floor level name is set to “15F,” the file name will be “floor_01.gif” when the floor is the first floor in the setting.																																																																																																																																																																																																																																																																																																																																																																												
File location	In the root folder of the USB memory																																																																																																																																																																																																																																																																																																																																																																											
Available colors (RGB) to be used in the 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* Use the colors in the table above, otherwise the floor plan will appear in different colors.																																																																																																																																																																																																																																																																																																																																																																												
* The default background color is RGB [103, 103, 103].																																																																																																																																																																																																																																																																																																																																																																												

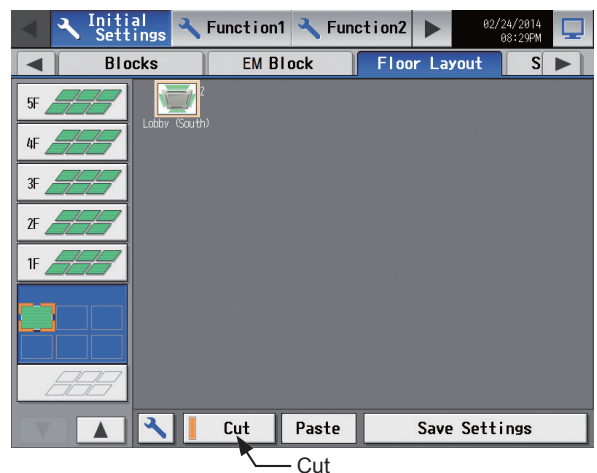
[3] Moving a group to other areas

- (1) On the [Floor Layout] screen, touch the group icon to be moved. The selected group icon will appear with an orange frame.

Note: When the "Unassigned groups" button is touched, groups that have not been assigned to any area will appear in the order of their group numbers. (Up to 30 groups will appear in an area.)

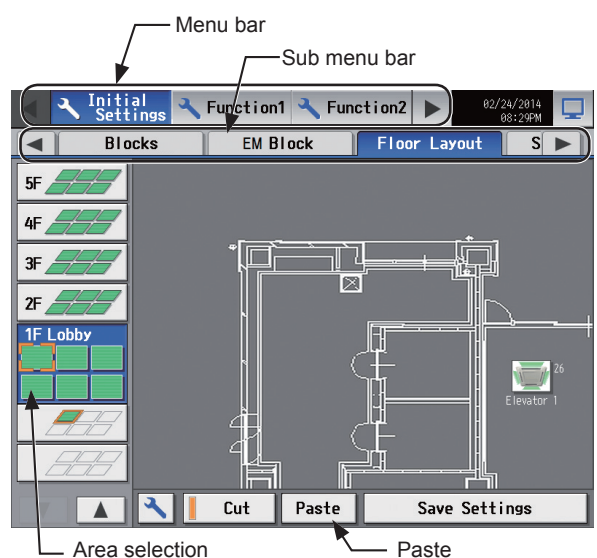


- (2) Touch [Cut].
The orange frame will change to a pale orange frame.



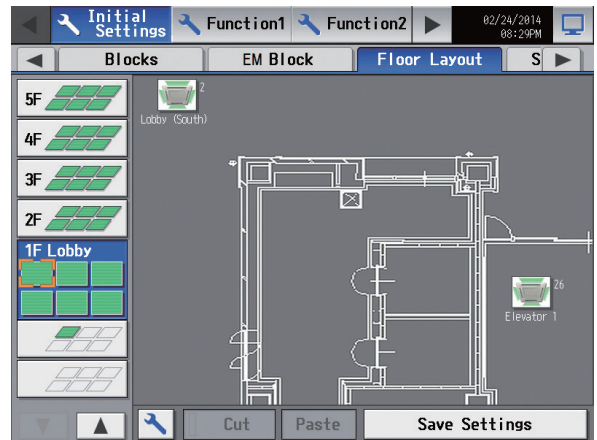
- (3) With the pale orange frame being displayed, select the area to move the group to, and touch [Paste] to move the selected group to the selected area.

Note: A popup message will appear when you touch the item in the menu bar or sub menu bar to see other screens without the changes being saved. Note that the changes will NOT be saved unless the [Save Settings] button is pressed.



- (4) Touch [Save Settings].

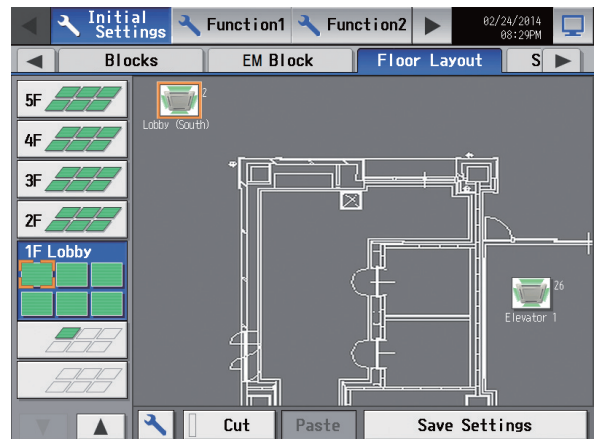
Note: To move the pasted group icon within the area, refer to [4] "Moving a group within the area" below.



[4] Moving a group within the area

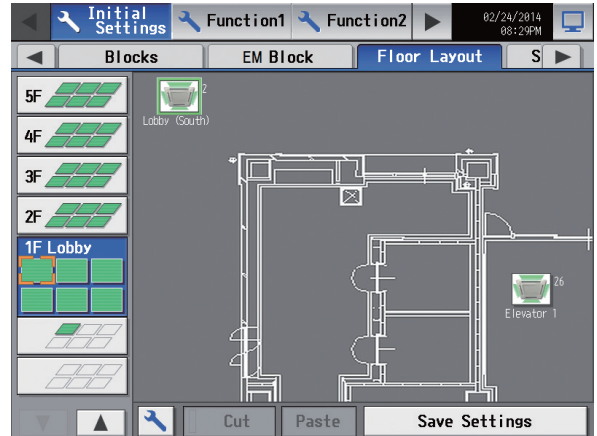
Note: It is recommended to use a commercially available touch pen.

- (1) On the [Floor Layout] screen, touch the group icon to be moved. The selected group icon will appear with an orange frame.

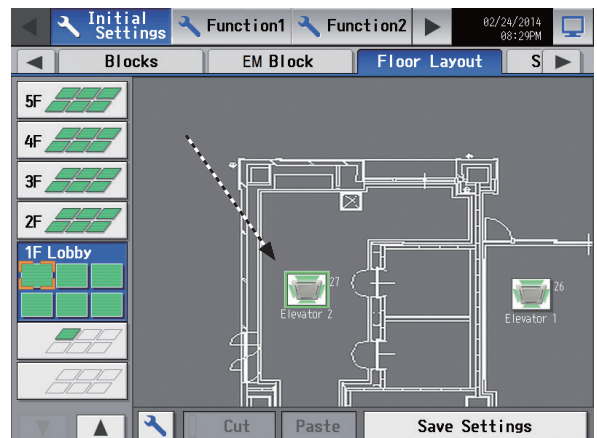


- (2) Touch and hold the group icon for one second. The orange frame will change to a yellow-green frame.

Note: The group icons cannot be moved on the screen that appears when the "Unassigned groups" button.



- (3) Drag and drop the icon to move anywhere within the area.



- (4) Touch [Save Settings].

5-1-11. System View

Refrigerant system information (connection information of outdoor and indoor units) can be checked for each AE-200, AE-50, and EW-50.

Touch [Initial Settings] in the menu bar, and then touch [System View].

Note: This screen shows the information of the units that have been registered to a group and have started up successfully.

Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to display the information for each AE-200, AE-50, and EW-50 individually.

Controller

Select [AE] to display the information for AE-200, and select [1], [2], [3], or [4] to display the information for each AE-50/EW-50.

Outdoor unit address

"Unit address of the main unit (Unit address of the sub unit)" will appear.

Initial Settings

Function1

Function2

27/03/2015 11:43

EM Block

Floor Layout

System View

Controller

Exp1

Mitsubishi

Outdoor Unit (Sub unit)	Indoor Units
51 (52)	1 2 3 7 8 9 10
61 (62)	11 12 13 14 15 16
67	17
68	18
73	19 20
74	27
95	45 46

Indoor unit address

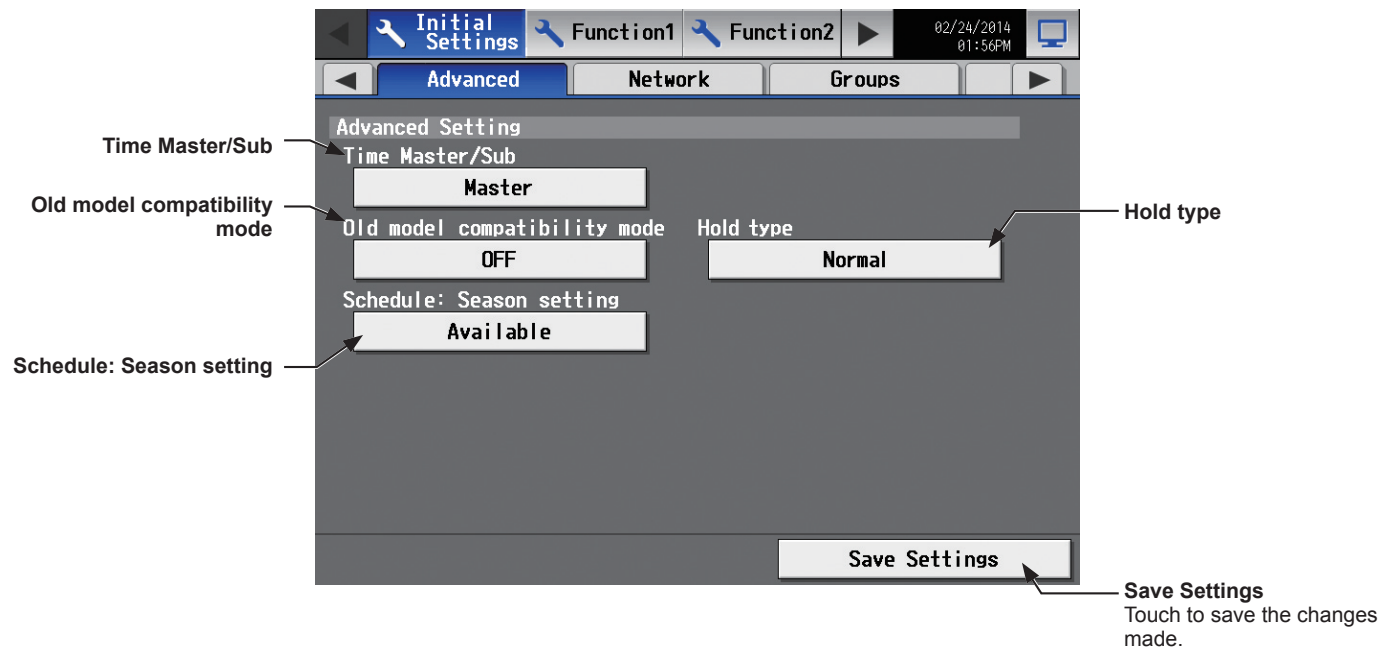
Unit address of the indoor units that are connected to the outdoor unit will appear. Air to Water (PWFY) units will appear, and LOSSNAY and HWHP (CAHV, CRHV) units will not appear.

- (1) Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to check the system information for each AE-200, AE-50, and EW-50 individually. (Only on the AE-200's LCD)

5-1-12. Advanced settings

Touch [Initial Settings] in the menu bar, and then touch [Advanced].
Make necessary settings, and then touch [Save Settings].

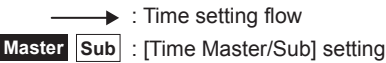
Note: The Advanced settings may not be accessible if logged in as a building manager.



[1] Time Master/Sub

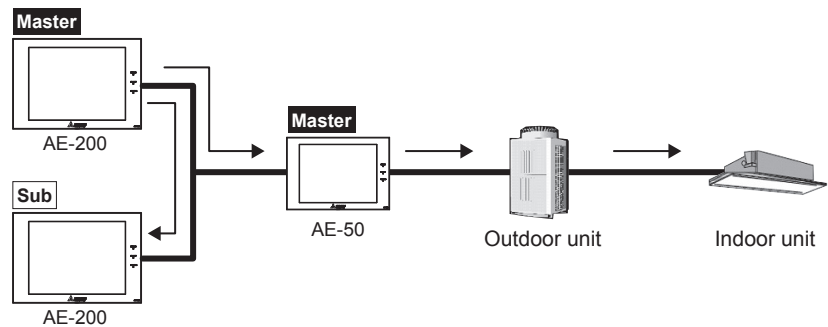
The default setting is [Master].
This setting is required to change only for a system with multiple AE-200 controllers connected to an AE-50 controller (System configuration (1) below).

System configuration



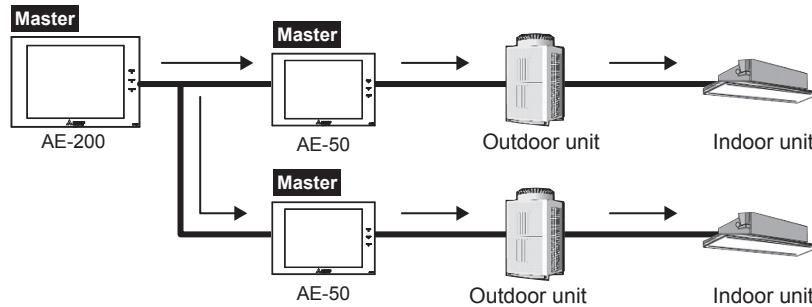
(1) System with multiple AE-200 controllers connected to an AE-50 controller

Set to [Master] on only one of the AE-200 controllers in a system.



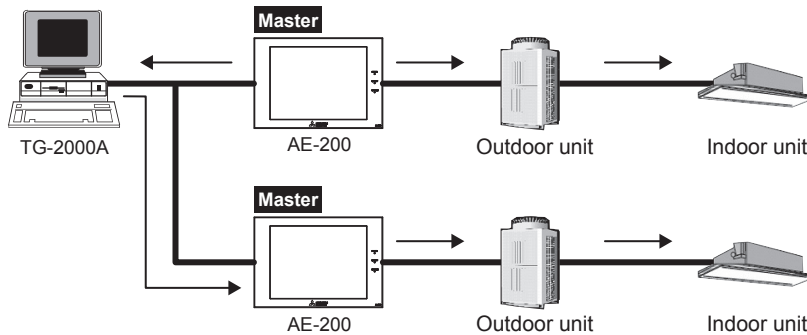
(2) System with an AE-200 controller connected to AE-50 controllers

Leave the default setting [Master] as it is.



(3) System with a high-level system (i.e., TG-2000A) connected to AE-200 controllers

Leave the default setting [Master] as it is.



[2] Old model compatibility mode

In the [Old model compatibility mode] section, select [ON] or [OFF].

When [ON] is selected, the Dual set point function and Prohibit Remote Controller function (Timer, Air Direction, Fan Speed) cannot be used.

Note: If the setting is changed, the controller will reboot.

[3] Hold type

The Hold function is a function to disable the operations that were scheduled for air conditioning unit groups.

If the setting for [Hold] is set to [ON] on the operation settings screen under the [Monitor/Operation] menu and the [Hold type] on the screen above is set to [Forced], the [Hold] setting can be cancelled only from the AE-200/AE-50.

If the [Hold type] is set to [Normal], the [Hold] setting can be cancelled from AE-200/AE-50, other system controllers, or remote controllers.

Note: The Hold function can be used on the AE-200A/AE-50A, but not on the AE-200E/AE-50E.

Note: The Hold function cannot be used on general equipments.

Note: The setting [Forced] will not be effective on Air To Water (PWFY) unit groups, LOSSNAY unit groups, HWHP (CAHV, CRHV) unit groups, general equipment groups, and air conditioning unit groups that do not support the Hold function (i.e., Mr. Slim M-Series/P-Series indoor units). If the setting for [Hold] is set to [ON] on those unit groups on the operation settings screen and the [Hold type] on the screen above is set to [Forced], the setting [Normal] will be effective.

[4] Schedule: Season setting

In the [Schedule: Season setting] section, select [Available] to enable the seasonal settings of the weekly schedules and [Not Available] to disable. Unless otherwise specified, leave the default setting [Available] as it is.

Note: The settings made on this screen on the AE-200 will be reflected on this screen on the AE-50.

5-2. Function1

5-2-1. Peak Cut (Energy-save control function)

According to the selected Peak Cut method, the AE-200/AE-50/EW-50 obtains the demand level or the electric energy values to determine the control level, and operates outdoor units and blocks of indoor units below the specified maximum capacity that corresponds to the control level.

Touch [Functions 1] in the menu bar, and then touch [Peak Cut] to access the Peak Cut control settings screen. Make necessary settings, and then touch [Save Settings].

Important

- The amount of electricity that is actually used may exceed the maximum power demand due to unexpected problems such as controller malfunctions or broken transmission cables. Mitsubishi Electric will not be responsible for exceeding the maximum power demand.
- An energy-save control can be performed, regardless of the electric energy consumption status. To perform an energy-save control at the same level (control level 0) at all times, make the control settings for control level 0 for given outdoor and indoor units. (In this case, Peak Cut method setting is not necessary.)

Note: Peak Cut settings using the LCD are possible on the AE-200/AE-50 from Ver. 7.23 onwards.

Note: After completing the settings, perform a test run and confirm proper connections of equipment before using the Peak Cut function.

Note: A separate license is required to use the Peak Cut function. Make sure that the required license has properly been registered on the [License] screen. (Refer to section 4-5 "License registration for optional functions" for details.) If the license is not registered, the settings can be saved, but the function will not be available until the license is registered. When the license is not registered, a message "License not registered" will appear at the left bottom of the screen.

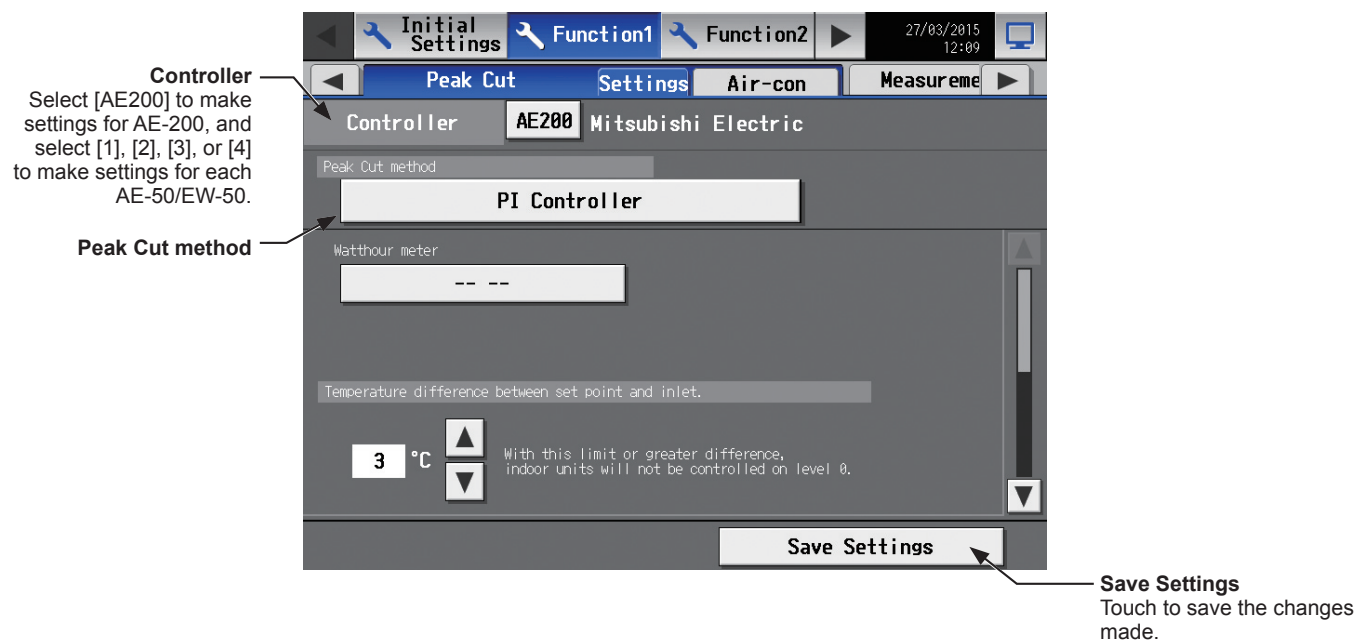
Note: Some settings may not be accessible if logged in as a building manager.

Note: Peak Cut control cannot be performed on DIDO controller (PAC-YG66DCA), AHC, or Air To Water (PWFY) unit.

Note: The Peak Cut control of indoor units is performed per block. Be sure to make block settings to use the Peak Cut function.

Note: The Peak Cut control settings between the outdoor and indoor units connected to the AE-200, AE-50, and EW-50, as well as between the units connected to different AE-50/EW-50 controllers, cannot be made.

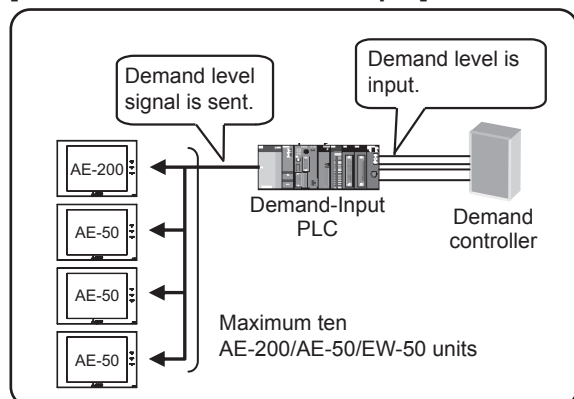
Note: Do not make the Peak Cut control settings for heat pump models of outdoor units or some types of outdoor units. For details, refer to section 5-2-1-2 (2) "Control details for outdoor units (All Peak Cut methods)".



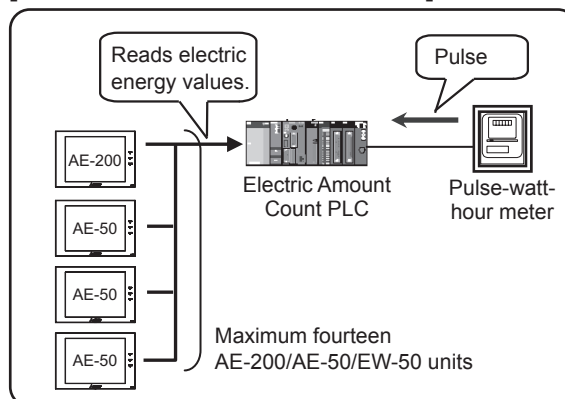
5-2-1-1. Peak Cut method

Touch the [Settings] tab in the Peak Cut control settings screen.

[PLC Software for Demand Input]

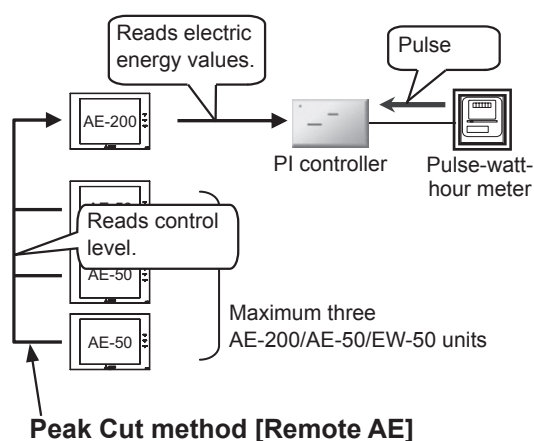


[Electric Amount Count Software]

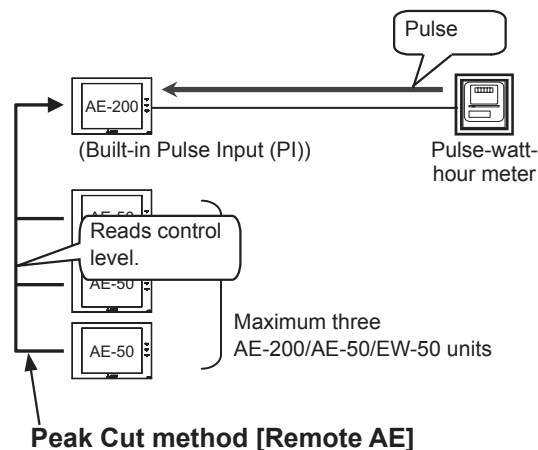


[PI Controller]

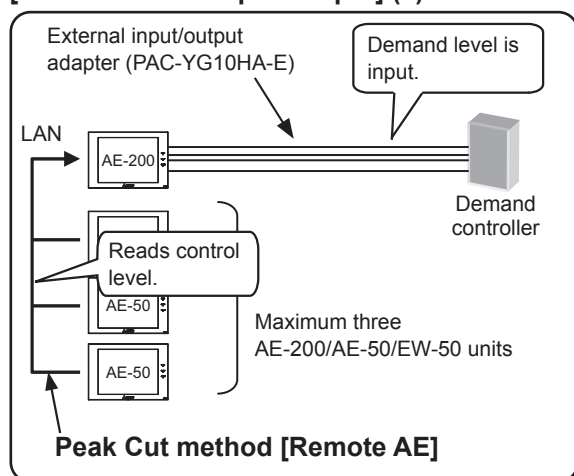
<When a PI controller (PAC-YG60MCA) is used>



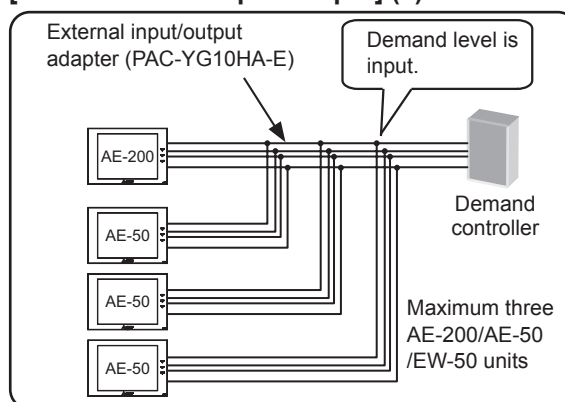
<When a built-in Pulse Input (PI) is used>



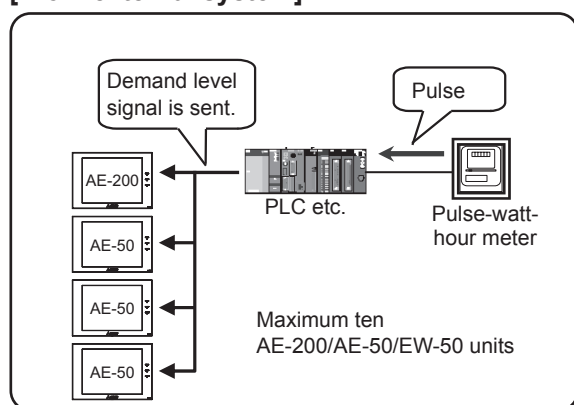
[External Contact point input] (1)



[External Contact point input] (2)

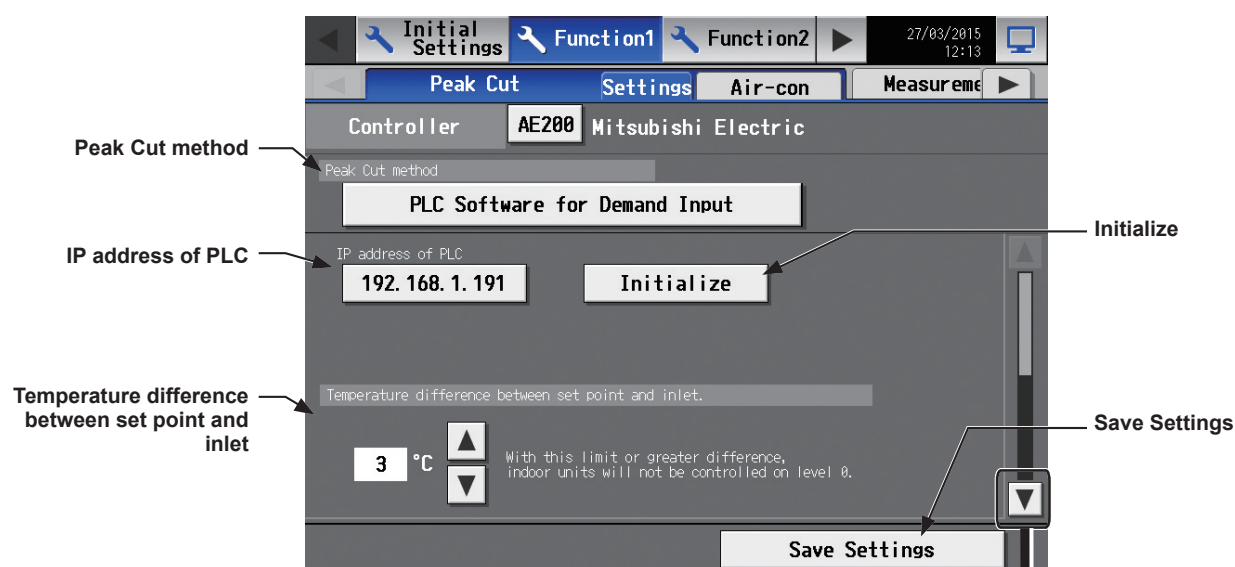


[From external system]

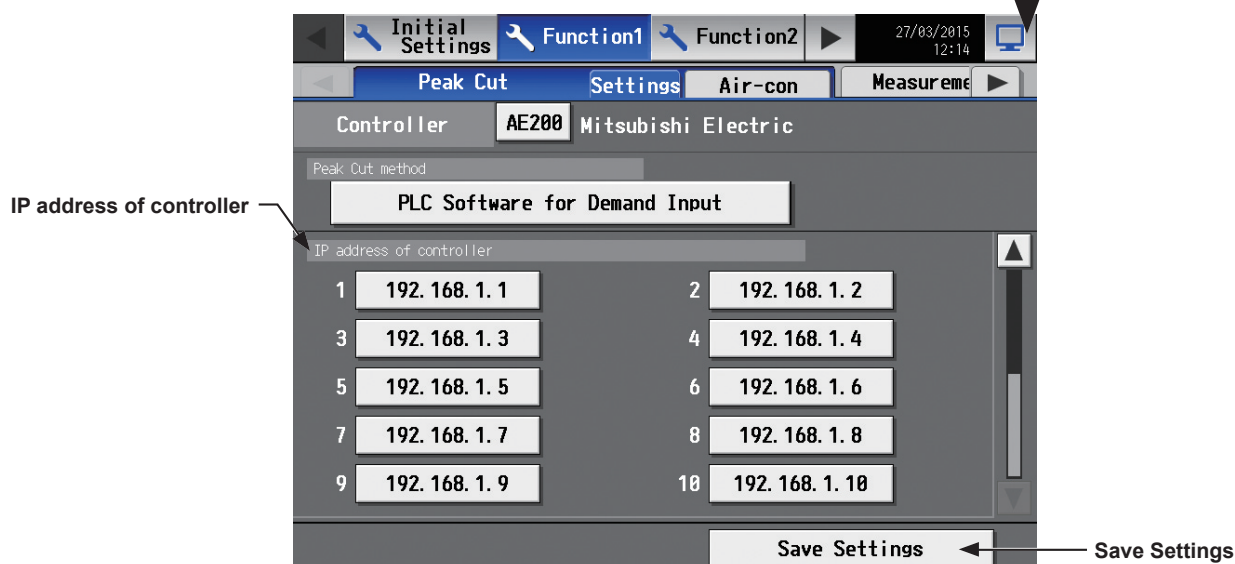


(A) When the Peak Cut method [PLC Software for Demand Input] is selected

1st page



2nd page



(1) In the [IP address of PLC] field, enter the IP address of the Demand-Input PLC.

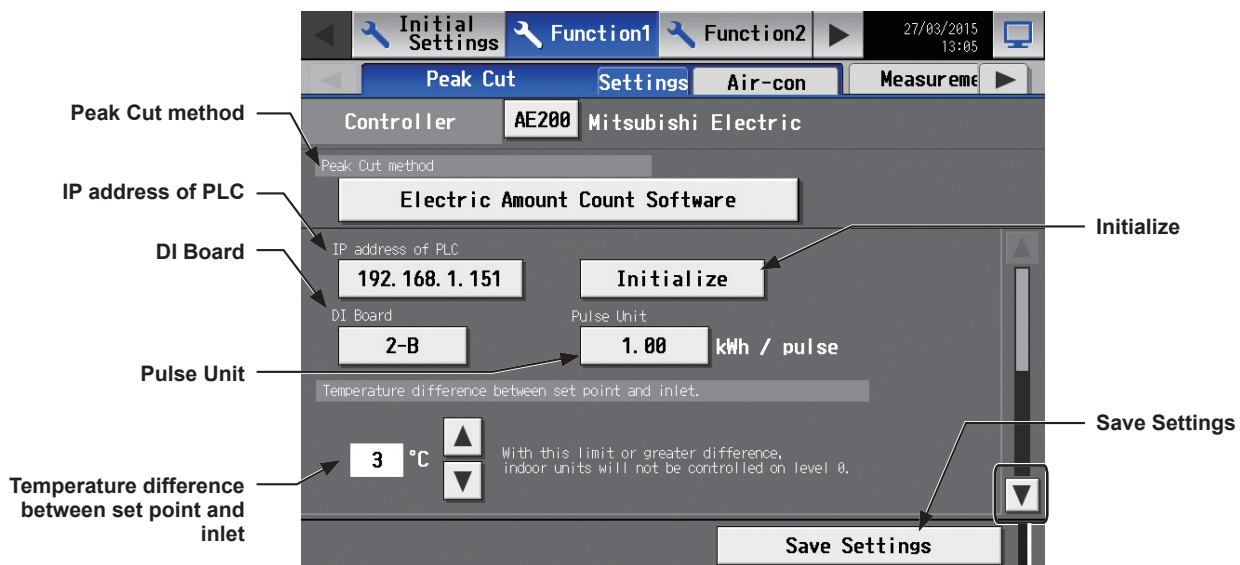
(2) When using the Demand-Input PLC for the first time, initialize its internal memory.

Note: Do not initialize the Demand-Input PLC after the operation has begun, for it will reset all settings to the default settings and will not properly perform the Peak Cut control.

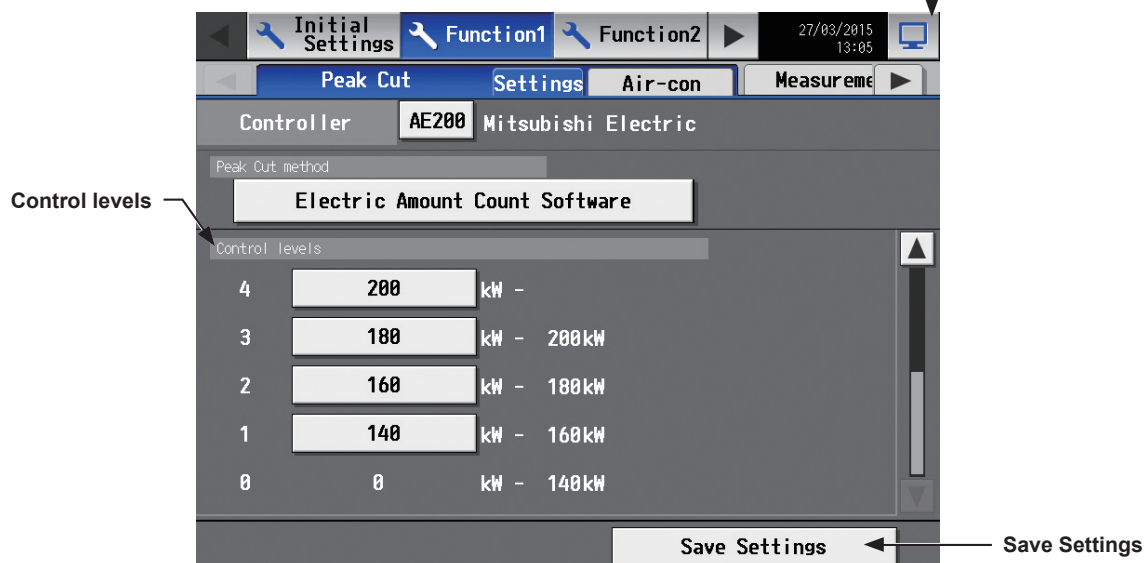
- (3) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.
- Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.
- (4) In the [IP address of controller] field, enter the IP addresses of the AE-200/AE-50/EW-50 units to which the demand level signal is sent. Up to 10 IP addresses can be registered.

(B) When the Peak Cut method [Electric Amount Count Software] is selected

1st page



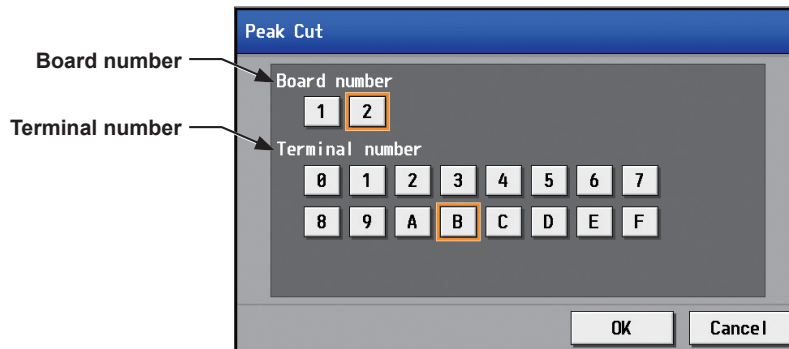
2nd page



- (1) In the [IP address of PLC] field, enter the IP address of the Electric Amount Count PLC.
- Note: Each PLC can be registered to up to ten AE-200/AE-50 units.
- Note: This setting is required for each AE-200/AE-50.
- (2) When using the Electric Amount Count PLC for the first time, initialize the internal memory.
- Note: Do not initialize the Electric Amount Count PLC after the operation has begun, for it will reset all settings to the default settings and will not properly perform the Peak Cut control.

- (3) Touch the [DI Board] or [Pulse Unit] button to open the window to select the DI board number to which the watt-hour meter is connected, and the terminal number. If the watt-hour meter is connected to terminal 2 on a DI board 1, select 1-2.

Note: Select a DI board number 1 or 2, and select a terminal number/code between 0 and F.



- (4) In the [Pulse Unit] field, enter the pulse value that the watt-hour meter outputs. Set the pulse value according to the watt-hour meter to be used.

Important: Check the watt-hour meter readings several times on the hour and the half-hour. Then, be sure to check that the increase in the watt-hour meter reading for each 30-minute period and the average electric power consumption in the same period that the Peak Cut function is used are the same amount. The average electric power for the period that the Peak Cut function is used can be checked on the [Peakcut] screen.

- (5) In the [Control levels] section, the range of the electric power must be set for each control level. For control level 4, enter the value that is 10% to 15% below the maximum power demand (average electric energy that cannot be exceeded in any 30-minute period). For control levels 3 to 0, enter the value that is decreased by about 10% from the set value of the previous control level. (The screenshot above shows the setting example of the maximum demand of 200 kW.)

Note: The optimum setting depends on the system configuration of the electric equipment and on the indoor environment in each building. Determine the appropriate values accordingly.

- (6) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(C) When the Peak Cut method [PI Controller] is selected

1st page

Initial Settings

Function1

Function2

27/03/2015 13:07

Peak Cut

Settings

Air-con

Measureme

Controller

AE200

Mitsubishi Electric

Peak Cut method

PI Controller

Watthour meter

47-1 1F

Temperature difference between set point and inlet.

3 °C

With this limit or greater difference, indoor units will not be controlled on level 0.

Save Settings

2nd page

Initial Settings

Function1

Function2

27/03/2015 13:07

Peak Cut

Settings

Air-con

Measureme

Controller

AE200

Mitsubishi Electric

Peak Cut method

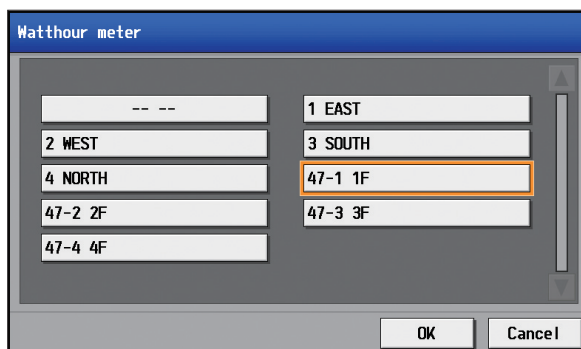
PI Controller

Control levels

4	200	kW -
3	180	kW - 200kW
2	160	kW - 180kW
1	140	kW - 160kW
0	0	kW - 140kW

Save Settings

- (1) Touch the [Watt-hour meter] button to open the window to select the PI controller to which the watt-hour meter used for the Peak Cut function is connected.



Note: Only the watt-hour meters that have been registered on the [Measurement] screen are selectable. (Refer to section 5-2-2 "Measurement" for how to register metering devices.)

Note: When a built-in Pulse Input (PI) is used, [Channel No. + (space) + Metering device name] will appear. (For example, if the watt-hour meter used for the Peak Cut function is connected to channel 3 of CN7 of AE-200 and the metering device name is "For Peak Cut function," [3 For Peak Cut function] will appear.)

When a PI controller (PAC-YG60MCA) is used, [PI controller address + "-" + Channel No. + (space) + Metering device name] will appear. (For example, if the watt-hour meter used for the Peak Cut function is connected to channel 2 of a PI controller (address 10) and the metering device name is not registered, [10-2] will appear.)

Note: To deselect the selection, select [-- --].

- (2) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

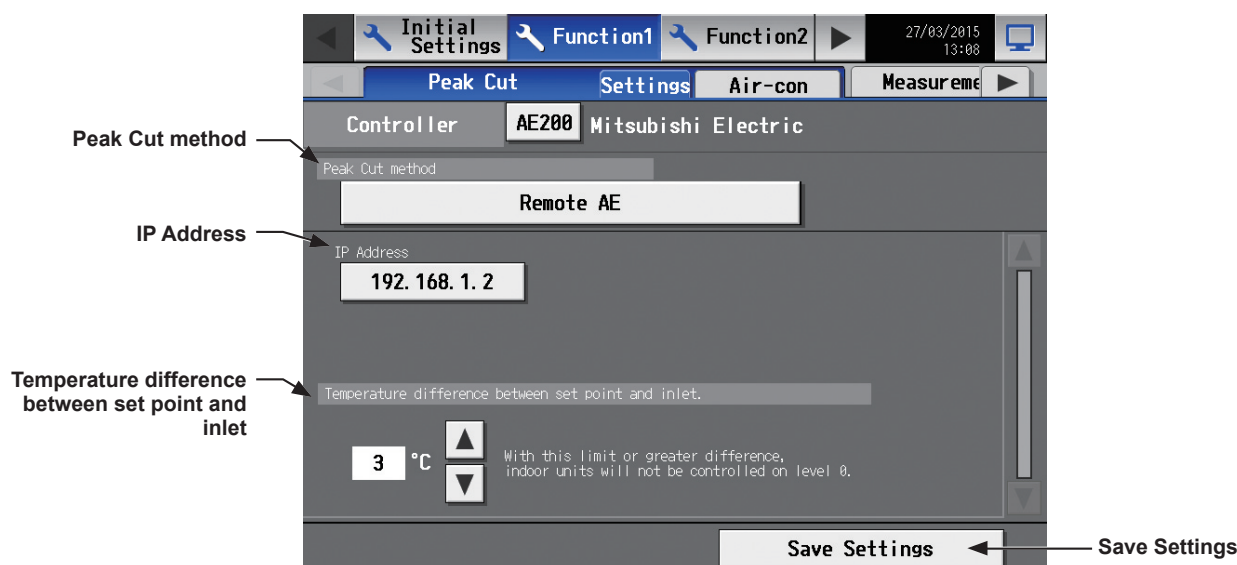
Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

- (3) In the [Control levels] section, the range of the electric power must be set for each control level. For control level 4, enter the value that is 10% to 15% below the maximum power demand (average electric energy that cannot be exceeded in any 30-minute period). For control levels 3 to 0, enter the value that is decreased by about 10% from the set value of the previous control level. (The screenshot above shows the setting example of the maximum demand of 200 kW.)

Note: The optimum setting depends on the system configuration of the electric equipment and on the indoor environment in each building. Determine the appropriate values accordingly.

Note: Other than the AE-200/AE-50/EW-50 units that use a built-in Pulse Input (PI) or a PI controller (PAC-YG60MCA), up to three more AE-200/AE-50/EW-50 units can be controlled. Refer to (D) "When the Peak Cut method [Remote AE] is selected" below for details.

(D) When the Peak Cut method [Remote AE] is selected



- (1) In the [IP address] field, enter the IP address of the AE-200/AE-50/EW-50 that uses one of the following.
- Built-in Pulse Input (PI)
 - PI controller (PAC-YG60MCA)
 - External contact input (Refer to (E) "When the Peak Cut method [External Contact point input] is selected" for details.)

Note: As the control level is obtained every minute from the AE-200/AE-50/EW-50 that uses a built-in Pulse Input (PI) or a PI controller (PAC-YG60MCA), the control will be late for up to one minute on the AE-200/AE-50 whose Peak Cut method setting is [Remote AE].

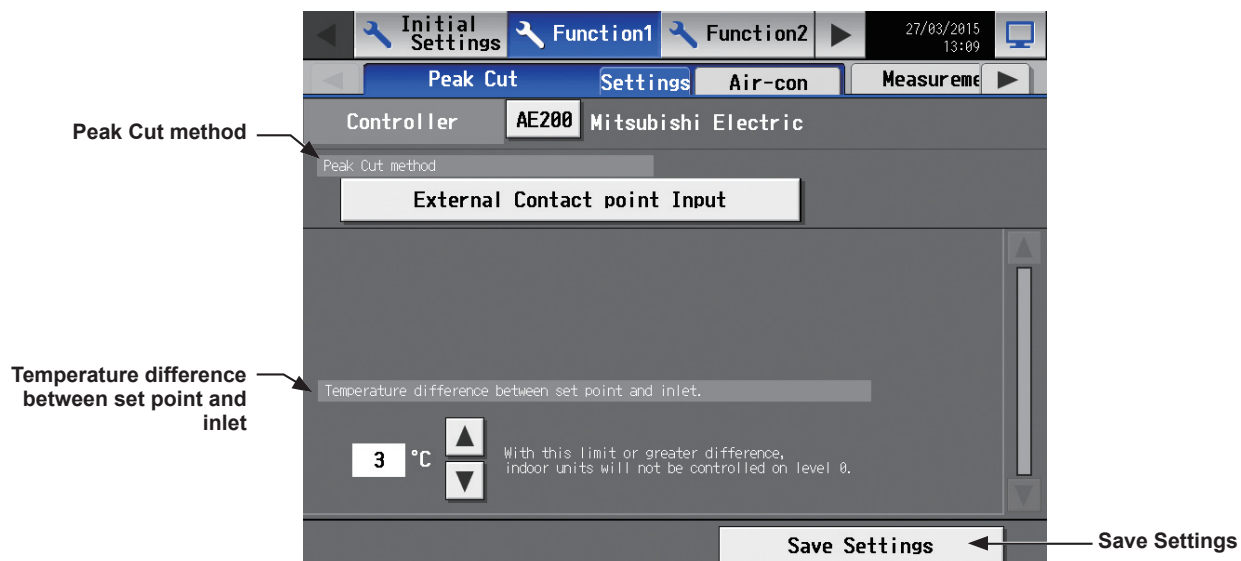
Note: Up to three AE-200/AE-50/EW-50 units can be connected to the AE-200/AE-50/EW-50 unit that uses a built-in Pulse Input (PI) or a PI controller (PAC-YG60MCA). When five or more AE-200/AE-50/EW-50 units are connected, add the settings explained in (C) "When the Peak Cut method [PI Controller] is selected" or use the Peak Cut method [Electric Amount Count Software].

- (2) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(E) When the Peak Cut method [External Contact point input] is selected

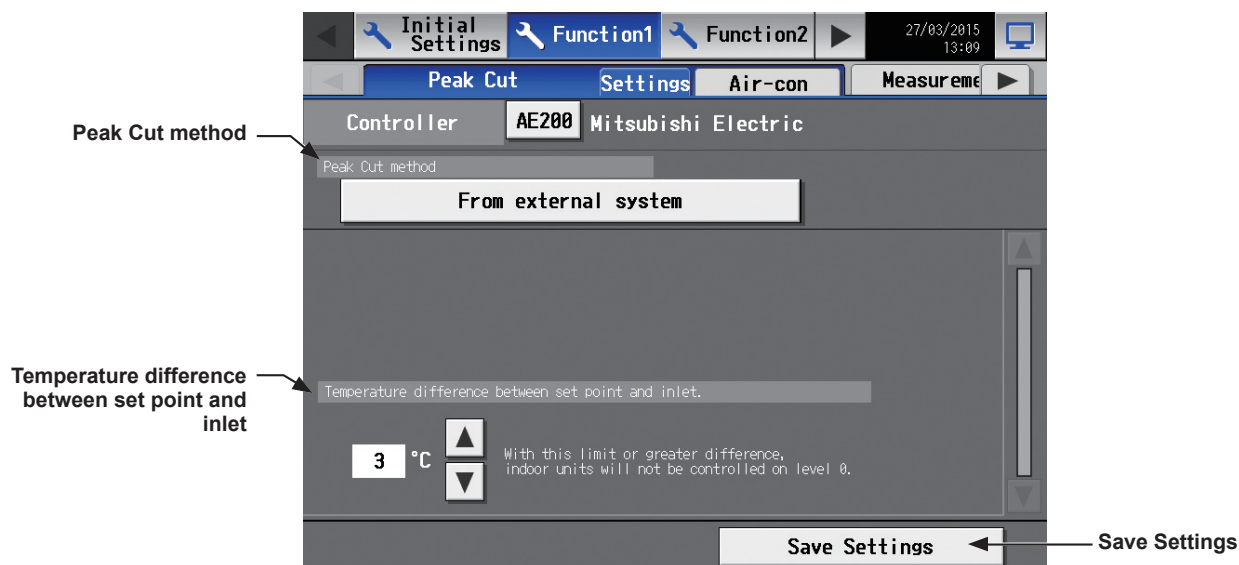
Note: The external signal can be input to AE-200, AE-50, and EW-50, so that all outdoor units and blocks of indoor units can be selected.



- (1) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(F) When the Peak Cut method [From external system] is selected



- (1) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

5-2-1-2. Unit settings

Touch the [Air-con] tab in the Peak Cut control settings screen.

(1) Control details for blocks of indoor units

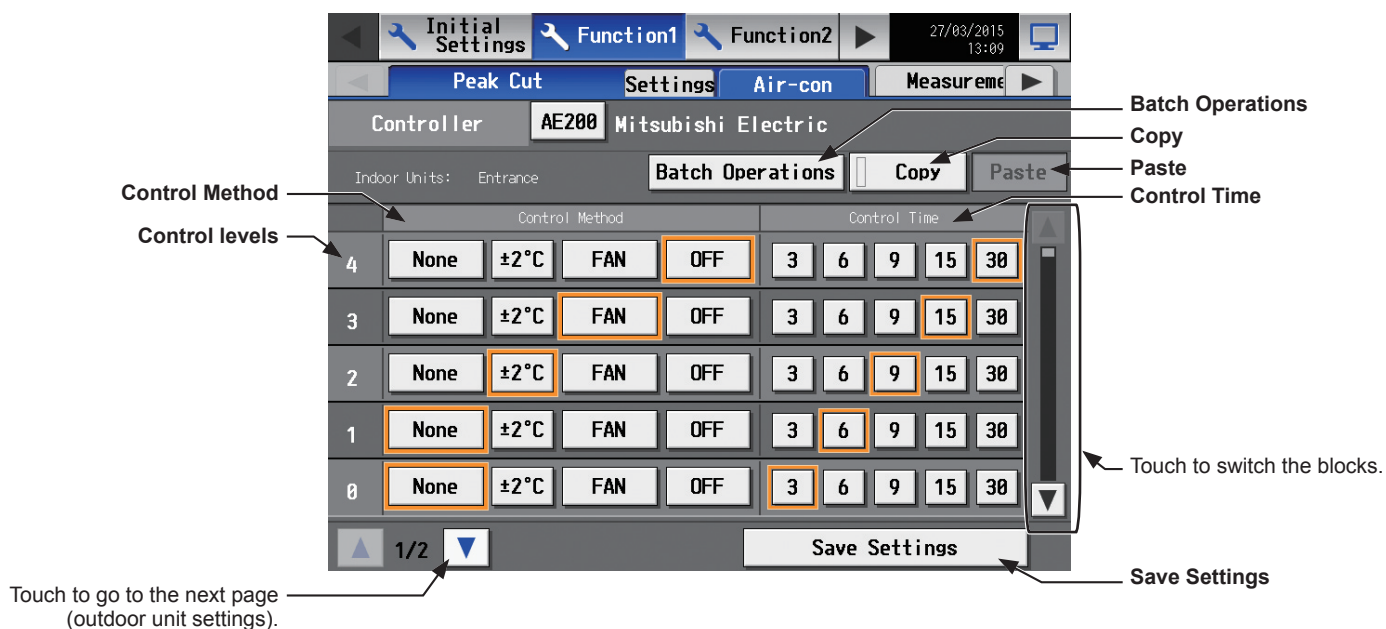
Follow the instructions below to make the Peak Cut control settings for each control level for given blocks of indoor units.

If the block settings have not been made, refer to section 5-1-8 “Blocks” for how to make the block settings.

Important

- An energy-save control at the same level (control level 0) can be performed at all times regardless of the electric energy consumption status.

1st page (Indoor unit settings)



- Touch or to display the block whose settings are to be made. To make settings for all blocks at once, check the [Batch Operations] checkbox.

Then, select the control method for each control level, referring to the table below.

Note: Only the control method “OFF” is effective for Air To Water (PWFY) units. Other methods can be selected, but are not effective.

Table: Indoor Unit Control Method

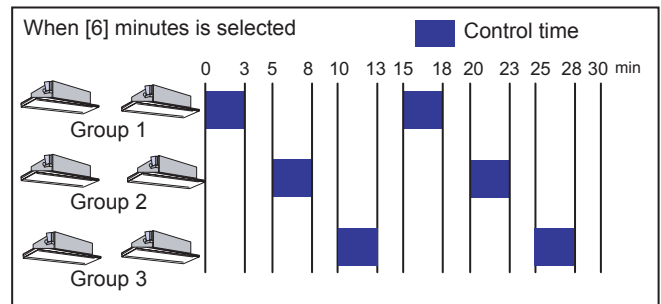
Control Method	Control details
None	Peak Cut control will not be performed.
±2°C (±4°F)	<p>During the Peak Cut control, the set temperature in the Cool or Dry mode will be offset by +2°C (+4°F), and the set temperature in the Heat mode will be offset by -2°C (-4°F).</p> <p>Note: Peak Cut control will not be performed during the Fan or Auto mode.</p> <p>Note: When the unit of temperature is Fahrenheit, the set temperature may not be offset by ±4°F exactly because 2°C is used for the calculation first, and then the temperature in Celsius is converted into the temperature in Fahrenheit.</p> <p>Note: The set temperature will be adjusted within the set temperature restrictions settings made on the Set Temperature Range Limit screen (accessible via the Web Browser for Initial Settings). Refer to section 7-3-1 “Set Temperature Range Limit” for details.</p>
Fan *1	During the Peak Cut control, free-plan indoor units and A-control Mr. Slim indoor units (M-Series/P-Series indoor units) will go in to the Thermo-OFF state, and the units older than free-plan units will operate in the Fan mode. (When the units are in the Thermo-OFF state, the operation mode on the remote controller LCD will not change.)
OFF *1	<p>During the Peak Cut control, the units will stop.</p> <p>Note: If the control method is set to [OFF] and the Control Time is set to [30] minutes, the groups that are operated in the Peak Cut control cannot be operated from any controller.</p>

*1 When the indoor unit Peak Cut control function is used during the heating operation, it takes a while to resume operation to prevent cold air draft. This may negatively affect the performance of the unit for a certain period of time after the operation is resumed. To ensure maximum performance, it is recommended to use an outdoor unit capacity-save control function (that will not stop the compressor operation) during the heating operation. If the indoor unit Peak Cut control function is still used, selecting [3] minutes in the Control Time section is recommended.

- (2) For each control level, set the total time in which the Peak Cut control is performed during every 30 minutes.

Each Peak Cut control is performed for three minutes. If [6] minutes is selected, three-minute Peak Cut control will be performed twice during every 30 minutes.

If any time other than [30] minutes is selected, the indoor units will operate in rotation so that they will not perform the Peak Cut control at the same time.



- (3) To copy the settings of a block to the settings for other blocks, display the block whose settings are to be copied and touch [Copy], then display the block to which the copied settings are to be pasted and touch [Paste]. The rectangular icons next to the selected buttons will appear in yellow-green.

(2) Control details for outdoor units (All Peak Cut methods)

Follow the instructions below to make the Peak Cut control settings for each control level for given outdoor units.

Note: If the outdoor unit is a City Multi unit, the M-NET address will appear. If the outdoor unit is an A-control (Mr. Slim) unit, the M-NET address and group name will appear.

Note: As for A-control outdoor units, only the inverter models can perform Peak Cut control. The Peak Cut control settings for constant-speed models can not be made.

Note: Do not make the Peak Cut control settings for heat pump models of outdoor units or some types of outdoor units.

2nd page (Outdoor unit settings)

Initial Settings Function1 Function2 27/03/2015 13:09

Peak Cut Settings Air-con Measure

Controller AE200 Mitsubishi Electric

Outdoor Units: Address51

Batch Operations Copy Paste

Maximum Capacity

Control levels

4 100 90 80 70 60 50 3 6 9 15 30

3 100 90 80 70 60 50 3 6 9 15 30

2 100 90 80 70 60 50 3 6 9 15 30

1 100 90 80 70 60 50 3 6 9 15 30

0 100 90 80 70 60 50 3 6 9 15 30

2/2 Save Settings

Batch Operations

Copy

Paste

Control Time

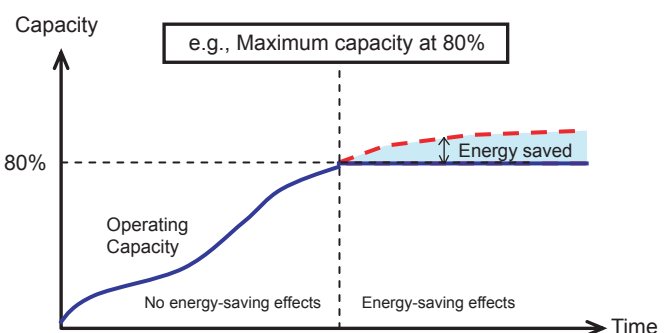
Touch to switch the outdoor unit addresses.

Save Settings

Touch to go to the previous page (indoor unit settings).

- (1) Touch ▲ or ▼ to display the address of the outdoor unit whose settings are to be made. To make settings for all outdoor units at once, check the [Batch Operations] checkbox. Then, set the maximum operating capacity for each control level. The smaller the maximum operating capacity, the more energy will be saved.

Note: Energy-saving effects cannot be expected during low-load operation with the capacity below the selected maximum capacity.



Note: For heat pump outdoor units and City Multi S series (PUMY) outdoor units, leave the default setting [100%] as it is not to activate the capacity-save control.

However, [50%] though [100%] can be set on the following models.

PUMY-P**KM or later

PUMY-P**KM-A or later

PUMY-P**HMC-S or later

PUMY-P**HMC-C or later

PUMY-P**KMC-C or later

PUMY-P**YKM.TH(-T) or later

Note: AE-200/AE-50/EW-50 that support Maximum Capacity [50%] are from Ver. 7.23 or later.

- (2) For each control level, set the total time in which the Peak Cut control is performed during every 30 minutes. Setting the time to [30] minutes is preferable, for shorter control time is not likely to bring much benefit. If any time other than [30] minutes is selected, the outdoor units will operate in rotation so that they will not perform the Peak Cut control at the same time.
- (3) To copy the settings of an outdoor unit to the settings for other outdoor units, display the outdoor unit whose settings are to be copied and touch [Copy], then display the outdoor unit to which the copied settings are to be pasted and touch [Paste]. The rectangular icons next to the selected buttons will appear in yellow-green.

5-2-2. Measurement

Measurement settings must be made to use temperature sensors, humidity sensors, and metering devices. Touch [Function1] in the menu bar, and then touch [Measurement]. Set the measurement settings for each AE-200 and AE-50, and then touch [Save Settings].

- Note: The measurement settings may not be accessible if logged in as a building manager.
- Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.
- Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

Important

- Measurement settings for the AE-50/EW-50 must be made with the AE-50/EW-50 properly connected to ensure proper settings. Those settings made without the connection of AE-50/EW-50 will not be reflected.

Controller
Select [AE] to make settings for AE-200, and select [1], [2], [3], or [4] to make settings for each AE-50/EW-50.

M-NET address of AI or PI controller
48

Selection of AI or PI controller

Setting details

Save Settings
Touch to save the changes made.

[1] Registering AI controllers and temperature/humidity sensors

Follow the instructions below to make the system settings for measurement sensors. Up to two measurement sensors can be connected to an AI controller (PAC-YG63MCA).

Sensor name

AI controller icon

Setting details of sensor 1

Setting details of sensor 2

Temperature or humidity sensor settings

Measurable range

Offset value

Upper/lower ON- and OFF-threshold settings for e-mail alarm function

Upper limit (ON-threshold)

Upper limit (OFF-threshold)

Lower limit (OFF-threshold)

Lower limit (ON-threshold)



- Touch or to select the address to which the AI controller (PAC-YG63MCA) will be connected.
- Select the AI controller icon

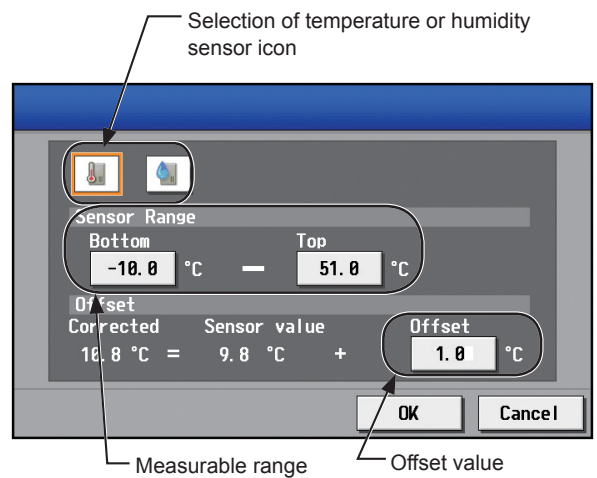
Note: Touch again to deselect.

- (3) Touch the “Sensor name” button to display the keyboard. Enter the name of the sensor in 20 characters or less.

Note: The following characters cannot be used: <, >, &, “, or ‘

- (4) Touch the “Temperature or humidity sensor settings” button to display the sensor settings screen.

Select the temperature sensor icon () or the humidity sensor icon ().



- (5) Touch the [Bottom] and [Top] buttons to display the keypad. Enter the measurable range of the sensor, and then touch [OK].

Note: The settable range for temperature sensor is between -100.0°C (-148.0°F) and +100.0°C (+212.0°F), and for the humidity sensor is between 0.0% and +100.0%.

Note: When the Pt100 sensor is connected, the range must be between -30°C (-22°F) and +60°C (+140°F).

When the sensors other than the Pt100 sensors are connected, enter the ranges that are described in the operation manuals of the sensor.



- (6) To set the offset value for the measured values, touch the [Offset] button to display the keypad. Enter the offset value, and then touch [OK].

Note: The settable offset value range for temperature sensor is between -10.0°C (-18.0°F) and +10.0°C (+18.0°F), and for the humidity sensor is between -10.0% and +10.0%.

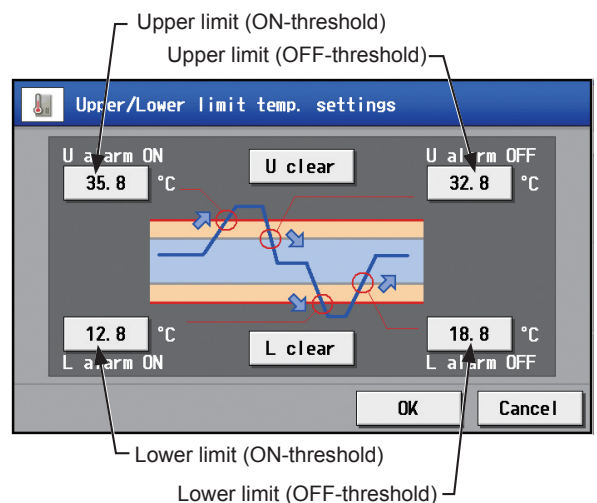
- (7) To receive an e-mail alarm when the temperature or the humidity exceeds certain predetermined values, set the ON- and OFF-thresholds for both the upper and lower limit temperatures.

Touch the “Upper/lower ON- and OFF-threshold settings for e-mail alarm function” section to display the settings screen.

Touch the [U alarm ON]/[L alarm ON] and [U alarm OFF]/[L alarm OFF] buttons to display the keypad. Enter the ON- and OFF-thresholds for the upper and lower limit temperatures, and then touch [OK].

Note: To clear the ON- and OFF-thresholds for the upper limit temperatures, touch [U clear]. To clear the ON- and OFF-thresholds for the lower limit temperatures, touch [L clear].

Note: To avoid frequent ON/OFF cycling, the minimum differential between the ON- and OFF-threshold values should be 1°C (2°F).



- (8) Touch [Save Settings].

[2] Registering PI controllers and metering devices

Important

- The built-in Pulse Input (PI) settings cannot be made on the TG-2000A.
- The built-in Pulse Input (PI) cannot be used for the electricity charge apportioning function of TG-2000A.

Follow the instructions below to make the system settings of the metering devices. Up to four metering devices can be connected to a PI controller (PAC-YG60MCA) or CN7 of AE-200/AE-50/EW-50.

Note: Although the maximum settable total number of built-in Pulse Input (PI) and PI controllers (PAC-YG60MCA) for each AE-200/AE-50/EW-50 is 15, the number of them in a system with connection to one or more AE-50/EW-50 controllers must be 20 or less. (Each built-in Pulse Input (PI) counts as one unit.)

<When a built-in Pulse Input (PI) is used>



<When a PI controller (PAC-YG60MCA) is used>



- (1) Touch or to display the address to which the PI controller (PAC-YG60MCA) will be connected or to display the settings area for a built-in Pulse Input (PI) at the top.
- (2) Select the PI controller icon ().
When a built-in Pulse Input (PI) is used, the top row shows the setting area for the built-in Pulse Input (PI) and there is no need to select an icon.
Note: Touch again to deselect.
- (3) Touch the "Metering device name" button to display the keyboard. Enter the name of the metering device in 20 characters or less.
Note: The following characters cannot be used: <, >, &, ", or '
- (4) Touch the "Pulse value" button to display the keypad. Enter the pulse value of the metering device, and touch [OK].
Note: The settable range is between 0.01 and +100.
Note: If the pulse value field is left blank, the reading of the metering device cannot be properly obtained. Be sure to set the pulse value.



- (5) Touch the “Measurement unit” button to select the measurement unit.

Note: The measurement unit can be selected from [kWh], [m3], [MJ], [--(no unit)], or [(blank)]. Select the blank when not using a metering device.

Important

- Set the pulse value according to the metering device to be used. To ensure proper settings, first check the value measured by the metering device and the value counted by the built-in Pulse Input (PI) or the PI controller (PAC-YG60MCA). Then, after a certain time, check that both values have increased by equal values. (The values that the built-in Pulse Input (PI) or the PI controller (PAC-YG60MCA) counts can be checked on the [Measurement] display under the [Monitor/Operation] menu.)

- (6) Touch [Save Settings].

5-2-3. Energy Management

On the Energy Management screen, make the settings for the energy-control-related items that appear on the screens under the [Energy Mgmt] menu, such as temperature sensor to measure the outdoor temperature with, electricity meters that are used for acquiring the data to display the trend graph of indoor unit electricity consumption, and also the mode that are used for apportioning indoor unit electricity consumption. Touch [Function1] in the menu bar, and then touch [Energy Management].

Note: Electricity consumption is apportioned based on the electricity consumed by outdoor units. The electricity consumed by indoor units is not considered.

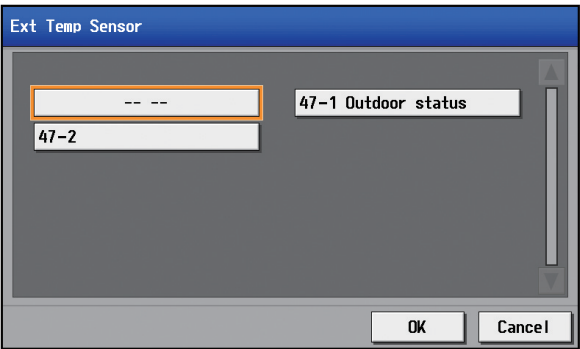
Important

- AI and PI controller settings are required beforehand to make energy management settings. Refer to section 5-2-2 “Measurement” for details.
- The energy management settings must be made after all units have been started up. The settings that have been saved while one or more units are starting up may be lost.



- (1) Touch the “Temperature Sensor” button. The name of the temperature sensor that is connected to the AI controller or the AHC will appear. Select a temperature sensor to measure the outdoor temperature with, and then touch [OK].

Note: To deselect the selection, select [-- --].
Note: This setting is not required when not showing the outdoor temperature in a line graph on the [Energy Use Status] screen.
Note: This setting is interlocked with the temperature sensor setting on the [External Temperature Interlock] screen.



- (2) Touch the [Indoor unit operation apportioning mode] button. Select the way indoor units’ operation time is counted that is used to apportion the electricity consumption, which appears on the screens under the [Energy Mgmt] menu. Select [Fan operation time] to apportion the electricity consumption based on the fan operation time, and select [Thermo-ON time] to apportion the electricity consumption based on the Thermo-ON time of the indoor units. Select [Capacity save amount] to apportion the electricity consumption based on the indoor unit operation time that was calculated based on the amount of energy saved on the indoor units. The selected setting must meet the system requirements. Selecting [Capacity save amount] is recommended.

Note: To deselect the selection, select [-- --].

Note: "FAN operation time" is the cumulative duration of time in which the indoor unit is powered on.

Note: "Thermo-ON time" is the cumulative duration of time in which the refrigerant is flowing into the indoor unit.

Note: "Capacity save amount" is the cumulative operation time of the outdoor unit based on its capacity.

Note: Electricity consumption is apportioned based on the electricity consumed by outdoor units. The electricity consumed by indoor units is not considered.

Note: When an AE-200 apportioned electricity billing function is used, this setting is not effective because the billing function settings are used to apportion the electricity consumption.

(3) Touch the [Indoor unit electricity meter] button.

Select the electricity meter to be used to measure the electricity consumption of each group of indoor units.

["Address" + PI controller address + "-" + Electricity meter number + Electricity meter name] will appear when a PI controller (PAC-YG60MCA) is connected, or ["Meter" + Channel No. + Electricity meter name] will appear when a metering device is directly connected to the controller.

Note: To deselect the selection, select [-- --].

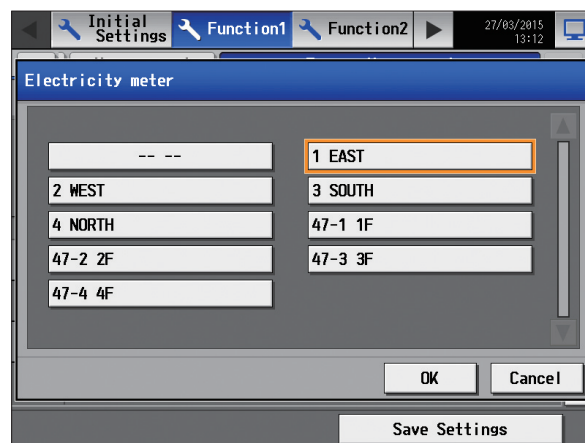
Note: If the electricity meter name is long, only part of it may be displayed.

Note: The electricity meter name will be blank if it has not been registered.

Note: Only the electricity meters whose measurement unit setting is set to [kWh] on the Measurement screen are available for selection.

Note: LOSSNAY unit groups and general equipment (connected via DIDO controller PAC-YG66DCA) groups are excluded. (Apportioned calculation is not available for these groups.)

Note: When an AE-200 apportioned electricity billing function is used, this setting is not effective because the billing function settings are used to apportion the electricity consumption.



(4) Touch [Save Settings] to save the settings.

5-3. Function2

5-3-1. External Temperature Interlock

Based on the temperature difference between the set temperature and the outdoor temperature, the set temperature can be adjusted automatically. Making this control setting on the air conditioning unit at an entrance of a building prevents extreme temperature change from distressing our bodies and sending us into shock.

Touch [Function2] in the menu bar, and then touch [Ext Temp Interlock].

Note: Either an AI controller (PAC-YG63MCA) or AHC, and an outdoor temperature sensor are required to measure the outdoor temperature.

Note: When connecting one or more AE-50/EW-50 controllers, connect an AI controller (PAC-YG63MCA) or AHC, and outdoor temperature sensor on each AE-50/EW-50.

Note: The External Temperature Interlock settings may not be accessible if logged in as a building manager.

Note: The External Temperature Interlock settings between the units connected to the AE-200 and the AE-50/EW-50, as well as between the units connected to different AE-50/EW-50 controllers, cannot be made.

Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

Important

- External Temperature Interlock settings for the AE-50/EW-50 must be made with the AE-50/EW-50 properly connected to ensure proper settings. Those settings made without the connection of AE-50/EW-50 will not be reflected.

Controller
Select [AE] to make settings for AE-200, and select [1], [2], [3], or [4] to make settings for each AE-50/EW-50.

Temperature Sensor
Select a temperature sensor to measure the outdoor temperature with.

Group No. and group name

Group No.	Group Name	Controller	Ext Temp Sensor	Control levels
1	Entrance 1	None	±1°C	±2°C
2	Lobby A	None	±1°C	±2°C
3	Lobby B	None	±1°C	±2°C
5	Meeting room	None	±1°C	±2°C

Control levels
Select a maximum temperature value to be added to or subtracted from the set temperature.

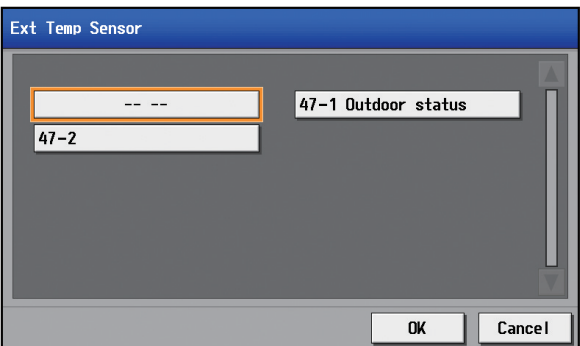
Save Settings
Touch to save the changes made.

- (1) Touch the "Temperature Sensor" button. The name of the temperature sensor that is connected to the AI controller or the AHC will appear.
- Select a temperature sensor to measure the outdoor temperature with, and then touch [OK].

Note: To deselect the temperature sensor, select [-- --].

Note: Connect the temperature sensor to either the Analog Input 1 or Analog Input 2 port on the AHC.

Note: This setting is interlocked with the temperature sensor setting on the [Energy Management] screen.



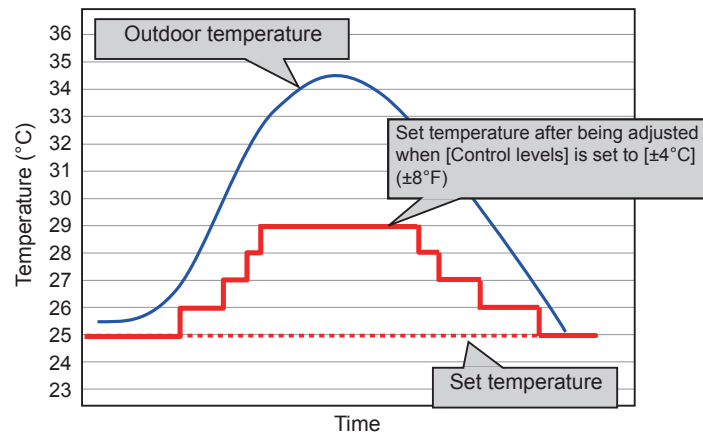
- (2) In the [Control levels] section, select a maximum temperature value for each group to be added to or subtracted from the set temperature.
- For example, when [$\pm 4^{\circ}\text{C}$] ($\pm 8^{\circ}\text{F}$) is selected and the set temperature for the Cool or the Dry mode is set to 24°C (75°F), the set temperature will be adjusted to a maximum of 28°C (83°F) based on the temperature difference between the set temperature and the outdoor temperature. When [$\pm 2^{\circ}\text{C}$] ($\pm 4^{\circ}\text{F}$) is selected, the set temperature will be adjusted to maximum of 26°C (79°F).

Note: When the unit of temperature is Fahrenheit, the selected temperature value may not be added to the set temperature accurately because 2°C is used for the calculation first, and then the temperature in Celsius is converted into the temperature in Fahrenheit.

- (3) Touch [Save Settings].

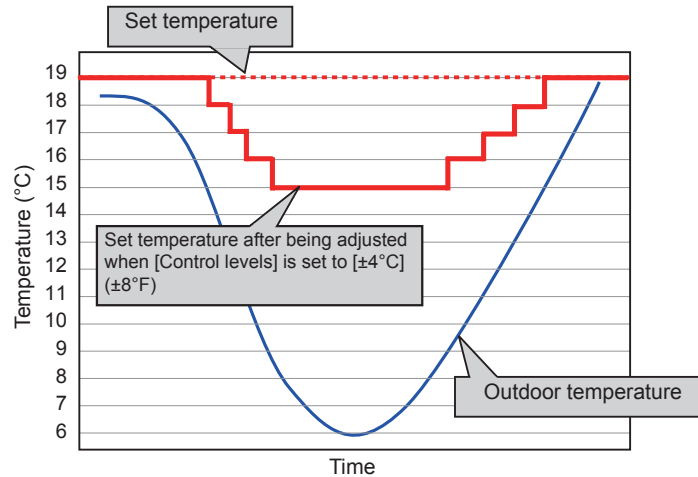
When the External Temperature Interlock function is active, the set temperature will be adjusted as shown below.

■ “Cool” and “Dry” modes



Outdoor temperature conditions	Set temperature after being adjusted
Outdoor temperature \geq Set temperature + 1.5°C (3°F)	Set temperature + 1°C (2°F)
Outdoor temperature \geq Set temperature + 4.5°C (9°F)	Set temperature + 2°C (4°F)
Outdoor temperature \geq Set temperature + 6.5°C (12°F)	Set temperature + 3°C (6°F)
Outdoor temperature \geq Set temperature + 7.5°C (14°F)	Set temperature + 4°C (8°F)

■ “Heat” mode



Outdoor temperature conditions	Set temperature after being adjusted
Outdoor temperature \leq Set temperature - 4.0°C (8°F)	Set temperature - 1°C (2°F)
Outdoor temperature \leq Set temperature - 6.0°C (11°F)	Set temperature - 2°C (4°F)
Outdoor temperature \leq Set temperature - 8.0°C (15°F)	Set temperature - 3°C (6°F)
Outdoor temperature \leq Set temperature - 10.0°C (18°F)	Set temperature - 4°C (8°F)

5-3-2. Night Setback Control

The Night Setback Control function (hereafter abbreviated as Setback Control) prevents indoor condensation by performing heating operation automatically when the room temperature goes outside of the specific range during the night. Touch [Function2] in the menu bar, and then touch [Setback].

Heating operation starts when a given group is stopped and the room temperature drops below the specified minimum temperature.

Note: The Setback Control function also prevents excessive temperature rise by performing cooling operation automatically when the room temperature goes outside of the specific range. Cooling operation starts when a given group is stopped and the room temperature rises above the specified maximum temperature.

Note: If the operation settings (on/off, operation mode, or set temperature) is changed from a local remote controller during the Setback Control, the settings selected before the Setback Control will not be restored.

Note: If the room temperature is measured by the return air temperature sensor on the air conditioning unit, the measured value may not be an accurate representation of the temperature in the room, especially when the air conditioning unit is stopped and the room air is stagnant. When this is the case, use an external temperature sensor (PAC-SE40TSA) or remote controller sensor to measure the room temperature.

Note: The Setback Control may not be accessible if logged in as a building manager.

Note: The [Controller] setting will appear (only on the AE-200's LCD) when the [System Exp] setting on the [Unit Info.] screen is set to [Expand]. Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

Important

- Setback Control settings for the AE-50/EW-50 must be made with the AE-50/EW-50 properly connected to ensure proper settings. Those settings made without the connection of AE-50/EW-50 will not be reflected.

Controller
Select [AE] to make settings for AE-200, and select [1], [2], [3], or [4] to make settings for each AE-50/EW-50.

Control Time

Group No. and group name

Initial Settings

Function1

Function2

27/03/2015

11:43

Ext Temp

Interlock

Setback

Controller

Exp1

Mitsubishi

Control Time

01:00 - 09:00

	Group Name	Minimum Temp	Maximum Temp
1	Entrance 1	17°C	--
2	Lobby A	18°C	30°C
3	Lobby B	25°C	28°C
5	Meeting room	--	26°C

Save Settings

Temperature range

Save Settings
Touch to save the changes made.

- (1) Touch the [Control Time] button to display the settings screen.
Set the [Setback] setting to [Use], set the time period in which Setback Control is performed, and then touch [OK].
Note: When [00: 00 - 00: 00] is selected, Setback Control is active for 24 hours.

Setback

Use

Setback Control Time Period

HourMinute

AM01:00

HourMinute

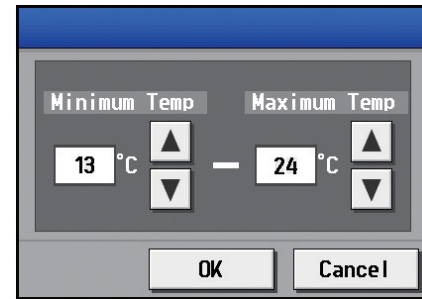
AM09:00

OKCancel

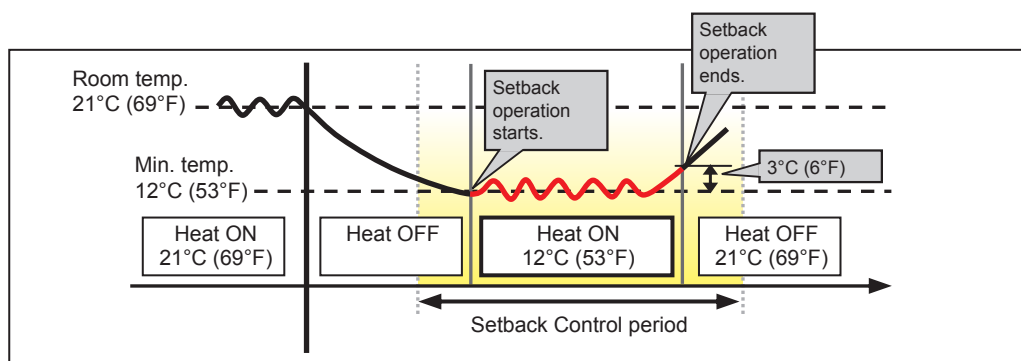
- (2) Touch the "Temperature range" button to display the settings screen.

Set the maximum and minimum temperatures for each group.

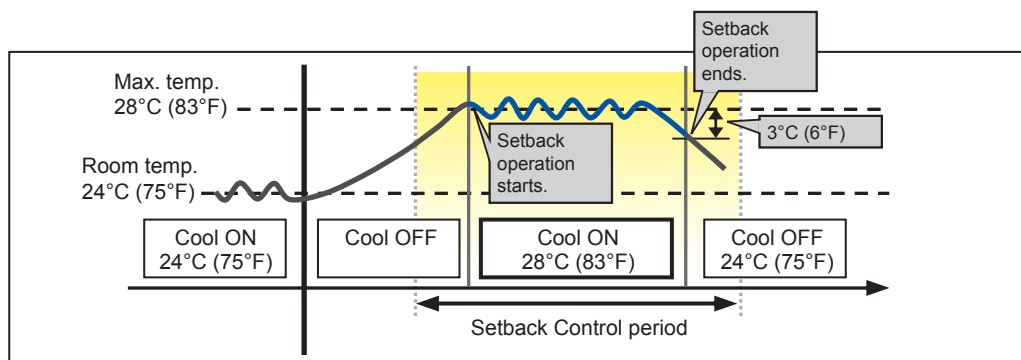
For example, if [Control Time] is set to [01:00 - 05:00] and "Temperature range" is set to [12°C - --°C] ([53°F - --°F]), heating operation starts automatically when the room temperature drops below the set temperature 12°C (53°F) between 1:00 and 5:00. When the Setback Control ends at 5:00, the set temperature returns to the original setting, and the operation stops.



Note: The air conditioning units in the heating operation will stop and the set temperature will return to the original setting when the Setback Control period is over or the room temperature rises to the minimum temperature plus 3°C (6°F). Likewise, the air conditioning units in the cooling operation will stop and the set temperature will return to the original setting when the Setback Control period is over or the room temperature drops to the maximum temperature minus 3°C (6°F).



When the temperature drops below the minimum temperature (heating operation)



When the temperature rises above the maximum temperature (cooling operation)

- (3) Touch [Save Settings].

5-4. Ventilation setting

5-4-1. Night purge

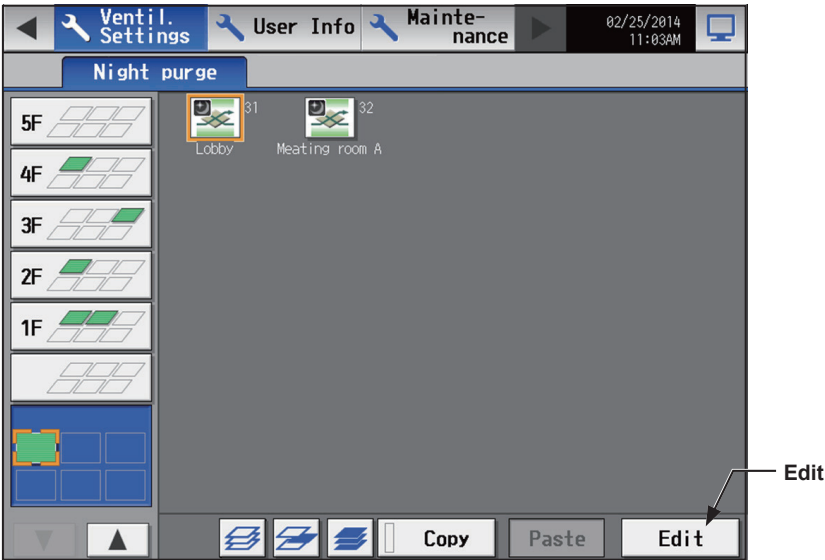
During summer, the Night purge function draws cooler outside air into the room to suppress temperature rises at night. This energy conservation reduces the load when air conditioning starts the next morning.

- Note: During the Night purge operation, the ventilation units (LOSSNAY) operate in the Bypass mode.
- Note: Night purge setting cannot be made from AE-200 for the ventilation units (LOSSNAY) that are connected to the AE-50/EW-50 in communication error.
- Note: Some models of ventilation units (LOSSNAY) do not support the Night purge function from AE-200. (As of October 2015, only LGH-RVX-E models support the function.)
- For more details about the Night purge function, refer to the Installation Manual, Instruction Book, or technical documents that are provided with the ventilation unit (LOSSNAY).

[1] Night purge settings on the LCD

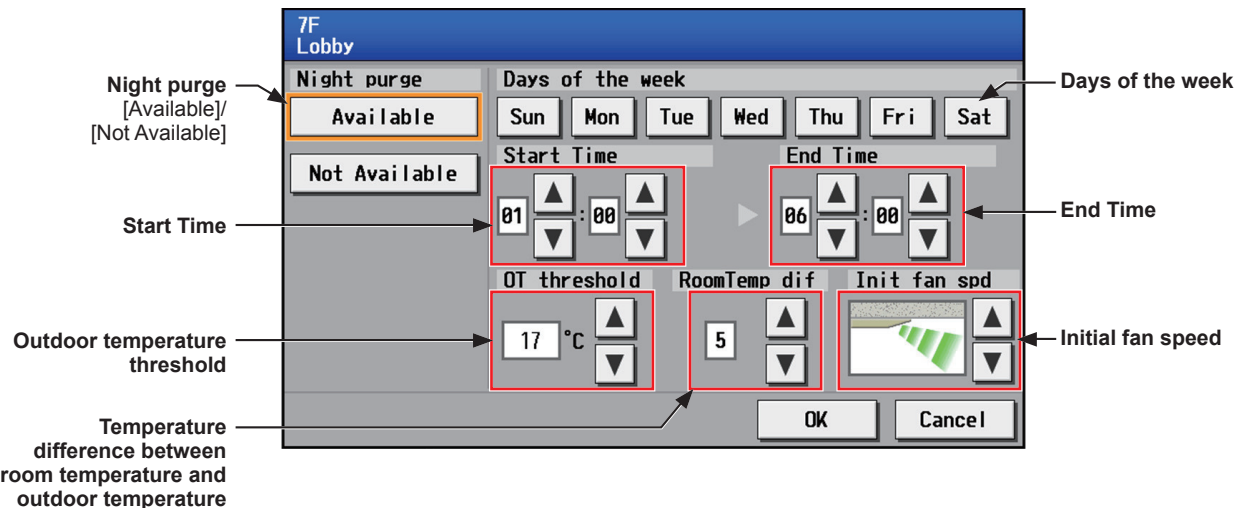
Log in to the Initial Settings menu, touch [Ventil. Settings] in the menu bar, and then touch [Night purge]. All ventilation unit (LOSSNAY) groups that support the Night purge function from AE-200 will appear.

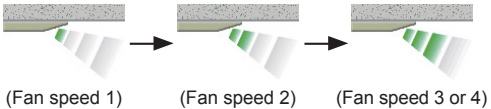
- (1) Touch one or more group icons whose settings are to be made, and then touch [Edit].



- (2) In the [Night purge] section, select [Available] to enable the Night purge settings, make detail settings (days of the week, start time, end time, outdoor temperature threshold, temperature difference between room temperature and outdoor temperature, initial fan speed), and then touch [OK].

- Note: When [Not Available] is selected in the [Night purge] section, the detail settings cannot be made.
- Note: Touch [Cancel] to return to the previously saved settings without making any changes.



	Setting item	Setting method	Remarks
(1)	Night purge [Available]/[Not Available]	Touch [Available] to enable the Night purge settings, and [Not Available] not to.	
(2)	Days of the week	Touch one or more days on which the Night purge control is executed at the selected Start Time below.	<p><Example> When the settings are made as follows, the Night purge control starts at 23:00 on Monday and ends at 6:00 on Tuesday. Days of the week: Monday Start Time: 23:00 End Time: 6:00</p> <p>* If the [Edit] button is touched with the multiple group icons selected, all days of the week are selected when the settings window opens.</p>
(3)	Start Time	Touch ▲ ▼ to set the time at which the Night purge control starts.	
(4)	End Time	Touch ▲ ▼ to set the time at which the Night purge control ends.	
(5)	Outdoor temperature threshold	Touch ▲ ▼ to set the outdoor temperature threshold value as a condition for activating the Night purge operation.	Touching ▲ or ▼ will increase or decrease the value in 1°C increments. The settable temperature is between 15°C and 30°C.
(6)	Temperature difference between room temperature and outdoor temperature	Touch ▲ ▼ to set the temperature difference as a condition for activating the Night purge operation.	Touching ▲ or ▼ will increase or decrease the value in 1°C increments. The settable temperature is between 0°C and 7°C.
(7)	Initial fan speed	Touch ▲ ▼ to set the fan speed to be set when the Night purge operation activates.	 <p>(Fan speed 1) (Fan speed 2) (Fan speed 3 or 4)</p> <p>* The maximum number of available fan speed setting from AE-200 is three. Auto cannot be set for the initial fan speed even for the units that support the Auto setting. The initial fan speed setting will not appear for the units with no fan speed switching function.</p>

Note: Setting the "Night purge" setting to [Not Available] during the Night purge operation will stop the Night purge operation of the ventilation units (LOSSNAY).

Note: The settings changed from a local remote controller will be reflected on this screen.

Note: When [Not Available] is selected in the [Night purge] section, the detail settings (days of the week, start time, end time, outdoor temperature threshold, temperature difference between room temperature and outdoor temperature, initial fan speed) cannot be made.

Night purge control time chart sample

The time chart when conditions below meet is as follows.

7F
Lobby

Night purge

Available

Not Available

Days of the week

SunMonTueWedThuFriSat

Start Time

01:00

End Time

06:00

OT threshold

17 °C

RoomTemp dif

5

Init fan spd

OK

Cancel

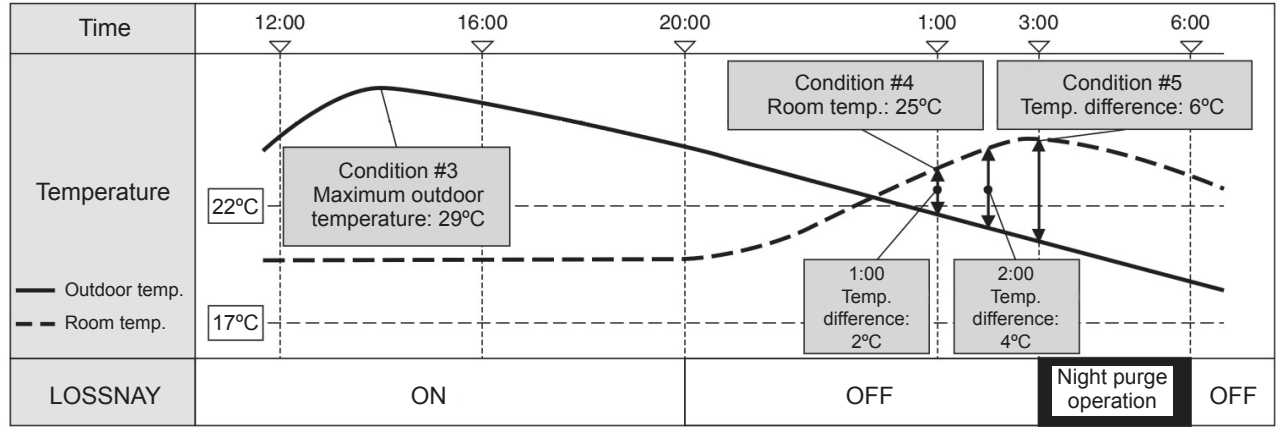
Setting value 1

Setting value 2

Setting value 3

Setting value 4

- Starting condition
- Condition #1: LOSSNAY units stop at 20:00.
- Condition #2: Between the start time 1:00 (setting value 1) and the end time 6:00 (setting value 2)
- Condition #3: LOSSNAY units detected the outdoor temperature threshold 17°C (setting value 3) or higher in the past 24 hours.
- Condition #4: The current room temperature is higher than 22°C.
- Condition #5: The temperature difference between room temperature and outdoor temperature is greater than the temperature difference 5°C (setting value 4).
- LOSSNAY units start the Night purge operation at 3:00 when the temperature difference between room temperature and outdoor temperature exceeds 5°C.
 - The Night purge operation is not activated at 1:00 or 2:00 because the temperature difference between room temperature and outdoor temperature is less than 5°C.



5-5. User Information

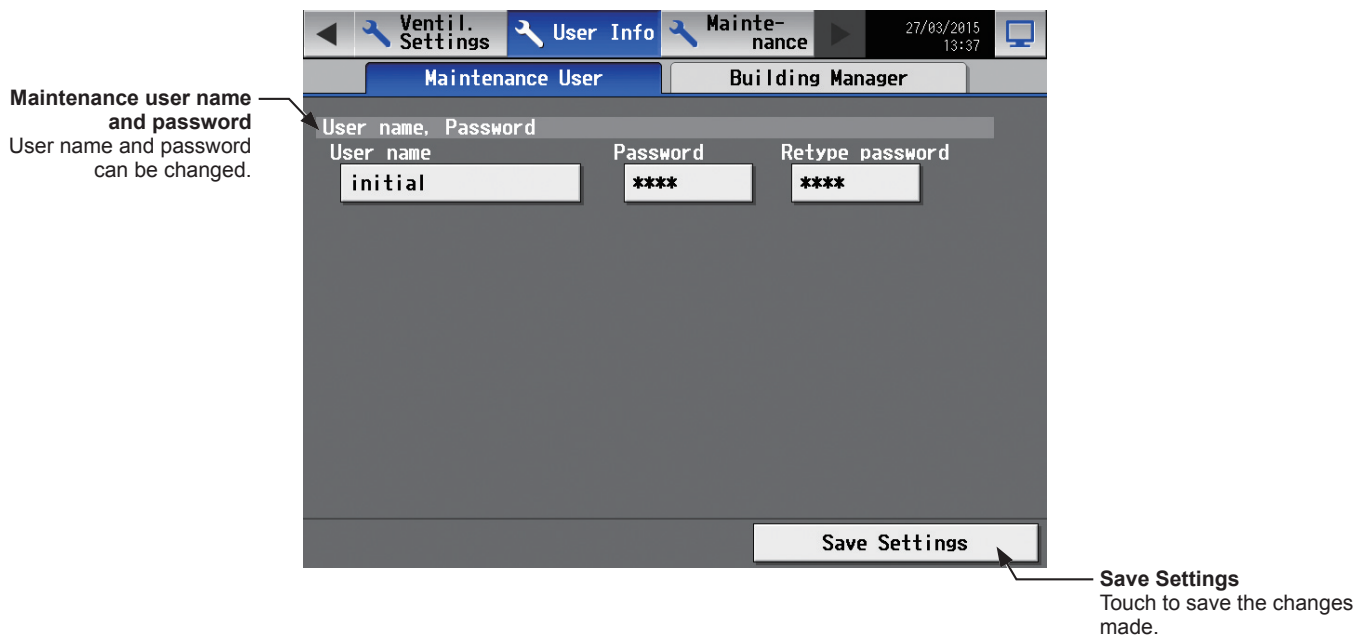
5-5-1. Maintenance User

On the [Maintenance User] screen, the user names and passwords of maintenance users can be changed.

Touch [User Info] in the menu bar, and then touch [Maintenance User].

Note: The Maintenance User settings are not be accessible if logged in as a building manager.

Note: The Maintenance User settings are required for each AE-200/AE-50/EW-50.



- (1) To change the maintenance user name or password, touch the [User name], [Password], and [Retype password] buttons. Enter new information on the keyboard.

Note: The user name must contain only alphanumeric characters.

Note: The user name and password are case-sensitive.

Note: The user name must be in 20 characters or less, and the password in 3 to 10 characters.

- (2) Touch [Save Settings].

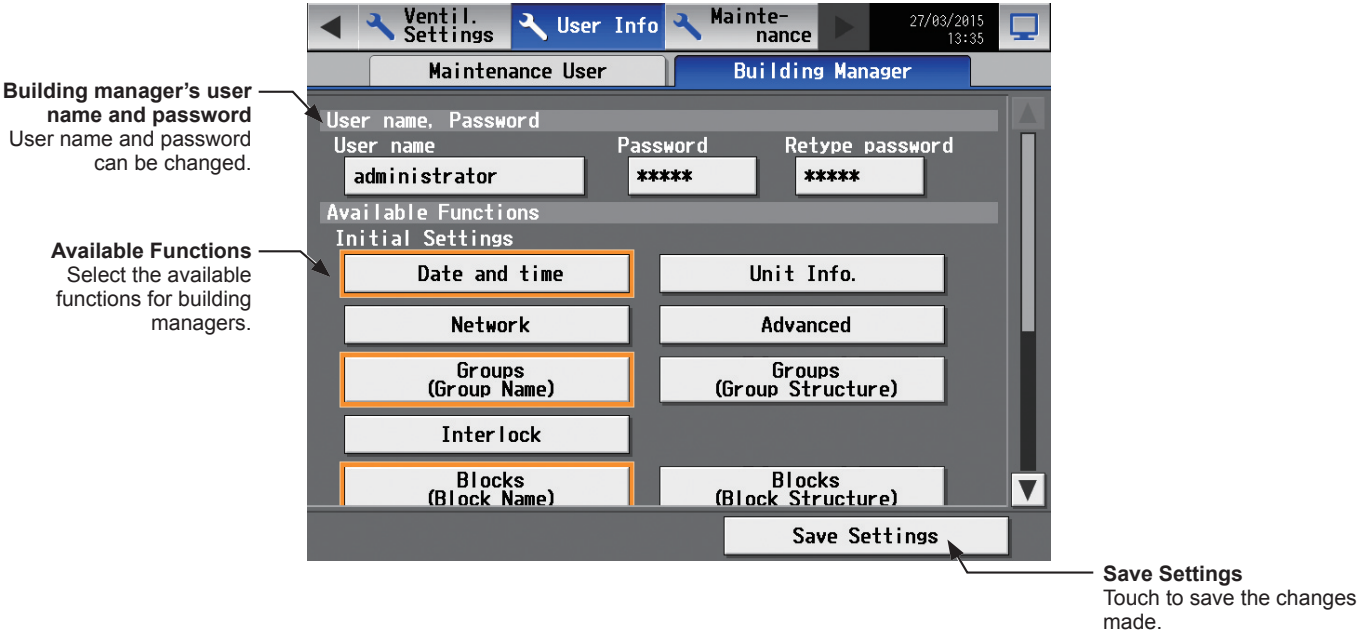
5-5-2. Building Manager

On the [Building Manager] screen, the user names and passwords of building managers can be changed, and the available functions for building managers can be limited.

For example, you can allow building managers to change the group name settings when the tenant is changed, or disallow them to change the basic system settings such as unit settings or network settings.

Touch [User Info] in the menu bar, and then touch [Building Manager].

Note: The Building Manager settings are required for each AE-200/AE-50.

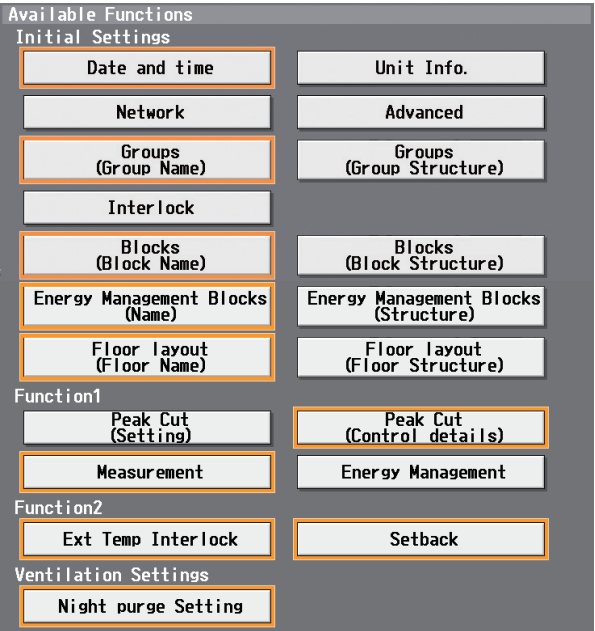


- (1) To change the building manager's user name or password, touch the [User name], [Password], and [Retype password] buttons. Enter new information on the keyboard.
Note: The user name must contain only alphanumeric characters.
Note: The user name and password are case-sensitive.
Note: The user name must be in 20 characters or less, and the password in 3 to 10 characters.

- (2) Touch the functions to be made available for building managers. The selected functions will appear with an orange frame.
Touch again to deselect.
For more information on each function, refer to the table below.

Note: If the user logs in as a building manager, the currently available functions can be checked, but cannot be changed.

Note: The settings on this screen will not be reflected to the functions on the Web browser.



- (3) Touch [Save Settings].

Table. Available Function List

Function		Content
Initial Settings	Date and time	Refer to section 5-1-3 “Date and time” for details.
	Unit Info. *1	Refer to section 5-1-4 “Unit Information” for details.
	Advanced *1	Refer to section 5-1-12 “Advanced settings” for details.
	Network *1	Refer to section 5-1-5 “Network” for details.
	Groups	Group Name Group Structure *1
	Interlock *1	Refer to section 5-1-7 “Interlocked LOSSNAY” for details.
	Blocks	Block Name Block Structure *1
	Energy Management Blocks	Name Structure *1
	Floor layout	Floor Name Floor Structure *1
Function1	Peak Cut	Setting Control details
	Measurement	Refer to section 5-2-2 “Measurement” for details.
	Energy Management	Refer to section 5-2-3 “Energy Management” for details.
Function2	Ext Temp Interlock	Refer to section 5-3-1 “External Temperature Interlock” for details.
	Setback	Refer to section 5-3-2 “Night Setback Control” for details.
Ventilation setting	Night purge	Refer to section 5-4-1 “Night purge” for details.

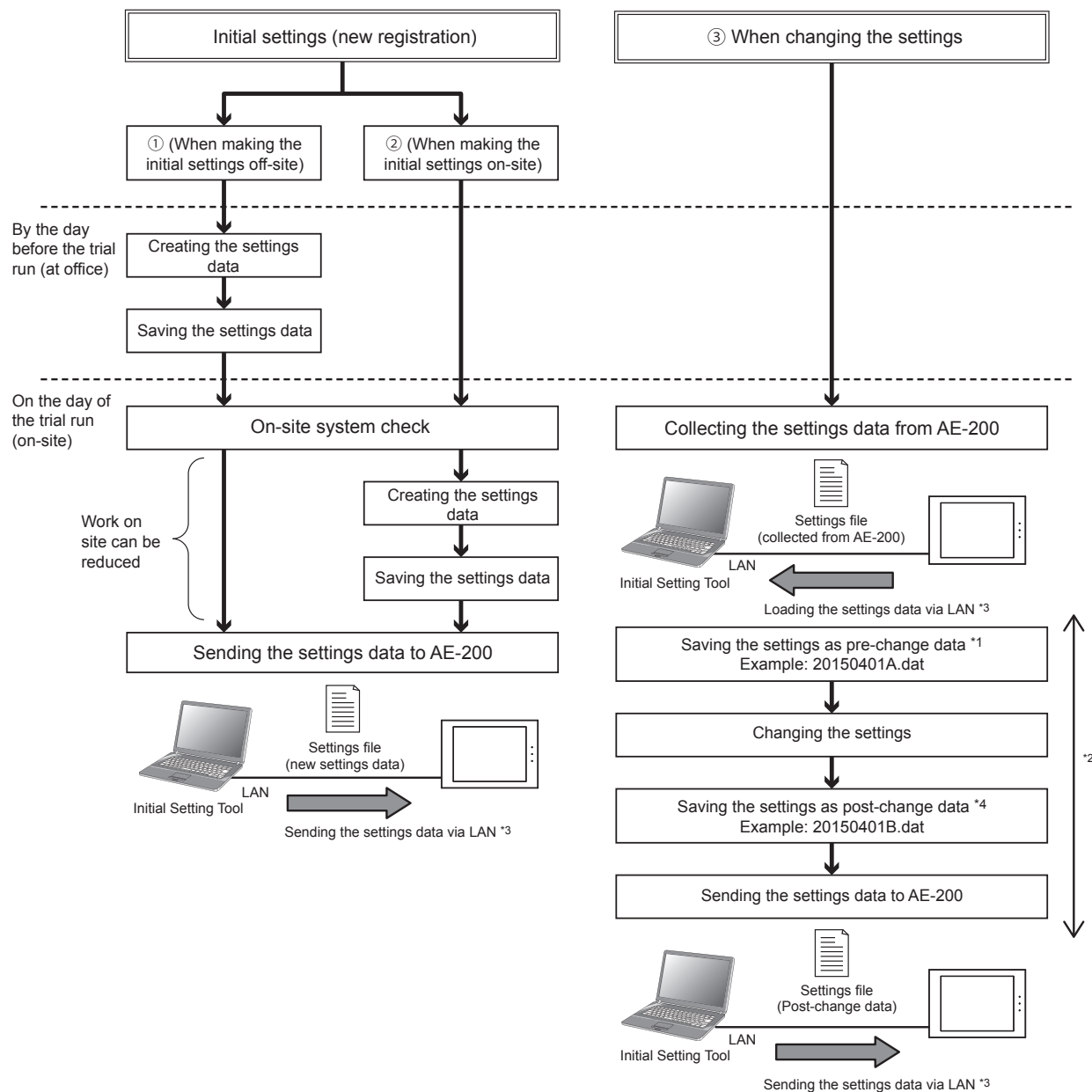
*1 At factory shipment, these settings by the building managers are prohibited.

6. Settings using Initial Setting Tool

6-1. Flow of the initial settings on Initial Setting Tool

Follow the procedures from step ③ onwards to make the initial settings for the apportioned electricity billing function.

As shown in flow ① below, settings data can be created beforehand at another location, such as office, to send it to the centralized controller on the day of the trial run.



*1 To change the existing AE-200/AE-50/EW-50 settings, make sure to save the settings file (collected from AE-200) before the change.

*2 After the settings data are loaded on the Initial Setting Tool and the changes are made, do not change the settings on the AE-200's LCD or from the Web Browser for Initial Settings until you finish sending the setting changes data.

*3 The settings data created on the Initial Setting Tool cannot be loaded or written to the AE-200 using a USB memory.

*4 Store the settings files set on the Initial Setting Tool (pre-change data and post-change data) in a safe place.

6-2. General descriptions of Initial Setting Tool

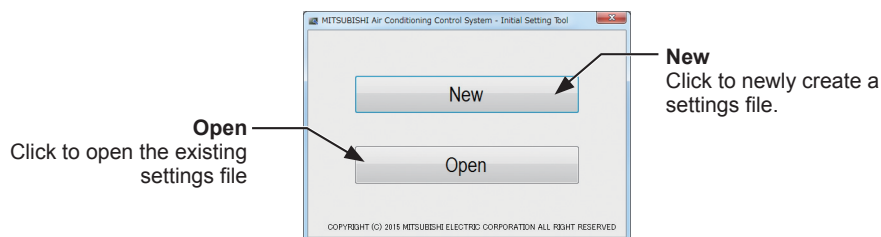
This section explains operation methods that are common to all setting screens of Initial Setting Tool.

6-2-1. Starting up the Initial Setting Tool



AE-200 Initial Setting Tool

The screen below will appear when the Initial Setting Tool is started up.

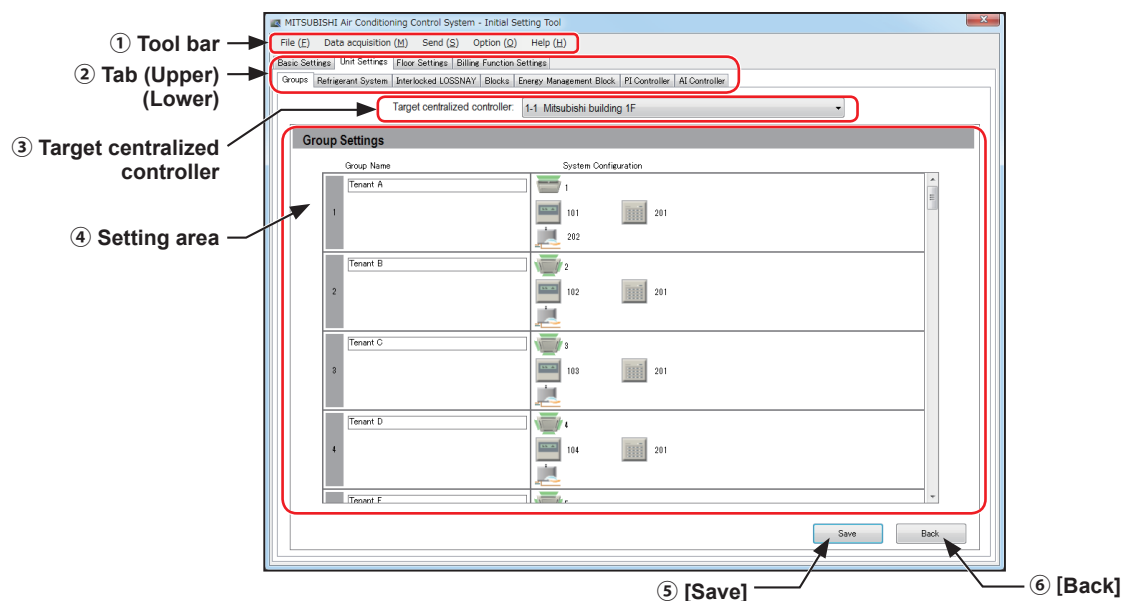


When [New] is clicked, all the settings in an unset status will be displayed.

When [Open] is clicked, the “Open” screen will be displayed. You can then select and load the settings file saved on the PC (filename.dat) which has been created beforehand. Once the settings file are loaded, the settings screen will be displayed with the settings in the file applied.

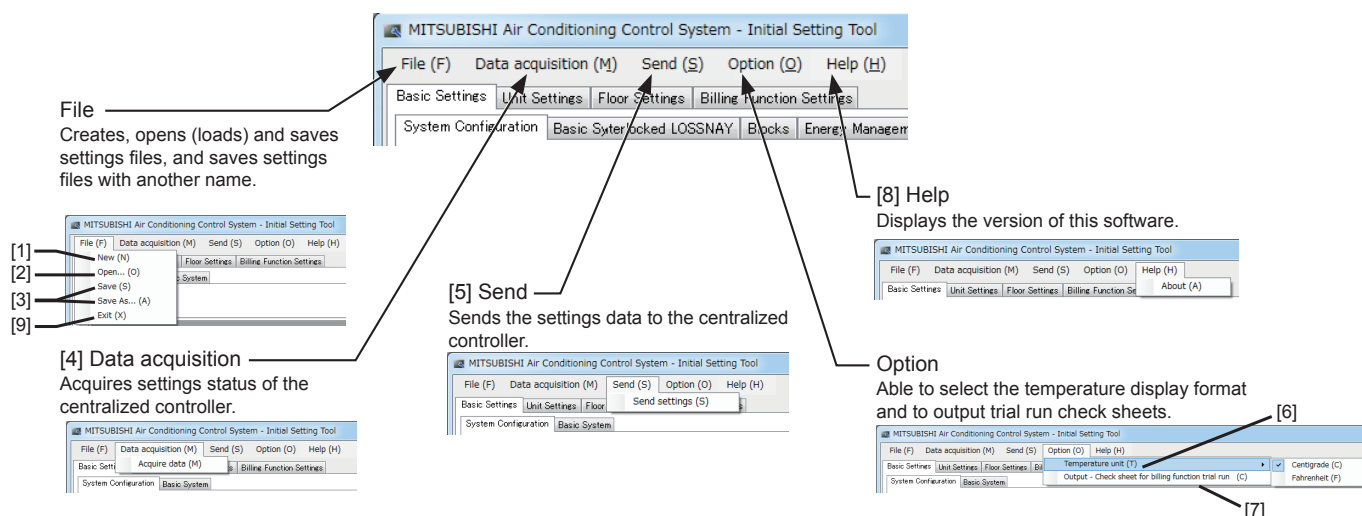
Note: When [Open] is clicked, the “Library” > “Documents” folder will be selected for the first time. Select the file saved on the Initial Setting Tool.

6-2-2. Screen configurations and common items



	Function	Operation method	Description
①	Tool bar	Operations such as to create, save, load and send the settings files, and to monitor the status of the settings from the centralized controller are possible.	Refer to section 6-2-3 "List of tool bar operations".
②	Tab	Click the tab to switch between setting screens. When the upper tabs are switched, the corresponding lower tabs will be displayed. Click the tab of which you want to make the settings.	When the "tab" of which you want to make the settings is clicked, settings screen will be displayed. Enter the settings data and then click [Save].
③	Target centralized controller	From the list of the centralized controllers with connection configuration set, select one to make the settings. Settings are required for each centralized controller.	Depending on the settings screen, this may not be displayed.
④	Setting area	The area in which settings are made.	Refer to sections 6-3 "Basic settings", 6-4 "Unit settings", and 6-6 "Billing function settings" for how to make settings.
⑤	[Save]	Click to save the settings in the Initial Setting Tool.	Even when [Save] is clicked, the settings data will not be sent to the AE-200/AE-50/EW-50. After all of the settings are completed, click [Send settings] in the tool bar to send it to the AE-200/AE-50/EW-50. Refer to section 6-2-3 [5] "Send" for details. Note also that even when saved, the settings are still not been saved in a settings file. To save a settings file, click [File] > [Save] or [Save As...] in the tool bar.
⑥	[Back]	Click to display the previous settings without making any changes.	

6-2-3. List of tool bar operations



[1] New

Click [File] > [New] in the tool bar to create a new “settings file”.

[2] Open

Click [File] > [Open] in the tool bar to load the “settings file” saved on the PC.

[3] Save

Click [File] > [Save] or [Save As...] in the tool bar to save a settings file on the PC.

Note: After the settings are completed, save the settings file and store it in a safe place.

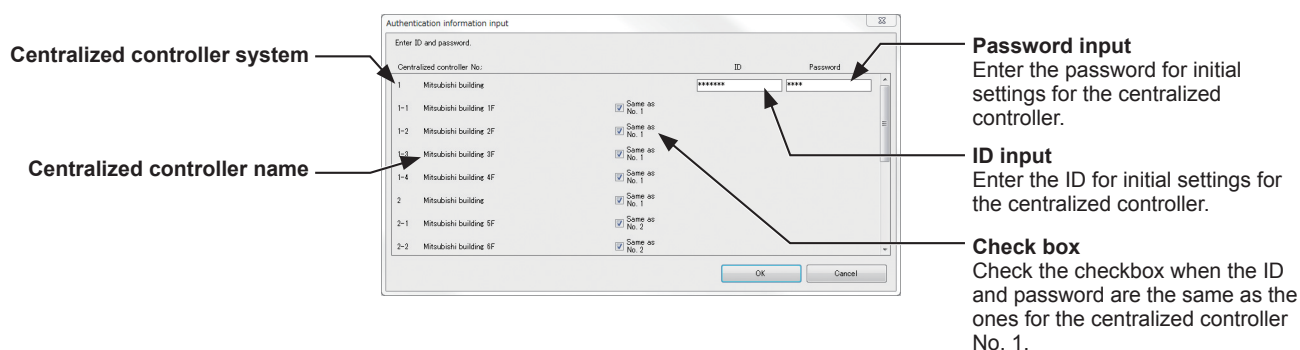
Note: The file will not be saved on the AE-200/AE-50/EW-50.

[4] Data acquisition

Loads the AE-200/AE-50/EW-50 settings data on the Initial Setting Tool.

Note: When changing the AE-200/AE-50/EW-50 settings, make sure to select [Acquire data] first.

- (1) Click [Basic Settings] > [System Configuration] and enter the IP address of the AE-200/AE-50/EW-50 from which the data is to be acquired. Then click [OK] at the bottom of the screen. (Refer to section 6-3-1 “System Configuration settings” for details.)
- (2) Click [Data acquisition] > [Acquire data] in the tool bar.
- (3) If the settings have been changed, a “Confirmation” screen will be displayed asking you to confirm the save operation. Select [Yes] to display the “Authentication information input” screen.



- (4) Enter the maintenance user ID and password of the centralized controller from which the data is to be acquired.
If the ID and password are the same as ones for the centralized controller No. 1, check the “Same as No.1” checkbox.
- (5) Click [OK] to acquire the data of the settings on the centralized controller. The settings will then be applied on the Initial Setting Tool.

Note: If data acquisition fails, the settings on the centralized controller registered in “System Configuration” will not be applied to the settings on the Initial Setting Tool.

Refer to section 6-3-1 “System Configuration settings”.

[5] Send

Click [Send] > [Send settings] in the tool bar to send all Initial Setting Tool settings to the centralized controller.

Note: This sends the settings data to all the centralized controller IP addresses set in "System Configuration" at once.

Note: Always check that all the items that require settings are entered and set before sending the data. Any items that are not set will be sent to all the centralized controllers as unset items.

Note: To change the settings, first save the acquired settings and make the setting changes before sending the settings data.

[6] Temperature unit

Click [Option] > [Temperature] in the tool bar to select the temperature display format on the Initial Setting Tool from Celsius (°C) and Fahrenheit (°F).

Note: Switching between Celsius and Fahrenheit consists of changing the unit shown on the Initial Setting Tool and does not set the unit used on each of the centralized controllers. To change the unit shown on the centralized controllers, make the settings in "Unit of temperature" setting in [Basic Settings] > [Basic System].

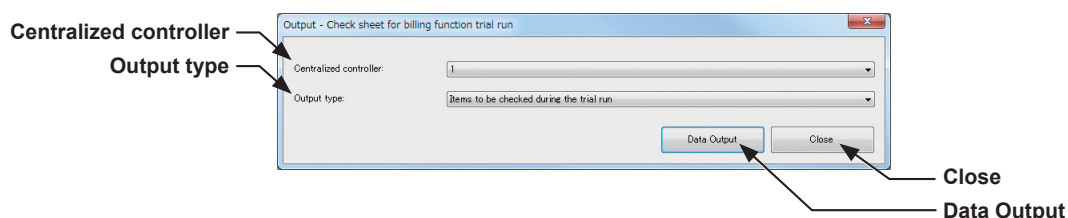
[7] Output - Check sheet for billing function trial run

Click [Option] > [Output - Check sheet for billing function trial run] in the tool bar to output the check sheet used for billing function trial runs.

Note: The check sheet will be output based on the settings on the Initial Setting Tool.

If the settings on the AE-200/AE-50/EW-50 and the Initial Setting Tool are not the same, the billing function trial will not run correctly. Be sure to complete [5] "Send" before starting the trial run.

- (1) Click [Option] > [Output - Check sheet for billing function trial run] in the tool bar.



- (2) Click the pull-down menu (▼) for "Centralized controller" and select the number for the centralized controller to be output.

Note: This centralized controller number is the one set in section 6-3-1 "System Configuration settings".

- (3) Click the pull-down menu (▼) for "Output type" and select the [Items to be checked during the trial run] for the first trial run. For the second trial run, select [Items to be checked 10 days after the trial run]. For the third trial run, select [Items to be checked on the next day of the closing date].

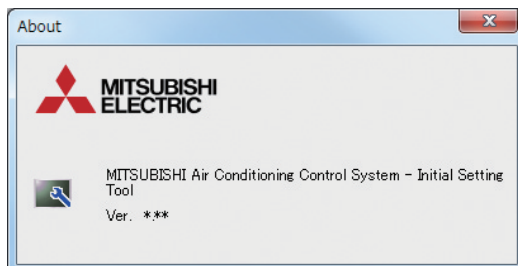
- (4) Click [Data Output].

- (5) Set the file name and save destination and then click [Save].

Note: Refer to the Instruction Book (Apportioned Electricity Billing Function) for details of the check sheet.

[8] Help

Click [Help] > [About] in the tool bar to display the version of the current Initial Setting Tool.



[9] Exit

Click [File] > [Exit] in the tool bar to exit the Initial Setting Tool.

6-2-4. Unit address selection screen

On unit address selection screen and group registration screen displayed from the group settings screen, the selectable unit addresses and groups will be displayed.

When an icon is clicked and selected, the background will change to yellow-green. To deselect an icon, click the icon again and it will then turn into deselected status (the background will change to light gray). Click [OK] to complete the selections and close the screen. Click [Cancel] to cancel your selections and close the screen. Addresses and groups that have already been registered elsewhere will be in gray background and will not be able to be selected.

On unit address selection screen displayed from the group settings screen, an icon can be changed. To change an icon, click the left or right arrow. The selected icon will be displayed on the AE-200/AE-50's LCD and in the AE-200/AE-50/EW-50 web browser.

Air conditioning unit (including A-control unit), LOSSNAY unit

General equipment

Icon selection

System controller

Remote controller

AHC

Block settings

Refrigerant system (indoor unit) settings, Interlocked LOSSNAY settings, AI controller settings

Refrigerant system (outdoor unit) settings

Energy management block settings

PI controller settings

Metering device settings

6-2-5. Other settings

- Up to 40 characters can be entered as the name on the basic system settings screen. Up to 20 characters can be entered as names in other setting screens.
- The following characters cannot be used for name settings: <, >, &, “, or ‘

6-2-6. Preparation and flow of the Initial Setting Tool

To change the AE-200/AE-50/EW-50 settings (for systems with initial settings already made), make sure to first acquire data of the settings status using the Initial Setting Tool and then follow the procedure below. If you follow a different procedure, the settings may not be correctly made.

- (1) Connect the AE-200/AE-50/EW-50 to a PC (the Initial Setting Tool) via a LAN.
- (2) Start up the Initial Setting Tool.
- (3) Click [New] or [Open].
To load a settings file stored on the PC, select [Open].
Otherwise, select [New].
- (4) Register the IP address of the AE-200/AE-50/EW-50 in [Basic Settings] > [System Configuration].
Refer to section 6-3-1 "System Configuration settings" for details.
- (5) Click [Data acquisition] > [Acquire data] in the tool bar to load the AE-200/AE-50/EW-50 settings information onto the Initial Setting Tool.
* Enter the user ID and password for an AE-200/AE-50/EW-50 maintenance user.
- (6) Click [File] > [Save As...] in the tool bar to save the pre-change initial settings data.
Note: For backup purposes, save the pre-change settings file under a file name such as "date + pre-change".
Note: At this point, the settings will not be sent to the AE-200/AE-50/EW-50.
- (7) Change the initial settings. Refer to sections 6-3 "Basic settings", 6-4 "Unit settings", and 6-6 "Billing function settings".
- (8) Click [File] > [Save As...] in the tool bar to save the settings data on the PC.
Note: Save the data using a different name to the pre-change settings file, such as "date + post-change".
Note: At this point, the settings will not be saved on the AE-200/AE-50/EW-50.
- (9) Click [Send] > [Send settings] to overwrite the AE-200/AE-50/EW-50 settings data registered in System Configuration settings.

6-3. Basic settings

6-3-1. System Configuration settings

Make the configuration settings of centralized controllers and expansion controllers on the Initial Setting Tool. Click [Basic Settings] > [System Configuration] to access the system configuration settings screen.

Note: Connection settings can be made for up to 40 centralized controllers.

AE-200 units set as the [AE-200 (Billing)] or [AE-200 (No M-NET)] will not be included in this 40 controllers.

- (1) Click the “Controller type” pull-down menu (▼) and select [AE-200], [AE-200 (No M-NET)], [AE-200 (Billing)], or [EW-50].
- (2) Enter the IP address in “Destination IP address”.
- (3) Click the “Expansion controller” checkbox.
- (4) Enter the IP address of the AE-50/EW-50 in “Destination IP address”.
- (5) If there are multiple AE-200/EW-50 units, click the “Centralized controller” checkbox and repeat procedures 1 to 4.
- (6) Click [Save] after completing the settings.

Note: The selectable options vary depending on the type of centralized controller selected in the “Controller type” of Centralized controller.

Note: The AE-200/AE-50/EW-50 IP address cannot be changed in this setting screen.

To set the AE-200/AE-50/EW-50 IP address, set on the AE-200/AE-50's LCD, the web browser for initial settings, or the quick IP address setting switch (EW-50 only).

Controller type
Set the centralized controller type.

Centralized controller
Check the checkbox to add a centralized controller. The checkbox of the first row is checked and cannot be unchecked.

Destination IP address
Set the IP address of the centralized controller.

Expansion controller
Check the checkbox to add an expansion controller.

Destination IP address
Set the IP address of the expansion controller.

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

Centralized controller	Destination IP address	Expansion controller	Destination IP address
<input checked="" type="checkbox"/> AE-200 (Billing)	192.168.1.1	<input checked="" type="checkbox"/> 1-1	192.168.1.211
		<input checked="" type="checkbox"/> 1-2	192.168.1.212
		<input checked="" type="checkbox"/> 1-3	192.168.1.213
		<input checked="" type="checkbox"/> 1-4	192.168.1.214
<input checked="" type="checkbox"/> AE-200 (No M-NET)	192.168.1.2	<input checked="" type="checkbox"/> 2-1	192.168.1.215
		<input checked="" type="checkbox"/> 2-2	192.168.1.216
		<input checked="" type="checkbox"/> 2-3	192.168.1.217
		<input type="checkbox"/> 2-4	
<input checked="" type="checkbox"/> AE-200 (No M-NET)	192.168.1.3	<input checked="" type="checkbox"/> 3-1	192.168.1.218
		<input checked="" type="checkbox"/> 3-2	192.168.1.219
		<input checked="" type="checkbox"/> 3-3	192.168.1.220
		<input checked="" type="checkbox"/> 3-4	192.168.1.221
<input checked="" type="checkbox"/> EW-50	192.168.1.4		

6-3-2. Basic System settings

Click [Basic Settings] > [Basic System] to access the basic system settings screen.

Make necessary basic system settings such as unit settings and M-NET settings for each centralized controller.

Target centralized controller
Select the connected centralized controller whose basic settings are to be made.

Unit Settings
Set the centralized controller name and unit ID. The serial number and the software version can be acquired.

Decimal point character and separator character for CSV file
Set the format of the CSV file that is output from the centralized controller.

Display Format
Set the screen display items for the centralized controller and the Web browser.

M-NET Settings
Set the M-NET address and range of prohibited controllers.

External Input Setting
Set the external signal input mode.

Advanced Setting
Click to display the screen for making advanced settings.

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

[1] Unit Settings

Set the AE-200/AE-50/EW-50 unit name and unit ID in "Unit Settings".

Clicking [Acquire] will start communication with the AE-200/AE-50/EW-50 selected in "Target centralized controller", and its serial number and software version will be displayed.

Unit Settings	
Name	Mitsubishi building
Unit ID	000001 (6 figures)
SERIAL No.	23164-027
Software Version	####(****)
<input type="button" value="Acquire"/>	

(1) Enter the unit name in "Name" in 40 characters or less. The name entered here will be used as a sender name in the error notification e-mail and e-mail alarm.

(2) Enter the unit ID in "Unit ID" in 6 figures. Use this setting to manage the multiple unit IDs.

Note: The unit name and the unit ID can be set for each centralized controller that can be selected in "Target centralized controller".

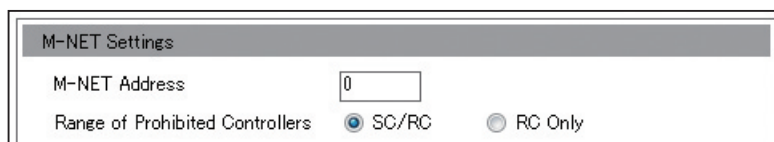
Note: The name entered here will be displayed in "Target centralized controller".

Note: The unit ID will be used as a sender ID in the error notification e-mail and e-mail alarm.

Note: When the software is updated, check that the ####(****) in "Software Version" is the same as the # of the update file (AExx_FW####_****.dat).

For example, if the AE-200 software version is 7.30 (1.05), the update file name is "AE200_FW0730_0105.dat".

[2] M-NET settings



The M-NET Settings dialog box contains two fields. The first is 'M-NET Address' with a text input field containing the value '0'. The second is 'Range of Prohibited Controllers' with two radio button options: 'SC/RC' (which is selected) and 'RC Only'.

- (1) Enter [0] in “M-NET Address” (unless otherwise specified).
- (2) When the local remote controller operation is prohibited on the centralized controller, this setting determines the scope of its applicability. Select [SC/RC] to prohibit the operation from both the sub system controllers and the remote controllers. Select [RC Only] to prohibit the operation only from the remote controllers.

[3] External Input setting

In “External Input Setting” column, set the external contact input function. Using a level signal or pulse signal of the external contact input function, the air conditioning units can be collectively controlled (e.g., stopped, operated) via a separately-sold external input/output adapter (PAC-YG10HA-E).

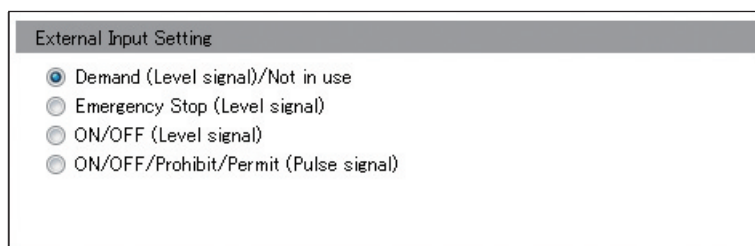
Note: Peak Cut control is performed based on the demand level signal (level 1 to 4) input from the connected demand controller.

Note: A separate license is required to use the Peak Cut function.

Note: The external input setting is required for each AE-200/AE-50/EW-50.

Important

- Refer to the AE-200 Installation Manual for details.

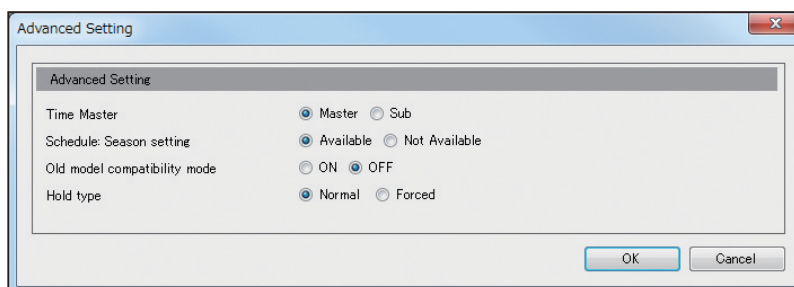


The External Input Setting dialog box shows four radio button options: 'Demand (Level signal)/Not in use' (selected), 'Emergency Stop (Level signal)', 'ON/OFF (Level signal)', and 'ON/OFF/Prohibit/Permit (Pulse signal)'.

- (1) Select one of the following options, referring to the AE-200 Installation Manual: [Demand (Level signal)/Not in use], [Emergency Stop (Level signal)], [ON/OFF (Level signal)], [ON/OFF/Prohibit/Permit (Pulse signal)].

[4] Advanced Settings

Click [Advanced Setting] to open the advanced settings screen.



The Advanced Setting dialog box contains four settings, each with two radio button options: 'Time Master' (Master selected, Sub), 'Schedule: Season setting' (Available selected, Not Available), 'Old model compatibility mode' (ON, OFF selected), and 'Hold type' (Normal selected, Forced). At the bottom right are 'OK' and 'Cancel' buttons.

(1) Time Master/Sub

- (1) In “Time Master”, select [Master] or [Sub]. When using two AE-200 units to operate and monitor the connected units, set to [Master] on only one AE-200, and set to [Sub] on the other AE-200. The date and time synchronization is performed from the AE-200 whose “Time Master” setting is set to [Master] to the AE-200 whose “Time Master” setting is set to [Sub].

Important

- When only one AE-200 unit is connected to the system, leave the default setting [Master] as it is.
- When multiple AE-50/EW-50 units are connected to the system, leave the default setting [Master] as it is on all AE-50/EW-50 units.

(2) Schedule: Season setting

- (1) In "Schedule: Season setting", select [Available] to enable the seasonal settings of the weekly schedules and [Not Available] to disable. Unless otherwise specified, leave the default setting [Available] as it is.

(3) Old model compatibility mode

- (1) In "Old model compatibility mode", select [ON] or [OFF].
Select [ON] when not using a Dual set point function and the Prohibit Remote Controller function (Timer, Air Direction, Fan Speed).
When some of the connected indoor units support a Dual set point function and some do not, selecting [ON] will mean that they all do not support the function.
When some of the connected indoor units support the Prohibit Remote Controller function (Timer, Air Direction, Fan Speed) and some do not, selecting [ON] will mean that they all do not support the function.

(4) Hold type

- (1) In "Hold type", select [Normal] or [Forced].
The Hold function is a function to disable the operations that were scheduled for air conditioning unit groups. If the setting for [Hold] is set to [ON] on the Monitor/Operation screen and the "Hold type" on the screen above is set to [Forced], the [Hold] setting can be cancelled only from the AE-200/AE-50/EW-50. If the "Hold type" is set to [Normal], the [Hold] setting can be cancelled from AE-200/AE-50/EW-50, other system controllers, or remote controllers.

Note: The Hold function can be used on the AE-200A/AE-50A/EW-50A, but not on the AE-200E/AE-50E/EW-50E.

Note: The Hold function cannot be used on general equipments.

Note: The setting [Forced] will not be effective on Air To Water (PWFY) unit groups, LOSSNAY unit groups, and air conditioning unit groups that do not support the Hold function (i.e., Mr. Slim M-Series/P-Series indoor units).

[5] Display Format



Set the items in "Display Format".

Display Format	
Unit of Temperature	<input checked="" type="radio"/> °C <input type="radio"/> °F
Pressure unit of measure	<input checked="" type="radio"/> MPa <input type="radio"/> PSI <input type="radio"/> kgf/cm ²
Date Format	<input checked="" type="radio"/> 31/12/2015 <input type="radio"/> 12/31/2015 <input type="radio"/> 2015/12/31
Time Format	<input type="radio"/> 06:00 PM <input checked="" type="radio"/> 18:00
Group name display on Condition List screen	<input checked="" type="radio"/> ON <input type="radio"/> OFF
Filter Sign Display	<input checked="" type="radio"/> ON <input type="radio"/> OFF
Room temperature	<input checked="" type="radio"/> Always show <input type="radio"/> Show during operation <input type="radio"/> Hide
Occupancy sensor display	<input type="radio"/> Hide <input checked="" type="radio"/> Show occupancy icon. <input type="radio"/> Show vacancy icon. <input type="radio"/> Show both icons.
Brightness sensor display	<input checked="" type="radio"/> Hide <input type="radio"/> Show bright icon. <input type="radio"/> Show dark icon. <input type="radio"/> Show both icons.
Humidity sensor display	<input checked="" type="radio"/> ON <input type="radio"/> OFF

- (1) In "Unit of Temperature", select the desired temperature unit.
- (2) In "Pressure unit of measure", select the desired pressure unit.
- (3) In "Date Format", select the desired display format for year, month, and date.
- (4) In "Time Format", select the desired display of time format.
- (5) In "Group name display on Condition List screen", select [ON] to display the group names under the icons on the Monitor/Operation screen. Select [OFF] not to display the group names.
- (6) In "Filter Sign Display", select [ON] to display the filter sign on the Monitor/Operation screen, and select [OFF] not to.
When the "Filter Sign Display" is set to [OFF], the filter sign will not appear on the Monitor/Operation screen even when the indoor unit detects a filter cleaning signal.
If the filter is regularly cleaned and the sign display is unnecessary, set it to [OFF].
- (7) In "Room temperature", select the desired temperature display option to be used on the Monitor/Operation screen. Select [Always show] to display the temperature at all times, [Show during operation] to display the temperature only during operation, and [Hide] not to display the temperature.

Note: Selecting [Show during operation] is recommended because the temperature shown may be higher than the actual temperature especially when the unit is stopped during the Heat mode.

- (8) In “Occupancy sensor display”, make the Show/Hide setting for the occupancy/vacancy status that is detected by the built-in occupancy sensor on the ME remote controller (North America: PAR-U01MEDU, Other countries: PAR-U02MEDA).

Occupancy icon	Vacancy icon
 (Blue)	 (Gray)

Select [Hide] not to display the occupancy/vacancy status on the Monitor/Operation screen.



Select [Show occupancy icon] to display the occupancy icon when the sensor on the remote controller detects occupancy.

Select [Show vacancy icon] to display the vacancy icon when the sensor on the remote controller detects vacancy.

Select [Show both icons] to display the occupancy or vacancy icon according to the occupancy status of the room.

Note: If the ME remote controller has no built-in occupancy sensor, the occupancy/vacancy icons will not be displayed on the Monitor/Operation screen.

- (9) In “Brightness sensor display”, make the Show/Hide setting for the brightness/darkness status that is detected by the built-in brightness sensor on the ME remote controller (North America: PAR-U01MEDU, Other countries: PAR-U02MEDA).

Brightness icon	Darkness icon
 (Yellow)	 (Gray)

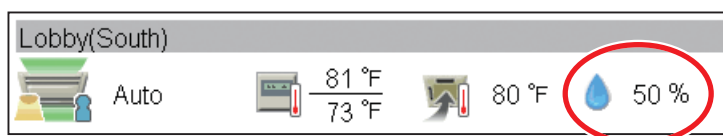
Select [Hide] not to display the brightness/darkness icons on the Monitor/Operation screen.

Select [Show bright icon] to display the brightness icon when the brightness level in the room reaches the predetermined brightness level.

Select [Show dark icon] to display the darkness icon when the darkness level in the room reaches the predetermined darkness level.

Select [Show both icons] to display the brightness or darkness icon according to the brightness/darkness level of the room.

- (10) In “Humidity sensor display”, make the Show/Hide setting for the humidity reading of the built-in humidity sensor on the ME remote controller (North America: PAR-U01MEDU, Other countries: PAR-U02MEDA).
Select [ON] to display the humidity reading on the Monitor/Operation screen.



[6] CSV file format settings (separator character and decimal point character)

- (1) Set the format of the AE-200 CSV file (apportioned results, charges calculation results from the Charge Calculation Tool).

Important

- This setting must be the same with the “Decimal point character for CSV file” and “Separator character for CSV file” settings on the [Advanced Settings] screen on the Charge Calculation Tool. If the settings are not the same, an error message “The CSV file format is not appropriate. Check the directory from which the CSV file is acquired.” will appear.
- When multiple AE-200 units are connected, make the same settings for all of them.

[7] Saving the settings

Click [Save] after setting [1] to [6] above.

6-4. Unit settings

This section explains how to make unit settings on the Initial Setting Tool.

6-4-1. Group settings

Note: Each group can contain up to 16 air conditioners.

Note: Air conditioners (City Multi indoor unit), Air conditioners (A-control), LOSSNAY units, Air To Water (PWFY) units, HWHP (CAHV, CRHV) units, and general equipment groups cannot be combined in one group.

Note: When registering LOSSNAY units, do not combine the units that support 24-hour ventilation function or Night Purge function and the units that do not in one group.

Note: The addresses of the units that have been registered to other groups or used for the interlocked LOSSNAY settings, PI controller settings, or AI controller settings will appear with a gray background and cannot be selected.

- (1) Click [Unit Settings] > [Groups] to access the group settings screen.

Register the groups of air conditioning units, LOSSNAY units, LOSSNAY with heater/humidifier, Air To Water (PWFY) units, HWHP (CAHV, CRHV) units, general equipment, remote controllers, system controllers, or AHC to be connected to the AE-200/AE-50/EW-50.

Target centralized controller
Select the connected centralized controller whose group settings are to be made.

Group No.

Group name

Unit registration
Click to display the screen for registering the air conditioners, Air To Water (PWFY) units, LOSSNAY units, LOSSNAY with heater/humidifier, HWHP (CAHV, CRHV) units, and general equipment.


System controller registration
Click to display the screen for registering the system controllers.




Remote controller registration
Click to display the screen for registering the remote controllers.

AHC registration
Click to display the screen for registering the AHC.

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

- (2) In "Group Name", enter the group name in 20 characters or less.
- (3) Click the icon in "Unit registration" () to display the unit address selection screen.
- (4) Select [Air-conditioners], [Air-conditioners (A-control)], [Air To Water], [HWHP], [LOSSNAY], or [General Equipment (via PAC-YG66DCA)].
- (5) Select the address numbers of the units to be registered.
- (6) When [General Equipment (via PAC-YG66DCA)] is selected, select the contact number that is connected to the general equipment to be registered.
- (7) To change the icon, click the right or left arrow.
The selected icon will be displayed on the AE-200/AE-50's LCD and on the AE-200/AE-50/EW-50's Integrated Centralized Control Web.
- (8) When [General Equipment (via PAC-YG66DCA)] is selected, make the setting to allow or disallow operation in "Allow Operations".
Select [In batch and on individual group] to allow the operator to turn on or off the general equipment collectively or by the groups.
Select [On individual group] to allow the operator to turn on or off the general equipment by the groups.
Select [No operations (Monitor only)] to disallow the operator to turn on or off the general equipment.

- (9) When [General Equipment (via PAC-YG66DCA)] is selected, in “Monitor”, select which status will be used to reflect the units’ ON/OFF status to the unit icons on the Monitor/Operation screen.
Select [Output status] to use the status that is sent to the general equipment, and [Input status] to use the status that is sent from the general equipment.
- (10) Click [OK] after completing the settings.
- (11) Click the icon in “Remote controller registration” () to display the unit address selection screen.
- (12) Select the address numbers of the ME remote controllers to be registered, and click [OK].
Note: Each group can contain up to two ME remote controllers.
Note: Each group can contain up to four ME remote and system controllers combined.
Note: MA remote controllers do not need to be registered to a group.
- (13) Click the icon in “System controller registration” () to display the unit address selection screen.
- (14) Select the address numbers of the system controllers to be registered, and click [OK].
Note: Each group can contain up to four ME remote and system controllers combined.
- (15) Click the icon in “AHC registration” () to display the unit address selection screen.
- (16) Select the address number of the AHC to be registered, and click [OK].
Note: Each group can contain one AHC.
- (17) Click [Save] to save the settings.
Note: Switch the “Target centralized controller” setting to make group settings for each centralized controller.
Note: The controllers to which [AE-200 (Billing)] or [AE-200 (No M-NET)] is set in section 6-3-1 “System Configuration settings” will not be displayed in “Target centralized controller”.
Note: Up to six general equipment can be registered for each DIDO controller (PAC-YG66DCA). Each contact counts as one unit.
Note: Each group can contain up to 16 general equipment. (Each contact counts as one unit.)
Note: To change the registered units to general equipment in the group to which air conditioners, LOSSNAYS, Air To Water (PWFY) units, HWHP (CAHV, CRHV) units, or LOSSNAYS with heater/humidifier are registered, unregister the air conditioners, LOSSNAYS, Air To Water (PWFY) units, HWHP (CAHV, CRHV) units, or LOSSNAYS with heater/humidifier first.
Note: General equipment groups cannot include remote controllers or system controllers.

6-4-2. Refrigerant System settings

Refrigerant system information (connection information of outdoor, sub outdoor, and indoor units) can be set.

- (1) Click [Unit Settings] > [Refrigerant System] to access the refrigerant system settings screen.

Target centralized controller
Select the connected centralized controller whose refrigerant system settings are to be made.

Outdoor unit registration
Click to display the screen for registering the outdoor units.




Data acquisition
Click to acquire the connection information of the actual unit from AE-50/EW-50 and replace the settings.

Indoor unit registration
Click to display the screen for registering the indoor units.

Sub outdoor unit registration
Click to display the screen for registering the sub outdoor units.

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

- (2) Click [Data acquisition] with the units properly connected to acquire the connection information from AE-200.
- (3) Click the icon in "Outdoor unit registration" () to display the unit address selection screen.
- (4) Select the address number of the outdoor unit to be registered, and click [OK].
- (5) Click the icon in "Sub outdoor unit registration" () to display the unit address selection screen.
- (6) Select the address number of the sub outdoor unit to be registered, and click [OK].
- (7) Click the icon in "Indoor unit registration" () to display the unit address selection screen.
- (8) Select the address number of the indoor unit to be registered, and click [OK].
- (9) Click [Save] to save the settings.

Note: Ensure that these settings match the actual connection status. Also open [Initial Settings] > [System View] screen on the AE-200's LCD and check that the settings are the same. If the settings are not the same, the charges will not be properly calculated.

Note: If A-control units are group registered, the addresses of the A-control units will be displayed under "Indoor unit" or "Outdoor unit".

Note: If a "warning message" appeared during [Data acquisition], there may be an error in the air conditioner connection information and in the group setting, PI controller setting or AI controller setting on the Initial Setting Tool. Review the settings on the Initial Setting Tool and then try the data acquisition again.

Note: Adding or deleting the information on this screen will not change the actual refrigerant system.

Note: Not all the refrigerant system information may be acquired depending on the centralized controller's start-up condition. In this case, add or change the information on this screen.

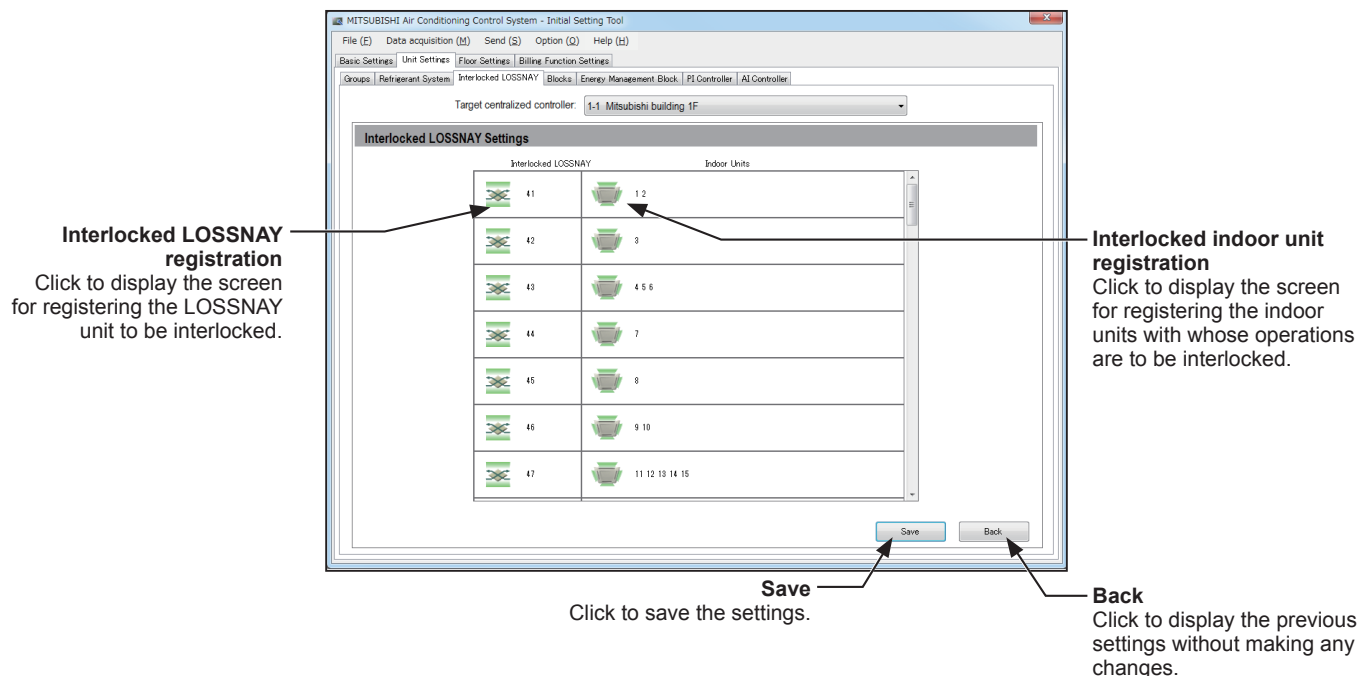
Note: If the displayed information acquired from the centralized controller differs from the actual system, restart the centralized controller or check the air conditioning units.



6-4-3. Interlocked LOSSNAY settings

The ON/OFF status of the LOSSNAY or LOSSNAY with heater/humidifier can be interlocked with the operation of indoor units.

Note: The ON/OFF status of the indoor units are not interlocked with the ON/OFF status of the LOSSNAY unit.

- (1) Click [Unit Settings] > [Interlocked LOSSNAY] to access the interlocked LOSSNAY settings screen.



- (2) Click the icon in "Interlocked LOSSNAY registration" () to display the unit address selection screen.
- (3) Select the address number of the LOSSNAY to be interlocked, and click [OK].
- (4) Click the icon in "Interlocked indoor unit registration" () to display the unit address selection screen.
- (5) Select the address number of the indoor units with whose operations are to be interlocked, and click [OK]. Each LOSSNAY can be interlocked with up to 16 indoor units.
- (6) Click [Save] to save the settings.

6-4-4. Block settings

By making block settings, multiple groups in a given block can be collectively monitored or operated on the AE-200's LCD and the Integrated Centralized Control Web.

- (1) Click [Unit Settings] > [Blocks] to access the block settings screen.

Target centralized controller
Select one of the connected centralized controllers whose block settings are to be made.

Block No.


Block name

Group registration
Click to display the screen for selecting groups.

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

Block No.	Block Name	Member Groups	Tenants
1	Tenant ABC	Group 1 Group 2 Group 3	Tenant A Tenant B Tenant C
2	Tenant DE	Group 4 Group 5	Tenant D Tenant E
3	Tenant F	Group 6	Tenant F
4	Tenant GH	Group 7 Group 8	Tenant G Tenant H
5	Tenant IJ	Group 9 Group 10	Tenant I Tenant J
6	Tenant KLM	Group 11 Group 12 Group 13	Tenant K Tenant L Tenant M
7	Tenant N	Group 14	Tenant N
8	Tenant O	Group 15	Tenant O

- (2) In "Block Name", enter the block name in 20 characters or less.
The name entered here will be displayed on the LCD and the Integrated Centralized Control Web.
- (3) Click the icon in "Group registration" () to display the group selection screen.
- (4) Select the group numbers to be registered, and click [OK].
(To show the group name, move the cursor to the group number.)
- (5) Click [Save] to save the settings.

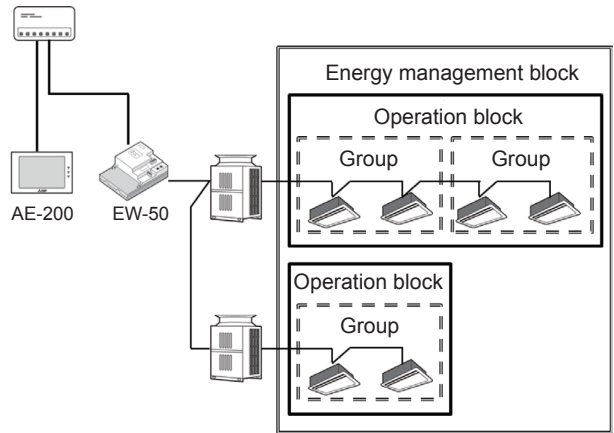
6-4-5. Energy management block settings

Make the settings for the energy management block (tenant) used as collective unit for the apportioned electricity billing function.

[1] General descriptions

(1) What is energy management block (tenant)?

- An energy management block (tenant) is the unit used for displaying and outputting charge calculation results.
- An energy management block (tenant) is a collection of operation blocks.
- An operation block is a collection of groups.



(2) LOSSNAY (including LOSSNAY with heater and humidifier) settings

Make the settings based on the LOSSNAY system configuration.

	Usage		Energy management block setting method
LOSSNAY (without heater and humidifier)	LOSSNAY groups only		To apportion the electric energy, set as energy management block (tenant).
	Interlocked with the operation of indoor units		No settings are required (cannot be set). Note: The LOSSNAY electric energy will be apportioned based on the operating status of the interlocked indoor units.
LOSSNAY with heater and humidifier	LOSSNAY groups only		Set as energy management block (tenant).
	Interlocked with the operation of indoor units	When interlocked with the operation of same tenant's indoor units	Set as same energy management block (tenant) as the interlocked indoor units.
		When interlocked with the operation of multiple tenants' indoor units	Make the settings in one of the following ways: <Method 1> Set as independent energy management block (tenant) and invoice the electricity charges by including it to common area charges, etc. <Method 2> Exclude these units from the tenant settings. In this case, the electric energy for LOSSNAY units with heater/humidifier will be apportioned based on the operating status of the interlocked indoor units.

[2] Energy management block settings

- (1) Click [Unit Settings] > [Energy Management Block] to access the energy management block settings screen.

Target centralized controller
Select one of the connected centralized controllers whose energy management block settings are to be made.

Energy management block No.



Member LOSSNAY with heater/humidifier registration
Click to display the screen for selecting LOSSNAY with heater/humidifier.

Member block registration
Click to display the screen for selecting member blocks.

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

Energy management block name	Member blocks	Member LOSSNAY with heater and humidifier
1 Tenant ABC	Exp1 Block1 Exp2 Block1 Exp3 Block1 Tenant ABC Meeting room A Meeting room B Meeting room C	Exp1 31 32
2 Tenant DE	Exp1 Block2 Exp2 Block2 Exp3 Block2 Tenant DE Meeting room D Meeting room E	
3 Tenant FGH	Exp1 Block3 Exp2 Block3 Exp3 Block3 Tenant F Tenant GH	
4 Tenant IJKLM	Exp1 Block5 Exp2 Block5 Exp3 Block5 Tenant IJ Tenant KLM	
5 Tenant NOP	Exp1 Block7 Exp2 Block7 Exp3 Block7 Tenant N Tenant O Tenant P	
6 Tenant QRS	Exp1 Block10 Exp2 Block10 Exp3 Block10 Tenant Q Tenant R Tenant S	
7 Tenant TUVW	Exp1 Block13 Exp2 Block13 Exp3 Block13 Tenant T Tenant U	

- (2) In "Energy management block name", enter the energy management block number in 20 characters or less.
Note: By setting the same name for the energy management blocks that are connected to different AE-200 units, the calculation results can be merged.
Refer to the Instruction Book (Apportioned Electricity Billing Function) for details.
- (3) Click the icon in "Member block registration" () to display the member block selection screen.
- (4) Select one of the controllers ([AE200], [Exp1] through [Exp4]) of the member block to be registered.
- (5) Select the block number of the member block to be registered, and click [OK].
Note: To show the block name, move the cursor to the block number.
- (6) Click the icon in "Member LOSSNAY with heater/humidifier registration" () to display the unit address selection screen.
- (7) Select the controller ([AE200], [Exp1] through [Exp4]) of the LOSSNAY with heater/humidifier to be registered.
- (8) Select the unit address of the LOSSNAY with heater/humidifier to be registered, and click [OK].
Note: To show the block name, move the cursor to the block number.
- (9) Click [Save] to save the settings.

6-4-6. PI controller settings

To use metering device on the centralized controller, follow the instructions below to register PI controllers (PAC-YG60MCA) and to make measurement settings.

Note: The maximum settable number of PI controllers for each centralized controller is 15. The maximum number of connectable PI controllers in an AE-200 system is 20.

Note: A separate license is required to use the Peak Cut function using the measurement values.

Note: Only the addresses that have not been registered on the group, interlocked LOSSNAY, or AI controller setting screens are available for selection.

- (1) Click [Unit Settings] > [PI Controller] to access the PI controller settings screen.

Target centralized controller
Select one of the connected centralized controllers whose PI controller settings are to be made.

PI controller registration
Click to display the screen for registering PI controllers.


Metering device name

Pulse Weight

Measurement unit

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

- (2) Click the icon in “PI controller registration” () to display the unit address selection screen.
- (3) Select the address number of the PI controller to be registered.
When a built-in Pulse Input (PI) of AE-200/AE-50/EW-50 is used, select [PI].
- (4) In “Metering device name” (Ch1 to Ch4), enter the metering device name in 20 characters or less.
- (5) Enter the pulse weight and select the measurement unit.
Note: The measurement unit can be selected from [kWh], [m3], [MJ], or [--(no unit)].
Note: When not using a metering device, leave the pulse weight blank and select [--(no unit)] for the measurement unit.
- (6) Click [Save] to save the settings.

Important

- Set the pulse weight according to the metering device to be used. To ensure proper settings, first check the value measured by the metering device and the value counted by the built-in Pulse Input (PI) of AE-200/AE-50/EW-50 or the PI controller. Then, after a certain time, check that both values have increased by equal values. (The values that the built-in Pulse Input (PI) of AE-200/AE-50/EW-50 or the PI controller counts can be checked on the LCD and the Integrated Centralized Control Web.

6-4-7. AI controller settings

To use temperature and humidity sensors, follow the instructions below to register AI controllers (PAC-YG63MCA) and to make measurement settings.

Note: Only the addresses that have not been registered on the group, interlocked LOSSNAY, or PI controller setting screens are available for selection.

- (1) Click [Unit Settings] > [AI Controller] to access the AI controller settings screen.

Target centralized controller
Select one of the connected centralized controllers whose AI controller settings are to be made.

AI controller registration
Click to display the screen for registering AI controllers.

Measurement setting

Save
Click to save the settings.

Back
Click to display the previous settings without making any changes.

Sensor name
Selection of temperature or humidity sensor icon

Measurable range

Upper/lower ON- and OFF-threshold settings for e-mail alarm function

Upper limit (ON-threshold)

Upper limit (OFF-threshold)

Lower limit (OFF-threshold)

Lower limit (ON-threshold)

Acquire

- (2) Click the icon in "AI controller registration" () to display the unit address selection screen.
- (3) Select the address number of the AI controller to be registered, and click [OK].
- (4) Enter the name of the sensor in 20 characters or less.
- (5) Select a temperature sensor icon () or humidity sensor icon () for Ch1 and Ch2 respectively. "Not in use" can also be selected.
- (6) Enter the measurable range of the sensor.
When the Pt sensor is connected, the range must be between -30°C (-22°F) and +60°C (+140°F).
When the sensors other than the Pt sensors are connected, enter the ranges that are described in the operation manuals of the sensor.
- (7) To receive an e-mail alarm when the temperature or the humidity exceeds certain predetermined values, set the ON- and OFF-thresholds for both the upper and lower limit temperatures.
To avoid frequent ON/OFF cycling, the minimum differential between the ON- and OFF-threshold values should be 1°C (2°F).
- (8) Click [Save] after completing the settings.

[1] Offsetting the measured temperature/humidity values

To set the offset value for the measured values, click [Acquire] to acquire the current value, and set the offset value according to your usage environment.

Note: If AI controller connection settings for a given centralized controller have not been saved, the "measurement value" will not be displayed even when [Acquire] is clicked.

Note: When registering an AI controller for the first time, the "measurement value" cannot be acquired. To input the "offset value" after acquiring and checking the "measurement value", once the setting information must be sent to the centralized controller. After registering the AI controller and temperature/humidity sensors, send the settings data to the centralized controller. (See section 6-2-3 [5] "Send".)

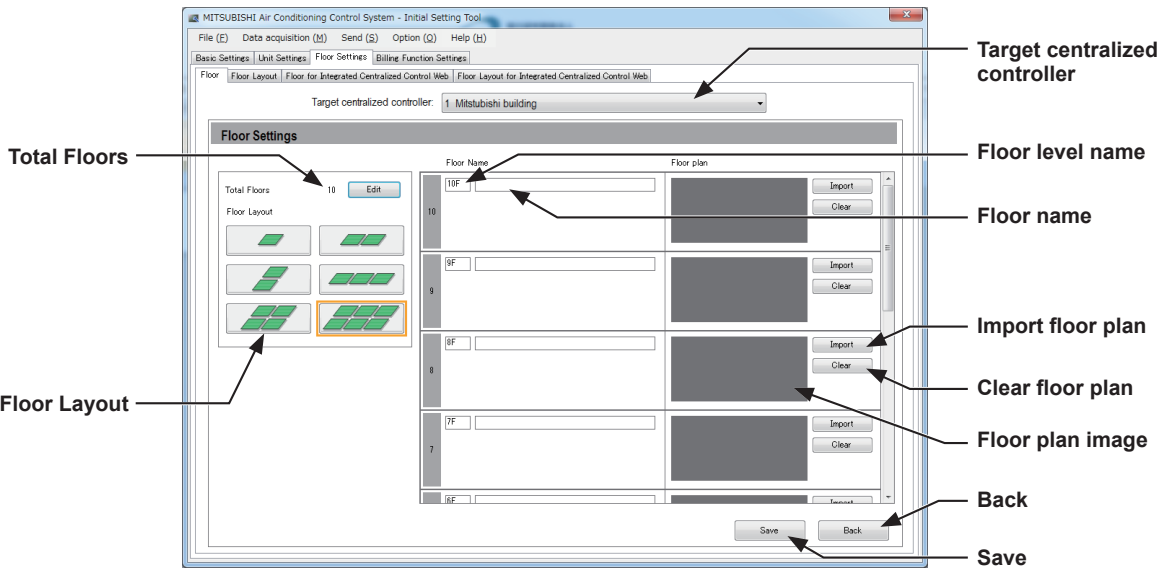
Note: The default offset value for temperature sensor is "0.0". The settable offset value range is between -10.0°C (-18.0°F) and +10.0°C (+18.0°F).

Note: The default offset value for humidity sensor is "0.0". The settable offset value range is between -10.0% and +10.0%.

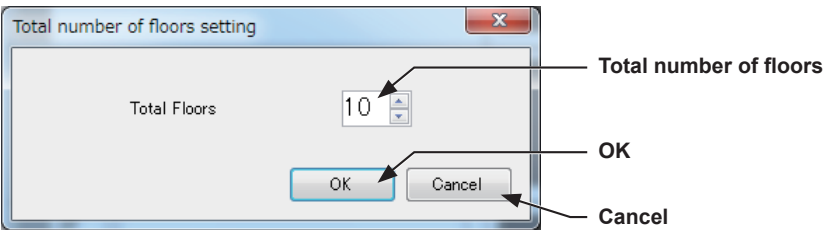
6-5. Floor Settings

6-5-1. Floor settings for LCD

The floor layout on the floor display under the [Monitor/Operation] menu on the LCD can be set and changed, and the display position of the group icons on the floor can be changed.
Click [Floor Settings] > [Floor] to access the LCD's floor settings screen.



- (1) In [Target centralized controller], select a target centralized controller.
The floor level settings for the selected centralized controller will appear.
Note: The target centralized controller No. is the number shown in 6-3-1 "System Configuration settings". The controller name is the name registered in unit settings in Basic System settings.
- (2) Click [Edit] in [Total Floors] to display the "Total number of floors setting" screen.
- (3) Set the total number of floors by entering the number on the keyboard or by clicking buttons.



- (4) In [Floor Layout], select the floor layout to be used.
Note: If the total number of floors is set to "0," all groups will appear as unassigned groups.
Note: Up to ten floors can be registered.
The display range of the area on the Floor Layout screen vary, depending on the selected floor layout.

Floor layout	Display area	Floor layout	Display area

- (5) In [Floor level name], enter the floor level name in 3 alphanumeric or symbol characters or less.
- (6) In [Floor name], enter the floor name in 20 alphanumeric or symbol characters or less.
- (7) To read a floor plan file, click [Import] and select a file. Refer to the table below for the restrictions on the floor plan files to be imported. Click [Clear] to delete the imported floor plan file.

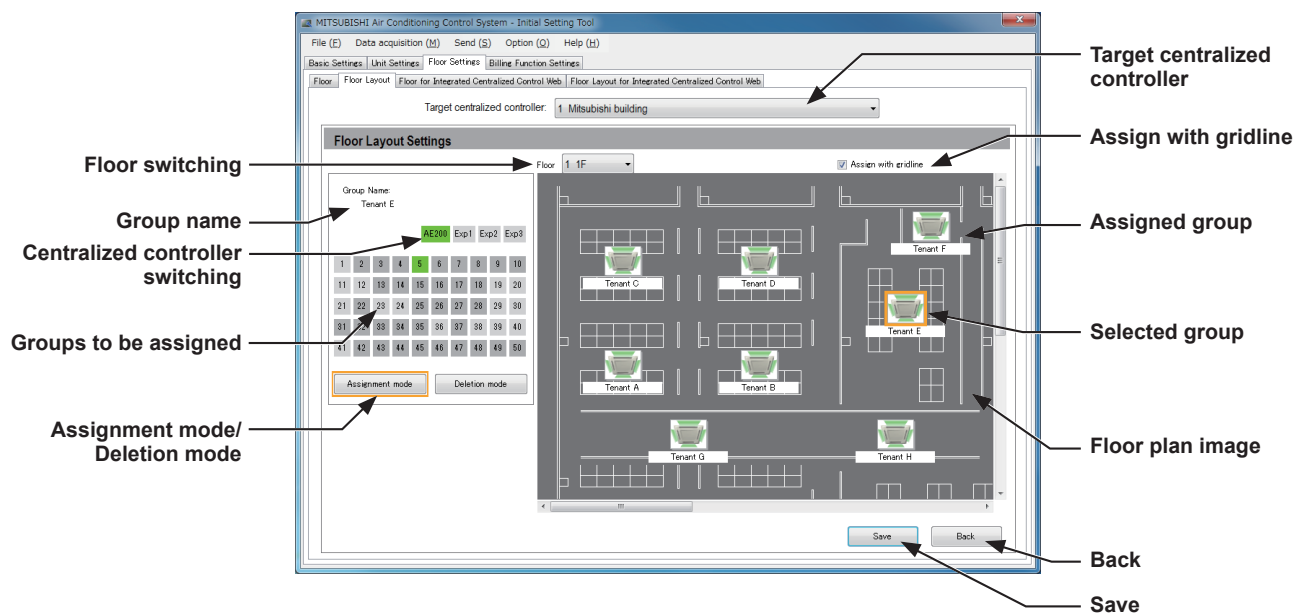
Restrictions on the floor plan files to be read

	<div>900 (height) × 1890 (width) dots for each floor plan</div> <div>Note: The file size must be 900 (height) × 1890 (width) dots regardless of the display range of the area. (Even when the floor layout shows only one display area, the file size must be 900 (height) × 1890 (width) dots. In this case, create a file plan only in the left top area.)</div>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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<div><div>* Use the colors in the table above, otherwise the floor plan will appear in different colors.</div><div>* The default background color is RGB [103, 103, 103].</div></div>	R	G	B	224	71	72	221	151	152	81	66	81	105	89	105	17	16	17	51	42	52	27	23	30	165	145	185	33	37	57	2	17	85	6	35	160	6	28	122	9	40	168	12	45	176	154	162	194	211	214	227	15	49	182	17	53	188	20	57	195	24	64	205	17	46	149	21	52	163	28	70	215	32	64	178	45	80	204	44	75	190	55	90	213	69	99	205	99	122	202	R	G	B	101	112	150	126	137	176	142	149	175	175	180	199	33	77	225	37	83	234	39	86	240	41	89	245	42	92	249	46	93	246	23	47	124	63	104	238	77	116	241	99	137	255	126	146	214	149	170	235	70	79	108	179	189	222	191	202	230	192	210	241	163	170	180	236	242	250	159	185	210	144	154	162	204	228	245	112	183	219	126	139	145	214	241	251	159	240	253	R	G	B	130	150	153	105	134	135	37	96	86	204	214	211	48	64	59	250	255	253	227	255	243	241	255	248	237	249	243	67	97	79	59	78	66	61	116	80	85	128	100	154	177	162	14	45	24	59	93	70	178	187	181	46	181	88	59	157	90	90	213	129	214	255	225	224	239	228	129	155	135	178	194	182	115	255	143	99	193	117	182	201	185	59	255	88	19	255	48	R	G	B	176	255	185	238	255	240	154	255	163	198	255	203	106	255	116	137	255	144	226	252	227	124	233	125	250	255	250	167	229	166	107	145	104	182	211	180	23	95	15	149	211	141	128	140	126	95	202	74	194	231	186	147	169	142	41	177	3	166	203	154	208	224	202	219	235	211	172	187	164	203	211	197	241	244	238	199	201	195	110	114	98	127	129	119	210	211	196	R	G	B	255	253	185	193	193	150	255	255	221	121	121	106	162	162	147	142	142	129	94	94	89	212	212	203	235	235	227	213	213	207	203	203	198	137	137	134	116	116	114	245	245	242	85	85	84	121	121	120	253	253	252	119	117	23	255	253	143	253	241	7	174	173	157	208	195	0	220	210	64	156	153	113	201	199	175	151	150	136	187	175	71	195	193	175	198	197	187	R	G	B	179	159	1	172	169	147	187	185	169	179	177	162	205	203	187	224	222	206	212	201	139	136	134	122	158	156	143	217	215	202	230	228	216	142	128	71	254	246	220	244	237	215	33	25	2	111	110	107	63	43	4	106	104	100	133	132	130	116	79	14	254	251	246	255	151	0	93	61	13	254	221	171	157	97	18	211	205	197	205	128	31	187	116	28	219	138	35	R	G	B	225	148	50	214	159	89	77	76	75	230	211	206	207	203	202	225	197	192	225	8	8	221	179	179	152	151	151	255	255	255	250	250	250	249	249	249	246	246	246	243	243	243	241	241	241	239	239	239	236	236	236	232	232	232	228	228	228	225	225	225	220	220	220	217	217	217	215	215	215	211	211	211	209	209	209	207	207	207	205	205	205	202	202	202	198	198	198	R	G	B	195	195	195	193	193	193	191	191	191	189	189	189	185	185	185	179	179	179	173	173	173	171	171	171	169	169	169	166	166	166	161	161	161	154	154	154	148	148	148	143	143	143	133	133	133	129	129	129	103	103	103	82	82	82	70	70	70	64	64	64	58	58	58	51	51	51	44	44	44	41	41	41	34	34	34	4	4	4	0	0	0	255	170	63	255	203	131
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(8) Click [Save] to save the settings.

6-5-2. Floor Layout settings for LCD

Click [Floor Settings] > [Floor Layout] to access the LCD's floor layout settings screen.



[1] Assigning groups

- (1) Click [Assignment mode].
- (2) Select a target centralized controller.
- (3) In [Floor switching], select a floor to set the layout.
- (4) Switch between display areas by scrolling up/down, and left/right.
- (5) Select the controller managing the group to assign. (EW-50 cannot be selected.)
- (6) Select the group number to assign.

Note: **5** (green) indicates a selected group, **2** (dark gray) an assigned group, and **1** (light gray) a selectable group.

- (7) Click on the floor plan image to assign the group.
Note: If assigning group icons overlappedly, groups having higher group number are placed above.
- (8) Click [Save] to save the changes.

[2] Moving groups within areas

- (1) Click [Assignment mode].
- (2) Click the group icon you wish to move within the display area, and this will become selected (with orange frame).

Note: Before clicking the group icon, placing a check mark in "Assign with gridline" to select (☒) will allow assignment of the group icons at a set interval.

Additionally, removing this check mark (☐) will allow fine assignment of group icons.

- (3) Click again in the location to move to in order to confirm the group icon positions.
- (4) Click [Save] to save the changes.

[3] Deleting groups

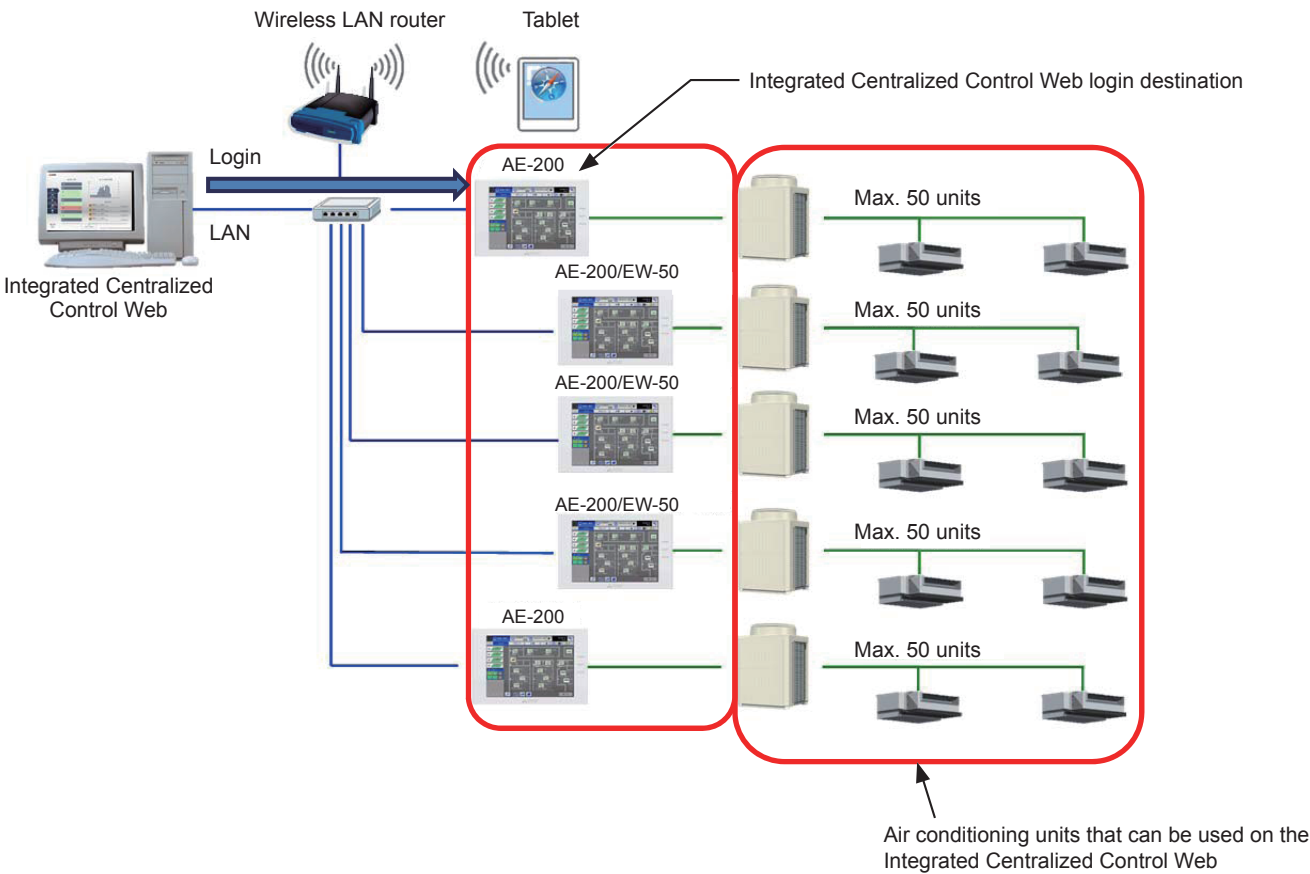
- (1) Click [Deletion mode].
- (2) Click the assigned group icon, and this will return to the selectable group.
- (3) Click [Save] to save the changes.

Note: Up to 30 groups can be assigned to each area. If the layout is 2 (height) × 3 (width), up to a maximum of 180 groups can be assigned on each floor.

Note: Groups that have not been assigned to any area will appear in "Unassigned groups" on the LCD.

6-5-3. Floor settings for Integrated Centralized Control Web

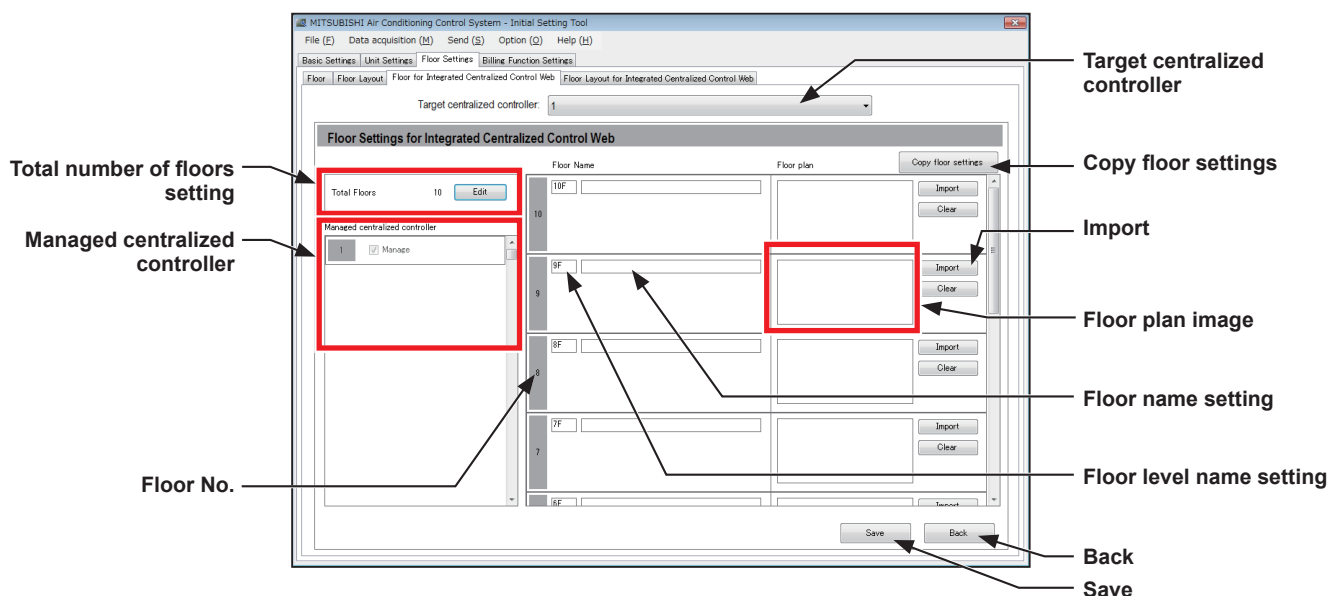
Configure floor-related settings for when monitoring and operating air conditioning units with centralized controllers using the Integrated Centralized Control Web. Logging in to the centralized controller set as the login destination using a Web browser enables monitoring and operating of all air conditioning units connected to the managing centralized controller using the Integrated Centralized Control Web.



Here, use the Integrated Centralized Control Web to configure the managing centralized controller, floor level, floor name and other floor settings, and the floor plan settings.

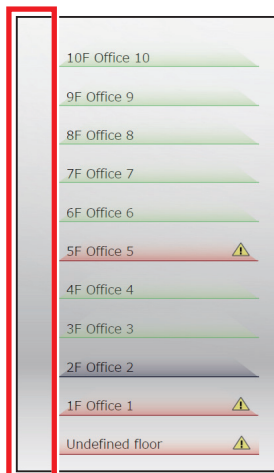


- (1) Click [Floor Settings] > [Floor for Integrated Centralized Control Web] to access the Integrated Centralized Control Web's floor settings screen.

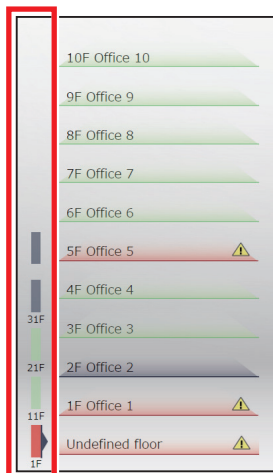


- (2) In [Target centralized controller], select a target centralized controller.
The setting contents of the selected centralized controller will appear.
- (3) In [Total number of floors setting], set the total number of floors to be displayed on the Integrated Centralized Control Web.
Click [Edit] in [Total Floors], and set the total number of floors by entering the number on the keyboard or by clicking buttons.
Up to 99 floors can be set. In the Integrated Centralized Control Web, floors can be divided up into 10 floor units and displayed.
Note: If the total number of floors is set to "0," all groups will appear as unassigned groups.

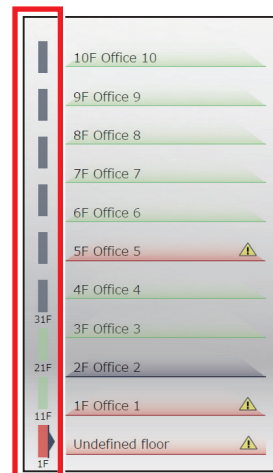
Number of floors: 0 to 10



Number of floors: 41 to 50



Number of floors: 91 to 99

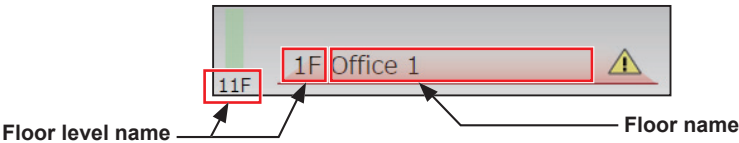


Display area switching

- (4) In [Managed centralized controller], set the centralized controllers to be managed with the Integrated Centralized Control Web.
Centralized controllers and expansion controllers set in section 6-3-1 "System Configuration settings" will appear.
The centralized controller with a check mark () next to [Manage] will be a control target of Integrated Centralized Control Web. Even if only one AE-200 is shown with a check mark () in gray, settings and reflecting the settings on the Initial Setting Tool is required.

Note: Any centralized controller without a check mark () is not a control target of Integrated Centralized Control Web.

- (5) In [Floor name setting], set the floor level name and floor name to be displayed on the floor layout.
 Enter the floor level name in 3 alphanumeric or symbol characters or less.
 Enter the floor name in 20 alphanumeric or symbol characters or less.



- (6) In [Floor plan image], import a floor layout image and configure settings.
 Click [Import] and select a file to import.
 To delete the imported floor layout image, click [Clear].
 Note: Floor layout images other than the following file sizes and file formats cannot be read.

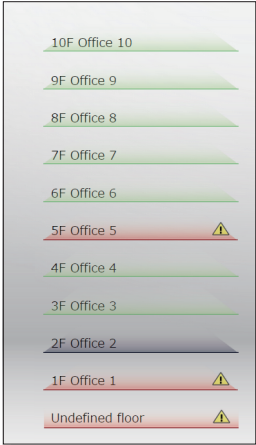
Floor layout size	Between 450 (height) × 630 (width) and 900 (height) × 1890 (width) dots
File format	gif
File capacity	Max. 600 KB for each floor plan

- (7) After the settings are completed, click [Save].
 Note: Adjusting the floor name settings enables application in managing multiple buildings.

Example) To manage three buildings A to C, configure the floor settings as follows.



Setting contents
 Total number of floors: 25
 Floor level name: No. 1 = A, No. 11 = B, No. 21 = C
 Floor name: No. 1 to No. 8 = 1F **** to 8F *****
 No. 11 to No. 20 = 1F **** to 10F *****
 No. 21 to No. 25 = 1F **** to 5F *****



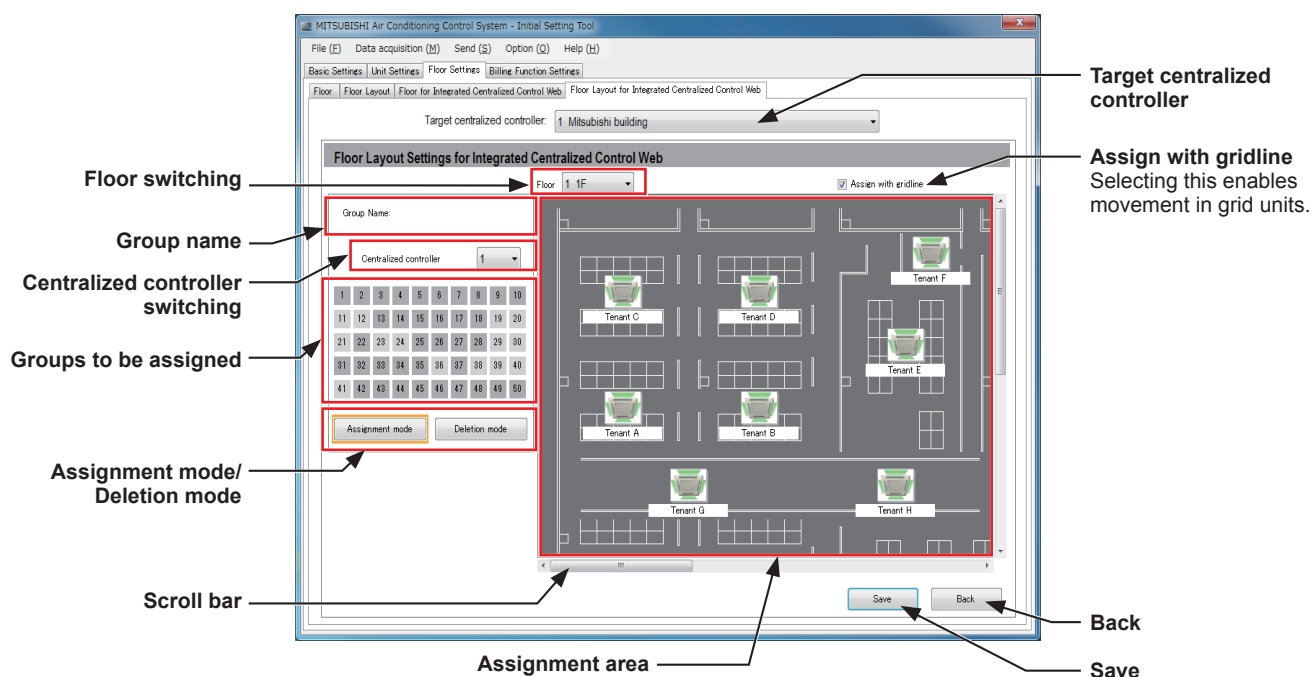
6-5-4. Floor Layout settings for Integrated Centralized Control Web

Assign the air conditioning unit icons to display on the Integrated Centralized Control Web floor layout.

Note: Assignment of unit groups registered in the centralized controllers selected as “Managed centralized controller” on the “Floor for Integrated Centralized Control Web” screen is possible.



- (1) Click [Floor Settings] > [Floor Layout for Integrated Centralized Control Web] to access the Integrated Centralized Control Web's floor layout settings screen.



- (2) In [Target centralized controller], select a target centralized controller.
Note: Make sure to select a target centralized controller set in section 6-5-3 “Floor settings for Integrated Centralized Control Web”.
- (3) In [Floor switching], select a floor to which the unit groups are assigned.
The floor layout set in section 6-5-3 “Floor settings for Integrated Centralized Control Web” will appear.
- (4) In [Centralized controller switching], select a centralized controller of the unit group to assign.
- (5) In [Groups to be assigned], select a unit group to assign.
- (6) In the floor layout in [Assignment area], assign unit group icons.

(7) After the settings are completed, click [Save].

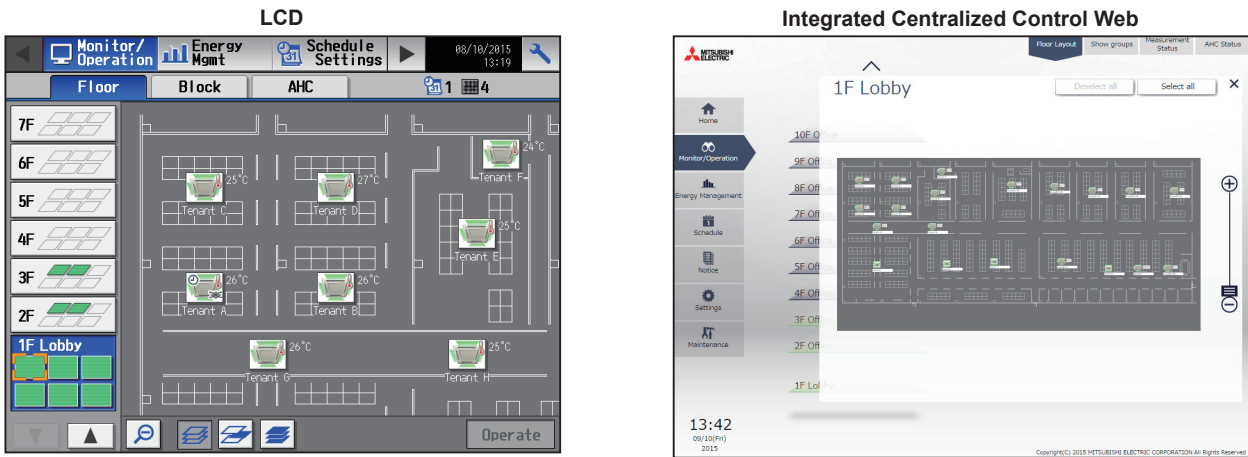
Note: Up to 180 unit group icons can be assigned in each floor layout.

Note: When no floor layout is registered, a white floor will appear.

6-5-5. Convenient usage methods

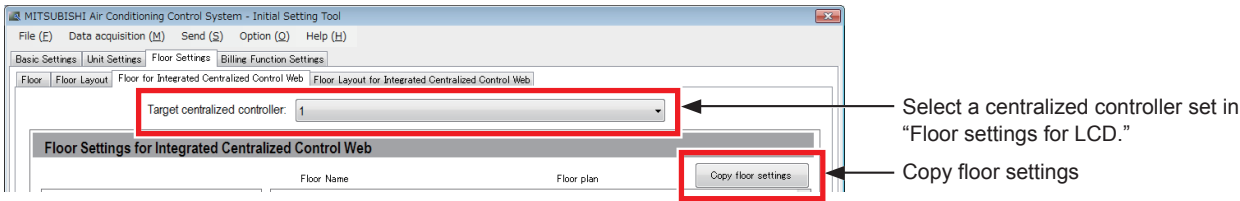
[1] Matching the AE-200's LCD and the Integrated Centralized Control Web floor layout

Use the Integrated Centralized Control Web to configure the settings to use the floor layout which is the same as on the LCD.

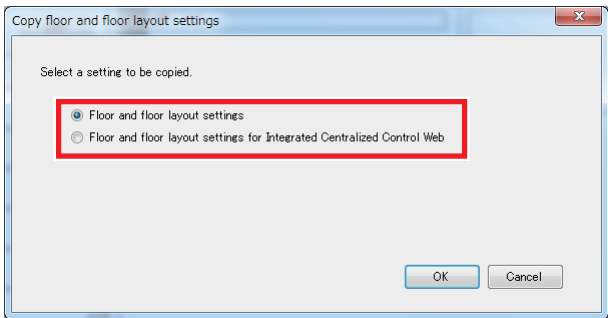


Note: On the LCD, the floor layout image is divided for display, however on the Integrated Centralized Control Web, it is not divided for display.

- (1) Carry out LCD floor settings.
Configure the 6-5-1 “Floor settings for LCD” and 6-5-2 “Floor Layout settings for LCD” settings for the target centralized controller.
- (2) Configure the floor settings for the Integrated Centralized Control Web.
From [Floor Settings], click [Floor for Integrated Centralized Control Web], and from [Target centralized controller], select the centralized controller set in (1) above.



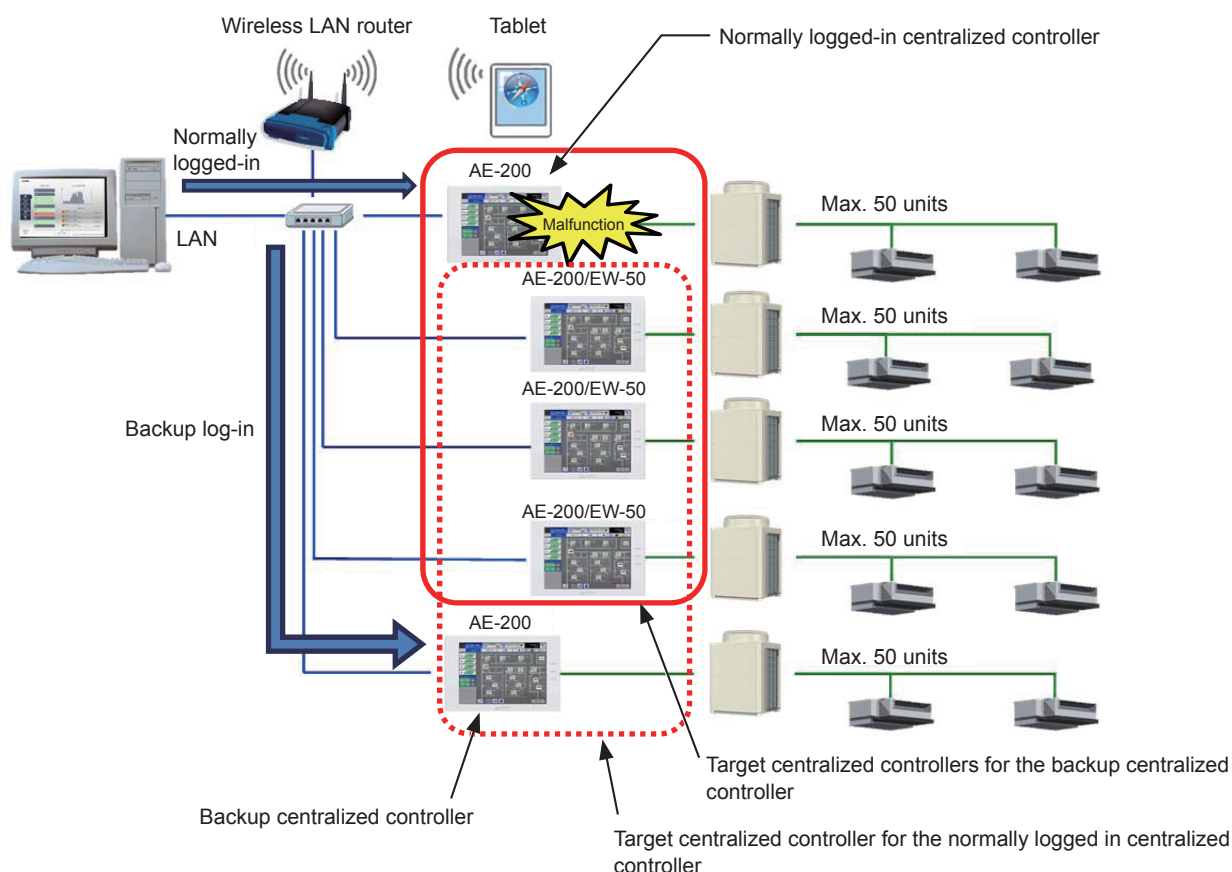
- (3) Click [Copy floor settings] and select [Floor and floor layout settings].



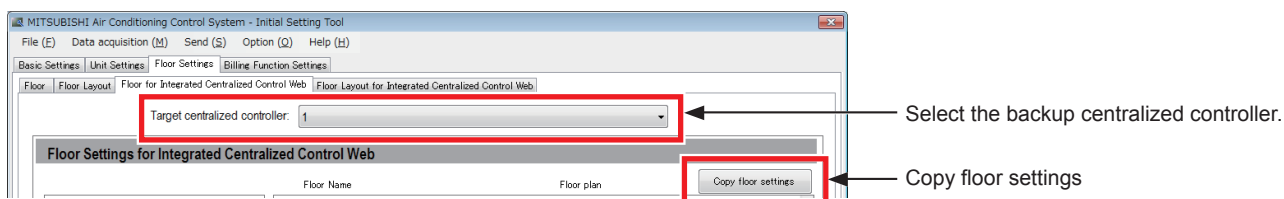
- (4) Click [OK].
The settings details for 6-5-1 “Floor settings for LCD” and 6-5-2 “Floor Layout settings for LCD” for the centralized controller set in (1) above are copied to the 6-5-3 “Floor settings for Integrated Centralized Control Web” and 6-5-4 “Floor Layout settings for Integrated Centralized Control Web”.

Note: Even if the floor layout settings for LCD are other than 2 (height) × 3 (width) layout, the copied Web floor plan size will be 900 (height) × 1890 (width). When handling a floor layout of other than 2 (height) × 3 (width), we recommend that this be replaced with a floor plan that has unnecessary areas cut away for Web use.

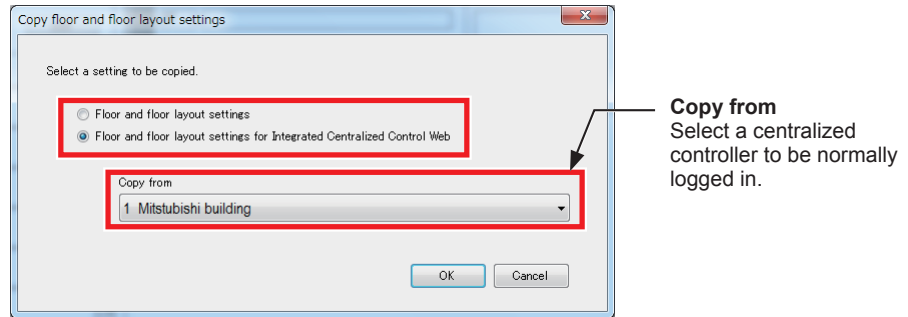
Multiple login destinations can be set for the Integrated Centralized Control Web. By copying the login destination centralized controller floor settings and preparing a backup centralized controller, then if the login destination centralized controller malfunctions, it is possible to use the Integrated Centralized Control Web by logging in to the backup centralized controller.



- (1) Add an IP address of the backup centralized controller in 6-3-1 “System Configuration settings”.
- (2) Configure the centralized controller to be normally logged in.
Configure the 6-5-3 “Floor settings for Integrated Centralized Control Web” and 6-5-4 “Floor Layout settings for Integrated Centralized Control Web” settings for Integrated Centralized Control Web login destination target centralized controller.
- (3) From [Floor Settings], click [Floor for Integrated Centralized Control Web], and from [Target centralized controller], select the backup centralized controller.



- (4) Click [Copy floor settings], select [Floor and floor layout settings for Integrated Centralized Control Web], and select a centralized controller set in (1).



- (5) Click [OK].
- The settings details for 6-5-3 “Floor settings for Integrated Centralized Control Web” and 6-5-4 “Floor Layout settings for Integrated Centralized Control Web” for the centralized controller set in (1) above are copied to the backup centralized controller.

6-6. Billing function settings

Configure the billing function settings on the Initial Setting Tool. For details about the billing function settings, refer to the Instruction Book (Apportioned Electricity Billing Function).

7. Settings using Web Browser for Initial Settings

7-1. Initial Settings

This section explains how to set the initial settings on the Web Browser for Initial Settings.

Note: When one or more AE-50/EW-50 controllers are connected, initial settings must be made on each AE-50/EW-50's Web browser. However, only Date and Time settings (section 7-1-1 "Date and Time") and Basic System settings (section 7-1-2 "Basic System") must be made on the AE-200 Web browser.

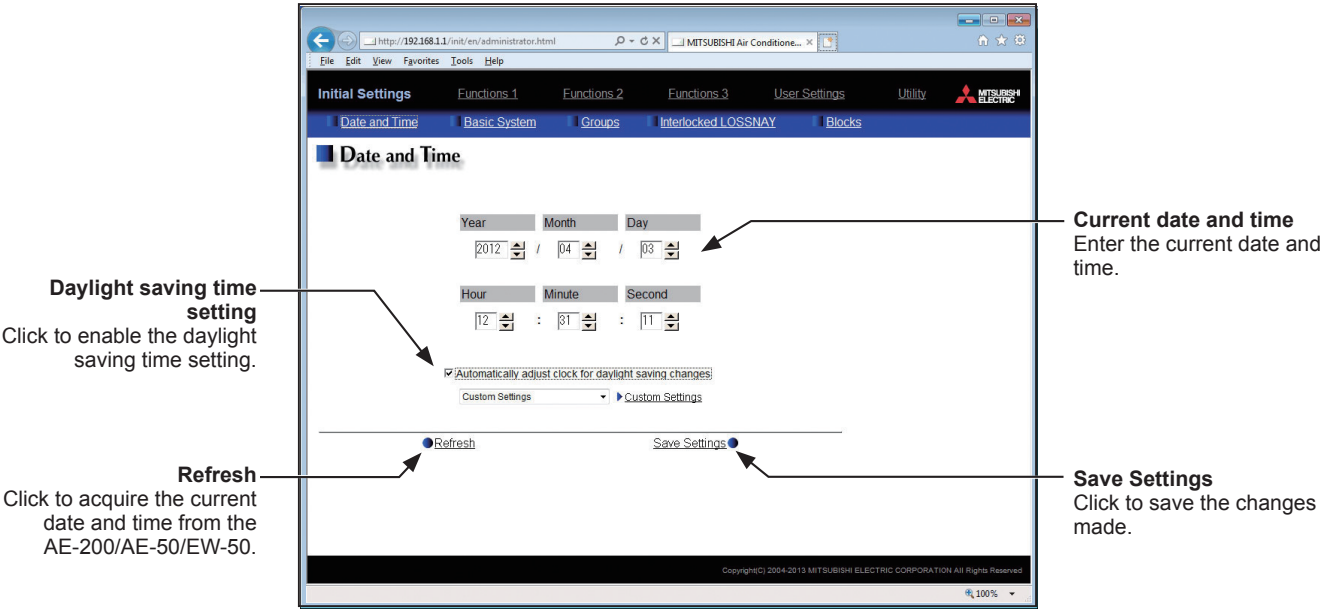
Important

- If the system is connected to a TG-2000A, make or change all settings from the TG-2000A so that the data in the TG-2000A and AE-200 will match.
- Any control (such as interlock control or Peak Cut control) between the outdoor and indoor units connected to the AE-200, AE-50, and EW-50, as well as between the units connected to different AE-50/EW-50 controllers, cannot be performed.

7-1-1. Date and Time

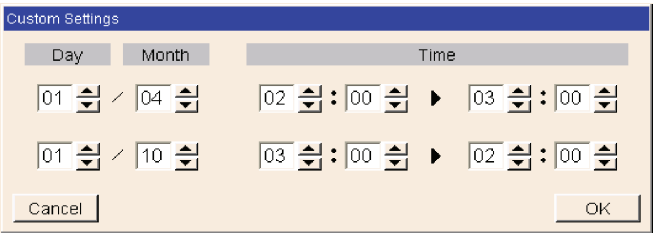
Click [Initial Settings] in the menu bar, and then click [Date and Time] to access the date and time settings screen.
Set the current date and time, and then click [Save Settings].

- Note: The date and time settings may not be accessible if logged in as a building manager.
- Note: The date and time settings made on this screen will be reflected on all the units in the M-NET system, all connected AE-50/EW-50 units, and the AE-200 units whose [Time Master] setting is set to [Sub].
- Note: The date and time cannot be set on this screen if the [Time Master] setting is set to [Sub].
- Note: The daylight saving time setting is required only on the AE-200.
- Note: Changing the date and/or time when the charging function is in use can affect the calculation of the charges.
- Note: When AE-50/EW-50 controller, DIDO controller (PAC-YG66DCA), AI controller (PAC-YG63MCA), or PI controller (PAC-YG60MCA) is added to the system, set the current date and time on this screen to synchronize the date and time on the added controller.
- Note: Although date and time settings can be made on each AE-50/EW-50, the date and time synchronization from AE-200 is performed once a day. Make the date and time settings on the AE-50/EW-50 only after the AE-50/EW-50 is replaced.



- (1) Enter the current date and time.
- (2) To adjust the daylight saving time automatically, check the [Automatically adjust clock for daylight saving changes] checkbox, and select the applicable country in the pulldown menu.

If the applicable country is not in the pulldown menu, select [Custom Settings] instead. A [Custom Settings] button will appear on the right of the pulldown menu.
Click the [Custom Settings] button to open the Custom Settings screen, and configure the daylight saving time setting.

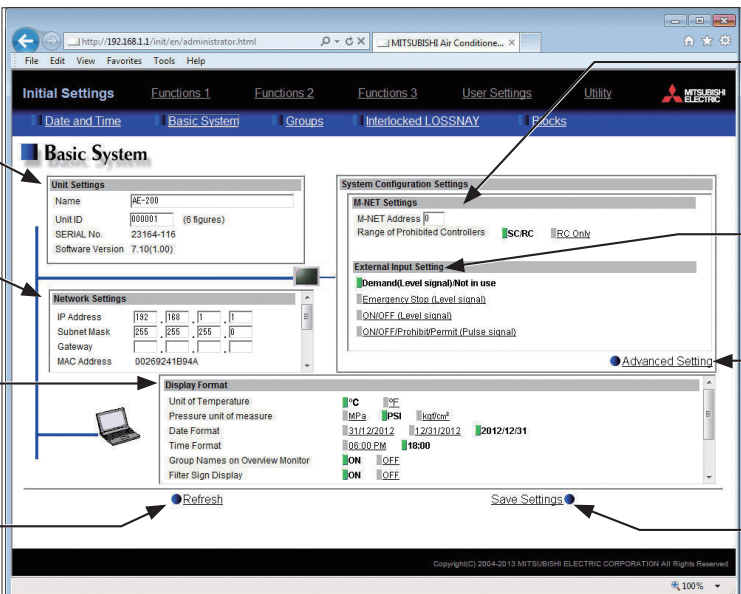


Custom Settings screen

7-1-2. Basic System

Click [Initial Settings] in the menu bar, and then click [Basic System] to access the Basic System settings screen. Make necessary basic system settings such as AE-200/AE-50/EW-50 unit settings, network settings, and M-NET settings, and then click [Save Settings] to send the settings to the AE-200/AE-50/EW-50. A message will appear asking whether or not to restart the AE-200/AE-50/EW-50. Click [OK] to restart the AE-200/AE-50/EW-50 to reflect the changes.

Note: The Basic System settings may not be accessible if logged in as a building manager.

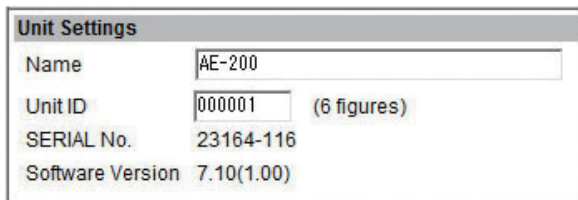


The screenshot shows the 'Basic System' settings screen with several sections and annotations:

- Unit Settings:** Set the AE-200/AE-50/EW-50 name and unit ID. (Points to the Unit Settings section)
- Network Settings:** Set the AE-200/AE-50/EW-50 IP address and subnet mask. (Points to the Network Settings section)
- Display Format:** Set the screen display items for the AE-200/AE-50/EW-50 and the Web browser. (Points to the Display Format section)
- Refresh:** Click to import the settings from AE-200/AE-50/EW-50. (Points to the Refresh button)
- M-NET Settings:** Set the AE-200/AE-50/EW-50 M-NET address and range of prohibited controllers. (Points to the M-NET Settings section)
- External Input Setting:** Set the AE-200/AE-50/EW-50 external signal input mode. (Points to the External Input Setting section)
- Advanced Setting:** Click to display the screen for making advanced settings. (Points to the Advanced Setting button)
- Save Settings:** Click to save the changes made. (Points to the Save Settings button)

7-1-2-1. Unit Settings

Follow the instructions below to set the AE-200/AE-50/EW-50 unit name and unit ID in the [Unit Settings] section. The AE-200/AE-50/EW-50 serial number and software version will appear.



The 'Unit Settings' form contains the following fields:

- Name:** AE-200
- Unit ID:** 000001 (6 figures)
- SERIAL No.:** 23164-116
- Software Version:** 7.10(1.00)

- (1) Enter the unit name in the [Name] field in 40 alphanumeric or symbol characters or less. The name entered here will be used on the screen of the software that controls multiple AE-200/AE-50/EW-50 units and will also be used as a sender name in the error notification e-mail and e-mail alarm.

Note: The following characters cannot be used in the [Name] field: <, >, &, ", or '.

- (2) Enter the unit ID in the [Unit ID] field in 6 figures. Use this setting to manage the multiple unit IDs. The unit ID entered here will be used on the screen of the software that controls multiple AE-200/AE-50/EW-50 units and will also be used as a sender ID in the error notification e-mail and e-mail alarm.

7-1-2-2. M-NET Settings

M-NET Settings	
M-NET Address	0
Range of Prohibited Controllers	<input checked="" type="checkbox"/> SC/RC <input type="checkbox"/> RC Only

- (1) Enter [0] in the [M-NET Address] field (unless otherwise specified).
- (2) When the local remote controller operation is prohibited, this setting determines the scope of its applicability.
Select [SC/RC] to prohibit the operation from both the sub system controllers and the remote controllers.
Select [RC Only] to prohibit the operation only from the remote controllers.

7-1-2-3. External Input Setting

Using the external signal input function, the following types of collective operations can be performed for all connected air conditioning units: Emergency stop, ON/OFF operation, and Prohibit/Permit local remote controller operation.

A separately-sold external input/output adapter (PAC-YG10HA-E) is required for each AE-200, AE-50 and EW-50.

Select the external signal input mode, referring to the explanations below.

Note: Peak Cut control is performed based on the demand level signal (level 1 to 4) input from the connected demand controller. (A separate license is required to use the Peak Cut function.)

Note: If an external signal is input to the AE-200 only, the collective operations will not be performed for the units connected to the AE-50/EW-50 controllers.

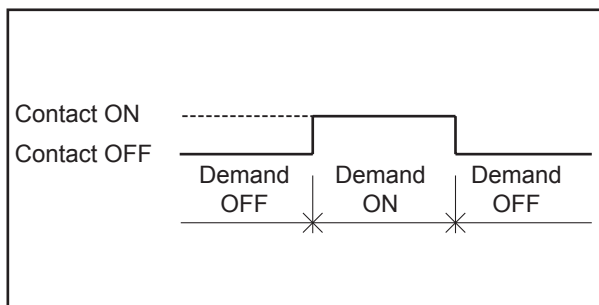
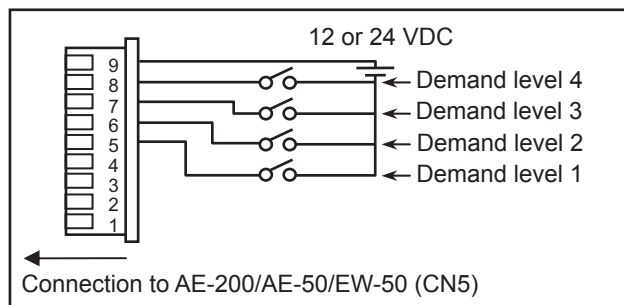
Note: Refer to the AE-200 Installation Manual for details about the external signal input function.

Note: General equipment connected via DIDO controller (PAC-YG66DCA) cannot be collectively run or stopped by using the external signal input function unless [Emergency Stop (Level signal)] is selected and relevant switches on the DIDO controller are set.

External Input Setting	
<input checked="" type="checkbox"/>	Demand(Level signal)/Not in use
<input type="checkbox"/>	Emergency Stop (Level signal)
<input type="checkbox"/>	ON/OFF (Level signal)
<input type="checkbox"/>	ON/OFF/Prohibit/Permit (Pulse signal)

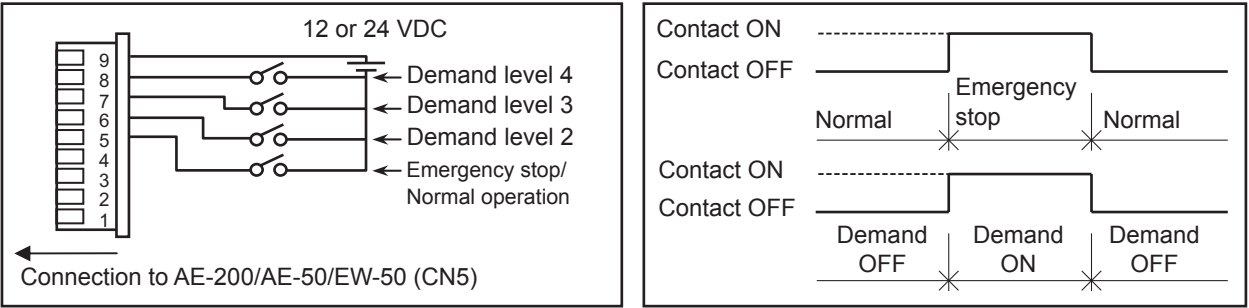
- (1) Select [Demand(Level signal)/Not in use] when using a level signal to receive a demand level or when not using the external signal input function.

Note: Refer to the AE-200 Installation Manual for details about the demand level.

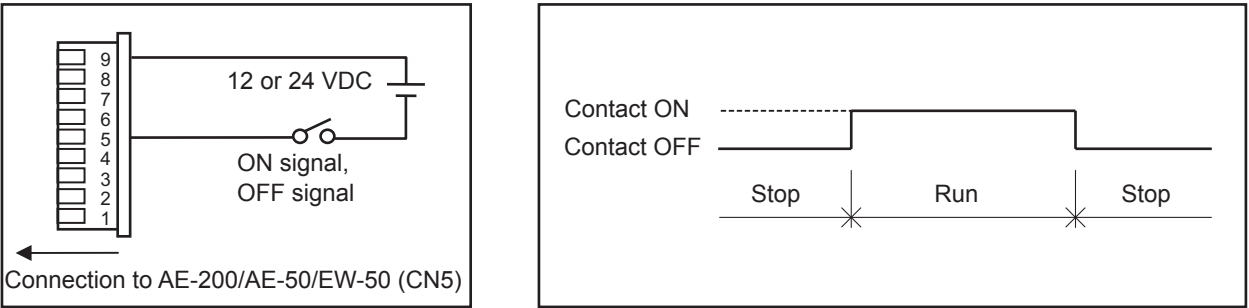


- (2) Select [Emergency Stop (Level signal)] when using a level signal to collectively run or stop all the air conditioning units connected to the AE-200, AE-50, or EW-50 in an emergency. During an emergency stop, the ON/OFF operation from the local remote controllers will be prohibited, and the ON/OFF operation and Prohibit/Permit settings on the AE-200, AE-50, or EW-50 will be prohibited.

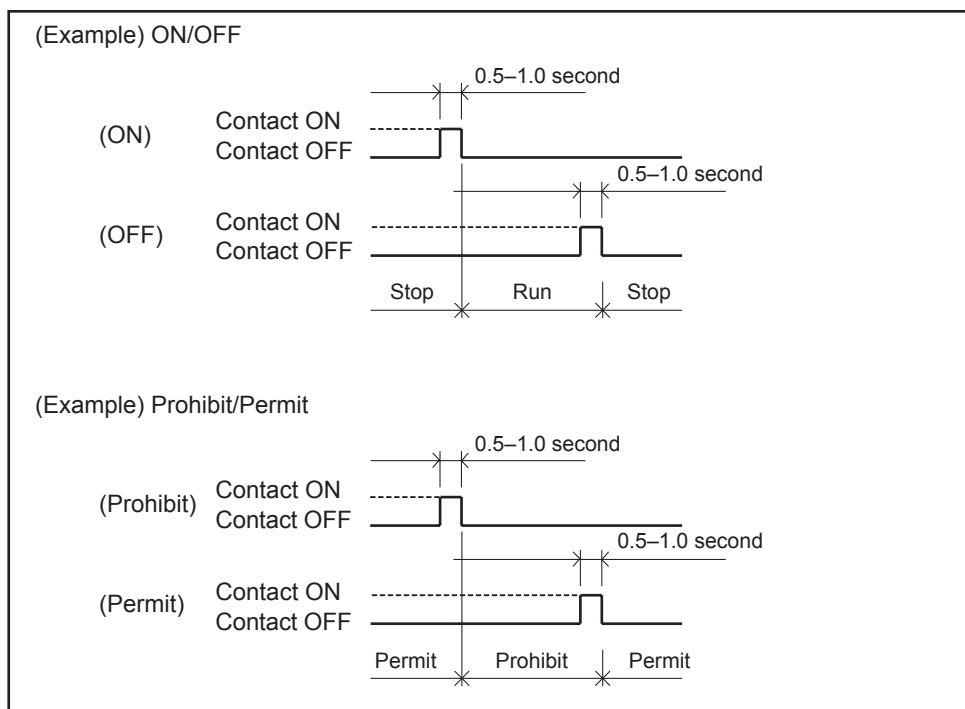
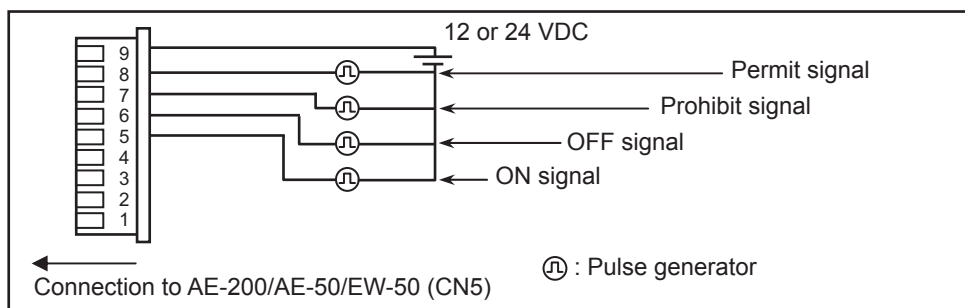
Note: Refer to the AE-200 Installation Manual for details about the demand level.



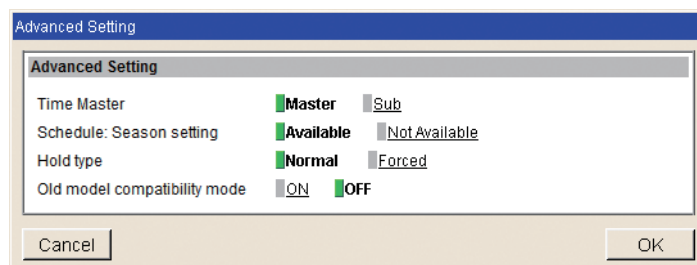
- (3) Select [ON/OFF (Level signal)] when using a level signal to collectively run or stop all the air conditioning units connected to the AE-200, AE-50, or EW-50. The ON/OFF operation from the local remote controllers will be prohibited, and the ON/OFF operation and Prohibit/Permit settings on the AE-200, AE-50, or EW-50 will be prohibited.



- (4) Select [ON/OFF/Prohibit/Permit (Pulse signal)] when using a pulse signal to collectively run or stop all the air conditioning units connected to the AE-200, AE-50, or EW-50, or to collectively prohibit or permit the operation from the local remote controllers.



7-1-2-4. Advanced Setting



[1] Time Master/Sub

In the [Time Master] section, select [Master] or [Sub]. The default setting is [Master].

This setting is required to change only for a system with multiple AE-200 controllers. Set to [Master] on only one of the AE-200 controllers in a system, and set to [Sub] on the rest of the AE-200 controllers. The date and time synchronization is performed from the AE-200 whose [Time Master] setting is set to [Master] to the AE-200 whose [Time Master] setting is set to [Sub].

Note: When only one AE-200 controller is connected to the system, leave the default setting [Master] as it is.

Note: When multiple AE-50 controllers are connected to the system, leave the default setting [Master] as it is on all AE-50 controllers.

[2] Schedule: Season setting

In the [Schedule: Season setting] section, select [Available] to enable the seasonal settings of the weekly schedules and [Not Available] to disable. Unless otherwise specified, leave the default setting [Available] as it is.

Note: The settings made on this screen on the AE-200 will be reflected on this screen on the AE-50/EW-50.

[3] Hold type

In the [Hold type] section, select [Normal] or [Forced].

The Hold function is a function to disable the operations that were scheduled for air conditioning unit groups.

If the setting for [Hold] is set to [ON] on the Monitor/Operation screen and the [Hold type] on the screen above is set to [Forced], the [Hold] setting can be cancelled only from the AE-200/AE-50/EW-50. If the [Hold type] is set to [Normal], the [Hold] setting can be cancelled from AE-200/AE-50/EW-50, other system controllers, or remote controllers.

Note: The Hold function can be used on the AE-200A/AE-50A/EW-50A, but not on the AE-200E/AE-50E/EW-50E.

Note: The Hold function cannot be used on general equipments.

Note: The setting [Forced] will not be effective on Air To Water (PWFY) unit groups, LOSSNAY unit groups, and air conditioning unit groups that do not support the Hold function (i.e., Mr. Slim M-Series/P-Series indoor units).

If the setting for [Hold] is set to [ON] on those unit groups on the Monitor/Operation screen and the [Hold type] on the screen above is set to [Forced], the setting [Normal] will be effective.

[4] Old model compatibility mode

In the [Old model compatibility mode] section, select [ON] or [OFF].

Select [ON] when not using the Dual set point function.

When [ON] is selected, the Prohibit Remote Controller function (Timer, Air Direction, Fan Speed) cannot be used.

Note: If the setting is changed, the controller will reboot.

7-1-2-5. Network Settings

Network settings vary depending on whether the AE-200/AE-50/EW-50 is connected to a dedicated LAN or an existing LAN. See the sections below for how to set the AE-200/AE-50/EW-50 IP, subnet mask, and gateway addresses in the [Network Settings] section.

Note: LAN2 (Network Settings 2) is exclusively used for BACnet[®] function. For BACnet[®] function settings, refer to the Instruction Book (BACnet[®] function).

Note: Although the settings for LAN1 (Network Settings) and LAN2 (Network Settings 2) will appear on the screen, only the settings for LAN1 is required. However, only when the LAN1 IP address is required to be set to [192.168.2.1], change the default LAN2 IP address to avoid address overlap.

Note: After the AE-200 IP address is changed, the AE-50/EW-50 power will be reset.

Network Settings	
IP Address	192 . 168 . 1 . 1
Subnet Mask	255 . 255 . 255 . 0
Gateway	
MAC Address	00269241B94A
Network Settings 2	
IP Address	192 . 168 . 2 . 1
Subnet Mask	255 . 255 . 255 . 0
MAC Address	00269241B94B

LAN1

LAN2

[1] Settings for connecting the AE-200/AE-50/EW-50 to a dedicated LAN

- Enter the AE-200, AE-50, or EW-50's IP address in the [IP Address] field. If the LAN has been newly set up, allocate IP addresses to the AE-200 units in a sequential order starting with [192.168.1.1]. For example, the first AE-200 unit will have an IP address of [192.168.1.1], the second AE-200 unit will have an IP address of [192.168.1.2] and so on.

Allocate IP addresses to the AE-50/EW-50 units in a sequential order starting with [192.168.1.211].

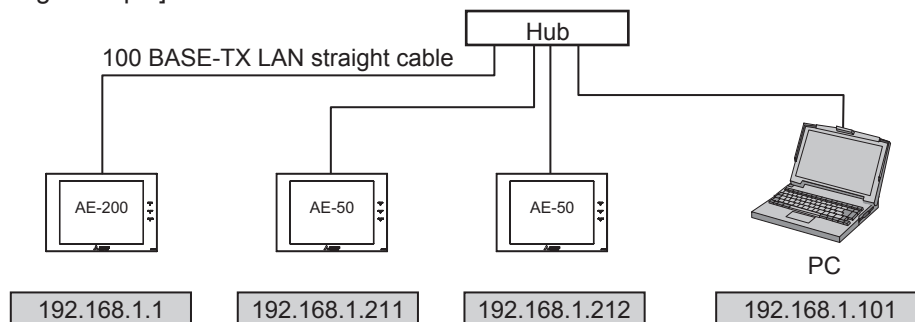
Note: The recommended IP address ranges are as follows.

AE-200: Between [192.168.1.1] and [192.168.1.40]

AE-50/EW-50: Between [192.168.1.211] and [192.168.1.249]

PC: Between [192.168.1.101] and [192.168.1.150]

[IP address setting example]



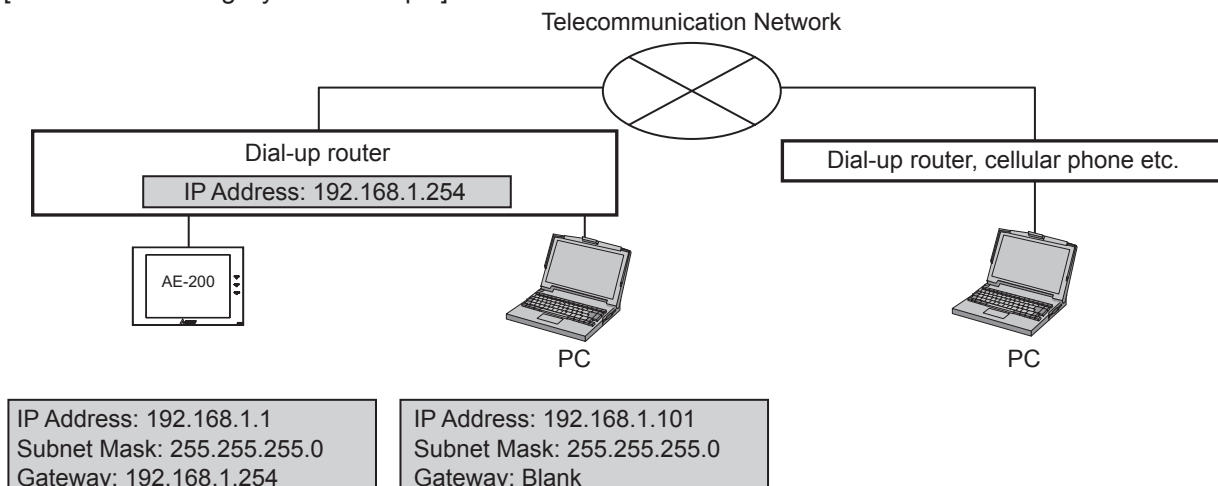
Note: Some hubs have dedicated ports for connection with another hub.

Connect the AE-200/AE-50/EW-50 and PC to the normal ports.

- Enter [255.255.255.0] in the [Subnet Mask] field (unless otherwise specified).

- (3) When monitoring the system remotely or using e-mail function via a dial-up router, enter the router IP address in the [Gateway] field.
Leave the [Gateway] field blank when not connecting a dial-up router.

[Remote Monitoring System example]



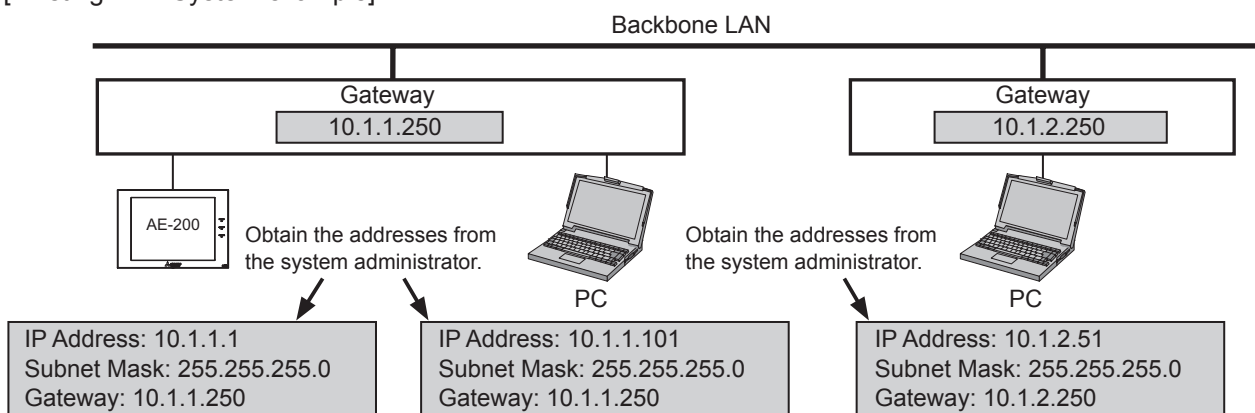
Note: [192.168.1.254] is recommended for use as the IP address of the dial-up router. Refer to the dial-up router instruction manual for details of how to set the IP address.

Note: The use of a dial-up router with no modem requires a modem (for analog or ISDN) to be connected between the router and the public phone line.

[2] Settings for connecting the AE-200/AE-50/EW-50 to an existing LAN

- (1) When connecting the AE-200/AE-50/EW-50 to an existing LAN, consult the system administrator to decide the IP, subnet mask, and gateway addresses.

[Existing LAN System example]



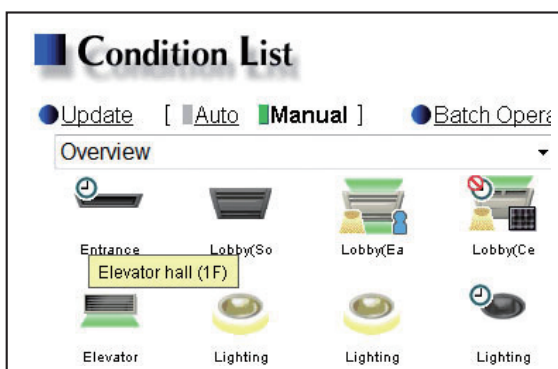
7-1-2-6. Display Format

Follow the instructions below to set the items in the [Display Format] section.

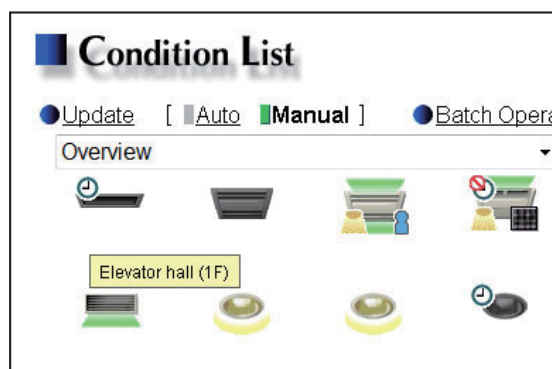
Display Format			
Unit of Temperature	<input checked="" type="checkbox"/> °C	<input type="checkbox"/> °F	
Pressure unit of measure	<input type="checkbox"/> MPa	<input checked="" type="checkbox"/> PSI	<input type="checkbox"/> kgf/cm ²
Date Format	<input type="checkbox"/> 31/12/2012	<input type="checkbox"/> 12/31/2012	<input checked="" type="checkbox"/> 2012/12/31
Time Format	<input type="checkbox"/> 06:00 PM	<input checked="" type="checkbox"/> 18:00	
Group Names on Overview Monitor	<input checked="" type="checkbox"/> ON	<input type="checkbox"/> OFF	
Filter Sign Display	<input checked="" type="checkbox"/> ON	<input type="checkbox"/> OFF	
Room temp. display (except for group list)	<input checked="" type="checkbox"/> Always show	<input type="checkbox"/> Show during operation	<input type="checkbox"/> Hide
Occupancy sensor display	<input type="checkbox"/> Hide	<input type="checkbox"/> Show occupancy icon.	<input type="checkbox"/> Show vacancy icon.
Brightness sensor display	<input type="checkbox"/> Hide	<input type="checkbox"/> Show bright symbol.	<input type="checkbox"/> Show dark symbol.
Humidity sensor display	<input checked="" type="checkbox"/> ON	<input type="checkbox"/> OFF	

- (1) In the [Unit of Temperature] section, select [°C] or [°F].
- (2) In the [Pressure unit of measure] section, select [MPa], [PSI], or [kgf/cm²].
- (3) In the [Date Format] section, select the desired display format for year, month, and date.
- (4) In the [Time Format] section, select the desired display of time format.
- (5) In the [Group Names on Overview Monitor] section, select [ON] to display the group names under the icons on the Monitor/Operation screen. Select [OFF] not to display the group names.

Note: Only the first 8 characters will be visible under the icons. To display all characters, move the cursor to the icon.



Icons with group names





Icons without group names

- (6) In the [Filter Sign Display] section, select [ON] to display the filter sign, and select [OFF] not to. When the [Filter Sign Display] is set to [OFF], the filter sign will not appear on the Monitor/Operation screen even when the indoor unit detects a filter cleaning signal. If the filter is regularly cleaned and the sign display is unnecessary, set it to [OFF].
- (7) In the [Room temp. display (except for group list)] section, select the desired temperature display option to be used on the Block display of the Monitor/Operation screen. Select [Always show] to display the temperature at all times, [Show during operation] to display the temperature only during operation, and [Hide] not to display the temperature.

- (8) In the [Occupancy sensor display] section, make the Show/Hide setting for the occupancy/vacancy status that is detected by the built-in occupancy sensor on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA).
 Select [Hide] not to display the occupancy/vacancy status on the Monitor/Operation screen.
 Select [Show occupancy icon] to display the occupancy icon when the sensor on the remote controller detects occupancy.
 Select [Show vacancy icon] to display the vacancy icon when the sensor on the remote controller detects vacancy.
 Select [Show both icons] to display the occupancy or vacancy icon according to the occupancy status of the room.



Note: If the ME remote controller has no built-in occupancy sensor, the occupancy/vacancy icons will not be displayed on the Monitor/Operation screen.

Occupancy icon	Vacancy icon
 (Blue)	 (Gray)





- (9) In the [Brightness sensor display] section, make the Show/Hide setting for the brightness/darkness status that is detected by the built-in brightness sensor on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA).
 Select [Hide] not to display the brightness/darkness icons on the Monitor/Operation screen.
 Select [Show bright symbol] to display the brightness icon when the brightness level in the room reaches the predetermined brightness level.
 Select [Show dark symbol] to display the darkness icon when the darkness level in the room reaches the predetermined darkness level.
 Select [Show both symbols] to display the brightness or darkness icon according to the brightness/darkness level of the room.

Note: If the ME remote controller has no built-in brightness sensor, the brightness/darkness icons will not be displayed on the Monitor/Operation screen.

Note: The brightness/darkness detection thresholds are set on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA).

Brightness icon	Darkness icon
 (Yellow)	 (Gray)

- (10) In the [Humidity sensor display] section, make the Show/Hide setting for the humidity reading of the built-in humidity sensor on the ME remote controller (North America: PAR-U01MEDU, Europe: PAR-U02MEDA).
 Select [ON] to display the humidity reading on the Block display of the Monitor/Operation screen.

Lobby(South)			
	Auto		81 °F 73 °F
	80 °F		50 %

7-1-3. Groups

Click [Initial Settings] in the menu bar, and then click [Groups] to access the group settings screen. Register the groups of air conditioning units, LOSSNAY units (ventilators), Air To Water (PWFY) units, AHC, HWHP (CAHV, CRHV) units, or general equipment to be connected to the AE-200/AE-50/EW-50, and then touch [Save Settings].

Note: Some settings may not be accessible if logged in as a building manager.

Group No.

Group name

AHC registration
Click to display the screen for registering the AHC.

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

Air conditioner, Air To Water (PWFY) unit, LOSSNAY unit, HWHP (CAHV, CRHV) unit, and general equipment registration
Click to display the screen for registering the air conditioners, Air To Water (PWFY) units, LOSSNAY units, HWHP (CAHV, CRHV) units, and general equipment.

System controller registration
Click to display the screen for registering the system controllers.

Remote controller registration
Click to display the screen for registering the remote controllers.

Save Settings
Click to save the changes made.

7-1-3-1. Setting group names

In the [Group Name] field, enter the group name to be displayed in 20 characters or less.

Note: The following characters cannot be used in the [Group Name] field: <, >, &, ", or '.

7-1-3-2. Registering air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units to a group

- (1) To register air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units to each group, click the [Air conditioner, Air To Water (PWFY) unit, LOSSNAY unit, HWHP (CAHV, CRHV) unit, and general equipment registration] field next to the target group name. The [Select Unit Addresses] screen will appear.

Check the radio button next to [Air-conditioners / Air to water / HWHP], and select the address numbers of the units to be registered.

The selected unit addresses will appear with a yellow-green background.

Click again to deselect. The deselected unit addresses will appear with a light-gray background.

Note: Each group can contain up to 16 air conditioners.

Note: Air conditioners, Air To Water (PWFY) units, LOSSNAY units, and HWHP (CAHV, CRHV) units cannot be combined with general equipment in one group. To change the registered units to air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units in the group in which general equipment is registered, unregister the general equipment first.

Note: The addresses of the units that have been registered to other groups will appear with a gray background and cannot be selected.

- (2) To change the icon, click the right or left arrow.
The selected icon will be displayed on the Web browser.

7-1-3-3. Registering remote controllers to a group

- (1) To register remote controllers to a group, click the [Remote controller registration] field next to the target group name. The [Select Unit Addresses] screen will appear.

Select the address numbers of the remote controllers to be registered. The selected unit addresses will appear with a yellow-green background.

Click again to deselect. The deselected addresses will appear with a light-gray background.

Note: Each group can contain up to two remote controllers.

Note: Each group can contain up to four remote and system controllers combined.

Note: MA remote controllers do not need to be registered to a group.

Select Unit Addresses									
Entrance									
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

Cancel OK

7-1-3-4. Registering system controllers to a group

- (1) To register system controllers to a group, click the [System controller registration] field next to the target group name. The [Select Unit Addresses] screen will appear.

Select the address numbers of the system controllers to be registered. The selected unit addresses will appear with a yellow-green background.

Click again to deselect. The deselected addresses will appear with a light-gray background.

Note: Each group can contain up to four remote and system controllers combined (excluding AE-200/AE-50/EW-50).

Select Unit Addresses									
Entrance									
201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250

Cancel OK

7-1-3-5. Registering AHC to a group

- (1) To register an AHC to a group, click the [AHC registration] field next to the target group name. The [Select Unit Addresses] screen will appear.

Select the address number of the AHC to be registered. The selected unit address will appear with a yellow-green background. Click again to deselect. The deselected address will appear with a light-gray background.

Note: Each group can contain one AHC.

Note: AHC must be registered to a group in which air conditioners are registered. Do not register AHC to a group in which Air To Water (PWFY) units, LOSSNAY units, HWHP (CAHV, CRHV) units, or general equipment (via PAC-YG66DCA) are registered.

Select Unit Addresses									
Entrance									
201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250

Cancel OK

7-1-3-6. Registering general equipment to a group

- (1) To register general equipment to a group, click the [Air conditioner, Air To Water (PWFY) unit, LOSSNAY unit, HWHP (CAHV, CRHV) unit, and general equipment registration] field next to the target group name. The [Select Unit Addresses] screen will appear.

Check the radio button next to [General Equipment (via PAC-YG66DCA)].

Select the device number of the DIDO controller (PAC-YG66DCA) that is connected to the general equipment to be registered. The selected number will appear with a red frame. Also, select contact points to which the general equipments are connected.

Click again to deselect. The deselected numbers will appear with a light-gray background.

Note: Each contact of DIDO controller counts as one unit.

Note: Each group can contain up to 16 general equipment.

Note: Up to six general equipment can be registered for each DIDO controller.

Note: Air conditioners, Air To Water (PWFY) units, LOSSNAY units, and HWHP (CAHV, CRHV) units cannot be combined with general equipment in one group. To change the registered units to general equipment in the group to which air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units are registered, unregister the air conditioners, Air To Water (PWFY) units, LOSSNAY units, or HWHP (CAHV, CRHV) units first.

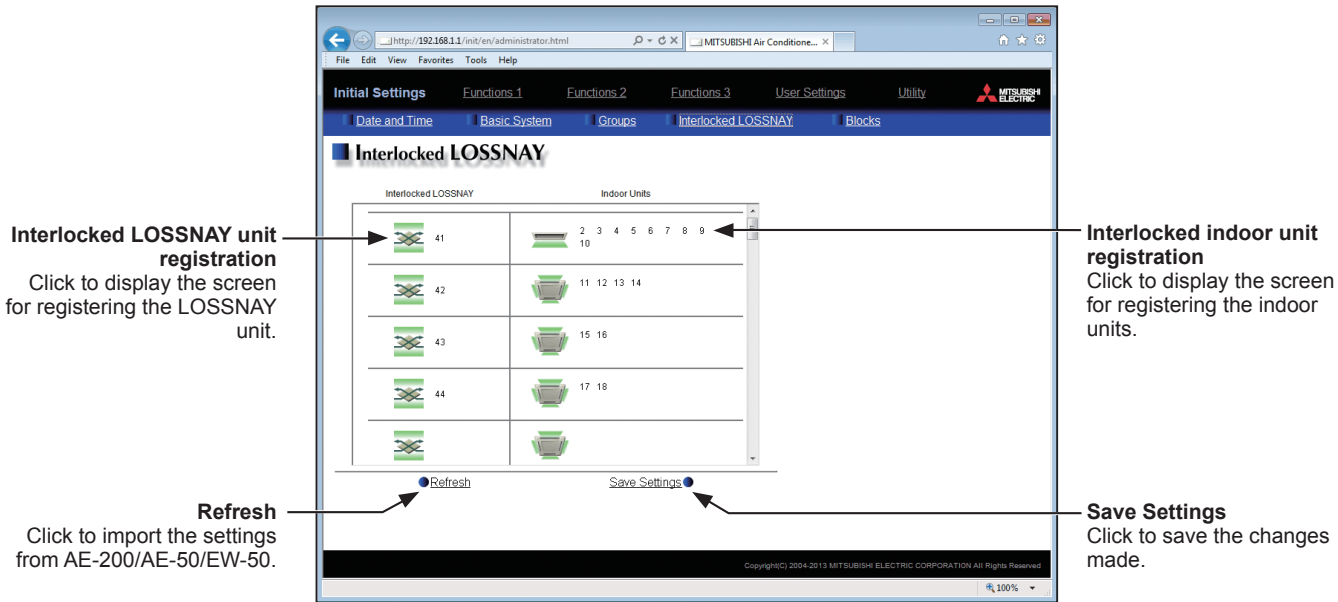
Note: General equipment groups cannot include remote controllers or system controllers.

- (2) To change the icon, click the right or left arrow.
The selected icon will be displayed on the Web browser.
- (3) In the [Allow Operations] section, make the setting to allow or disallow operation.
Select [In batch and on individual group] to allow the operator to turn on or off the general equipment collectively or by the groups.
Select [On individual group] to allow the operator to turn on or off the general equipment by the groups.
Select [No operations (Monitor only)] to disallow the operator to turn on or off the general equipment.
- (4) In the [Monitor] section, select which status will be used to reflect the units' ON/OFF status to the unit icons on the Monitor/Operation screen. Select [Output status] to use the status that is sent to the general equipment, and [Input status] to use the status that is sent from the general equipment.

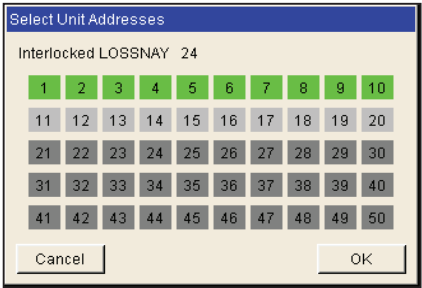
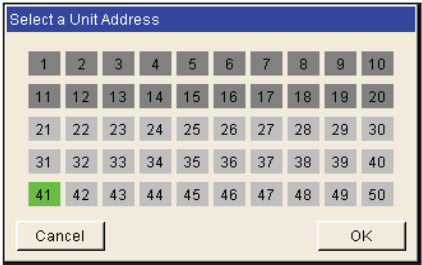
7-1-4. Interlocked LOSSNAY

The ON/OFF status of the LOSSNAY unit can be interlocked with the operation of indoor units. Click [Initial Settings] in the menu bar, and then click [Interlocked LOSSNAY] to access the Interlocked LOSSNAY settings screen. Set the interlocking conditions, and then click [Save Settings].

- Note: The Interlocked LOSSNAY settings may not be accessible if logged in as a building manager.
- Note: The ON/OFF status of the indoor units are not interlocked with the ON/OFF status of the LOSSNAY unit.
- Note: The interlock settings between the units connected to the AE-200, AE-50, and EW-50, as well as between the units connected to different AE-50/EW-50 controllers, cannot be made.



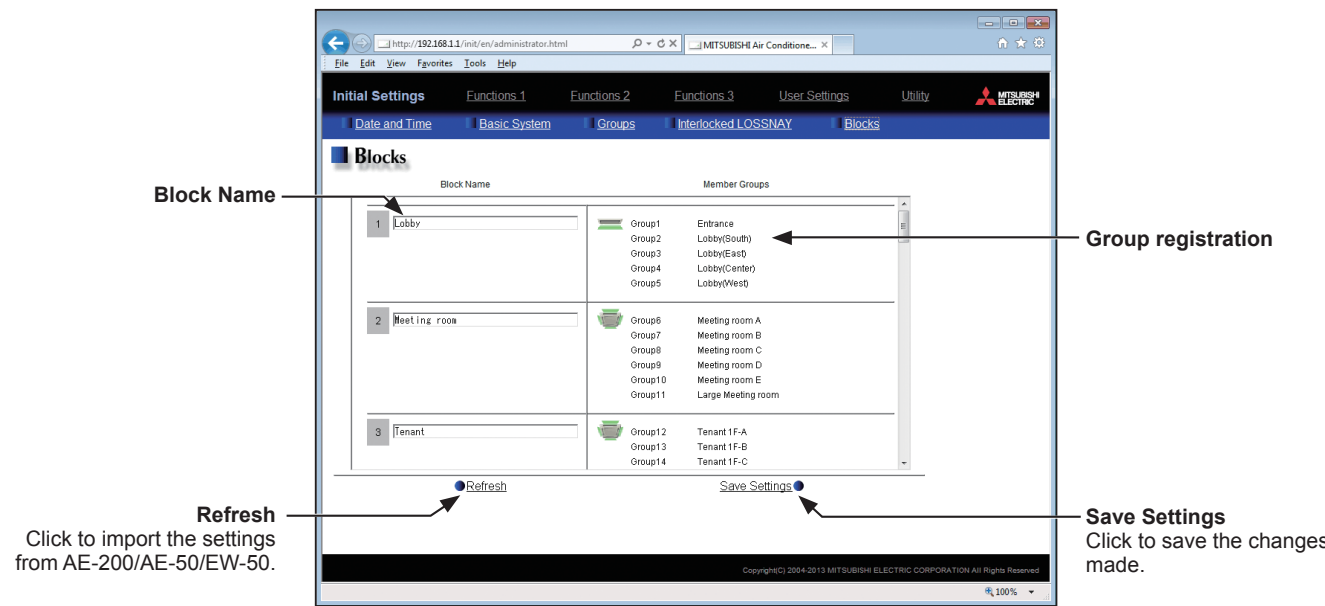
- (1) Click the [Interlocked LOSSNAY unit registration] field. The [Select a Unit Address] screen will appear. Select the address number of the LOSSNAY unit to be registered. The selected unit address will appear with a yellow-green background. Click again to deselect. The deselected address will appear with a light-gray background.
- (2) Click the [Interlocked indoor unit registration] field. The [Select Unit Addresses] screen will appear. Select the address numbers of the indoor units to which the selected LOSSNAY unit will be interlocked. The selected unit addresses will appear with a yellow-green background. Click again to deselect. The deselected addresses will appear with a light-gray background.
 - Note: Each LOSSNAY unit can be interlocked with up to 16 indoor units.



7-1-5. Blocks

By making block settings, multiple groups in a given block can be collectively monitored or operated on the Web browser. Click [Initial Settings] in the menu bar, and then click [Blocks] to access the block settings screen. Register the groups to each block, and then click [Save Settings].

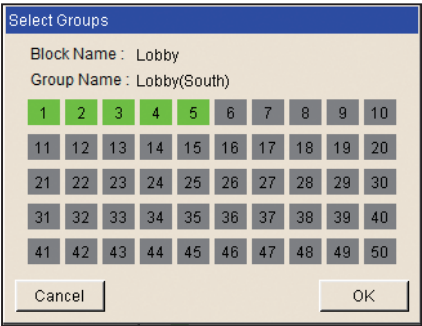
- Note: Some settings may not be accessible if logged in as a building manager.
- Note: The groups of units connected to the AE-200, AE-50, and EW-50, as well as the groups of units connected to different AE-50/EW-50 controllers, cannot be registered to the same block.



- (1) Enter the block name in the [Block Name] field to be displayed on the Web browser in 20 characters or less.
Note: The following characters cannot be used in the [Block Name] field: <, >, &, ", or '.

- (2) Click the [Group registration] field next to the target block. The [Select Groups] screen will appear.
Select the group numbers to be registered. (To show the group name, move the cursor to the group number.)
The selected group numbers will appear with a yellow-green background.
Click again to deselect. The deselected group numbers will appear with a light-gray background.

Note: HWHP (CAHV, CRHV) unit groups cannot be registered to a block.



7-2. Functions 1

7-2-1. E-Mail

E-mail settings must be configured properly to use the error notification e-mail function or the e-mail communication function. Error notification e-mail function is the function to send the error information to the specified e-mail addresses. E-mail communication function is the function to send the units' maintenance data to the specified e-mail addresses of the PCs to which Maintenance Tool is installed.

Click [Functions 1] in the menu bar, and then click [E-Mail] to access the e-mail settings screen. Make the various e-mail settings, and then click [Save Settings].

Note: The E-mail settings may not be accessible if logged in as a building manager.

Mail Server Information
Set the mail server/DNS server information.

Mail Communication Setting
Set the e-mail addresses of the PCs that will receive maintenance data through e-mail communication function.

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

E-Mail Settings of AE-200A
E-Mail Settings of AE-200/AE-50/EW-50

Error Mail Settings
Enter the e-mail information for error notification e-mail function.

Save Settings
Click to save the changes made.

[1] E-Mail Settings of AE-200/AE-50/EW-50

E-Mail Settings of AE-200A

E-Mail Address

User ID

Password

Interval of checking incoming mails minute(s)

Enter the AE-200/AE-50/EW-50's e-mail information provided by the Internet Service Provider (ISP) or the system administrator. The items required to be set vary, depending on the functions to be used. Refer to the table below to determine which items need to be set.

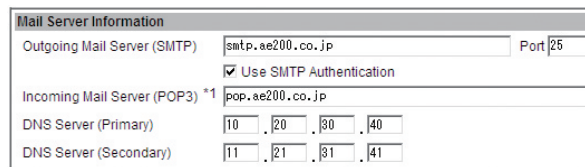
Note: A contract with the ISP is required to send e-mail via an ISP.

Table: Items required to be set (E-Mail Settings of AE-200/AE-50/EW-50)

Item	Error notification e-mail function		E-mail communication function	
	Without SMTP authentication	With SMTP authentication	Without SMTP authentication	With SMTP authentication
E-Mail Address	V	V	V	V
User ID	-	V	V	V
Password	-	V	V	V
Interval of checking incoming mails	-	-	V	V

(V) Required to be set, (-) Not required to be set

[2] Mail Server Information



The 'Mail Server Information' window contains the following fields:

- Outgoing Mail Server (SMTP): smtp.ae200.co.jp
- Port: 25
- ☒ Use SMTP Authentication
- Incoming Mail Server (POP3) *1: pop.ae200.co.jp
- DNS Server (Primary): 10, 20, 30, 40
- DNS Server (Secondary): 11, 21, 31, 41

Enter the e-mail server information provided by the ISP or the system administrator. The items required to be set vary, depending on the functions to be used. Refer to the table below to determine which items need to be set. Either the IP address or the host name (server name) can be entered in the [Outgoing Mail Server (SMTP)] and [Incoming Mail Server (POP3)] fields.

Note: The port number of the Outgoing Mail Server (SMTP) can be changed. (Factory setting: 25)

Note: When "587" is entered in the [Port] field, make sure to check the checkbox next to [Use SMTP Authentication].

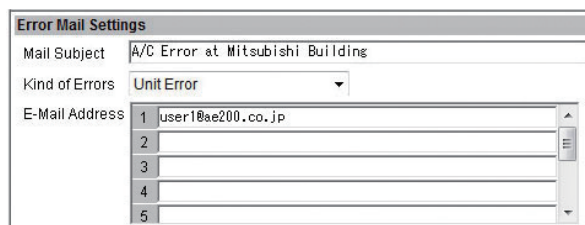
Table: Items required to be set (Mail Server Information)

Item	Error notification e-mail function		E-mail communication function	
	Without SMTP authentication	With SMTP authentication	Without SMTP authentication	With SMTP authentication
Outgoing Mail Server (SMTP)	V IP address or host name	V Host name	V IP address or host name	V Host name
Use SMTP Authentication	-	V	-	V
Incoming Mail Server (POP3)	-	-	V IP address or host name	V IP address or host name
DNS Server (Primary)	(V) *1	V	(V) *1	V
DNS Server (Secondary)	(V) *1	V	(V) *1	V

(V) Required to be set, (-) Not required to be set

*1 Not required if the IP address is entered in the [Outgoing Mail Server (SMTP)] or [Incoming Mail Server (POP3)] field.

[3] Error Mail Settings



The 'Error Mail Settings' window contains the following fields:

- Mail Subject: A/C Error at Mitsubishi Building
- Kind of Errors: Unit Error
- E-Mail Address: 1 user1@ae200.co.jp, 2, 3, 4, 5

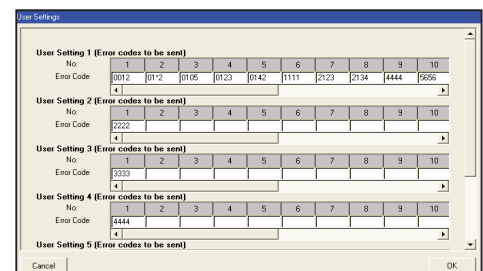
- (1) In the [Mail Subject] field, enter the mail subject to be used for the error notification e-mail function in 40 characters or less.

Note: The following characters cannot be used in the [Mail Subject] field: <, >, &, ", or '.

- (2) In the [Kind of Errors] field, select the error type out of the following: [Unit Error], [Preliminary Unit Error], [Communication Error], [General Equipment], and [User Setting 1] through [User Setting 6]. Then, in the [E-Mail Address] field, enter the e-mail addresses of the recipients of the error notification e-mail.

- (3) If [User Setting 1] through [User Setting 6] is selected in the [Kind of Errors] field, a [User Settings] button will appear. To send error notification e-mail only upon occurrences of certain errors, click [User Settings] to display the User Settings screen. Enter the error codes to be notified.

Up to 20 error codes can be set for each user setting. In addition to specific error codes such as [1302] or [6607], codes that use asterisks as wildcards such as [10**] or [12**] can also be used. If [10**] is entered, for example, error notification e-mail will be sent upon an occurrence of any type of errors between [1000] and [1099]. If error codes are entered on this screen, confirm that the e-mail addresses of the recipients are registered.



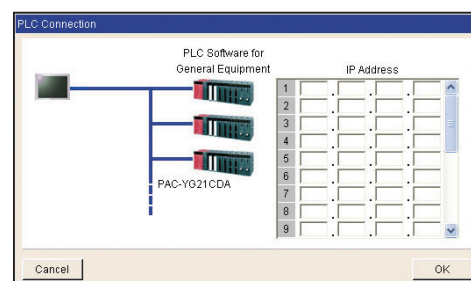
The 'User Settings' window displays settings for five user settings. Each setting has a table for error codes to be sent:

- User Setting 1: Error Code 0012, 01*2, 0105, 0123, 0142, 1111, 2123, 2134, 4444, 9998
- User Setting 2: Error Code 2222
- User Setting 3: Error Code 3333
- User Setting 4: Error Code 4444
- User Setting 5: Error Code 5555

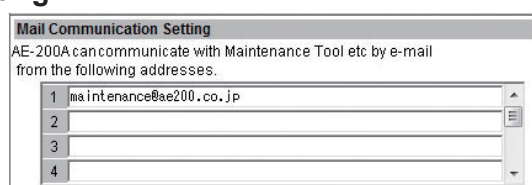
- (4) If [General Equipment] is selected in the [Kind of Errors] field, a [PLC Connection] button will appear. To send error notification e-mail upon occurrences of errors on the general equipment that are connected to PLC Software for General Equipment, click [PLC Connection] to display the [PLC Connection] screen. Enter the IP addresses of PLC Software for General Equipment.

The row number that corresponds to each IP address will appear in the error notification e-mail as a PLC number. (e.g., When an error occurs on the general equipment #20 connected to the PLC Software in the second row, "PLC2-20" will appear in the [Error unit] section in the error notification e-mail.)

Note: A TG-2000A is required to monitor the status of the general equipment that is connected to the PLC Software for General Equipment.



[4] Mail Communication Setting



To use an e-mail communication function, enter the addresses of the PCs that will receive the units' maintenance data in the [Mail Communication Setting] section. Up to 10 e-mail addresses can be set.

[5] E-mail format

Error notification e-mail will be sent in the format shown below.

```
From:Mitsubishi Building(000001)
Date:01/06/2014 16:32:12
Error unit:065
Error code:1302
Status:Occurrence
```

Mail subject	The mail subject entered in section 7-2-1 "E-Mail" [3] will appear.
From	The AE-200/AE-50/EW-50 unit name and unit ID entered in section 7-1-2-1 "Unit Settings" will appear.
Date	Error occurrence date and time will appear in the format entered in section 7-1-2-6 "Display Format".
Error unit	<ul style="list-style-type: none"> - When an error occurs on air conditioning units or general equipment, the M-NET address of the unit in error will appear. - When an error occurs on general equipment connected to PLC Software for General Equipment, PLC number* (1 to 20) and connection number of general equipment (1 to 32) will appear. - When a communication error occurs on PLC Software for General Equipment, PLC number* (1 to 20) will appear. <p>* PLC number indicates the row number on the [PLC Connection] screen. (Refer to section 7-2-1 "E-Mail" [3].)</p> <p>Note: When an error occurs on the general equipment connected via DIDO controller, M-NET address of the DIDO controller will appear. (The recipients will know that an error has occurred on one of the general equipment that is connected to the DIDO controller.)</p>
Error code	<p>Error code (4-digit) will appear.</p> <ul style="list-style-type: none"> - When an error occurs on air conditioning units, refer to the service manual of the unit for the error codes. - When an error occurs on general equipment, "0091" (General equipment error) will appear. - When a communication error occurs on PLC Software for General Equipment, "0003" (LAN communication error to PLC) or "0007" (PLC program stopped) will appear.
Status	Error status "Occurrence" (The error is occurring) or "Recovery" (The error has been resolved) will appear.

7-2-2. Peak Cut (Energy-save control function)

According to the selected Peak Cut method, the AE-200/AE-50/EW-50 obtains the demand level or the electric energy values to determine the control level, and operates outdoor units and blocks of indoor units below the specified maximum capacity that corresponds to the control level.

Click [Functions 1] in the menu bar, and then click [Peak Cut] to access the Peak Cut control settings screen. Make necessary settings, and then click [Save Settings].

Important: The amount of electricity that is actually used may exceed the maximum power demand due to unexpected problems such as controller malfunctions or broken transmission cables. Mitsubishi Electric will not be responsible for exceeding the maximum power demand.

- Note: After completing the settings, perform a test run and confirm proper connections of equipment before using the Peak Cut function.
- Note: A separate license is required to use the Peak Cut function. Make sure that the required license has properly been registered on the Registration of Optional Functions screen. (Refer to section 4-5 “License registration for optional functions” for details.)
- Note: Some settings may not be accessible if logged in as a building manager.
- Note: Peak Cut control cannot be performed on DIDO controller (PAC-YG66DCA), AHC, or Air To Water (PWFY) unit.
- Note: The Peak Cut control of indoor units is performed per block. Be sure to make block settings to use the Peak Cut function.
- Note: The Peak Cut control settings between the outdoor and indoor units connected to the AE-200, AE-50, and EW-50, as well as between the units connected to different AE-50/EW-50 controllers, cannot be made.

Peak Cut method

Control details for outdoor units

Refresh

Click to import the settings from AE-200/AE-50/EW-50 and PLC.

Setting details for the selected Peak Cut method

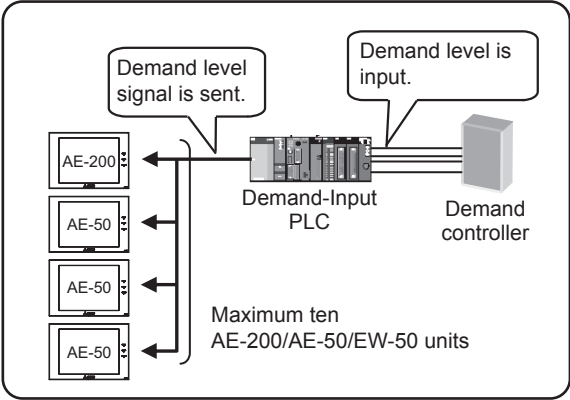
Control details for blocks of indoor units

Save Settings

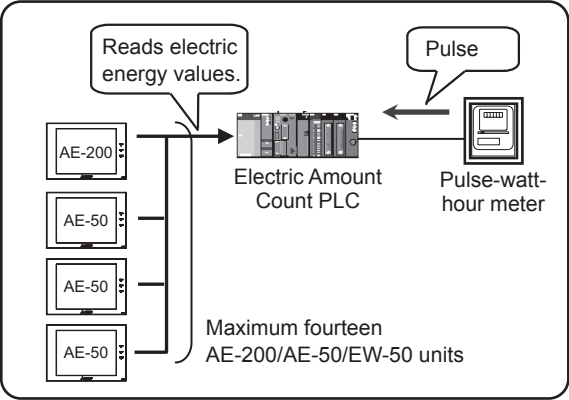
Click to send the settings to AE-200/AE-50/EW-50 and PLC.

[1] Peak Cut method

[Demand-Input PLC]

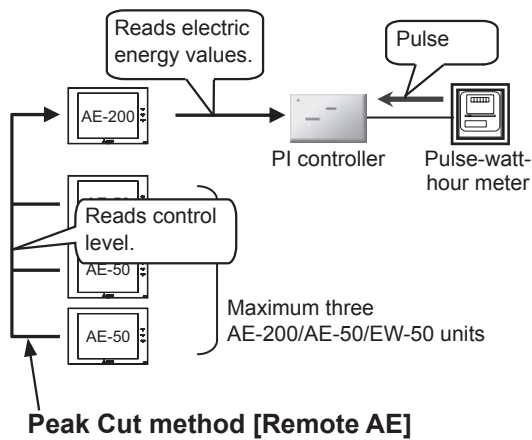


[Electric Amount Count PLC]

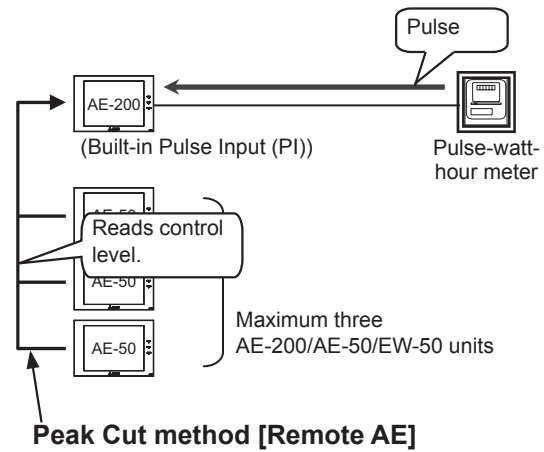


[PI Controller]

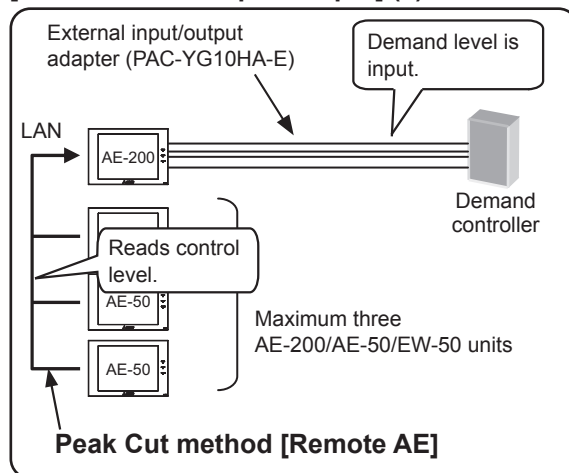
<When a PI controller (PAC-YG60MCA) is used>



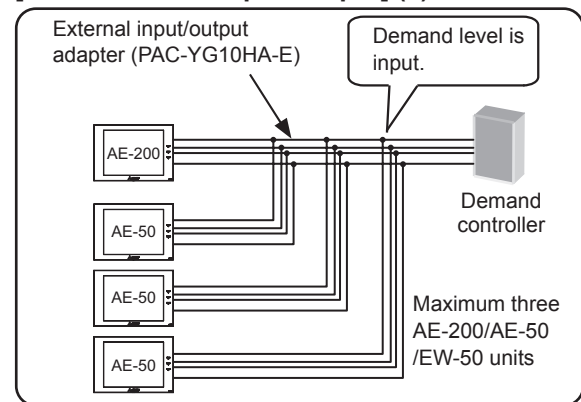
<When a built-in Pulse Input (PI) is used>



[External Contact point input] (1)

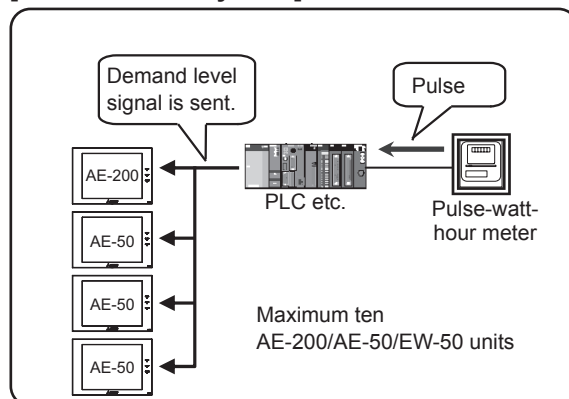


[External Contact point input] (2)



Note: An external input/output adapter (PAC-YG10HA-E) is required for each AE-200/AE-50/EA-50.

[From external system]



(A) When the Peak Cut method [Demand-Input PLC] is selected

Demand Input PLC

Electric Amount Count PLC

PI Controller

Remote AE

External Contact point Input

From external system

Initialize

IP Address: 192.168.1.171

Controlled AE

1	192	168	1	1
2	192	168	1	2
3	192	168	1	3
4	192	168	1	4
5				

3 °C: Temperature difference between set point and inlet.
With this limit or greater difference, indoor units will not be controlled on level 0.

- (1) In the [IP Address] field, enter the IP address of the Demand-Input PLC.
- (2) When using the Demand-Input PLC for the first time, click [Initialize] to initialize its internal memory.
Note: Do not initialize the Demand-Input PLC after the operation has begun, for it will clear all operation data.
- (3) In the [Controlled AE] field, enter the IP addresses of the AE-200/AE-50/EW-50 units to which the demand level signal is sent. Up to 10 IP addresses can be registered.
- (4) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.
Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(B) When the Peak Cut method [Electric Amount Count PLC] is selected

Demand Input PLC

Electric Amount Count PLC

PI Controller

Remote AE

External Contact point Input

From external system

Initialize

IP Address: 192.168.1.151

DI Board: 1 - 0

Pulse Unit: 0.1 kWh / pulse

Control levels

4	180	kW	-	180	kW
3	160	kW	-	160	kW
2	140	kW	-	140	kW
1	120	kW	-	120	kW
0	0	kW	-	120	kW

3 °C: Temperature difference between set point and inlet.
With this limit or greater difference, indoor units will not be controlled on level 0.

- (1) In the [IP address] field, enter the IP address of the Electric Amount Count PLC.
- (2) When using the Electric Amount Count PLC for the first time, click [Initialize] to initialize the internal memory.
Note: Do not initialize the Electric Amount Count PLC after the operation has begun, for it will clear all operation data.
- (3) In the [DI Board] field, select the DI board number to which the watt-hour meter is connected, and the terminal number. If the watt-hour meter is connected to terminal 2 on a DI board 1, select 1-2.
Note: Select a DI board number 1 or 2, and select a terminal number/code between 0 and F.
- (4) In the [Pulse Unit] field, enter the pulse value that the watt-hour meter outputs. Set the pulse value according to the watt-hour meter to be used.

Important: Check the watt-hour meter readings several times on the hour and the half-hour. Then, be sure to check that the increase in the watt-hour meter reading for each 30-minute period and the average electric power consumption in the same period that the Peak Cut function is used are the same amount.

- (5) In the [Control levels] section, the range of the electric power must be set for each control level. For control level 4, enter the value that is 10% to 15% below the maximum power demand (average electric energy that cannot be exceeded in any 30-minute period). For control levels 3 to 0, enter the value that is decreased by about 10% from the set value of the previous control level. (The screenshot above shows the setting example of the maximum demand of 200 kW.)
Note: The optimum setting depends on the system configuration of the electric equipment and on the indoor environment in each building. Determine the appropriate values accordingly.

- (6) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(C) When the Peak Cut method [PI Controller] is selected

The screenshot shows the configuration interface for the Peak Cut method using a PI Controller. On the left, there is a list of input options: Demand Input PLC (PAC-YG41CDA), Electric Amount Count PLC (PAC-YG11CDA), PI Controller (PAC-YG60MCA), Remote AE, External Contact point Input, and From external system. The 'PI Controller' option is selected. The 'Watt-hour meter' field is set to 'Address48-1'. The 'Control levels' section contains a table with 5 rows (levels 4 to 0) and 4 columns (Level, Value, Unit, and another Unit). The values are: Level 4 (180 kW), Level 3 (160 kW), Level 2 (140 kW), Level 1 (120 kW), and Level 0 (0 kW). To the right of the table, there is a dropdown menu for the temperature differential, currently set to 3 °C. A text box explains: '3 °C : Temperature difference between set point and inlet. With this limit or greater difference, indoor units will not be controlled on level 0.'

Control levels	Value	Unit	Unit
4	180	kW	-
3	160	kW	- 180 kW
2	140	kW	- 160 kW
1	120	kW	- 140 kW
0	0	kW	- 120 kW

- (1) In the [Watt-hour meter] field, select the watt-hour meter used for the Peak Cut function or the PI controller to which the watt-hour meter is connected.

Note: Only the watt-hour meters that have been registered on the Measurement screen are selectable. Refer to section 7-2-3 "Measurement" for how to register metering devices.

Note: When a built-in Pulse Input (PI) is used, ["Meter" + Channel No. + (space) + Metering device name] will appear. (For example, if the watt-hour meter used for the Peak Cut function is connected to channel 3 of CN7 of AE-200 and the metering device name is "For Peak Cut function," [Meter3 For Peak Cut function] will appear.)

When a PI controller (PAC-YG60MCA) is used, ["Address" + PI controller address + "-" + Channel No. + (space) + Metering device name] will appear. (For example, if the watt-hour meter used for the Peak Cut function is connected to channel 2 of a PI controller (address 10) and the metering device name is not registered, [Address10-2] will appear.)

- (2) In the [Control levels] section, the range of the electric power must be set for each control level. For control level 4, enter the value that is 10% to 15% below the maximum power demand (average electric energy that cannot be exceeded in any 30-minute period). For control levels 3 to 0, enter the value that is decreased by about 10% from the set value of the previous control level. (The screenshot above shows the setting example of the maximum demand of 200 kW.)

Note: The optimum setting depends on the system configuration of the electric equipment and on the indoor environment in each building. Determine the appropriate values accordingly.

- (3) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

Note: When a PI controller is only connected to AE-200, and when AE-50/EW-50 monitors AE-200, select "Remote AE" for AE-50/EW-50.

(D) When the Peak Cut method [Remote AE] is selected

<input type="checkbox"/> Demand Input PLC PAC-YG41CDA <input type="checkbox"/> Electric Amount Count PLC PAC-YG11CDA <input type="checkbox"/> PI Controller PAC-YG60MCA <input checked="" type="checkbox"/> Remote AE <input type="checkbox"/> External Contact point Input <input type="checkbox"/> From external system	IP Address 192 . 168 . 1 . 1 <div style="border: 1px solid black; padding: 5px;"> 3 °C : Temperature difference between set point and inlet. With this limit or greater difference, indoor units will not be controlled on level 0. </div>
---	--

- (1) In the [IP address] field, enter the IP address of the AE-200/AE-50/EW-50 that uses one of the following.
- Built-in Pulse Input (PI)
 - PI controller (PAC-YG60MCA)
 - External contact input (Refer to (E) “When the Peak Cut method [External Contact point input] is selected” for details.)

Note: As the control level is obtained every minute from the AE-200/AE-50/EW-50 that uses a built-in Pulse Input (PI) or a PI controller (PAC-YG60MCA), the control will be late for up to one minute on the AE-200/AE-50 whose Peak Cut method setting is [Remote AE].

Note: Up to three AE-200/AE-50/EW-50 units can be connected to the AE-200/AE-50/EW-50 unit that uses a built-in Pulse Input (PI) or a PI controller (PAC-YG60MCA). When five or more AE-200/AE-50/EW-50 units are connected, add the settings in (C) “When the Peak Cut method [PI Controller] is selected” or use the Peak Cut method [Electric Amount Count PLC].

- (2) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(E) When the Peak Cut method [External Contact point input] is selected

Note: The external signal can be input to AE-200, AE-50, and EW-50, so that all outdoor units and blocks of indoor units can be selected.

<input type="checkbox"/> Demand Input PLC PAC-YG41CDA <input type="checkbox"/> Electric Amount Count PLC PAC-YG11CDA <input type="checkbox"/> PI Controller PAC-YG60MCA <input type="checkbox"/> Remote AE <input checked="" type="checkbox"/> External Contact point Input <input type="checkbox"/> From external system	<div style="border: 1px solid black; padding: 5px;"> 3 °C : Temperature difference between set point and inlet. With this limit or greater difference, indoor units will not be controlled on level 0. </div>
---	---

- (1) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

Note: When an external input is only connected to AE-200, and when AE-50/EW-50 monitors AE-200's control level, select “Remote AE” for AE-50/EW-50.

(F) When the Peak Cut method [From external system] is selected

<div><div><div><div><div></div><div>Demand Input PLC</div><div>PAC-YG41CDA</div></div><div><div></div><div>Electric Amount Count PLC</div><div>PAC-YG11CDA</div></div><div><div></div><div>PI Controller</div><div>PAC-YG60MCA</div></div><div><div></div><div>Remote AE</div></div><div><div></div><div>External Contact point Input</div></div><div><div></div><div>From external system</div></div></div></div></div>	<div><div><div>3</div><div>°C</div><div>:</div><div>Temperature difference between set point and inlet</div></div><div>With this limit or greater difference, indoor units will not be controlled on level 0.</div></div>
--	---

- (1) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between the set temperature and the room temperature is greater than the specified temperature differential.

Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

[2] Control details for outdoor units (All Peak Cut methods)

Follow the instructions below to make the Peak Cut control settings for each control level for given outdoor units.

Note: If the outdoor unit is a City Multi unit, the M-NET address will appear. If the outdoor unit is an A-control (Mr. Slim) unit, the M-NET address and group name will appear.

Note: As for A-control outdoor units, only the inverter models can perform Peak Cut control. The Peak Cut control settings for constant-speed models can not be made.

Note: Do not make the Peak Cut control settings for heat pump models of outdoor units or some types of outdoor units.

Control details for outdoor units

Address 51 Copy Paste

	Maximum Capacity					Control Time (per 30 minutes)					
Control level 4	100%	90%	80%	70%	60%	50%	3	6	9	15	30
3	100%	90%	80%	70%	60%	50%	3	6	9	15	30
2	100%	90%	80%	70%	60%	50%	3	6	9	15	30
1	100%	90%	80%	70%	60%	50%	3	6	9	15	30
0	100%	90%	80%	70%	60%	50%	3	6	9	15	30

☐ Batch Operations

Maximum Capacity
Select the upper limit of outdoor unit operating capacity.

- (1) To make settings for all outdoor units at once, check the [Batch Operations] checkbox. Then, set the maximum operating capacity for each control level.

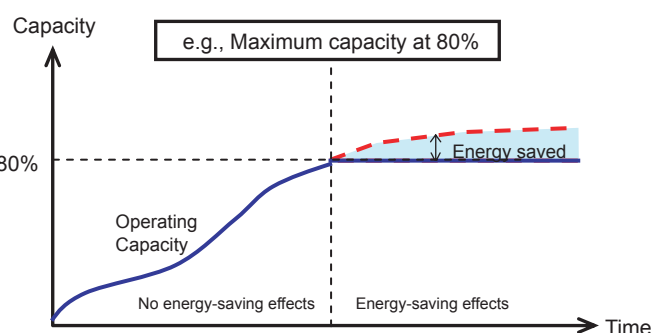
The smaller the maximum operating capacity, the more energy will be saved.

Note: Energy-saving effects cannot be expected during low-load operation with the capacity below the selected maximum capacity.

Note: For heat pump outdoor units and City Multi S series (PUMY) outdoor units, leave the default setting [100%] as it is not to activate the capacity-save control. However, [50%] though [100%] can be set on the following models.

PUMY-P**KM or later
PUMY-P**KM-A or later
PUMY-P**HMC-S or later
PUMY-P**HMC-C or later
PUMY-P**KMC-C or later
PUMY-P**YKM.TH(-T) or later

Note: AE-200/AE-50/EW-50 that support Maximum Capacity [50%] are from Ver. 7.23 or later.



- (2) For each control level, set the total time in which the Peak Cut control is performed during every 30 minutes. Setting the time to [30] or [15] minutes is preferable, for shorter control time is not likely to bring much benefit. If any time other than [30] minutes is selected, the outdoor units will operate in rotation so that they will not perform the Peak Cut control at the same time.
- (3) To copy the settings of an outdoor unit to the settings for other outdoor units, display the outdoor unit whose settings are to be copied and click [Copy], then display the outdoor unit to which the copied settings are to be pasted and click [Paste]. The rectangular icons next to the selected buttons will appear in yellow-green.

[3] Control details for blocks of indoor units

Follow the instructions below to make the Peak Cut control settings for each control level for given blocks of indoor units.

If the block settings have not been made, refer to section 7-1-5 “Blocks” for how to make the block settings.

Control details for indoor units

Block 1 Lobby(1F) Copy Paste

Control level	Control Method	Control Time (per 30 minutes)
4	None ±2°C Fan OFF	3 6 9 15 30
3	None ±2°C Fan OFF	3 6 9 15 30
2	None ±2°C Fan OFF	3 6 9 15 30
1	None ±2°C Fan OFF	3 6 9 15 30
0	None ±2°C Fan OFF	3 6 9 15 30

☐ Batch Operations Click to make settings for all blocks at once.

Control method

- (1) Scroll up or down to display the block whose settings are to be made. To make settings for all blocks at once, check the [Batch Operations] checkbox.

Then, select the control method for each control level, referring to the table below.

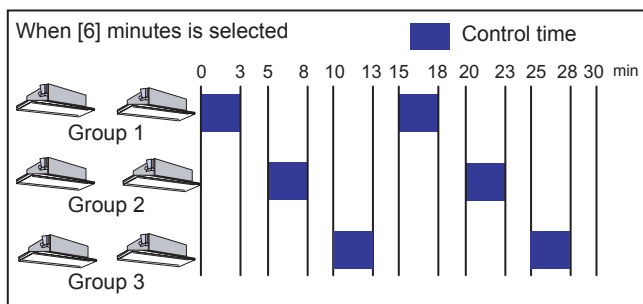
Note: Only the control method “OFF” is effective for Air To Water (PWFY) units. Other methods can be selected, but are not effective.

Table: Indoor Unit Control Method

Control Method	Control details
None	Peak Cut control will not be performed.
±2°C (±4°F)	<p>During the Peak Cut control, the set temperature in the Cool or Dry mode will be offset by +2°C (+4°F), and the set temperature in the Heat mode will be offset by -2°C (-4°F).</p> <p>Note: Peak Cut control will not be performed during the Fan or Auto mode.</p> <p>Note: When the unit of temperature is Fahrenheit, the set temperature may not be offset by ±4°F exactly because 2°C is used for the calculation first, and then the temperature in Celsius is converted into the temperature in Fahrenheit.</p> <p>Note: The set temperature will be adjusted within the set temperature restrictions settings. Refer to section 7-3-1 “Set Temperature Range Limit” for details.</p>
Fan *1	During the Peak Cut control, free-plan indoor units and A-control Mr. Slim indoor units (M-Series/ P-Series indoor units) will go in to the Thermo-OFF state, and the units older than free-plan units will operate in the Fan mode. (When the units are in the Thermo-OFF state, the operation mode on the remote controller LCD will not change.)
OFF *1	<p>During the Peak Cut control, the units will stop.</p> <p>Note: If the control method is set to [OFF] and the Control Time is set to [30] minutes, the groups that are operated in the Peak Cut control cannot be operated from any controller.</p>

*1 When the indoor unit Peak Cut control function is used during the heating operation, it takes a while to resume operation to prevent cold air draft. This may negatively affect the performance of the unit for a certain period of time after the operation is resumed. To ensure maximum performance, it is recommended to use an outdoor unit capacity-save control function (that will not stop the compressor operation) during the heating operation. If the indoor unit Peak Cut control function is still used, selecting [3] minutes in the Control Time section is recommended.

- (2) For each control level, set the total time in which the Peak Cut control is performed during every 30 minutes.
Each Peak Cut control is performed for three minutes. If [6] minutes is selected, three-minute Peak Cut control will be performed twice during every 30 minutes.
If any time other than [30] minutes is selected, the indoor units will operate in rotation so that they will not perform the Peak Cut control at the same time.



- (3) To copy the settings of a block to the settings for other blocks, display the block whose settings are to be copied and click [Copy], then display the block to which the copied settings are to be pasted and click [Paste]. The rectangular icons next to the selected buttons will appear in yellow-green.

7-2-3. Measurement

Measurement settings must be made to use temperature sensors, humidity sensors, and metering devices. Click [Functions 1] in the menu bar, and then click [Measurement] to access the measurement settings screen. Set the measurement settings, and then click [Save Settings].

Note: The measurement settings may not be accessible if logged in as a building manager.

The screenshot shows the 'Measurement' settings screen in a web browser. The browser address bar shows 'http://192.168.1.1/init/en/administrator.html'. The page has a menu bar with 'Initial Settings', 'Functions 1', 'Functions 2', 'Functions 3', 'User Settings', and 'Utility'. Below the menu bar, there are tabs for 'E-Mail', 'Peak Cut', 'Measurement', and 'Energy Management Settings'. The 'Measurement' tab is selected, showing a list of sensors with columns for 'Address', 'Name / Sensor Range / Alarm Mail', and 'Set offset'. A scroll bar is present on the right side of the sensor list. Below the sensor list, there are sections for 'E-mail Settings' and 'Save Settings'. Annotations point to various elements: 'Selection of AI or PI controller' points to the 'Address' column; 'M-NET address of AI or PI controller' points to the value '49' in the 'Address' column; 'Selection of separator character for energy management data' points to the 'Comma (,)' option; 'Selection of decimal point character for energy management data' points to the 'Dot (.)' option; 'Refresh' points to the 'Refresh' button; 'Setting details' points to the 'Sensor Range' field; 'Scroll bar' points to the scroll bar on the right; 'E-mail Settings' points to the 'E-mail Address' field; and 'Save Settings' points to the 'Save Settings' button.

Selection of AI or PI controller

M-NET address of AI or PI controller

Selection of separator character for energy management data

Selection of decimal point character for energy management data

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

Setting details

Scroll bar
Slide to show the address to which the AI or PI controller will be connected.

E-mail Settings

Save Settings
Click to save the changes made.

[1] Registering AI controllers and temperature/humidity sensors

Follow the instructions below to make the system settings for measurement sensors. Up to two measurement sensors can be connected to an AI controller (PAC-YG63MCA).

The screenshot shows the 'Measurement' settings screen with detailed annotations for sensor registration. The 'Address' column shows '40'. The 'Name / Sensor Range / Alarm Mail' column shows 'Exhibition hall (T)' with a temperature sensor icon and a range of '-30.0 °C - 60.0 °C'. The 'Set offset' column shows '23.2 °C'. The 'E-mail Settings' section shows 'Type of E-Mail' as 'Out-of-limit alarm', 'Mail Subject' as 'Alarm Mail', and 'E-Mail Address' as 'm1sub/shi@ae200.co.jp'. Annotations point to: 'Sensor name' (the name field), 'AI controller icon' (the icon in the 'Address' column), 'Setting details of sensor 1' (the 'Name / Sensor Range / Alarm Mail' field), 'Setting details of sensor 2' (the 'Set offset' field), 'Selection of temperature or humidity sensor icon' (the temperature sensor icon), 'Measurable range' (the range field), 'Upper/lower ON- and OFF-threshold settings for e-mail alarm function' (the threshold fields), 'Upper limit (ON-threshold)' (the upper limit field), 'Upper limit (OFF-threshold)' (the upper limit field), 'Lower limit (OFF-threshold)' (the lower limit field), and 'Lower limit (ON-threshold)' (the lower limit field).

Sensor name

AI controller icon

Setting details of sensor 1

Setting details of sensor 2

Selection of temperature or humidity sensor icon

Measurable range

Upper/lower ON- and OFF-threshold settings for e-mail alarm function

Upper limit (ON-threshold)

Upper limit (OFF-threshold)

Lower limit (OFF-threshold)

Lower limit (ON-threshold)

Set offset

(1) Using the scroll bar, select the address to which the AI controller (PAC-YG63MCA) will be connected.

(2) Select the AI controller icon ().

Note: Click again to deselect.

(3) In the [Sensor name] field, enter the name of the sensor.

(4) Select the temperature sensor icon () or the humidity sensor icon ().

(5) Enter the measurable range of the sensor.

Note: When the Pt sensor is connected, the range must be between -30°C (-22°F) and +60°C (+140°F).

When the sensors other than the Pt sensors are connected, enter the ranges that are described in the operation manuals of the sensor.

- (6) To receive an e-mail alarm when the temperature or the humidity exceeds certain predetermined values, set the ON- and OFF-thresholds for both the upper and lower limit temperatures.

Note: To avoid frequent ON/OFF cycling, the minimum differential between the ON- and OFF-threshold values should be 1°C (2°F).

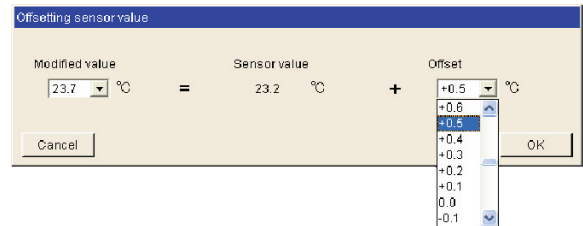
[2] Offsetting the measured temperature/humidity values

To set the offset value for the measured values, follow the instructions below.

Note: The actual measurement values or the adjusted measurement values are not displayed until the connection settings of the AI controller are completed.

When the AI controller is registered for the first time, click [Save Settings] to send the settings data, and click [Functions 1]-[Measurement] to refresh the measurement settings screen.

- (1) Click [Set offset] in the [Setting details] section.
 - (2) Select the offset value in the [Offset] pulldown menu, or select the desired value in the [Modified value] pulldown menu.
- The settable offset value range for temperature sensor is between -10.0°C (-18.0°F) and +10.0°C (+18.0°F), and for the humidity sensor is between -10.0% and +10.0%.

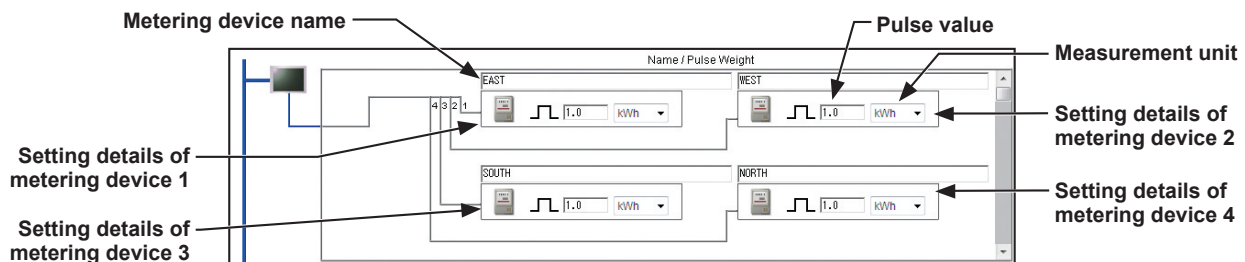


[3] Registering PI controllers and metering devices

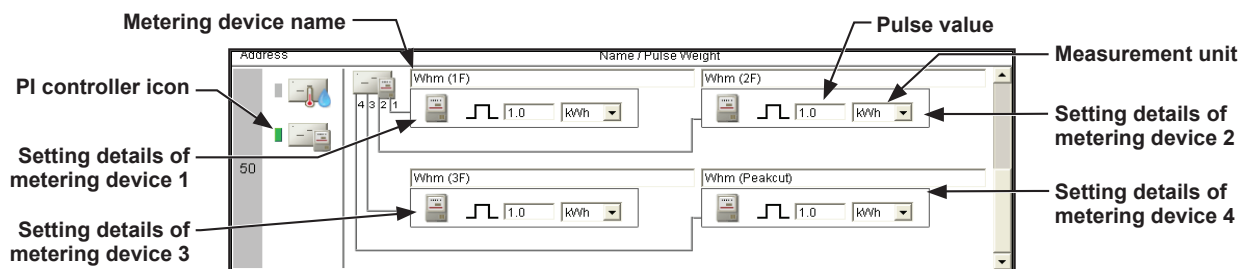
Follow the instructions below to make the system settings of the metering devices. Up to four metering devices can be connected to a PI controller (PAC-YG60MCA) or CN7 of AE-200/AE-50/EW-50.


Note: Although the maximum settable total number of built-in Pulse Input (PI) and PI controllers (PAC-YG60MCA) for each AE-200/AE-50/EW-50 is 15, the number of them in a system with connection to one or more AE-50/EW-50 controllers must be 20 or less. (Each built-in Pulse Input (PI) counts as one unit.)

<When a built-in Pulse Input (PI) is used>



<When a PI controller (PAC-YG60MCA) is used>



- (1) Using the scroll bar, display the address to which the PI controller (PAC-YG60MCA) will be connected or to display the settings area for a built-in Pulse Input (PI) at the top.
- (2) Select the PI controller icon ().
When a built-in Pulse Input (PI) is used, the top row shows the setting area for the built-in Pulse Input (PI) and there is no need to select an icon.
Note: Click again to deselect.
- (3) In the [Metering device name] field, enter the name of the metering device.

- (4) Enter the pulse value of the metering device, and select the measurement unit.

Note: The measurement unit can be selected from [kWh], [m3], [MJ], or [--(no unit)].

Note: Select the blank in the measurement unit pulldown menu when not using a metering device.

Note: If the pulse value field is left blank, the reading of the metering device cannot be properly obtained. Be sure to set the pulse value.

Important: Set the pulse value according to the metering device to be used. To ensure proper settings, first check the value measured by the metering device and the value counted by the PI controller. Then, after a certain time, check that both values have increased by equal values. (The values that the PI controller counts can be checked on the LCD and the Integrated Centralized Control Web.)

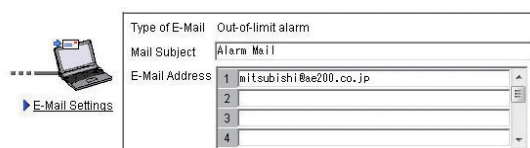
[4] E-mail alarm function settings

To receive an e-mail alarm when the temperature or the humidity exceeds certain predetermined values, set the e-mail settings by following the instructions below.

- (1) In the [Type of E-Mail] field, select [Out-of-limit alarm].

Then, enter the mail subject and the e-mail addresses.

Note: The following characters cannot be used in the [Mail Subject] field: <, >, &, ", or '



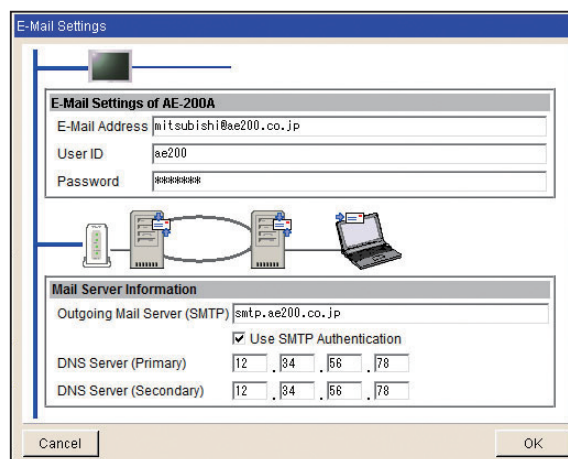
An e-mail alarm will be sent in the format shown below.

From: Mitsubishi Building(000001)
 Date/Time: 13/03/2014 09:38:39
 Address: 50-1
 Current value: 24.9 deg C
 Status: Exceeded lower limit
 Trend Data:
 09:38 25.2 deg C
 09:37 25.4 deg C
 09:36 25.6 deg C
 09:35 25.8 deg C
 09:34 26.1 deg C
 09:33 26.4 deg C
 09:32 26.7 deg C
 09:31 27.0 deg C
 09:30 27.5 deg C
 09:29 27.7 deg C

From	AE-200/AE-50/EW-50 name + Unit ID Note: The AE-200/AE-50/EW-50 unit name and unit ID entered in section 7-1-2-1 "Unit Settings" will appear.
Date/Time	yyyy/mm/dd hh:mm:ss Note: The date and time will appear in the format selected in section 7-1-2-6 "Display Format".
Address	M-NET address of AI controller + sensor No.
Current value	Current temperature or humidity (one decimal place) Note: [**.*) may appear until the value measured by sensor becomes stable.
Status	"Exceeded upper limit," "Recovered from upper limit," "Exceeded lower limit," or "Recovered from lower limit"
Trend Data	Time + Temperature or humidity values (for the last 10 minutes)

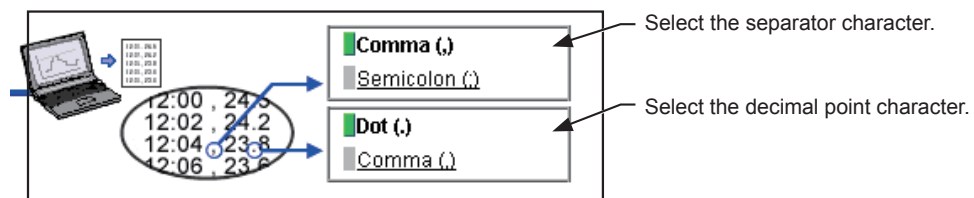
- (2) Click [E-Mail Settings] to enter the mail server information.

Note: The setting details are the same as those described in sections 7-2-1 "E-Mail" [1] and [2]. Refer to those sections for details.



[5] Energy management data format settings

Set the format of the energy management data that can be output in a CSV format from the screens under the Energy Management menu.



7-2-4. Energy Management Settings

On the Energy Management Settings screen, make the settings for the energy-control-related items, such as temperature sensor to measure the outdoor temperature with, electricity meters that are used for acquiring the data to display the trend graph of indoor unit electricity consumption, and also the mode that are used for apportioning indoor unit electricity consumption.

Click [Functions 1] in the menu bar, and then click [Energy Management Settings] to access the energy management settings screen.

Note: The energy management settings may not be accessible if logged in as a building manager.

Note: Electricity consumption is apportioned based on the electricity consumed by outdoor units. The electricity consumed by indoor units is not considered.

Important: The energy management settings must be made after all units have been started up.
The settings that have been saved while one or more units are starting up may be lost.

Temperature sensor
Select a temperature sensor to measure the outdoor temperature with.

Indoor unit operation apportioning mode

Indoor unit electricity meter

Indoor unit address

Group Name

Electricity meter

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

Save Settings
Click to save the changes made.

- (1) In the [Temperature sensor] section, select a temperature sensor to measure the outdoor temperature with. In the pulldown menu, the name of the temperature sensor that is connected to the AI controller or the AHC will appear.

Note: Connect the temperature sensor to either the Analog Input 1 or Analog Input 2 port on the AHC.

Note: This setting is interlocked with the temperature sensor setting on the External Temperature Interlock settings screen.

- (2) In the [Indoor unit operation apportioning mode] section, select the way indoor units' operation time is counted that is used to apportion the electricity consumption, which appears on the screens under the Energy Management menu.

Select [Fan operation time] to apportion the electricity consumption based on the fan operation time, and select [Thermo-ON time] to apportion the electricity consumption based on the Thermo-ON time of the indoor units.

Select [Capacity save amount] to apportion the electricity consumption based on the indoor unit operation time that was calculated based on the amount of energy saved on the indoor units.

The selected setting must meet the system requirements. Selecting [Capacity save amount] is recommended.

Note: "FAN operation time" is the cumulative duration of time in which the indoor unit is powered on.

Note: "Thermo-ON time" is the cumulative duration of time in which the refrigerant is flowing into the indoor unit.

Note: "Capacity save amount" is the cumulative operation time of the outdoor unit based on its capacity.

Note: Electricity consumption is apportioned based on the electricity consumed by outdoor units. The electricity consumed by indoor units is not considered.

Note: When an AE-200 apportioned electricity billing function is used, this setting is not effective because the billing function settings are used to apportion the electricity consumption.

- (3) In the [Indoor unit electricity meter] section, select the electricity meter to be used to measure the electricity consumption of each group of indoor units.

In the pulldown menu, ["Address"+ PI controller address + "-" + Electricity meter number + Electricity meter name] will appear when a PI controller (PAC-YG60MCA) is connected, or ["Meter" + Channel No. + Electricity meter name] will appear when a metering device is directly connected to the controller.

Note: If the electricity meter name is long, only part of it may be displayed.

Note: The electricity meter name will be blank if it has not been registered.

Note: Only the electricity meters whose measurement unit setting is set to [kWh] on the Measurement screen are available for selection.

Note: When an AE-200 apportioned electricity billing function is used, this setting is not effective because the billing function settings are used to apportion the electricity consumption.

- (4) Click [Save Settings] to save the settings.

7-3. Functions 2

7-3-1. Set Temperature Range Limit

The settable temperature range for the local remote controllers can be limited. By restricting the lower and upper limit of the set temperatures for cooling, heating, and auto modes, energy consumption can be reduced. Click [Functions 2] in the menu bar, and then click [Set Temperature Range Limit] to access the set temperature range restrictions settings screen.

Note: The set temperature range restrictions settings may not be effective, depending on the unit model of the remote controller and the indoor unit.

Note: A-control (Mr. Slim) units, room air conditioners, and residential air conditioners do not support the set temperature range restrictions settings.

Note: The set temperature range restrictions settings may not be accessible if logged in as a building manager.

Note: The set temperature limit range for the AUTO mode cannot be set for the groups that support the dual set point function in the AUTO mode. The set temperature ranges for the normal cooling and heating modes will be used for the ones for cooling and heating in the Auto (dual set point) mode.

The screenshot shows the 'Set Temperature Range Limit' web interface. The interface has a menu bar at the top with 'Initial Settings', 'Functions 1', 'Functions 2' (selected), 'Functions 3', 'User Settings', and 'Utility'. Below the menu bar, there are sub-menus: 'Set Temperature Range Limit' (selected), 'Night Mode Schedule', and 'System-changeover'. The main content area is titled 'Set Temperature Range Limit' and contains a table with columns: 'Group No. and group name', 'Cooling Mode', 'Heating Mode', 'Auto Mode', and 'Batch Operations'. The table lists seven groups: Entrance, Lobby(South), Lobby(East), Lobby(Center), Lobby(West), Meeting room A, and Meeting room B. Each group has temperature range settings for Cooling, Heating, and Auto modes. The 'Batch Operations' column contains 'Copy' and 'Paste' buttons. Annotations with arrows point to various elements: 'Group No. and group name' points to the first column; 'Set temperature range' points to the temperature range input fields; 'Batch Operations' points to the 'Batch Operations' column header; 'Copy' points to a 'Copy' button; 'Paste' points to a 'Paste' button; 'Refresh' points to a 'Refresh' button at the bottom; and 'Save Settings' points to a 'Save Settings' button at the bottom.

Group No. and group name	Cooling Mode	Heating Mode	Auto Mode	Batch Operations
1 Entrance	24 - 28 °C	- °C	- °C	Copy Paste
2 Lobby(South)	26 - 28 °C	20 - 23 °C	- °C	Copy Paste
3 Lobby(East)	26 - 28 °C	20 - 23 °C	- °C	Copy Paste
4 Lobby(Center)	26 - 28 °C	20 - 23 °C	- °C	Copy Paste
5 Lobby(West)	26 - 28 °C	20 - 23 °C	- °C	Copy Paste
6 Meeting room A	- °C	- °C	19 - 23 °C	Copy Paste
7 Meeting room B	24 - 28 °C	- °C	- °C	Copy Paste

Refresh Click to import the settings from AE-200/AE-50/EW-50.

Save Settings Click to save the changes made.

- (1) Scroll up or down to display the group whose settings are to be made. To make settings for all groups at once, click [Batch Operations]. Then, click the [Set temperature range] area to display the setting screen.

Set the temperature ranges for cooling, heating, and auto modes.

Click [OK] to return to the previous screen.

Note: When the temperature unit is Fahrenheit, temperatures are displayed in 2°F increments.

Note: The temperature range for Dry mode will be the same as the one for cooling mode.

The screenshot shows the 'Set Temperature Range Limit' dialog box. It has a title bar 'Set Temperature Range Limit' and a subtitle 'Group Name : Lobby (South)'. The dialog box contains three sections: 'Cooling Mode', 'Heating Mode', and 'Auto Mode'. Each section has a temperature range input field. The 'Cooling Mode' field shows '26' and '28' with up/down arrows and '°C'. The 'Heating Mode' field shows '20' and '23' with up/down arrows and '°C'. The 'Auto Mode' field shows '-' and '-' with up/down arrows and '°C'. There are 'Cancel' and 'OK' buttons at the bottom.

- (2) To copy the settings of a group to the settings for other groups, click [Copy] in the row of the group whose settings are to be copied, then click [Paste] in the row of the group to which the copied settings are to be pasted. The rectangular icons next to the selected buttons will appear in yellow-green.
- (3) Click [Save Settings] to save the settings.

7-3-2. Night Mode (quiet operation) Schedule

Outdoor units can be operated in a quiet mode for the specified time period. Use the Night mode when low-noise operation of the outdoor unit is preferable during the night.

Click [Functions 2] in the menu bar, and then click [Night Mode Schedule] to access the Night Mode Schedule settings screen.

Note: Make the Night Mode Schedule settings only when all the units are in normal operation. When connection error occurs with the indoor or the outdoor units, the target outdoor units may not be displayed properly.

Note: The degree of noise reduction depends on the outdoor unit model.

Note: The Night Mode Schedule settings may not be accessible if logged in as a building manager.

Start Time

End Time

Target Outdoor Units

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

Save Settings
Click to save the changes made.

- (1) In the [Start Time] and [End Time] sections, specify the start and end times for the Night mode.
Note: When the start time and the end time is the same, the units will operate in the Night mode at all times.
Note: The time period over the next day (such as 22: 00 - 6: 00) can be set.
- (2) In the [Target Outdoor Units] section, select the M-NET addresses of the target outdoor units.
- (3) Click [Save Settings] to save the settings.

7-3-3. System-changeover

The System-changeover function switches the operation modes of the indoor units connected to the same outdoor unit between cooling and heating based on the room temperature and the set temperature. Click [Functions 2] in the menu bar, and then click [System-changeover] to access the System-changeover settings screen.

The System-changeover function is available only on the Y series of outdoor units, whose operation modes do not include the Auto mode. Use this function to operate the air conditioning units in the heating mode in the morning and in the cooling mode in the afternoon. The operation mode of all indoor units will automatically be switched, eliminating the need to switch the operation mode manually from the remote controllers.

Note: Because the operation mode is selected based on the demands of the representative group or of the majority of the groups, not all areas may be air conditioned to the optimum temperature.

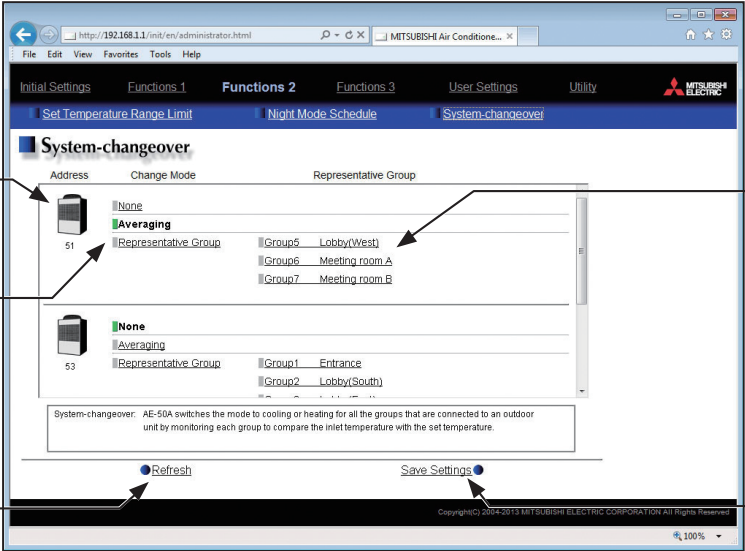
Note: The System-changeover settings may not be accessible if logged in as a building manager.

Note: If the outdoor unit is an R2 series, whose operation modes include the Auto mode, use the Auto mode instead of the System-changeover function to switch the operation mode automatically.

Target outdoor unit
The M-NET address of the outdoor unit appears.

Change Mode

Refresh
Click to import the settings from AE-200/AE-50/EW-50.



Groups
The names of the groups that are connected to the outdoor unit appear. When the [Representative Group] mode is selected, select the representative group from among these groups.

Save Settings
Click to save the changes made.

- (1) Select the Change Mode [None], [Averaging], or [Representative Group], referring to the table below. If [Representative Group] is selected, also select a representative group from among the groups on the right.

Table: Change Mode

Change Mode	Content
None	System-changeover function will not be used.
Averaging	The operation mode (cooling or heating) will be determined and switched every 15 minutes based on the demands of the majority of all groups connected to the outdoor unit, taking into consideration the capacity of each indoor unit and the temperature differences between the set temperatures and room temperatures.
Representative Group	The operation mode (cooling or heating) will be switched based on the temperature difference between the set temperature and the room temperature of the representative group.

- (2) Click [Save Settings] to save the settings.

7-4. Functions 3

7-4-1. External Temperature Interlock

Based on the temperature difference between the set temperature and the outdoor temperature, the set temperature can be adjusted automatically. Making this control setting on the air conditioning unit at an entrance of a building prevents extreme temperature change from distressing our bodies and sending us into shock. Click [Functions 3] in the menu bar, and then click [External Temperature Interlock] to access the External Temperature Interlock settings screen.

Note: External Temperature Interlock is available only for air conditioning unit groups.

Note: Either an AI controller (PAC-YG63MCA) or AHC, and an outdoor temperature sensor are required to measure the outdoor temperature.

Note: When connecting one or more AE-50/EW-50 controllers, connect an AI controller (PAC-YG63MCA) and outdoor temperature sensor on each AE-50/EW-50.

Note: The External Temperature Interlock settings between the units connected to the AE-200, AE-50, and EW-50, as well as between the units connected to different AE-50/EW-50 controllers, cannot be made.

Note: The External Temperature Interlock settings may not be accessible if logged in as a building manager.

Temperature Sensor
Select a temperature sensor to measure the outdoor temperature with.

Group No. and group name

Group No.	Group Name	Set Temperature Variation Range
1	Entrance	None $\pm 1^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$ $\pm 3^{\circ}\text{C}$ $\pm 4^{\circ}\text{C}$
2	Lobby(South)	None $\pm 1^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$ $\pm 3^{\circ}\text{C}$ $\pm 4^{\circ}\text{C}$
3	Lobby(East)	None $\pm 1^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$ $\pm 3^{\circ}\text{C}$ $\pm 4^{\circ}\text{C}$
4	Lobby(Center)	None $\pm 1^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$ $\pm 3^{\circ}\text{C}$ $\pm 4^{\circ}\text{C}$
5	Lobby(West)	None $\pm 1^{\circ}\text{C}$ $\pm 2^{\circ}\text{C}$ $\pm 3^{\circ}\text{C}$ $\pm 4^{\circ}\text{C}$

Set Temperature Variation Range
Select a maximum temperature value to be added to or subtracted from the set temperature.

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

Save Settings
Click to save the changes made.

- (1) In the [Temperature Sensor] section, select a temperature sensor to measure the outdoor temperature with. In the pulldown menu, the name of the temperature sensor that is connected to the AI controller or the AHC will appear.

Note: Connect the temperature sensor to either the Analog Input 1 or Analog Input 2 port on the AHC.

- (2) In the [Set Temperature Variation Range] section, select a maximum temperature value for each group to be added to or subtracted from the set temperature.

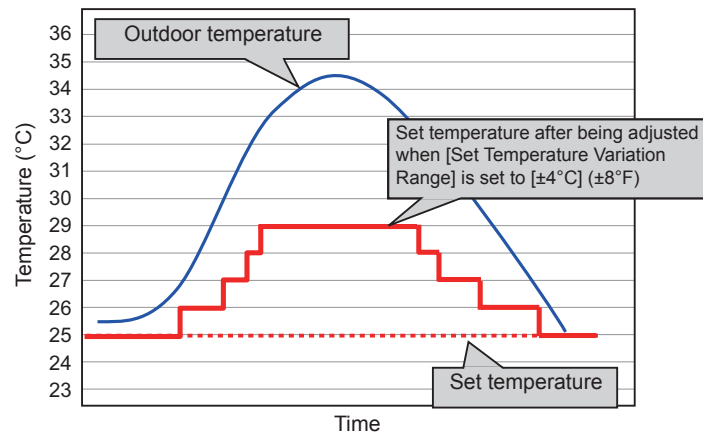
For example, when $\pm 4^{\circ}\text{C}$ ($\pm 8^{\circ}\text{F}$) is selected and the set temperature for the Cool or the Dry mode is set to 24°C (75°F), the set temperature will be adjusted to a maximum of 28°C (83°F) based on the temperature difference between the set temperature and the outdoor temperature. When $\pm 2^{\circ}\text{C}$ ($\pm 4^{\circ}\text{F}$) is selected, the set temperature will be adjusted to maximum of 26°C (79°F).

Note: When the unit of temperature is Fahrenheit, the selected temperature value may not be added to the set temperature accurately because 2°C is used for the calculation first, and then the temperature in Celsius is converted into the temperature in Fahrenheit.

- (3) Click [Save Settings] to save the settings.

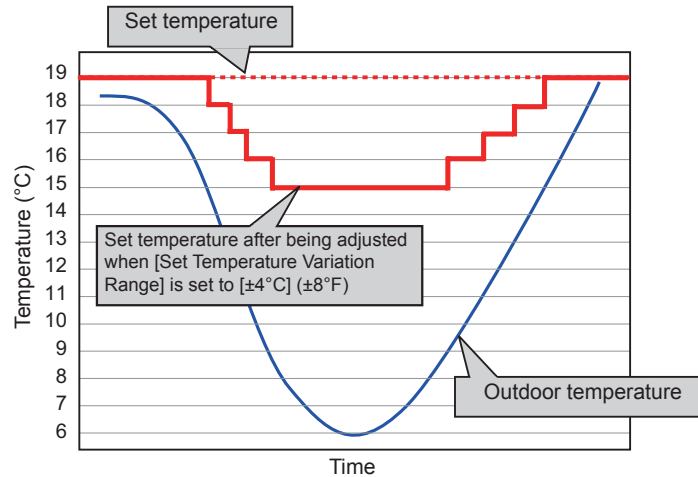
When the External Temperature Interlock function is active, the set temperature will be adjusted as shown below.

■ “Cool” and “Dry” modes



Outdoor temperature conditions	Set temperature after being adjusted
Outdoor temperature \geq Set temperature + 1.5°C (3°F)	Set temperature + 1°C (2°F)
Outdoor temperature \geq Set temperature + 4.5°C (9°F)	Set temperature + 2°C (4°F)
Outdoor temperature \geq Set temperature + 6.5°C (12°F)	Set temperature + 3°C (6°F)
Outdoor temperature \geq Set temperature + 7.5°C (14°F)	Set temperature + 4°C (8°F)

■ “Heat” mode



Outdoor temperature conditions	Set temperature after being adjusted
Outdoor temperature \leq Set temperature - 4.0°C (8°F)	Set temperature - 1°C (2°F)
Outdoor temperature \leq Set temperature - 6.0°C (11°F)	Set temperature - 2°C (4°F)
Outdoor temperature \leq Set temperature - 8.0°C (15°F)	Set temperature - 3°C (6°F)
Outdoor temperature \leq Set temperature - 10.0°C (18°F)	Set temperature - 4°C (8°F)

7-4-2. Night Setback Control

The Night Setback Control function (hereafter abbreviated as Setback Control) prevents indoor condensation by performing heating operation automatically when the room temperature goes outside of the specific range during the night. Click [Functions 3] in the menu bar, and then click [Night Setback Control] to access the Night Setback Control settings screen.

Heating operation starts when a given group is stopped and the room temperature drops below the specified minimum temperature.

Note: The Setback Control function also prevents excessive temperature rise by performing cooling operation automatically when the room temperature goes outside of the specific range. Cooling operation starts when a given group is stopped and the room temperature rises above the specified maximum temperature.

Note: If the room temperature is measured by the return air temperature sensor on the air conditioning unit, the measured value may not be an accurate representation of the temperature in the room, especially when the air conditioning unit is stopped and the room air is stagnant. When this is the case, use an external temperature sensor (PAC-SE40TSA) or remote controller sensor to measure the room temperature.

Note: The Night Setback Control may not be accessible if logged in as a building manager.

The screenshot shows the 'Night Setback Control' settings interface. It includes a 'Setback Control Period' section with 'Use' and 'Do not use' options and a time range selector. Below this is a table for 'Control Object Group' with columns for 'Group Name', 'Minimum Temp', and 'Maximum Temp'. The table lists five groups: Entrance, Lobby(South), Lobby(East), Lobby(Center), and Lobby(West), each with a temperature range of 12°C to 28°C. To the right of the table are 'Copy' and 'Paste' buttons for each row. At the bottom are 'Refresh' and 'Save Settings' buttons. Annotations point to various elements: 'Setback Control Usability' points to the 'Use' option; 'Group No. and group name' points to the first row of the table; 'Setback Control Period' points to the time range selector; 'Temperature range' points to the temperature values in the table; 'Copy' and 'Paste' point to the respective buttons; 'Refresh' points to the 'Refresh' button; and 'Save Settings' points to the 'Save Settings' button.

Setback Control Usability

Setback Control Period

Temperature range

Copy

Paste

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

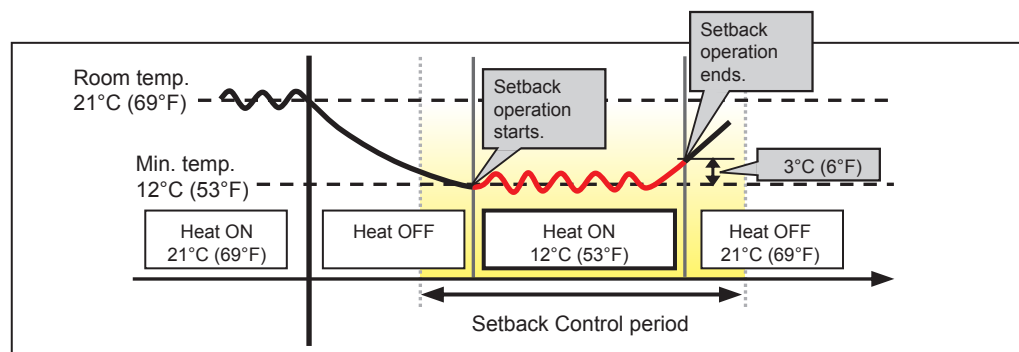
Save Settings
Click to save the changes made.

- (1) Select [Use] and set the time period in which Setback Control is performed.

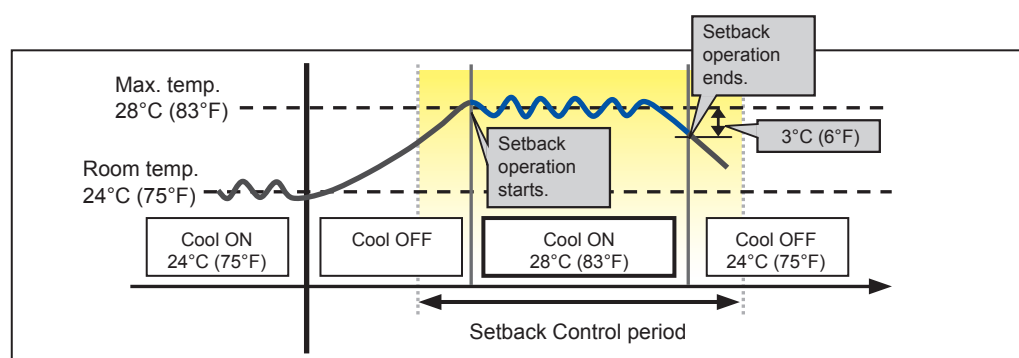
Note: When [00: 00 - 00: 00] is selected, Setback Control is active for 24 hours.

- (2) In the [Temperature range] section, set the maximum and minimum temperatures for each group. For example, if [Setback Control Period] is set to [01:00 - 05:00] and [Temperature range] is set to [12°C - --°C] ([53°F - --°F]), heating operation starts automatically when the room temperature drops below the set temperature 12°C (53°F) between 1:00 and 5:00. When the Setback Control ends at 5:00, the set temperature returns to the original setting, and the operation stops.

Note: The air conditioning units in the heating operation will stop and the set temperature will return to the original setting when the Setback Control period is over or the room temperature rises to the minimum temperature plus 3°C (6°F). Likewise, the air conditioning units in the cooling operation will stop and the set temperature will return to the original setting when the Setback Control period is over or the room temperature drops to the maximum temperature minus 3°C (6°F).



When the temperature drops below the minimum temperature (heating operation)



When the temperature rises above the maximum temperature (cooling operation)

- (3) To copy the settings of a group to the settings for other groups, click [Copy] in the row of the group whose settings are to be copied, then click [Paste] in the row of the group to which the copied settings are to be pasted. The rectangular icons next to the selected buttons will appear in yellow-green.
- (4) Click [Save Settings] to save the settings.

7-4-3. Interlock control

Click [Functions 3] in the menu bar, and then click [Interlock control] to access the Interlock Control settings screen. Set the interlocking conditions and actions, and then click [Save Settings] to save the settings.

Note: A separate license is required to use the Interlock Control function. Make sure that the required license has properly been registered on the Registration of Optional Functions screen. (Refer to section 4-5 "License registration for optional functions" for details.)

Note: The Interlock Control settings may not be accessible if logged in as a building manager.

Note: Interlock Control is not effective when [External Input Setting] is set to [ON/OFF (Level signal)]. (See section 7-1-2-3 "External Input Setting").

Note: If a group is deleted on the group settings screen, be sure to delete the Interlock Control settings in which the group is selected as the input units or the output units.



Up to 150 Interlock Control settings from No.1 through No.150 can be set for each AE-200/AE-50/EW-50. (Up to 600 Interlock Control settings can be made when one AE-200 and three or four AE-50/EW-50 controllers are connected.) The Interlock Control verifies the state changes in an ascending order of No.1 to No.150 every three to five seconds. When the interlocking conditions are met, the interlocking action commands will be issued to the output units.

By making the interlocking condition settings (input category, input states, and input units) and interlocking action settings (output unit type, actions, and output units) for each Interlock Control setting, the operation of the output units can be interlocked with the operation of the input units.

Caution:

Before using the Interlock Control function, you must agree to the following.

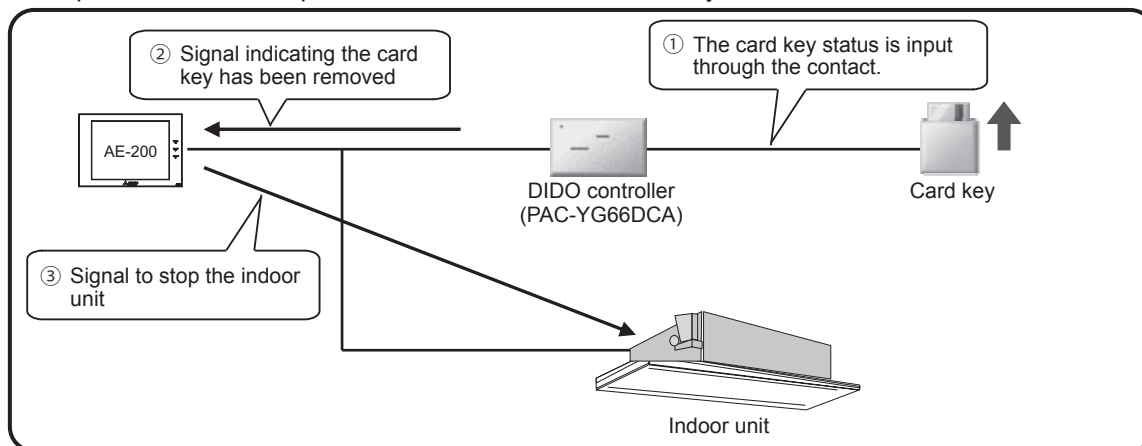
1. This function must not be used for disaster prevention or security purposes unless a backup device is provided in case of failure of this function. (This function should never be used in the way that would put people's lives at risk.)
2. The interlocking action settings that are not supported by the interlocked output units must not be made on the [Set up Actions] screen. Failure to observe this precaution may result in malfunctions.
3. After completing each Interlock Control setting, perform a test run and confirm proper settings and operation.
4. Do not set the Interlock Control settings as the following examples show. Doing so will cause short-cycling, resulting in unit damage.

Example 1: Group 1 is turned off when Group 1 is turned on.

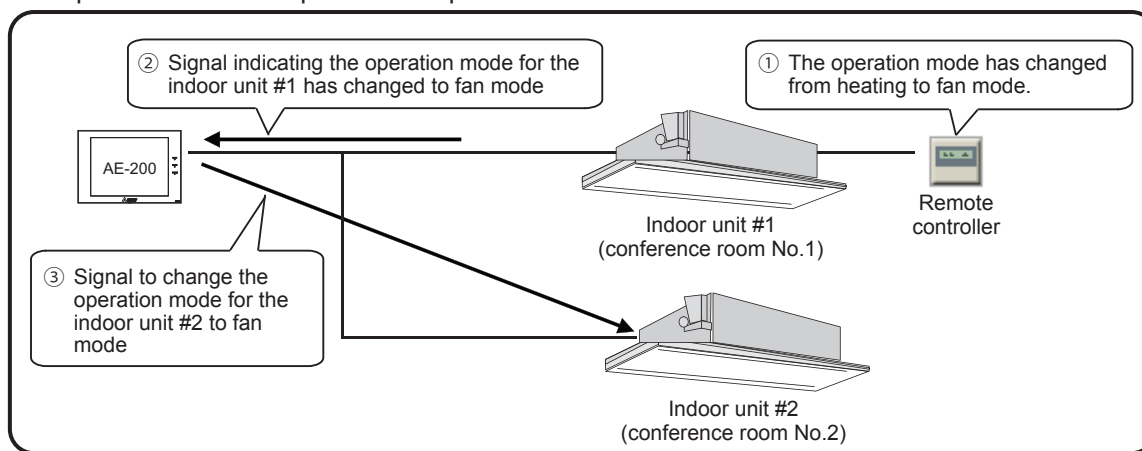
Example 2: Group 1 is turned on when Group 1 is turned off.

Shown below are eight examples of Interlocked operations.

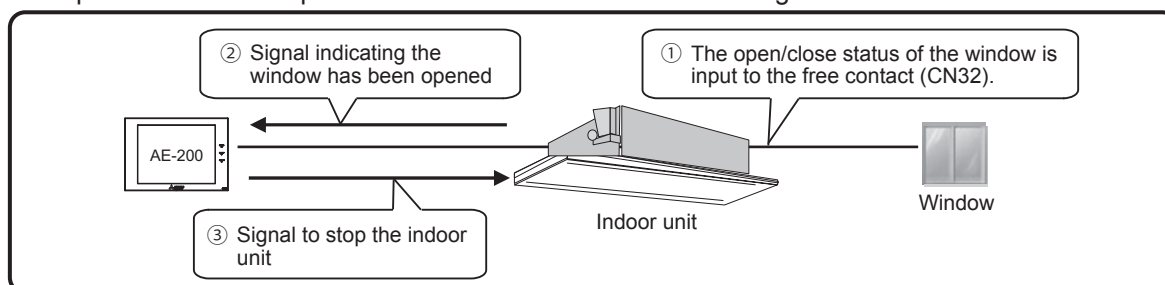
Example 1: Interlocked operation of indoor unit and card key via a DIDO controller



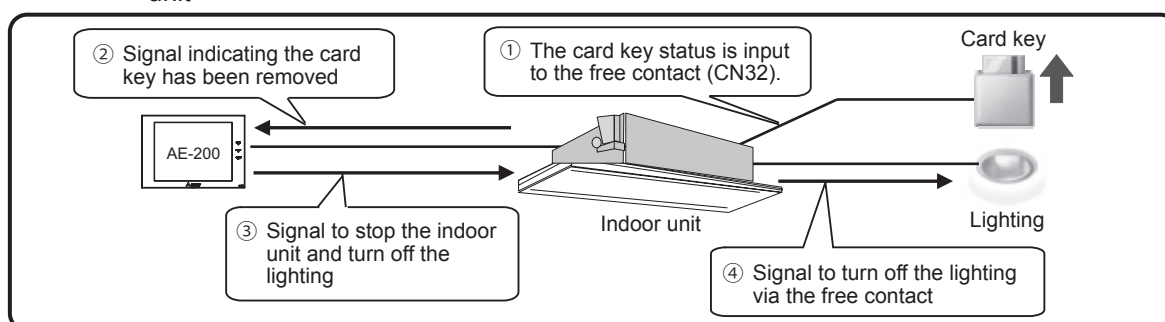
Example 2: Interlocked operation of operation mode between indoor units



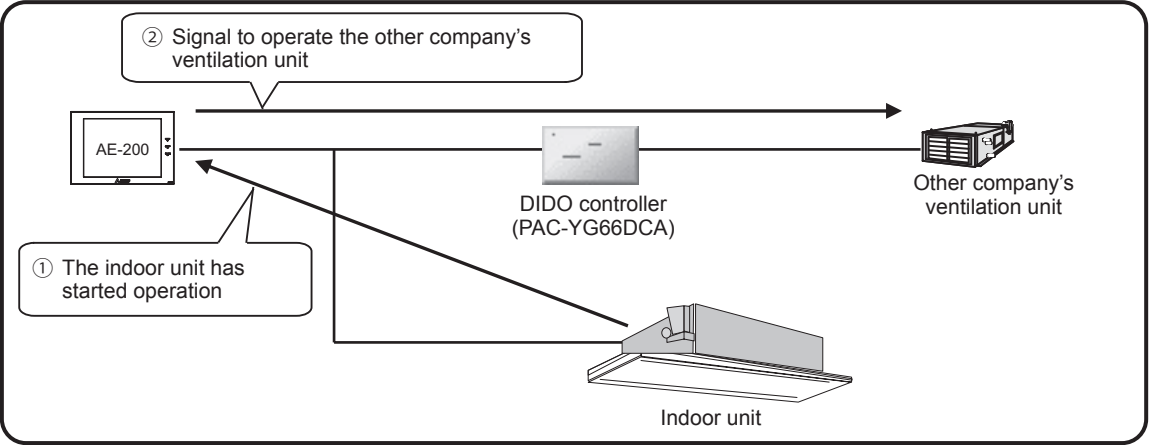
Example 3: Interlocked operation of indoor unit and window through the free contact on an indoor unit



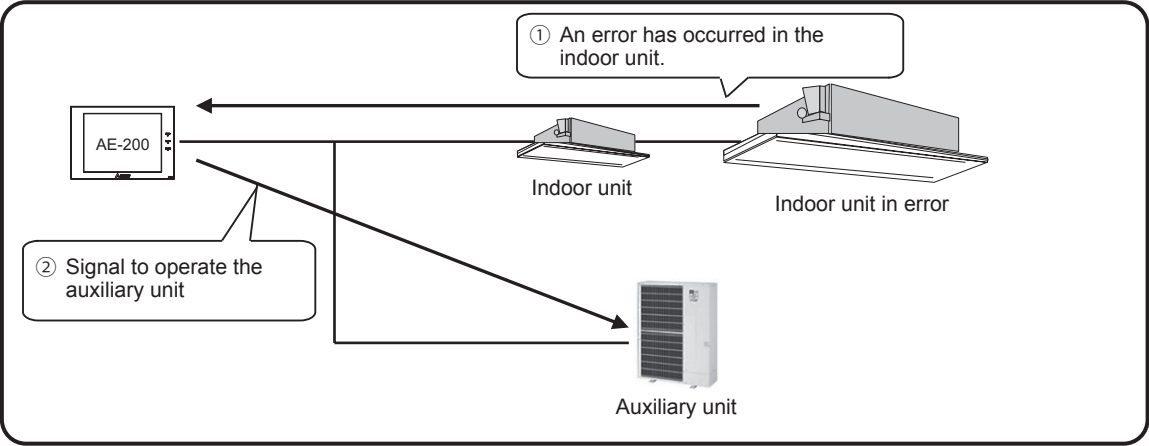
Example 4: Interlocked operation of indoor unit, lighting, and card key through the free contact on an indoor unit



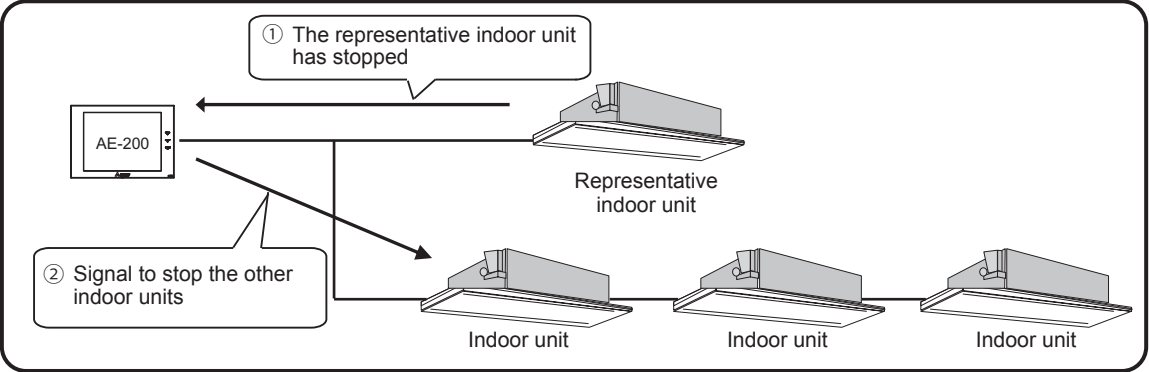
Example 5: Interlocked operation of indoor unit and other company's ventilation unit via a DIDO controller



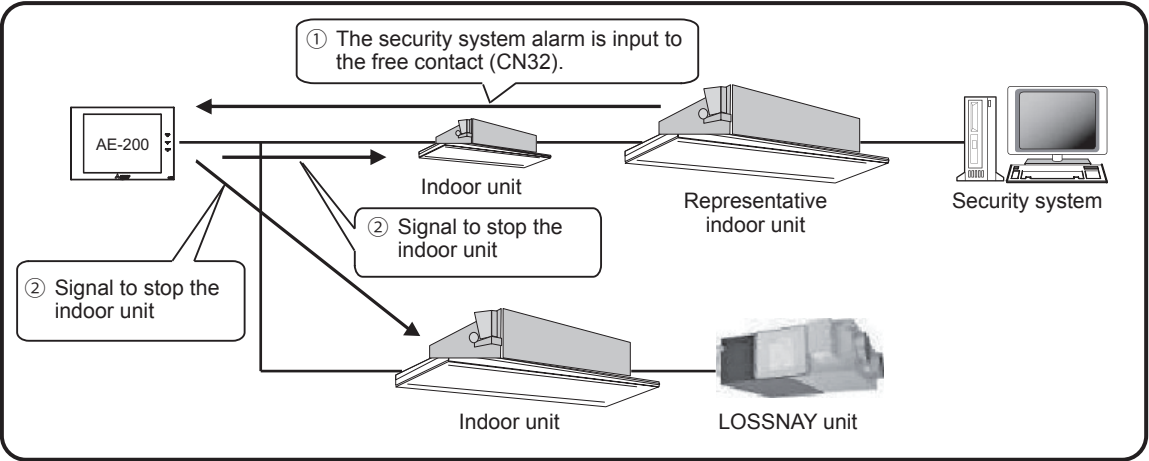
Example 6: Interlocked operation of the indoor unit in error and the auxiliary unit



Example 7: Interlocked operation of the indoor units



Example 8: Interlocked operation of the security system and the connected units







[1] Making the interlocking condition settings

(1) Setting an Input Category and Input States

Select an Input Category and Input States 1 and 2, referring to the table below.

Table: Interlocking condition settings

Input Category	Input unit icon	Input State 1	Input State 2
Group (On/Off)		All Groups On All Groups Off One or more Groups On One or more Groups Off	—
Group (Mode)		All groups in the mode All groups out of the mode One or more groups in the mode One or more groups out of the mode	Air conditioning unit group: *1 *2 *3 Cool, Dry, Fan, Heat, Auto, Setback LOSSNAY unit group: Bypass, Heat Recovery, Auto
Group (Error/Normal)		All units in error All units in normal operation One or more units in error One or more units in normal operation	—
Free Input Points (On/Off)		All Units On All Units Off One or more Units On One or more Units Off	—

*1 The operation modes for Air To Water (PWFY) unit groups, HWHP (CAHV, CRHV) unit groups, or general equipment groups are not available for selection.

*2 If the selected operation mode is not available on the input unit, interlocking conditions will not be fulfilled.

*3 The Setback mode can be selected on the AE-200A/AE-50A/EW-50A, but not on the AE-200E/AE-50E/EW-50E.

Note: If the Input Category is set to [Group (On/Off)] and the Input State 1 is set to [All Groups On], the interlocking action commands will be issued to the output units when the state on the input units changes to [All Groups On] from another state [All Groups Off], [One or more Groups On], or [One or more Groups Off].

Note: Free contact is available for use on R410A- and R407C-compatible indoor units with software Ver. 33 or later. The software version can be confirmed with the Maintenance Tool.

Note: When [External Input Setting] is set to [Emergency Stop (Level signal)] (see section 7-1-2-3 "External Input Setting") or when the indoor unit is stopped due to the Peak Cut control (see section 7-2-2 "Peak Cut (Energy-save control function)"), only the Interlock Control of free contact and DIDO controller (PAC-YG66DCA) will be performed, but other Interlock Control will not be.

(2) Selecting the input units

Click [Select Input Units] to display one of the following screens, depending on the selected Input Category.

(A) When [Group (On/Off)], [Group (Mode)], or [Group (Error/Normal)] is selected as the Input Category

The [Select Input Groups] screen will appear.

Select the group numbers of the input unit groups. The selected group numbers will appear with a yellow-green background.

Click again to deselect. The deselected group numbers will appear with a light-gray background.

To deselect all selected groups, click [Reset selections].

To select a block of groups, click [Select a Block]. Select a block name and press [OK]. The groups that are registered to the block will appear with a yellow-green background.

Select Input Groups

Group Name :

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

☒ Select a Block ☐ Reset selections

Cancel OK

Note: If the Input Category is set to [Group (On/Off)] or [Group (Error/Normal)], air conditioning unit groups, LOSSNAY unit groups, Air To Water (PWFY) unit groups, HWHP (CAHV, CRHV) unit groups, and general equipment (connected via DIDO controller PAC-YG66DCA) groups can be selected.

If the input category is set to [Group (Mode)], air conditioning unit groups and LOSSNAY unit groups can be selected.

Note: Different types of groups (air conditioning unit groups, LOSSNAY unit groups, or general equipment (connected via DIDO controller PAC-YG66DCA) groups) cannot be simultaneously selected.

(B) When [Free Input Points (On/Off)] is selected as the Input Category

The [Select Addresses of Input Units] screen will appear.

Select the addresses of the indoor units to which the general equipment is connected, and select contact points for each indoor unit.

The selected unit address will appear with a red frame. The unit addresses whose contact points have been set will appear with a yellow-green background.

Select Addresses of Input Units

Unit Addresses

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Contact Points

1	2	3	4
---	---	---	---



Cancel OK

[2] Making the interlocking action settings

(1) Setting an Output Unit Type and Actions

Select an Output Unit Type and set the Actions, referring to the table below.

Table: Interlocking action settings

Output Unit Type	Output unit icon	Actions	
		Setting item*2	Setting options
Group		ON/OFF	ON, OFF
		Mode *1	Air conditioning unit group: Cool, Dry, Fan, Heat, Auto, Setback*3 LOSSNAY unit group: Bypass, Heat Recovery, Auto
		Set Temp. *1	Desired temperature
		Air direction *1	Mid3, Mid2, Mid1, Mid0, Horizontal, Swing, Auto
		Fan speed *1	Low, Mid2, Mid1, High, Auto
		Prohibit Remote Controller Operation (ON/OFF)	Permit, Prohibit
		Prohibit Remote Controller Operation (Mode)	Permit, Prohibit
		Prohibit Remote Controller Operation (Set Temp.)	Permit, Prohibit
Free Output Points		ON/OFF	ON, OFF

*1 The available setting options vary, depending on the connected indoor unit model.

Make the interlocking action settings that are available for the output units.

*2 Only the items "ON/OFF" and "Prohibit Remote Controller Operation (ON/OFF and Set Temp.)" can be selected for Air To Water (PWFY) units. Only the item "ON/OFF" can be selected for HWHP (CAHV, CRHV) units.

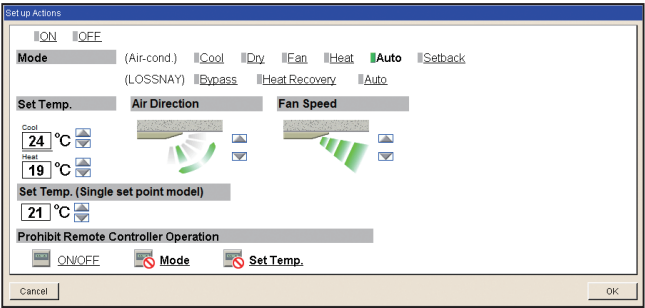
*3 The Setback mode can be selected on the AE-200A/AE-50A/EW-50A, but not on the AE-200E/AE-50E/EW-50E.

The screen display under Action will vary, depending on the selected Output Unit Type.

(A) When [Group] is selected as the Output Unit Type

Click [Edit] under Action. The [Set up Actions] screen will appear.

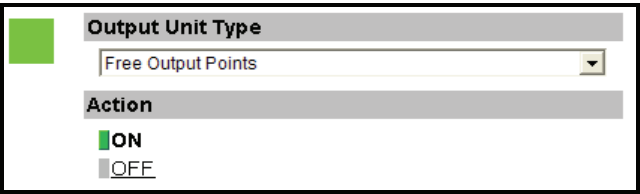
Set the interlocking actions to be taken when the interlocking conditions are met.



- Note: The current operation status will be maintained for the setting items that were not changed.
- Note: The set temperature cannot be set unless the operation mode has been set.
- Note: If the selected operation mode is not available on the interlocked output units, the Interlock Control will not be performed.
- Note: To prevent malfunctions of the air conditioning units, be sure to set the set temperature to a temperature within the normal operating temperature range, although there may be rare cases in which it is possible to set the set temperature to a temperature outside the normal operating temperature range (depending on the model of the air conditioning units that are connected to a system).
- Note: Signals for Swing and Auto of Air direction setting and Auto of Fan speed setting will not be output unless these functions are available on the interlocked output units.
With respect to the air direction and fan speed, if the number of settable air directions and fan speeds vary among the connected unit models, the signals that are rounded up to the settable range may be output.
- Note: When the interlocking conditions are met, it will take some time to issue the interlocking action commands to the output units. This may delay the state change verification, which is usually performed every three to five seconds.

(B) When [Free Output Points] is selected as the Output Unit Type

Select [ON] or [OFF] under Action to turn on or off the output units.



(2) Selecting the output units

Click [Select Output Units] to display one of the following screens, depending on the selected Output Unit Type.

(A) When [Group] is selected as the Output Unit Type

The [Select Output Groups] screen will appear.

Select the group numbers of the output unit groups. The selected group numbers will appear with a yellow-green background.

Click again to deselect. The deselected group numbers will appear with a light-gray background.

To deselect all selected groups, click [Reset selections].

To select a block of groups, click [Select a Block]. Select a block name and press [OK]. The groups that are registered to the block will appear with a yellow-green background.

Select Output Groups

Group Name : Entrance

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

☒ Select a Block ☐ Reset selections

Cancel OK

Note: If the Output Unit Type is set to [Group], air conditioning unit groups, LOSSNAY unit groups, Air To Water (PWFY) unit groups, HWHP (CAHV, CRHV) unit groups, and general equipment (connected via DIDO controller PAC-YG66DCA) groups are available for selection.

Note: Different types of groups (air conditioning unit groups, LOSSNAY unit groups, Air To Water (PWFY) unit groups, HWHP (CAHV, CRHV) unit groups, or general equipment (connected via DIDO controller PAC-YG66DCA) groups) cannot be simultaneously selected.

(B) When [Free Output Points] is selected as the Output Unit Type

The [Select Addresses of Output Units] screen will appear.

Select the addresses of the indoor units to which the general equipment is connected, and select contact points for each indoor unit.

The selected unit address will appear with a red frame.

The unit addresses whose contact points have been set will appear with a yellow-green background.

Select Addresses of Output Units

Unit Addresses

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Contact Points

1	2	3
---	---	---

Cancel OK

[3] Disabling/Enabling Interlock Control settings

Use the Enable/Disable button to enable or disable each Interlock Control setting.
No actions will be taken for the Interlock Control setting that is set to [Disable].

[4] Temporarily disabling the Interlock Control

Click the [Stop Execution] button to temporarily disable the Interlock Control. Click [Execute] to resume the Interlock Control.

Note: State change that occurs while [Stop Execution] is selected will be ignored.

[5] Editing Interlock Control settings

Use the Edit buttons to edit each row of Interlock Control setting.

Button name	Function
Delete all steps	Deletes all Interlock Control settings.
Insert a step	Inserts a blank row of Interlock Control setting above the row that is displayed, and moves all rows down by one. If interlocking conditions are entered in the last row, no more rows can be inserted.
Delete a step	Deletes the row of Interlock Control setting that is displayed, and moves up the rows below by one.
Clear the display	Clears the row of Interlock Control setting that is displayed.
Copy	To copy the settings of a row to the settings for other rows, display the row whose settings are to be copied and click [Copy], then display the row to which the copied settings are to be pasted and click [Paste].
Paste	

7-4-4. AHC Port Name Settings

On the AHC Port Name Settings screen, enter the names of the input and output ports of the Advanced HVAC CONTROLLER (AHC).

The names that are entered on this screen will appear on the AHC List screen.

Click [Functions 3] in the menu bar, and then click [AHC Port Name Settings] to access the AHC Port Name Settings screen.

Note: The AHC port name settings may not be accessible if logged in as a building manager.

Important: The AHC port name settings must be made after all units have been started up.
The settings that have been saved while one or more units are starting up may be lost.

The screenshot shows the 'AHC Port Name Settings' web interface. The interface includes a menu bar at the top with 'Initial Settings', 'Functions 1', 'Functions 2', 'Functions 3' (selected), 'User Settings', and 'Utility'. Below the menu bar are tabs for 'External Temperature Interlock', 'Night Setback Control', 'Interlock control', and 'AHC Port Name Settings'. The main content area is divided into three columns: 'Input Name', 'Output Name', and 'Unit address'. The 'Input Name' column lists 15 digital inputs (DI1-DI15) and 8 analog inputs (AI1-AI8). The 'Output Name' column lists 9 digital outputs (DO1-DO9) and 4 extended outputs (EO1-EO4) and 2 analog outputs (AO1-AO2). The 'Unit address' column shows a list of unit addresses (e.g., 201, 202). Annotations point to various elements: 'Unit address' points to the unit address list; 'Digital Input (1-15)' points to the DI list; 'Input Port Name' points to the input name input field; 'Refresh' points to the 'Refresh' button; 'Extended Input (1-4)' points to the EI list; 'Output Port Name' points to the output name input field; 'Digital Output (1-9)' points to the DO list; 'Extended Output (1-4)' points to the EO list; 'Analog Output (1-2)' points to the AO list; 'Analog Input (1-8)' points to the AI list; and 'Save Settings' points to the 'Save Settings' button. A note at the bottom left states: 'Click to import the settings from AE-200/AE-50/EW-50.'

- (1) In the [Input Port Name] field, enter the input port name in 20 characters or less.

Note: Digital Input (DI) 1-15, Extended Input (EI) 1-4, and Analog Input (AI) 1-8 will appear regardless of whether the ports are used or not.

Note: The following characters cannot be used in the [Input Port Name] field: <, >, +, &, ", or '.

- (2) In the [Output Port Name] field, enter the output port name in 20 characters or less.

Note: Digital Output (DO) 1-9, Extended Output (EO) 1-4, and Analog Output (AO) 1-2 will appear regardless of whether the ports are used or not.

Note: The following characters cannot be used in the [Output Port Name] field: <, >, +, &, ", or '.

- (3) Click [Save Settings] to save the settings.

7-5. Ventilation Settings

7-5-1. Night purge

During summer, the Night purge function draws cooler outside air into the room to suppress temperature rises at night. This energy conservation reduces the load when air conditioning starts the next morning. Click [Ventilation Settings] in the menu bar, and then click [Night purge Setting] to access the Night purge settings screen.

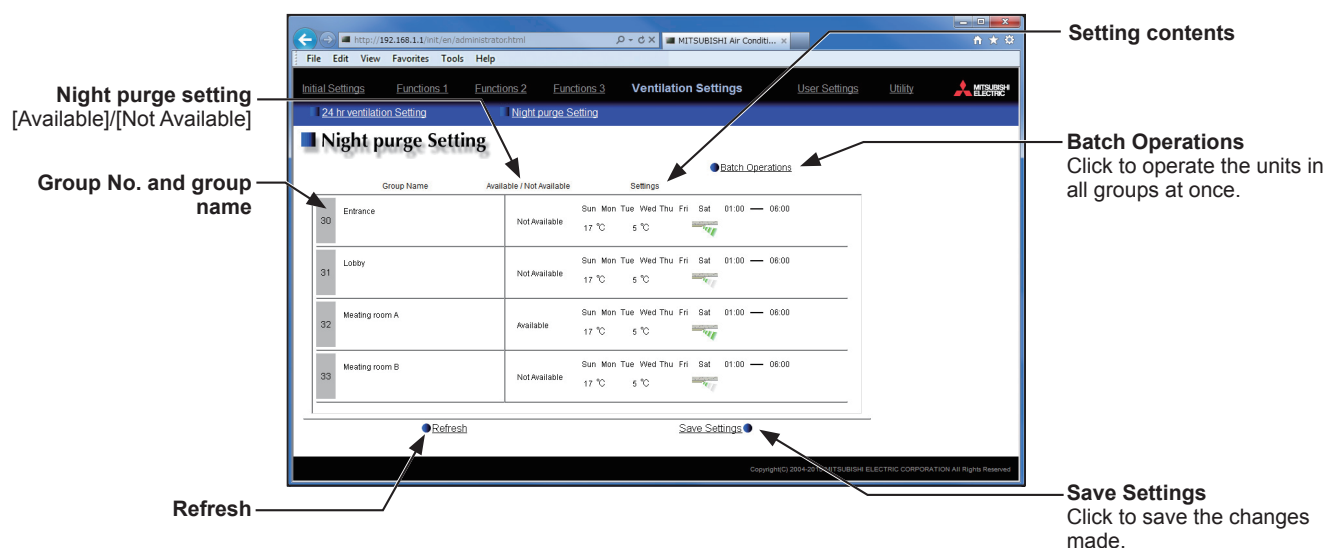
All ventilation unit (LOSSNAY) groups that support the Night purge function from AE-200 will appear.

Note: During the Night purge operation, the ventilation units (LOSSNAY) operate in the Bypass mode.

Note: Night purge setting cannot be made from AE-200 for the ventilation units (LOSSNAY) that are connected to the AE-50/EW-50 in communication error.

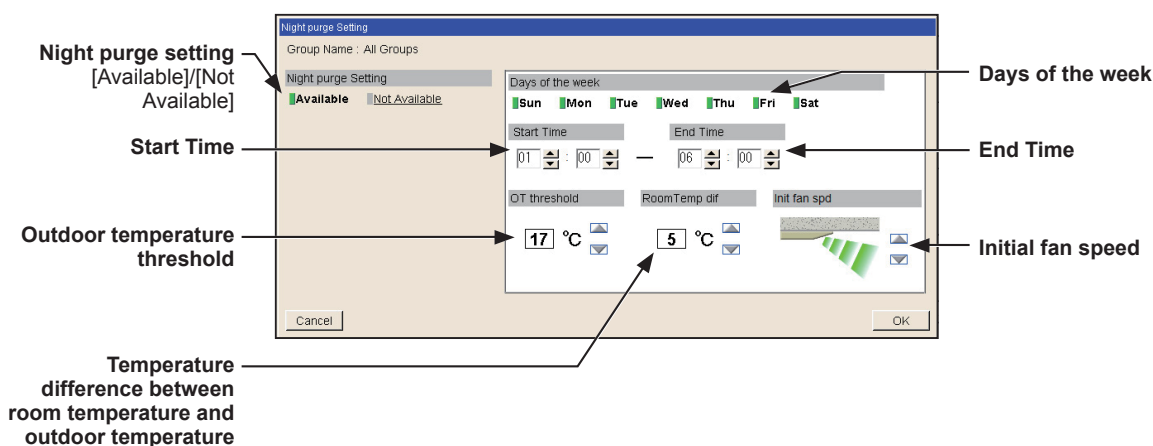
Note: Some models of ventilation units (LOSSNAY) do not support the Night purge function from AE-200. (As of March 2015, only LGH-RVX-E models support the function.)

For more details about the Night purge function, refer to the Installation Manual, Instruction Book, or technical documents that are provided with the ventilation unit (LOSSNAY).



- (1) Click the "Setting contents" section in the row of the group whose settings are to be made. A settings screen will appear.

Note: To make settings for all groups at once, click [Batch Operations].



- (2) In the Night purge setting section, select [Available] to enable the Night purge settings.
- (3) Select one or more days on which the Night purge control is executed at the selected start time.
- (4) Set the times at which the Night purge control starts and ends.
- (5) Set the outdoor temperature threshold value as a condition for activating the Night purge operation.

* The settable temperature is between 15°C and 30°C.

- (6) Set the temperature difference as a condition for activating the Night purge operation.
* The settable temperature is between 0°C and 7°C.
- (7) Set the fan speed to be set when the Night purge operation activates.
- (8) Click [OK] to go back to the previous screen.
- (9) After the settings are completed, click [Save Settings] to send the settings to the AE-200/AE-50/EW-50.

Starting condition

Condition #1: LOSSNAY units stop at 20:00.

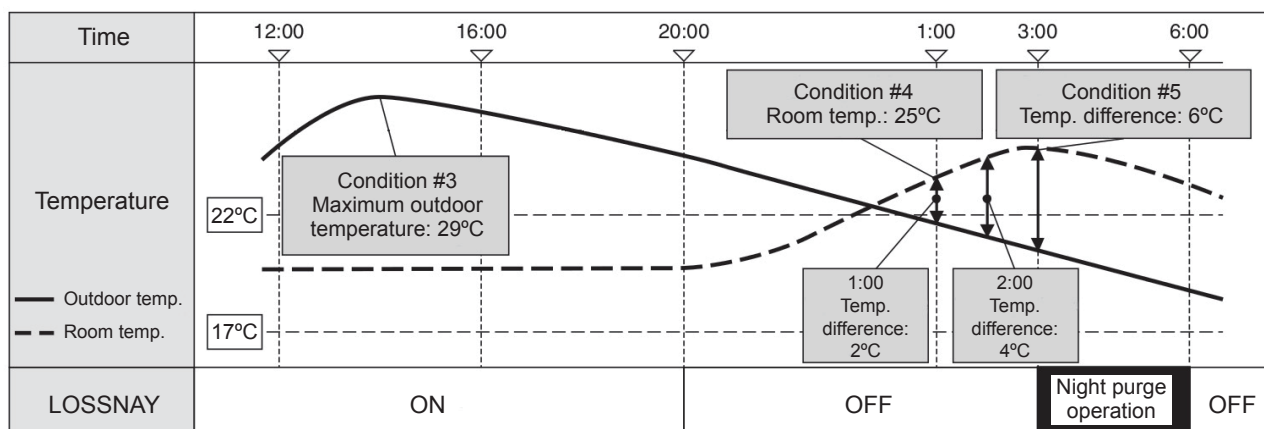
Condition #2: Between the start time 1:00 and the end time 6:00

Condition #3: LOSSNAY units detected the outdoor temperature threshold 17°C or higher in the past 24 hours.

Condition #4: The current room temperature is higher than 22°C.

Condition #5: The temperature difference between room temperature and outdoor temperature is greater than the temperature difference 5°C.

- LOSSNAY units start the Night purge operation at 3:00 when the temperature difference between room temperature and outdoor temperature exceeds 5°C.
- The Night purge operation is not activated at 1:00 or 2:00 because the temperature difference between room temperature and outdoor temperature is less than 5°C.



7-6. User Settings

On the User Settings screen, the user names and passwords of maintenance users and building managers can be changed, and the available functions for building managers can be limited.

For example, you can allow building managers to change the group name settings when the tenant is changed, or disallow them to change the basic system settings such as unit settings or network settings.

Also, maintenance users can use this screen to change the user name and password of building managers in case that they are forgotten.

Click [User Settings] in the menu bar to access the User Settings screen.

Maintenance user name and password
User name and password can be changed.

Building manager's user name and password
User name and password can be changed.

Available functions
Select the available functions for building managers.

Refresh
Click to import the settings from AE-200/AE-50/EW-50.

Save Settings
Click to save the changes made.

- (1) To change the maintenance user name or password, type new information in the [User Name], [New Password], and [Retype Password] fields.

Note: If the user logs in as a building manager, the maintenance user name and the password will not be displayed, and cannot be changed.

Note: User name must contain only alphanumeric characters.

Note: The user name and password are case-sensitive.

Note: The user name must be in 20 characters or less, and the password in 3 to 10 characters.

- (2) To change the building manager's user name or password, type new information in the [User Name], [New Password], and [Retype Password] fields.

- (3) Click the functions to be made available for building managers. The rectangular icons next to the selected functions will appear in yellow-green.

Click again to deselect. The rectangular icons next to the deselected functions will appear in gray.

For more information on each function, refer to the table below.

Note: If the user logs in as a building manager, the currently available functions can be checked, but cannot be changed.

Note: The settings on this screen will not be reflected to the functions on the AE-200/AE-50's LCD.

The screenshot shows a menu titled 'Initial Settings'. It contains several sub-sections, each with a yellow-green rectangular icon next to it, indicating they are selected. These sub-sections are: 'Date and Time', 'Basic System', 'Groups' (with sub-items 'Group Name' and 'Group Structure'), 'Interlocked LOSSNAY', 'Blocks' (with sub-items 'Block Name' and 'Block Structure'), 'Functions 1' (with sub-items 'E-Mail', 'Peak Cut' (with sub-items 'System settings' and 'Control Details'), 'Measurement', and 'Energy Management Settings'), 'Functions 2' (with sub-items 'Set Temperature Range Limit', 'Night Mode Schedule', and 'System-changeover'), 'Functions 3' (with sub-items 'External Temperature Interlock', 'Night Setback Control', 'Interlock control', and 'AHC Port Name Settings'), and 'Ventilation Settings' (with sub-item 'Night purge Setting').

Table: Available Function List

Function		Content
Initial Settings	Date and Time	Refer to section 7-1-1 for details.
	Basic System *1	Refer to section 7-1-2 for details.
	Groups	Group Name
		Group Structure
	Interlocked LOSSNAY *1	Refer to section 7-1-4 for details.
	Blocks	Block Name
		Block Structure *1
Functions 1	E-Mail *1	Refer to section 7-2-1 for details.
	Peak Cut	System Settings
		Control Details
	Measurement	Refer to section 7-2-3 for details.
	Energy Management Settings	Refer to section 7-2-4 for details.
Functions 2	Set Temperature Range Limit	Refer to section 7-3-1 for details.
	Night Mode Schedule	Refer to section 7-3-2 for details.
	System-changeover	Refer to section 7-3-3 for details.
Functions 3	External Temperature Interlock	Refer to section 7-4-1 for details.
	Night Setback Control	Refer to section 7-4-2 for details.
	Interlock control	Refer to section 7-4-3 for details.
	AHC Port Name Settings	Refer to section 7-4-4 for details.
Ventilation Settings	Night purge Setting	Refer to section 7-5-1 for details.

*1 At factory shipment, these settings by the building managers are prohibited.

- (4) Click [Save Settings] to save the settings.

8. Maintenance

This section explains backup and reading of settings data.

There are two ways to backup the settings data — from the AE-200's LCD to a USB memory device, and from AE-200/AE-50/EW-50 Web Browser for Initial Settings.

8-1. Settings Data Backup from the AE-200's LCD

Backup the settings data from the AE-200's LCD to a USB memory device.

Backup of settings for the AE-200 and for the expansion controller is possible.

Note: Use a USB memory device that meets the following conditions.

- Supports USB 2.0
- Formatted with FAT32 or FAT (FAT16)
- Security function is not provided or not required to be set.

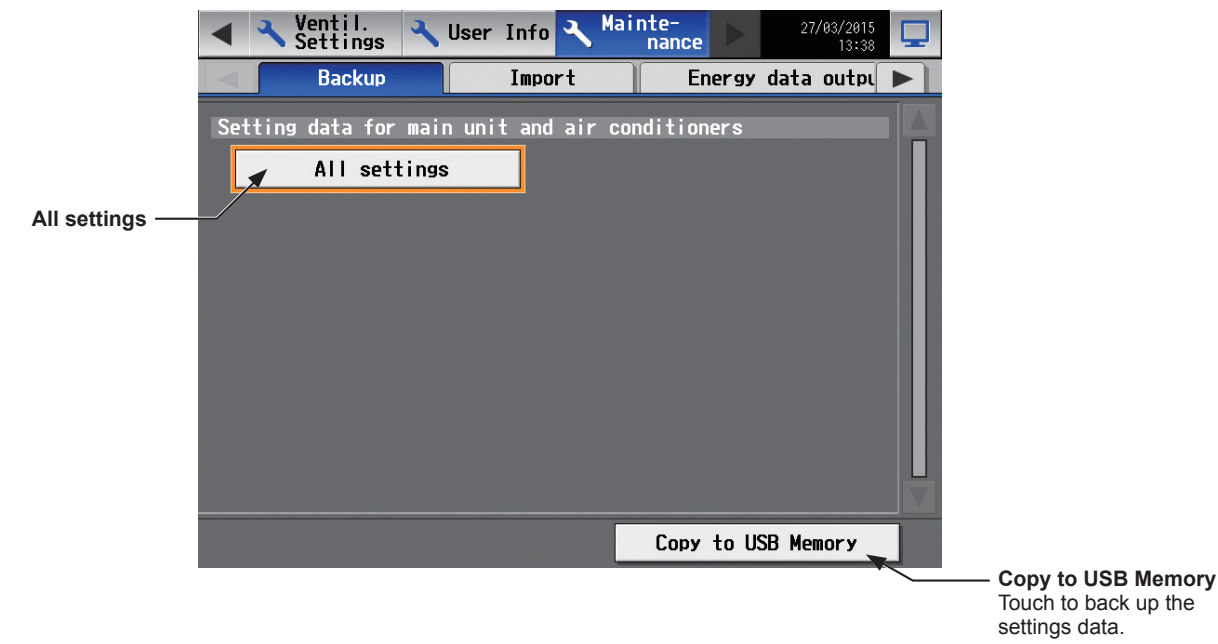
Note: Test the USB memory device several times before use and verify that the device functions properly. Reading data from or writing data to a USB memory device that has not been confirmed to work may cause unexpected problems. (If the data cannot be output to the USB memory device after a writing error occurs and the device is replaced, reboot the AE-200/AE-50 (turn off the power and restart). Do not use the USB memory device that has experienced writing error once.)

8-1-1. Backing up settings data

The settings data can be exported to a USB memory as a backup.

Touch [Maintenance] in the menu bar, and then touch [Backup].

Note: IP address settings will not be backed up. Make sure to write them down.



Important

- The USB memory device may not be recognized if you insert and remove it within a short time. If this happens, reset the AE-200/AE-50.
- The AE-50/EW-50 data can be output from the AE-200.

- (1) Remove the controller cover, and insert a USB memory device to the USB port.

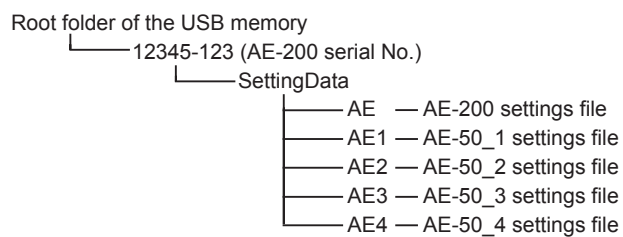
- (2) Touch [All settings], then touch [Copy to USB Memory].
The settings data file will be created in the root folder of the USB memory.

■ File output destination, folder name, and file name

[Root folder of the USB memory]\[Serial No.]\[SettingData]\[AE] *1

*1 "AE1," "AE2," "AE3," or "AE4" when one or more AE-50/EW-50 controllers are connected

<Example>



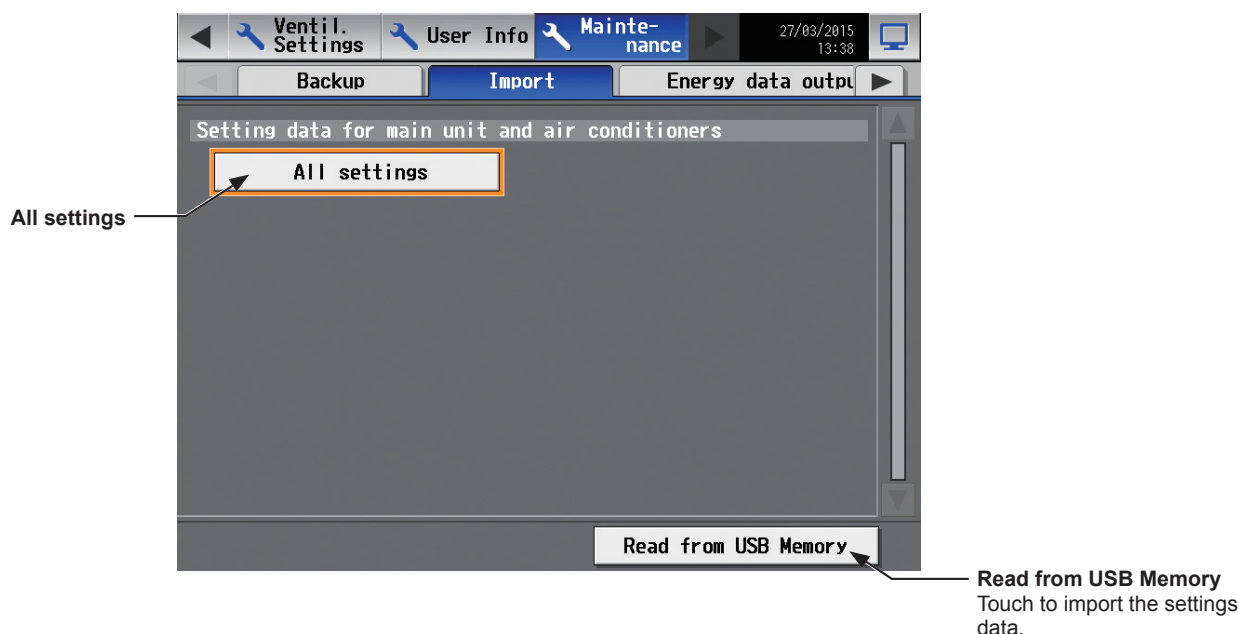
Note: It will take a few minutes to create the settings data.

Note: Do not remove the USB memory device while the data is being output.

8-1-2. Importing settings data

The exported data can be imported back to the AE-200/AE-50/EW-50 to restore the previous settings after the controller replacement.

Touch [Maintenance] in the menu bar, and then touch [Import].



Important

- The USB memory device may not be recognized if you insert and remove it within a short time. If this happens, reset the AE-200/AE-50/EW-50.

(1) Have the settings data to be imported ready in the root folder of the USB memory as shown below.

■ File location, folder name, and file name

[Root folder of the USB memory]\“SetupData”_[IP address]\“AE” *1

*1 “AE1,” “AE2,” “AE3,” or “AE4” when one or more AE-50/EW-50 controllers are connected

<Example (When AE-200 LAN1 IP address is [192.168.1.1])>

```

Root folder of the USB memory
├── SetupData_192_168_1_1 *2
│   ├── AE — AE-200 settings file
│   ├── AE1 — AE-50_1 settings file
│   ├── AE2 — AE-50_2 settings file
│   ├── AE3 — AE-50_3 settings file
│   └── AE4 — AE-50_4 settings file

```

*2 The folder name will not be [SetupData_192_168_001_001].

Note: Only the data that have been backed up from the AE-200 can be imported to the AE-200. The data that have been backed up from the AE-50 must be imported to the AE-50.

Note: Do not change the file name from that of when backup was performed. If the folder name or file name is different from the given name, no data can be read.

(2) Remove the controller cover, and insert a USB memory device to the USB port.

(3) Touch [All settings], then touch [Read from USB Memory].

Note: It will take a few minutes to import the settings data.

Note: Do not remove the USB memory device while the data is being imported.

Note: If the data is not read, check the folder name and the file name.

Note: If the data is not read, check if the USB memory device is inserted correctly.

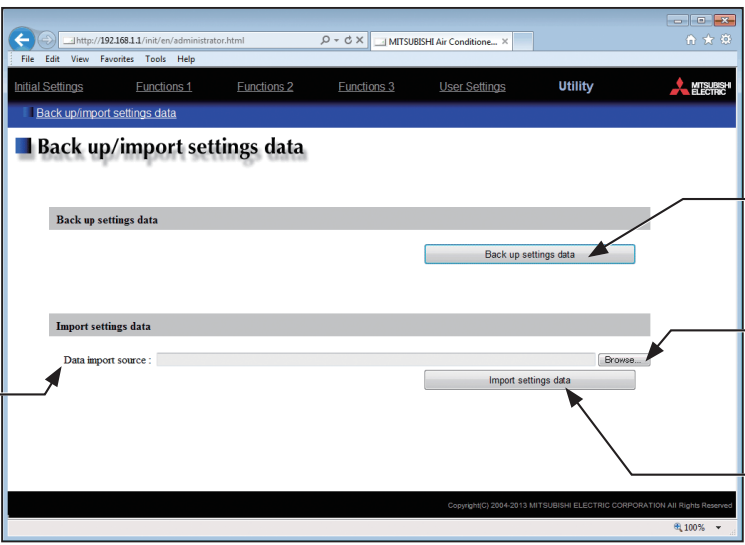
8-2. Settings Data Backup from the Web Browser for Initial Settings

Backup settings data from the AE-200/AE-50/EW-50 Web Browser for Initial Settings to a hard disk or to a USB memory device.

If there are multiple AE-200/AE-50/EW-50, then it is necessary to back up these individually.

Click [Utility] in the menu bar, and then click [Back up/import settings data] to access the Back up/import settings data screen.

Note: Back up/import settings data function is accessible only if logged in as a maintenance user.



The screenshot shows a web browser window displaying the 'Back up/import settings data' page. The page has a navigation bar with 'Initial Settings', 'Functions 1', 'Functions 2', 'Functions 3', 'User Settings', and 'Utility'. The 'Utility' menu is selected, and the 'Back up/import settings data' sub-menu is active. The main content area has two sections: 'Back up settings data' and 'Import settings data'. In the 'Back up settings data' section, there is a 'Back up settings data' button. In the 'Import settings data' section, there is a 'Data import source' text field, a 'Browse...' button, and an 'Import settings data' button. Annotations with arrows point to these elements: 'Back up settings data' points to the button; 'Browse...' points to the 'Browse...' button; 'Data import source' points to the text field with the note 'The path to the file to be imported will appear.'; and 'Import settings data' points to the 'Import settings data' button with the note 'Click to import the file specified in the "Data import source" field to the AE-200/AE-50/EW-50.'

Back up settings data
Click to back up the AE-200/AE-50/EW-50 settings data.

Browse...
Click to browse for a file that contains the data to be imported.

Import settings data
Click to import the file specified in the "Data import source" field to the AE-200/AE-50/EW-50.

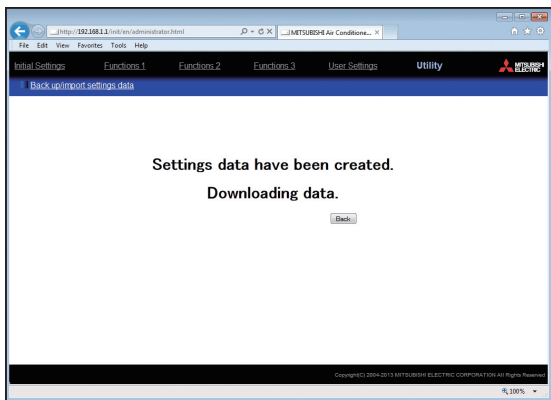
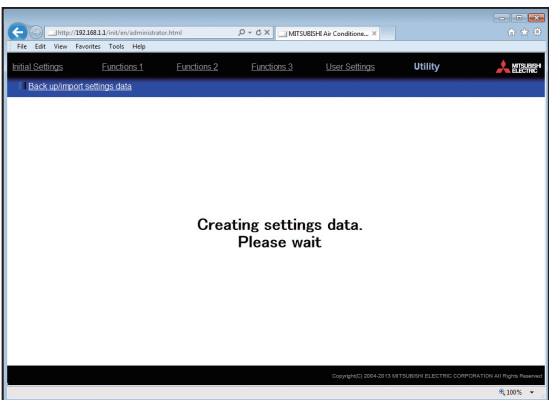
Data import source
The path to the file to be imported will appear.

8-2-1. Backing up settings data

- (1) To back up the data, click [Back up settings data]. The settings data will be created and the Window's standard file download dialog will appear.

Note: It will take a few minutes to create the settings data.

Note: The name of the settings data will be "SettingData.dat".

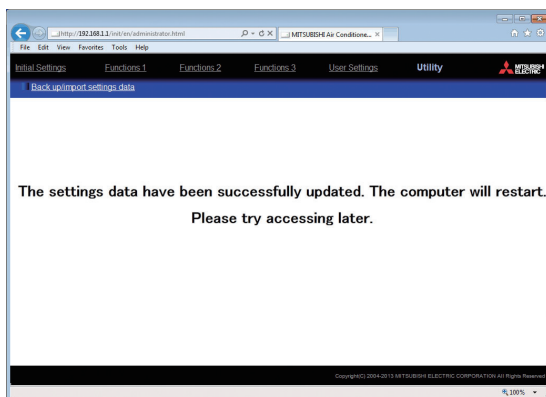


8-2-2. Importing settings data

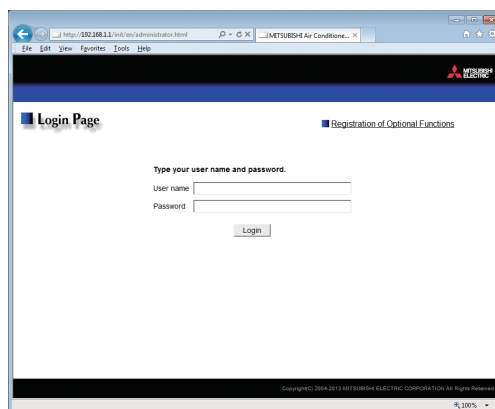
- (1) Click the [Browse...] button to launch the explorer and browse for a file that contains the data to be imported. Select the desired file, and click [Open]. The path to the file to be imported on an external storage media will appear in the [Data import source] field.
- (2) Click [Import settings data] to import the data from the external storage media to the AE-200/AE-50/EW-50.
Note: It will take a few minutes to import the settings data.



- (3) When the settings data has been successfully imported, the AE-200/AE-50/EW-50 will restart.



- (4) Go back to the login screen and login again.



9. Troubleshooting

See the table below and troubleshoot accordingly.

No.	Problem	Possible cause	Solution
(1)	Errors are displayed on the [Malfunction] screen under the [Status List] menu. Or,	"Version combination error (0092)"	The versions of the AE-200/AE-50/EW-50 do not match.
(2)	Error log is displayed on the [Unit Error] screen under the [Log] menu.	"Warning - possibility of damaged metering device (0095)"	The measurement value of the metering device (which should count up the operation amount of air-conditioning units) does not count up for 3 days or longer.
(3)	A message is displayed when Initial Setting Tool settings are transmitted.	Message: "The versions of one or more centralized controllers are old and not compatible with this tool. The settings that are not supported for these centralized controllers will not be sent. Check the transmission result."	Settings transmitted from Initial Setting Tool Ver. 1.1 to AE-200/AE-50/EW-50 Ver. 7.2.
(4)	Initial settings data cannot be output from the LCD to the USB memory device.	Settings for functions added in AE-200/AE-50/EW-50 Ver. 7.3 (Floor, Floor for Integrated Centralized Control Web) have not been carried out. Update the AE-200/AE-50/EW-50. Refer to section 4-4 "Software Update" for details of updates.	Check causes 1) to 3). Cause 1) Check that the USB memory device is fully inserted. Cause 2) Check that there is sufficient free space on the USB memory device, and if necessary, create more free space. (Maximum 64 MBytes) Cause 3) Use a USB memory device as detailed in section 8 "Maintenance". After a malfunction has occurred, if writing does not proceed normally even after using a different USB memory device, then restart the AE-200/AE-50 (power OFF→ON), then try again using a USB memory device different from that originally used. Cause 4) Restart the AE-200/AE-50 (power OFF→ON). Cause 5) Unlock the write-protect switch on the USB memory. For details, refer to the USB memory device Instruction Book.

No.	Problem	Possible cause	Solution
(5)	Reading of initial settings data from the USB memory device by using an LCD is not possible.	1) The USB memory device is not set correctly. 2) The USB memory device read folder is different. 3) A USB memory device that supports the AE-200/AE-50 is not used.	Check causes 1) to 3). Cause 1) Check that the USB memory device is properly inserted. Cause 2) Check that the folder name for the initial settings data is correctly set as "SetupData" (case-sensitive). For details, refer to section 8-1 "Settings Data Backup from the AE-200's LCD". Cause 3) Refer to Cause 3) of problem (4).
(6)	Login to the initial settings screen from the LCD was successful, but the settings button stays pressed, and cannot be operated.	1) This is logged in as the building manager, so there is no right for settings.	Cause 1) Input the maintenance user login name and password, and log in. In order to log in as the building manager and configure settings, have the settings rights changed to maintenance user.
(7)	When the AE-200's Web Browser for Initial Settings is accessed, the message "If you see this you don't have a Java-enabled Web browser. Here's a picture of what you are missing." or "Error. Click for details." appears, and no login window appears.	1) Improper temporary files remain in the web browser, generating an error.	Cause 1) Refer to section 9-1 "Notes on connecting to Web browser" and use the web browser, and reset the temporary files.

9-1. Notes on connecting to Web browser

Follow the instructions below to change settings if the message “If you see this you don’t have a Java-enabled Web browser. Here’s a picture of what you are missing.” or “Error. Click for details.” appears, and no login window appears when the AE-200’s Web page is accessed.

Note: To remedy the above-mentioned problem, go to section 9-1-1 “Clearing cache” first, and if the problem still persists, go to section 9-1-2 “Resetting Internet Explorer”. Resetting Internet Explorer will reset Internet Explorer’s settings to their default condition.

9-1-1. Clearing cache

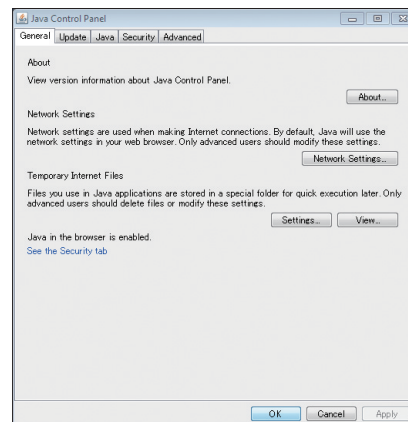
[1] How to clear Java cache

- (1) Click [Control Panel]>[Java].

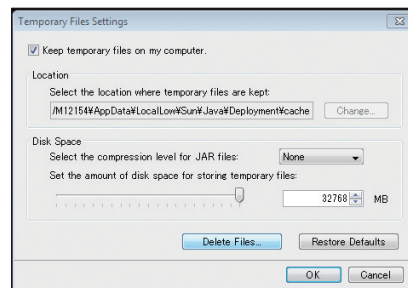
Note: If [Category] is selected in the top right corner, next to [View by:], change it to [Large icons] or [Small icons].

- (2) Java Control Panel will open.

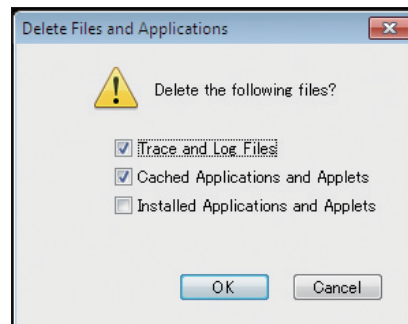
- (3) Click [Settings...] under [Temporary Internet Files].



- (4) The [Temporary Files Settings] dialog will appear. Click [Delete Files...].

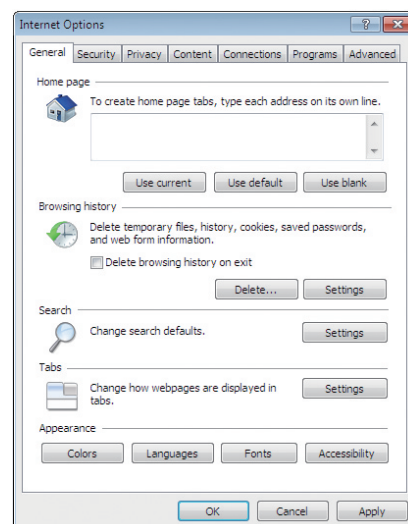


- (5) The [Delete Files and Applications] dialog will appear. Make sure that the checkboxes next to [Trace and Log Files] and [Cached Applications and Applets] are both checked, and then click [OK].

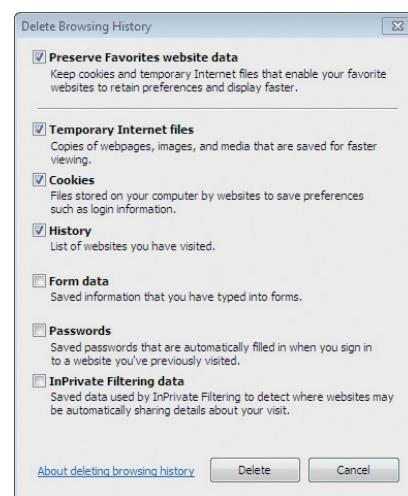


[2] How to clear Internet Explorer cache

- (1) Open the Internet Explorer, click [Tools] in the menu bar, and then click [Internet options].
- (2) The [Internet Options] dialog will appear.
Click [Delete...] under [Browsing history].



- (3) Make sure that the checkbox next to [Temporary Internet files] is checked, and then click [Delete].



9-1-2. Resetting Internet Explorer

If the problem persists after section 9-1-1 “Clearing cache”, reset Internet Explorer settings.

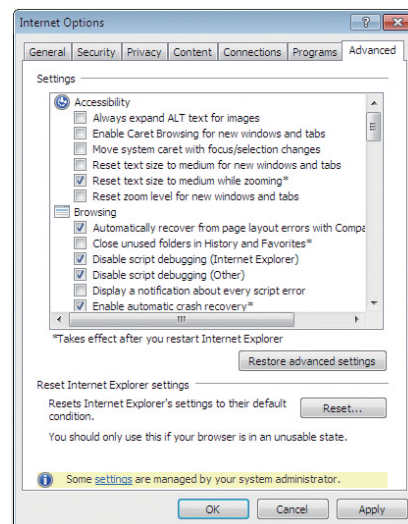
Note: Resetting Internet Explorer's settings will impact the following. Before you make any changes, write down the current settings if necessary.

- Disable toolbars and add-ons
- Advanced options
- Default web browser settings
- Tabbed browsing settings
- Privacy settings
- Pop-up settings
- Security settings

(1) Open the Internet Explorer, click [Tools] in the menu bar, and then click [Internet options].

(2) The [Internet Options] dialog will appear.

Click the [Advanced] tab, and then click [Reset...] under [Reset Internet Explorer settings].



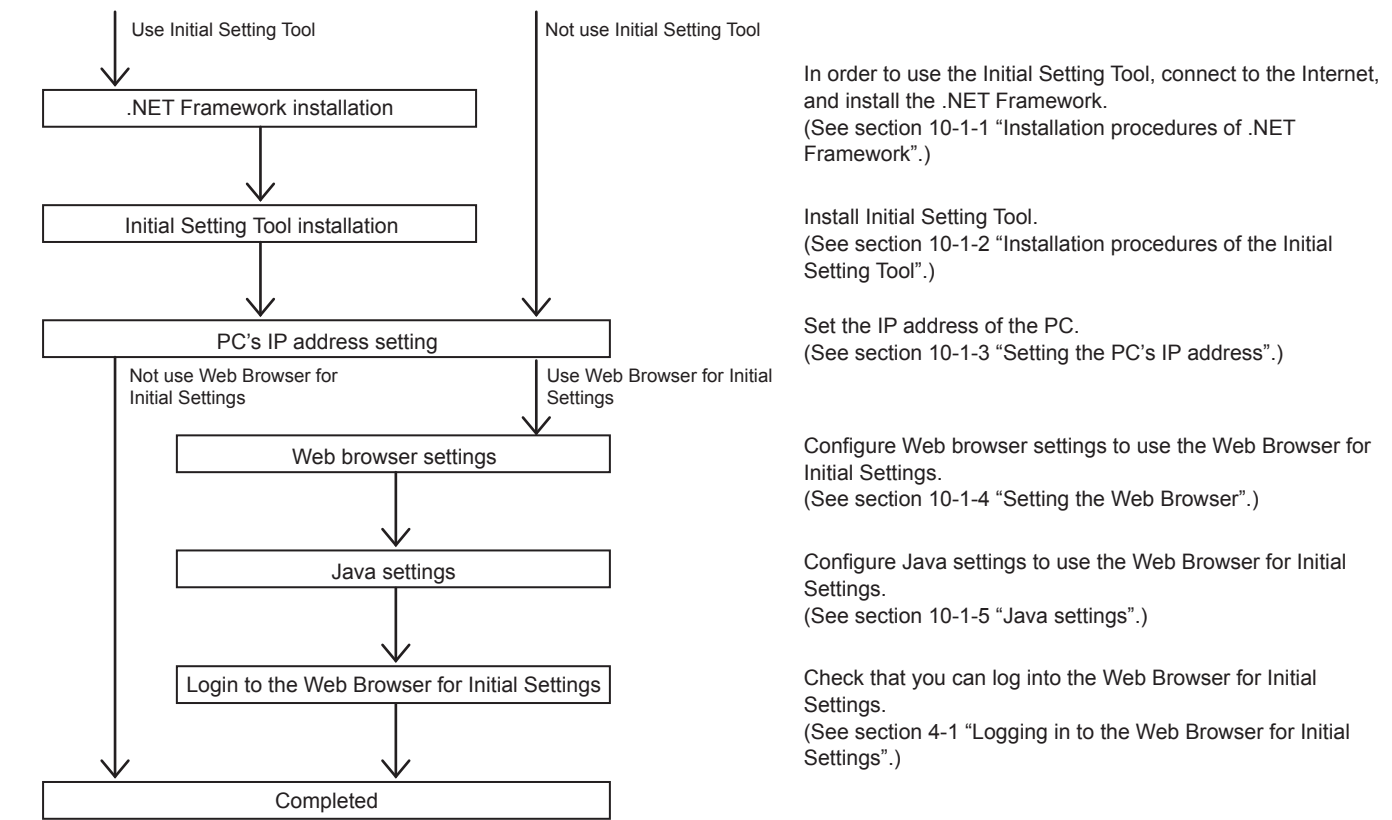
10.Advance preparation

This section explains preparations for prior to configuring initial settings.

10-1. Preparation of the PC

Prepare a PC with which to use the Initial Setting Tool and Web Browser for Initial Settings.
These preparations are not required when configuring all settings using only the LCD.

Carry out preparations using the following procedure.



10-1-1. Installation procedures of .NET Framework

If .NET Framework 4.5.2 or later is not already installed, download the .NET Framework 4.5.2 installer from the URL shown below, and then install it.

URL for when the Internet is connected (Web installer) (English):
<http://www.microsoft.com/en-US/download/details.aspx?id=42643>

URL for when the Internet is not connected (Offline installer) (English):
<http://www.microsoft.com/en-US/download/details.aspx?id=42642>

* Other language can also be selected from this website.

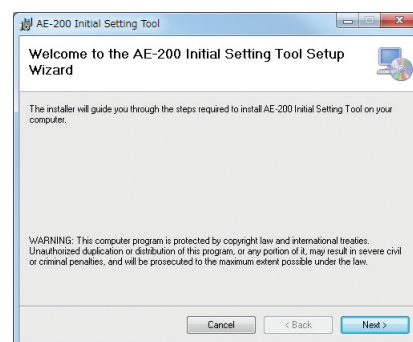
10-1-2. Installation procedures of the Initial Setting Tool

- (1) Execute the install file for the Initial Setting Tool.

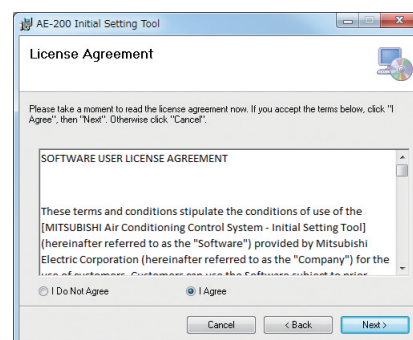
* The install file name is "SetupISToolA_V***" for AE-200A/AE-50A/EW-50A.
The install file name is "SetupISToolE_V***" for AE-200E/AE-50E/EW-50E.
("V***" indicates version number. "V110" indicates Ver. 1.10.)

- (2) If the "Security Warning" message appears, click [Run].

- (3) When the "Setup Wizard" screen appears, click [Next].

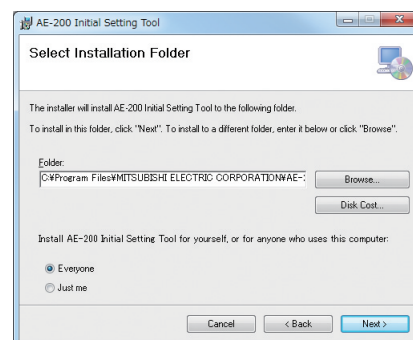


- (4) The "License Agreement" screen will appear. Select [I Agree] and click [Next].

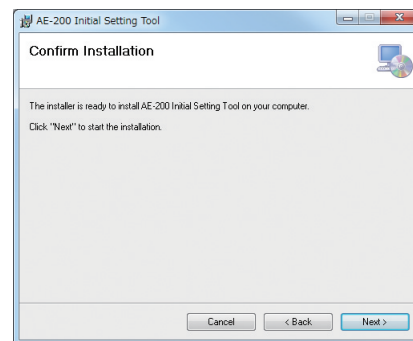


- (5) The "Select Installation Folder" screen will appear. Select the save destination folder and click [Next].

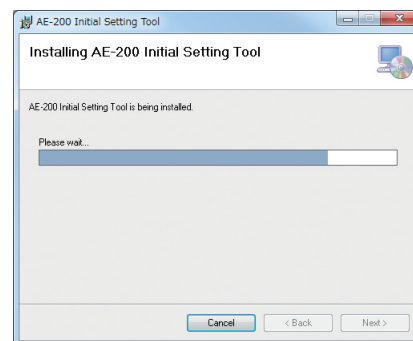
Note: To allow all users who can login the PC to have access to the Initial Setting Tool, check that the [Everyone] checkbox is selected and then click [Next].



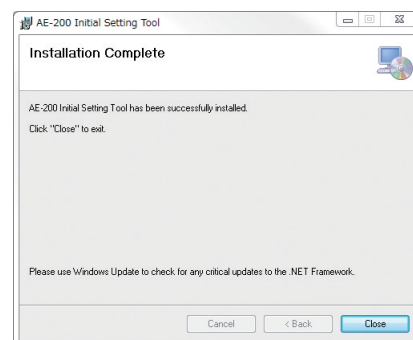
(6) When the “Confirm Installation” screen appears, click [Next].



(7) The Initial Setting Tool will be installed.



(8) Once installation is completed, click [Close].



Note: An Initial Setting Tool shortcut icon will be created on the desktop.
To launch the software, double-click the icon.

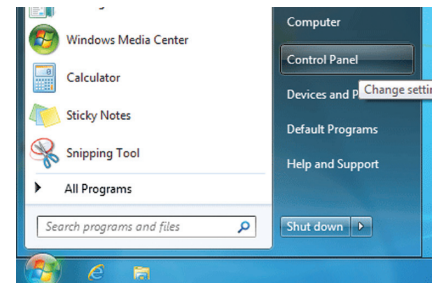
10-1-3. Setting the PC's IP address

Set the PC's IP address so that settings data can be sent from the Initial Setting Tool to the AE-200/AE-50/EW-50. When setting the PC's IP address, set a network address in the same system as the IP address for the AE-200/AE-50/EW-50.

(Example: AE-200 IP address: 192.168.1.1; PC IP address: 192.168.1.101)

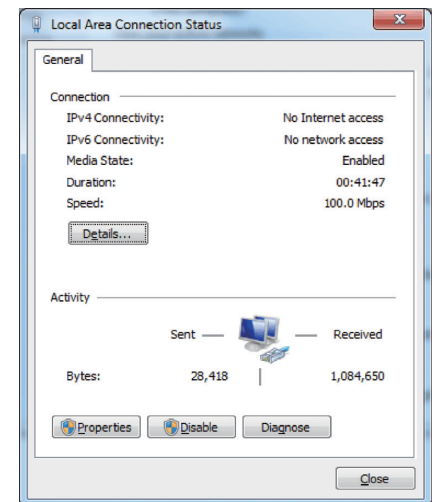
[1] For Windows 7

(1) Click [Control Panel] in the Start menu.

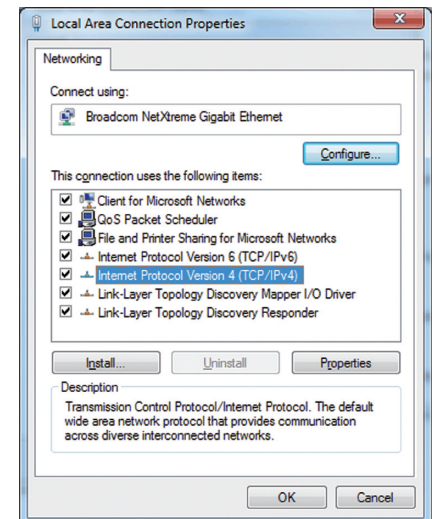


(2) Click [Network and Sharing Center] > [Local Area Setting].

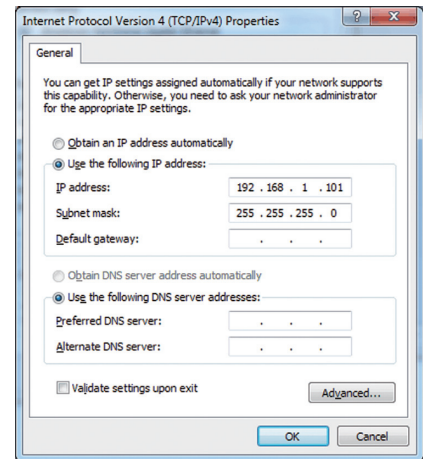
(3) In the "Local Area Connection Status" window, click [Properties].



(4) Click [Internet Protocol Version 4 (TCP/IPv4)] to select it, and click [Properties].



- (5) In the [Internet Protocol Version 4 (TCP/IPv4) Properties] window, check the radio button next to [Use the following IP address].
- (6) Enter the PC's IP address (e.g., [192.168.1.101]) in the "IP address" field.
- (7) Enter the subnet mask [255.255.255.0] (unless otherwise specified) in the "Subnet mask" field.
- (8) In the "Default gateway" field, enter the gateway address as necessary.



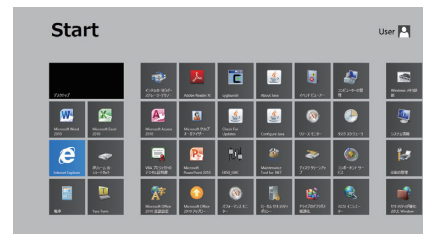
Important

- Consult the system administrator to decide the IP, subnet mask, and gateway addresses.

- (9) Keep clicking [OK] or [Close] to close all windows.

[2] For Windows 8.1

- (1) Click the [Desktop] icon on the Start screen.



- (2) Double-click the [My Computer] icon on the desktop.



- (3) Click [Open Control Panel] in the tool bar.
- (4) Click the [Network and Sharing Center] icon.
- (5) Click [Change adapter settings].
- (6) Double-click the [Ethernet] icon.
- (7) In the "Ethernet Status" window, click [Properties].
- (8) Click [Internet Protocol Version 4 (TCP/IPv4)] to select it, and click [Properties].
- (9) In the [Internet Protocol Version 4 (TCP/IPv4) Properties] window, check the radio button next to [Use the following IP address]
- (10) Enter the PC's IP address (e.g., [192.168.1.101]) in the "IP address" field.
- (11) Enter the subnet mask [255.255.255.0] (unless otherwise specified) in the "Subnet mask" field.
- (12) In the "Default gateway" field, enter the gateway address as necessary.

Important

- Consult the system administrator to decide the IP, subnet mask, and gateway addresses.

(13) Keep clicking [OK] or [Close] to close all windows.

10-1-4. Setting the Web Browser

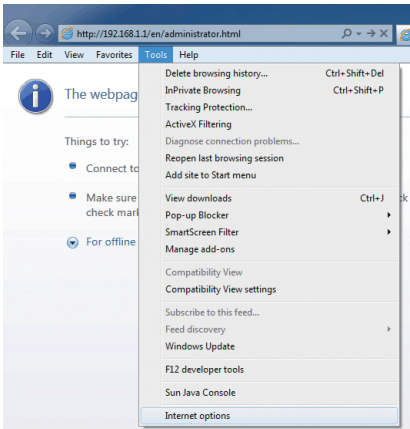
Web browser setting varies with the Internet connection type. See the sections below for how to make Web browser settings for different types of Internet connection.

Note: To prevent unauthorized access, always use a security device such as a VPN router when connecting the AE-200/AE-50/EW-50 to the Internet.

[1] No Internet connection

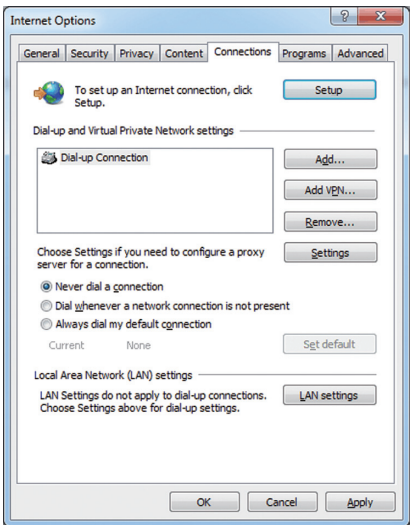
To monitor and operate the air conditioning units from a PC with no Internet connection, follow the instructions below to set the environment for the Web browser.

(1) Click [Tools] in the menu bar, then click [Internet options].



(2) In the [Internet Options] window, click the [Connections] tab.

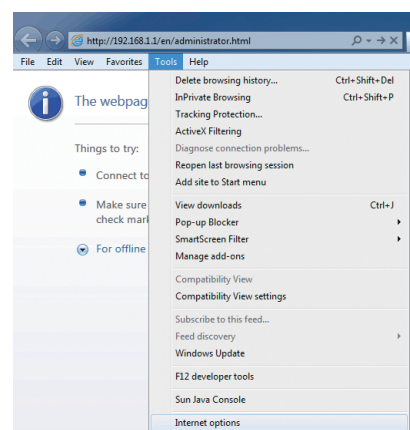
(3) Check the radio button next to [Never dial a connection] in the middle of the window, and click [OK] to close the window.



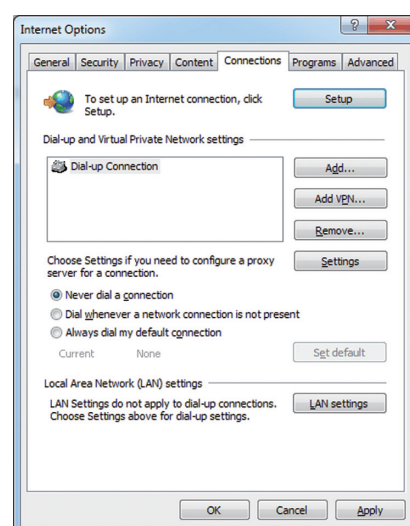
[2] Connecting to the Internet via proxy server using an existing LAN

To monitor and operate the air conditioning units from a PC that connects to the Internet through a proxy server by connecting to an existing LAN, such as a LAN within your company, follow the instructions below to set the environment for the Web browser.

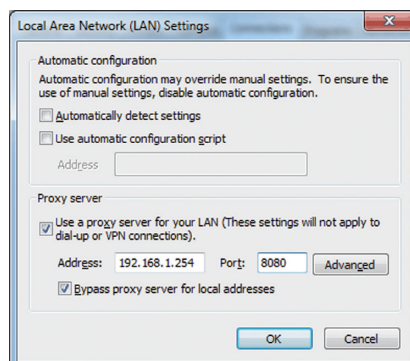
- (1) Click [Tools] in the menu bar, then click [Internet options].



- (2) In the [Internet Options] window, click the [Connections] tab.
- (3) Check the radio button next to [Never dial a connection] in the middle of the window.
- (4) Click [LAN settings] under [Local Area Network (LAN) settings].

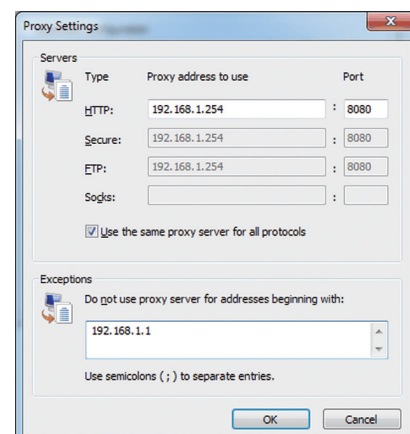


- (5) In the [Local Area Network (LAN) Settings] window, check [Bypass proxy server for local addresses], and click [Advanced].



- (6) In the [Proxy Settings] window, enter the AE-200/AE-50/EW-50's IP address (e.g., 192.168.1.1) in the [Exceptions] field. Then, keep clicking [OK] or [Close] to close all windows.

If connecting multiple AE-200/AE-50/EW-50 units, enter their addresses (e.g., [192.168.1.1; 192.168.1.2]). It is also possible to use an asterisk as a wildcard (e.g., [192.168.1.*]).



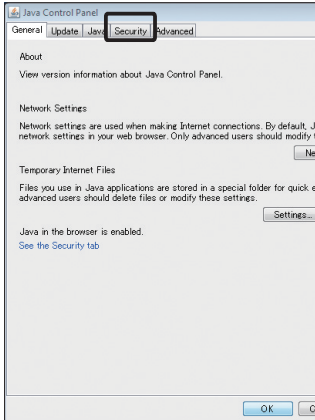
10-1-5. Java settings

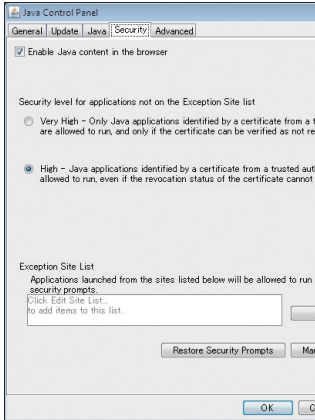
Java settings are required to use the Web Browser for Initial Settings.


[1] How to register exception site list

- (1) Click [Control Panel]>[Java].
Note: If [Category] is selected in the top right corner, next to [View by:], change it to [Large icons] or [Small icons].

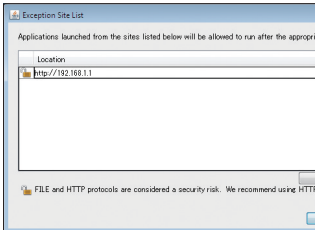
(2) Java Control Panel will open.
Click the [Security] tab.

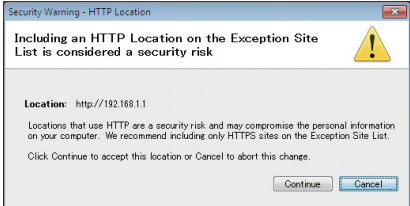

- (3) The security setting window will open.
Click the [Edit Site List...] button.


- (4) The [Exception Site List] dialog will appear.
Click [Add].

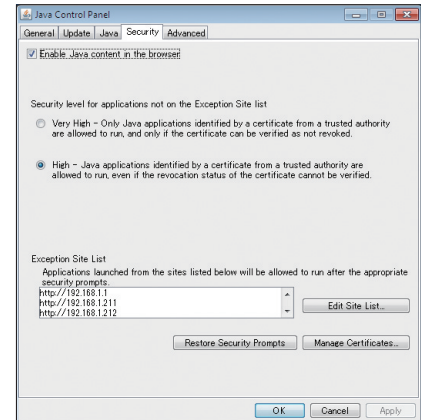

- (5) The [Exception Site List] dialog will appear.
In the white box, enter the following, and then click [OK].
http://[IP address of AE-200, AE-50, or EW-50]
Note: If the IP address of the AE-200 is [192.168.1.1], enter [http: //192.168.1.1].
Note: When using HTTPS (SSL) connection, prefix the web address with [https]. (https: //[IP address of AE-200, AE-50, or EW-50])

(6) The security warning screen will appear.
Click [Continue].
Note: The security warning screen will not appear when HTTPS (SSL) connection is used.





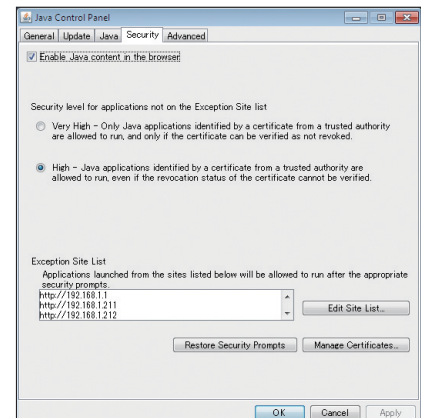
- (7) Add all AE-200/AE-50/EW-50 to the list in the same manner, and click [OK].



- (8) If a PC with 32-bit OS is used, after completing the settings, close all Internet Explorer windows, and access the Web page again to make sure the appropriate window will appear.
If a PC with 64-bit OS is used, go to step (9) below.
- (9) Click [My Computer]>[Local Disk (C:)]>[Program Files (x86)]*1>[Java]>[jre*] (The asterisk indicates a version number. (i.e., jre1.8.0_31))>[bin] to open the [bin] folder.
- *1 If a PC with 64-bit OS is used, both [Program Files] and [Program Files (x86)] folders will appear. Make sure to select [Program Files (x86)].
- (10) Double click the “javacpl.exe” file in the [bin] folder.
- (11) Java Control Panel will open. Follow the steps (3) through (8) again.

[2] How to enable Java content

- (1) Open the security setting window. (See [1] “How to register exception site list”.)
- (2) Click on the checkbox next to [Enable Java content in the browser] unless it is already checked.
Click [Apply] at the right bottom corner of the screen, and then click [OK].



- (3) After completing the settings, close all Internet Explorer windows, and access the Web page again to make sure the appropriate window will appear.

11.Explanation of terms

This explains terms used in this manual.

- AE-200 system

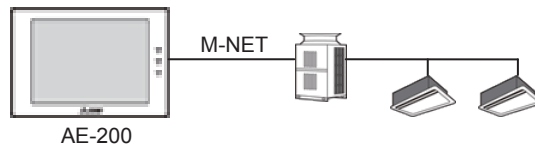
This indicates one AE-200 connected to 0 to 4 AE-50/EW-50 expansion controllers.

System configurations are as follows.

- AE-200 (independent)

A system that does not use an expansion controller.

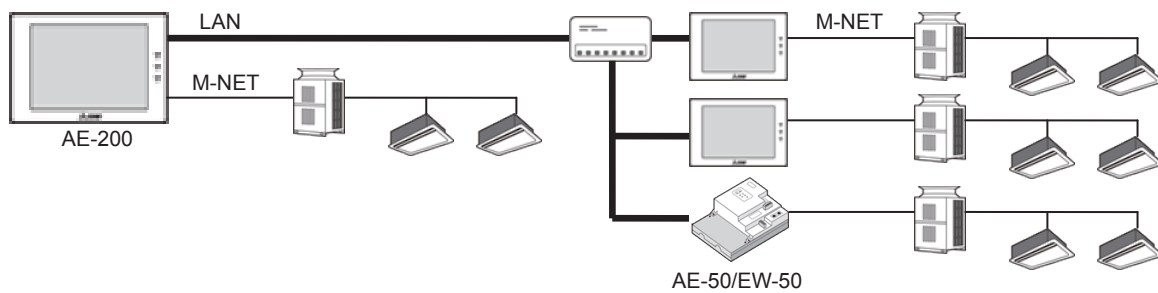
Use this configuration when not using the apportioned electricity billing function, with up to 50 units managed, and controlled from the LCD.



- AE-200

A system that uses 1 to 3 expansion controllers.

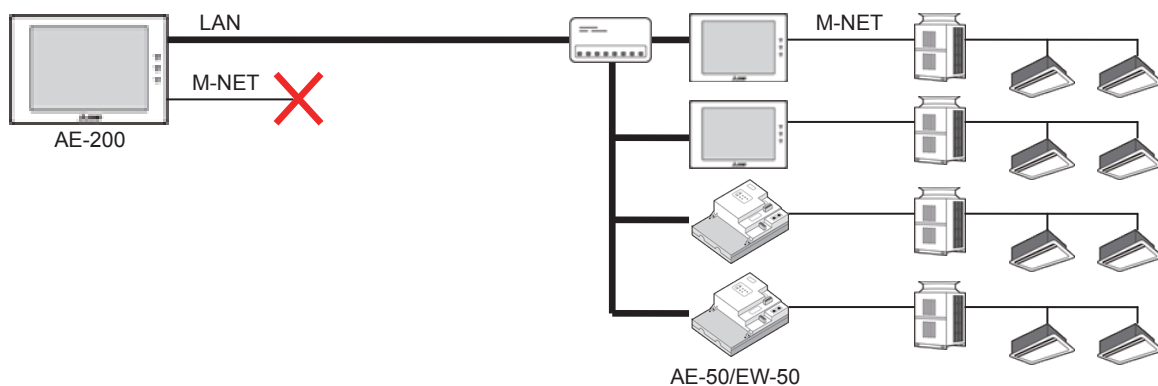
Use this configuration when not using the apportioned electricity billing function, with 50 or more units managed.



- AE-200 (No M-NET)

A system that uses 1 to 4 expansion controllers.

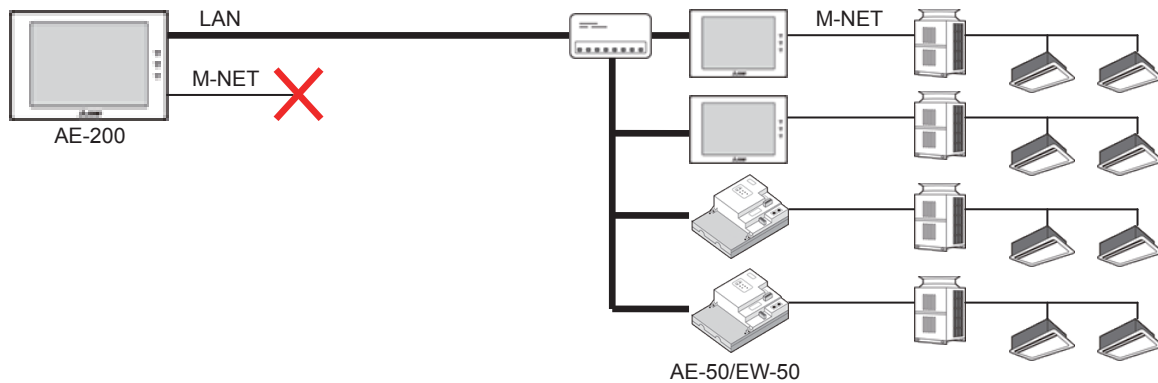
Use this configuration when not using the apportioned electricity billing function, with 50 or more units managed, and with the management room far from the indoor units, with electric power not reaching from the AE-200 to the indoor units.



■ AE-200 (Billing)

A system that uses 1 to 4 expansion controllers.

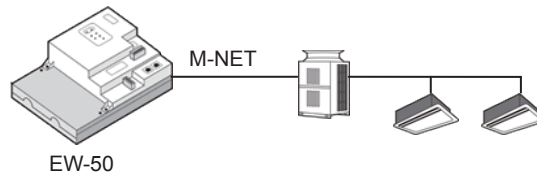
Use this configuration when using the apportioned electricity billing function.



• EW-50 system

This indicates a single EW-50 unit.

Use this configuration when not using the apportioned electricity billing function, with up to 50 units managed, not using the LCD, and controlled from the Integrated Centralized Control Web.



• BACnet® Setting Tool

The BACnet® Setting Tool is used for configuring BACnet® functions from a PC.

This allows separate configuration of single AE-200/AE-50/EW-50 units.

For how to use the BACnet® Setting Tool, refer to the Instruction Book (BACnet® Setting Tool).

* BACnet® is a registered trademark of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, INC.).

• Group

Groups are the smallest operational units. The same operation as with local remote controllers.

Control 1 to 16 units together.

• Block (Operation block)

Blocks are multiple groups grouped together.

It is possible to create blocks by partition or room, for batch monitoring and operation.

Control 1 to 50 groups together. However, blocks that cover AE-200/AE-50/EW-50 cannot be configured.

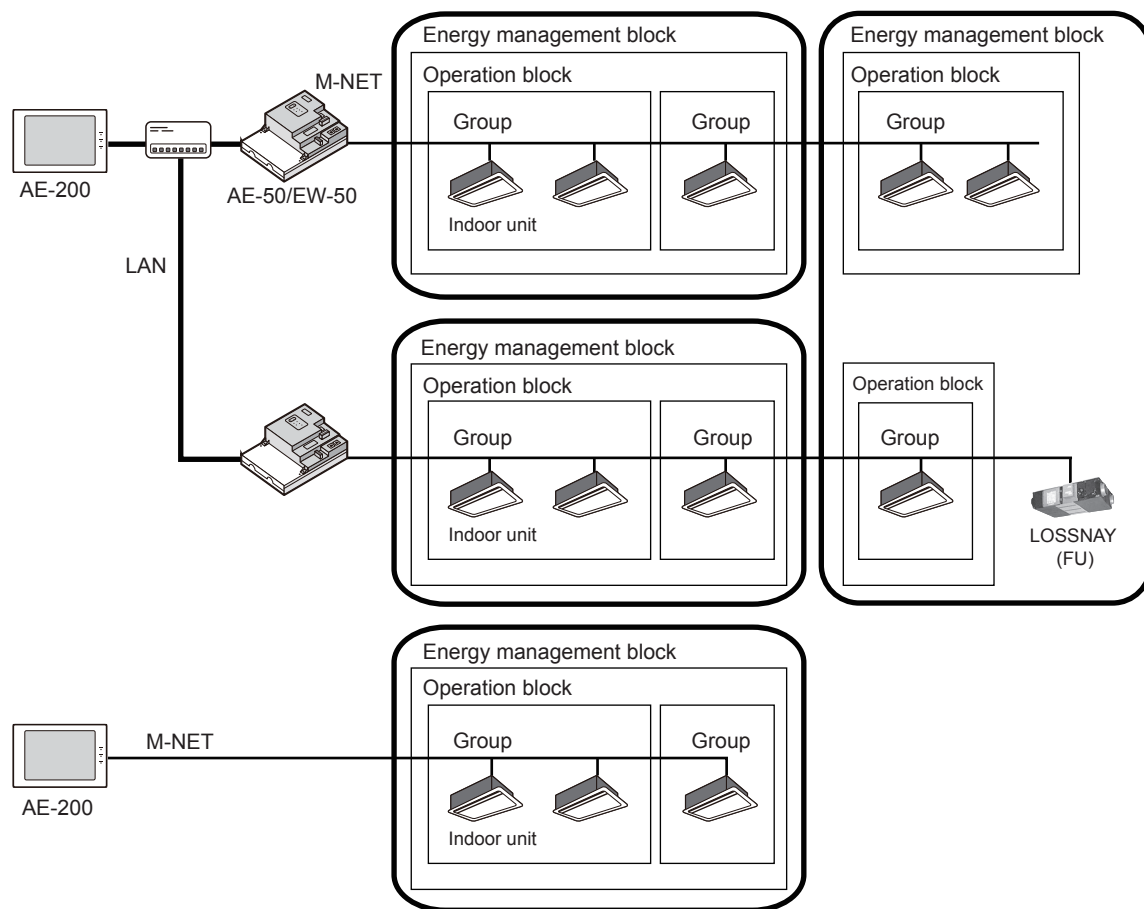
• Energy management block

An energy management block combines multiple operation blocks and LOSSNAY with FU attribute.

This is the unit at which AE-50/EW-50 are together managed, and using the apportioned electricity billing function, at which the electric energy and billing calculation results are displayed and output.

Create energy management blocks by units such as tenant or floor, enabling batch monitoring, control, and management of electric energy and billing.

Control 1 to 200 operations groups together. However, energy management blocks that cover AE-200/EW-50 systems cannot be configured.



- Main and Sub system controllers

Each group can be controlled by a Main system controller or a Sub system controller.

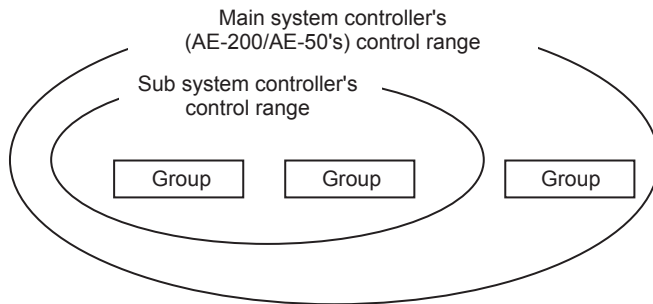
AE-200/AE-50 is exclusively for use as a Main system controller and cannot be used as a Sub system controller.

Main system controller

Main system controller refers to a system controller that controls all other system controllers including the units they control. If a given system has only one system controller, that controller becomes a Main system controller. Group settings and interlock settings can be made only from a Main system controller.

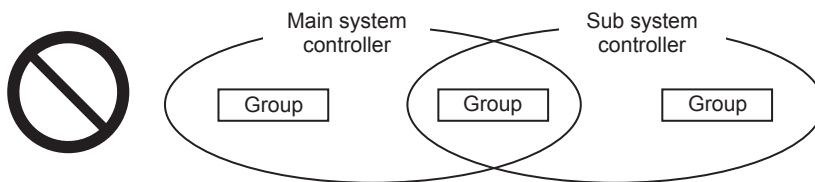
Sub system controller

Sub system controller refers to a system controller that is controlled by a Main system controller.

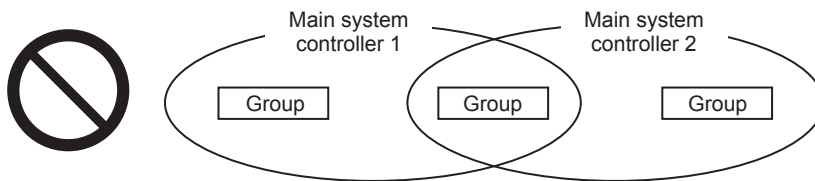


The system cannot be configured as shown in the examples below.

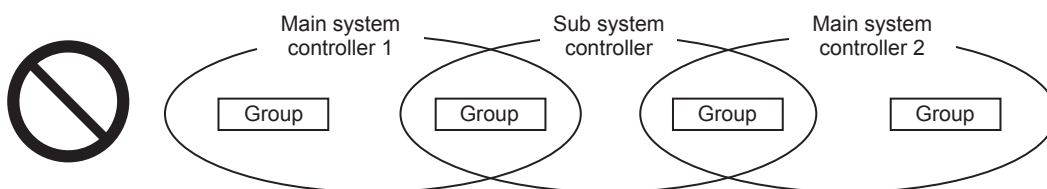
- Groups that are not under the control of a Main system controller cannot be controlled from a Sub system controller.



- Each group cannot be placed under the control of two or more Main system controllers.



- Sub system controllers cannot be placed under the control of two or more Main system controllers.



- License

A license may be required for AE-200/AE-50/EW-50 depending on the functions used.

Licenses required will differ depending on the functions used. Please contact your dealer as regards license types and purchasing.

Refer to section 4-5 "License registration for optional functions" for license registration method.

Error code list

Error codes and their definitions are shown below. If an error occurs, note the error code and consult your dealer.
(A) indicates A-control units.

[1] M-NET errors

0092	Version combination error
0093	System configuration change warning
0094	"Charge" license not registered
0095	Warning - possibility of damaged metering device
0096	Air conditioning charges file automatic output abnormality
0097	Apportioned calculation data collection error
0100	Equipment abnormality
01*0	Equipment abnormality (PAC-YG66DCA) in system *
01**	Equipment abnormality in system **
0200	Hydraulic abnormality
0201	Heater overheating
0202	Heater disconnected
0203	General equipment
0204	Bad defrosting
0205	COS fault
0300	Hydraulic abnormality
0301	Heater overheating
0302	Heater disconnected
0303	General equipment
0304	Bad defrosting
0310	Maintenance inspections (inclusive)
0311	Long compressor running time
0400	Controller abnormality (inclusive)
0401	Controller I/O module abnormality
0402	Controller memory abnormality
0403	Serial transmission trouble
0404	Indoor unit EEPROM error (A)
0405	Outdoor unit EEPROM error (A)
0701	Combustion circuit abnormality (A)
0702	Combustion heat exchange overheating protection (A)
0703	Accidental fire (A)
0704	Heater abnormality (A)
0705	Seismoscope malfunction (A)
0706	Flame current sensor abnormality (A)
0707	Ignition abnormality (A)
0708	Blower motor rotation abnormality (A)
0709	Oil pump circuit abnormality (A)
0900	Test run
1000	Refrigerant cycle abnormality
10*0	Refrigerant cycle abnormality in line *
1102	Discharge temperature abnormality (TH4) (A)
1108	Inner thermo (49C) operation (A)
11**	Refrigerant cycle temperature abnormality - Common operand: **
1300	Low-pressure abnormality (63L operation) (A)
13**	Refrigerant cycle pressure abnormality - Common operand: **
1500	Refrigerant cycle not operate due to overcharge
1501	Refrigerant cycle not operate due to undercharge (/compressor shell temperature abnormality)
1502	Refrigerant cycle not operate due to liquid back /Low-discharge super heat abnormality (A)
1503	Refrigerant cycle not operate due to coil frost
1504	Refrigerant cycle not operate due to overheat protection
1505	Refrigerant cycle not operate due to compressor vacuum operation protection/refrigerant low temperature abnormality
1506	Refrigerant cycle not operate due to refrigerant pump abnormality
1507	Refrigerant cycle not operate due to composition detection abnormality
1508	Refrigerant cycle not operate due to control valve fault
1509	Refrigerant cycle not operate due to high pressure abnormality (ball valve closed)
1510	Refrigerant cycle - Gas leakage
1511	Refrigerant cycle not operate due to oil slick abnormality
1512	Refrigerant cycle not operate due to a stop of freezing protection function
1513	Refrigerant cycle - Brine freezing
1514	Refrigerant cycle - Refrigerant circuit error
1559	Oil balance circuit abnormality
1600	Refrigerant overfilled
1601	Insufficient refrigerant
1602	Liquid floodback

1603 Freezing
 1604 Excessive temperature rise protection
 1605 Compressor vacuum operation protection
 1606 Gas pump abnormality
 1607 Composition detection abnormality
 1608 Control valve fault delay
 1610 Gas leak alarm
 1615 Compressor excessive start-stop
 1659 Oil equalizing circuit fault delay
 2000 Water system abnormality (Pump interlock abnormality)
 20*0 Water system abnormality in line *
 21** Water system temperature abnormality - Common operand: **
 23** Water system pressure abnormality - Common operand: **
 2500 Water system not operate due to water leak
 2501 Water system not operate due to water supply suspension
 2502 Water system not operate due to drain pump abnormality
 2503 Water system not operate due to drain sensor abnormality/float switch function
 2504 Water system not operate due to liquid level abnormality
 2505 Water system not operate due to cool water valve abnormality
 2506 Water system not operate due to warm water valve abnormality
 2507 Water system not operate due to dew condensation prevention control activated
 2508 Water system - Air pump abnormality
 2509 Water system - Brine pump abnormality
 2510 Water system - Water level abnormality (heat storage tank, etc.)
 2511 Water system - Brine low level abnormality
 2512 Water system - Control valve fault
 2515 Water system - Water pump abnormality
 2550 Water system - Float switch 2
 2555 Water system - Cold water solenoid valve 2
 2556 Water system - Hot water solenoid valve 2
 2600 Water system operation restricted due to water leak
 2601 Water system operation restricted due to water supply suspension/humidifier water supply suspension
 2602 Water system operation restricted due to drain pump abnormality
 2603 Water system operation restricted due to drain sensor abnormality
 2604 Water system operation restricted due to liquid level abnormality
 2607 Water system - Condensation prevention control operation
 2608 Water system - Air pump abnormality
 2609 Water system - Brine pump abnormality
 2610 Water system - Water level abnormality (heat storage tank, etc.)
 2611 Water system - Brine low level abnormality
 2613 Drop in water flow rate
 2615 Water pump abnormality
 3000 Air system - General air system abnormality
 30*0 Air system - Air system general X system abnormality (inclusive)
 31** Air system - Temperature abnormality - Common operand: **
 3152 Air system operation restricted due to inverter control box inner temperature abnormality
 3182 Air system operation restricted due to housing inner temperature abnormality
 33** Air system - Pressure abnormality - Common operand: **
 3600 Air system operation restricted due to filter clogging
 3601 Air system operation restricted due to filter maintenance
 3602 Air system operation restricted due to damper position detecting abnormality
 3604 Air system - Filter cleaning position detection abnormality (slim)
 3605 Air system - Filter cleaning dust box installation abnormality (slim)
 3606 Air system - Filter cleaning position detection abnormality
 3607 Air system - Filter cleaning dust box installation abnormality
 3608 Air system - Filter cleaning position detection connector connection abnormality
 3609 Air system - Ambient temperature high
 3610 Air system - Heat exchanger blockage
 37** Air system operation humidity abnormality allowance - Common operand: **
 38** Air system operation humidity abnormality - Common operand: **
 4000 Electric system abnormality
 40*0 Electric system abnormality in line *
 4100 Electric system not operate due to overcurrent shut-off
 4101 Electric system not operate due to overcurrent protection
 4102 Electric system not operate due to open phase /Open phase (T phase) (A)
 4103 Electric system not operate due to reversed phase/open phase
 4104 Electric system not operate due to electric leak
 4105 Electric system not operate due to short circuit
 4106 Electric system not operate due to self power supply OFF/power failure
 4107 Electric system not operate due to overload
 4108 Electric system not operate due to overload protection/OCR51C /Open phase (S phase),51CM connector open (A)

4109 Electric system not operate due to OCR51F
 4110 Electric system not operate due to high voltage part
 4111 Electric system not operate due to bus current
 4112 Electric system not operate due to coil overheat 49°C
 4113 Electric system not operate due to heater overheat
 4114 Electric system not operate due to fan controller abnormality
 4115 Electric system not operate due to power supply synchronism abnormality /Input circuit (board) failure
 4116 Electric system not operate due to motor abnormality/speed abnormality
 4117 Compressor self-protection function operation (A)
 4118 Opposite phase detection circuit (board) failure (A)
 4119 Open of 2 or more connectors (A)
 4120 Electric system - Differing voltage applied
 4121 Electric system not operate due to trouble in equipment to which a measure against higher harmonics is taken
 4122 Electric system - Air blower fan interlock
 4123 Electric system not operate due to Inverter output error
 4124 Electric system not operate due to damper abnormality
 4125 Electric system - Rush-proof circuit abnormality
 4126 Electric system - Analog input abnormality
 4127 Electric system - Deodorizing circuit abnormality
 4128 Electric system - Pulse discharge circuit abnormality
 4200 Inverter abnormality
 420* Inverter abnormality - Inverter No.: *
 4210 Inverter overcurrent shut-off
 421* Inverter overcurrent shut-off - Inverter No.: *
 4220 Inverter bus voltage insufficiency / Voltage abnormality (A)
 422* Inverter bus voltage insufficiency - Inverter No.: *
 4230 Inverter radiating thermostat abnormality
 423* Inverter radiating thermostat abnormality - Inverter No.: *
 4240 Inverter overcurrent (overload) protection
 424* Inverter overcurrent protection - Inverter No.: *
 4250 Inverter IPM/bus voltage abnormality /Power module abnormality (A)
 425* Inverter IPM abnormality *
 4260 Inverter cooling fan trouble
 426* Inverter cooling fan trouble - Inverter No.: *
 5000 Sensor trouble
 50*0 Sensor trouble in system *
 51** Temperature sensor trouble - Sensor No.: **
 5202 Connector (63L) open (A)
 52** Pressure sensor trouble - Sensor No.: **
 5300 Current sensor abnormality (A)
 53** Current sensor trouble - Sensor No.: **
 54** Humidity sensor trouble - Sensor No.: **
 55** Gas sensor trouble - Sensor No.: **
 56** Air speed sensor trouble - Sensor No.: **
 57** Limit switch trouble - Switch No.: **
 58** Sensor trouble - Sensor No.: **
 59** Other sensors trouble - Sensor No.: **
 6000 System abnormality
 6100 Instantaneous power interruption
 6101 System not operate due to abnormality - With response frame
 6102 No answer back
 6103 Fire alarm emergency stop
 6200 Controller H/W abnormality
 6201 E2PROM abnormality
 6202 RTC abnormality
 6203 Timer kit abnormality
 6204 External memory read/write error
 6500 Communication error
 6600 Communication error - Address duplicate
 6601 Communication error - Polarity unsettled
 6602 Communication error - Transmission processor hardware error
 6603 Communication error - Transmission line busy
 6604 Communication error - No ACK (06H) (communication circuit error)
 6605 Communication error - No response frame
 6606 Communication error - Transmission processor communication error
 6607 Communication error - No ACK return
 6608 Communication error - No return of response frame
 6609 Communication error
 6610 Communication error
 6800 Communication error - Other communication errors
 6801 Communication error - V-control communication error

6810	Communication error - UR communication error
6811	Communication error - UR communication synchronism not recover
6812	Communication error - UR communication hardware error
6813	Communication error - UR communication status bit detection error
6820	Other communication errors
6821	Other communication errors - Transmission line busy
6822	Other communication errors - No communication ACK
6823	Other communication errors - No response command
6824	Other communication errors - Receive data error
6830	Communication error - MA communication refrigerant address double setting error
6831	Communication error - No MA communication reception error
6832	Communication error - MA communication synchronism not recover
6833	Communication error - MA communication transmission/reception hardware trouble
6834	Communication error - MA communication start bit detection error
6840	Communication error - A control no indoor/outdoor communication/reception abnormality
6841	Communication error - A control indoor/outdoor communication synchronization recovery abnormal
6842	Communication error - A control indoor/outdoor communication - Communication H/W abnormality
6843	Communication error - A control indoor/outdoor communication - Start bit detection abnormality
6844	Communication error - A control indoor/outdoor communication incorrect indoor/outdoor wiring connection, excessive number of indoor units (more than five units)
6845	Communication error - A control indoor/outdoor communication incorrect indoor/outdoor wiring connection (telecommunication, disconnection)
6846	Communication error - A control indoor/outdoor communication startup time exceeded
7000	System abnormality
7100	System abnormality - Total capacity error
7101	System abnormality - Capacity code error
7102	System abnormality - Connecting unit number excess
7103	System abnormality - Piping length setting error
7104	System abnormality - Floor height setting error
7105	System abnormality - Address setting over 254
7106	System abnormality - Attribute setting error
7107	System abnormality - Distributor setting error
7108	System abnormality - Refrigerant system setting error
7109	System abnormality - Connection setting error
7110	System abnormality - Refrigerant system connection/connection data unsettled
7111	System abnormality - I/O connection equipment not connected/remote controller sensor abnormality
7112	System abnormality - I/O type setting error
7113	System abnormality - Equipment unsettled
7114	System abnormality - Too many VAV units
7115	System abnormality - Too many units requiring ventilation
7116	System abnormality - Replace non-wash setting error
7117	System abnormality - Model identification setting error
7130	System abnormality - Different unit model error
7131	System abnormality - Mixed cooling only H/P connection error (Facility PAC)
7132	System abnormality - Multiple entries of operation performance (Facility PAC)
7200	System abnormality - Numeric values unsettled
7201	System abnormality - Numeric values unsettled
73**	System abnormality - LON system equipment abnormality

[2] Errors between AE-200 and AE-50 (EW-50)

6920	Communication error - No response error
6922	Communication error - Receiving frame ID error
7901	System abnormality - Excessive number of connected units
7902	System abnormality - Connection lock error
7903	System abnormality - Unit information error
7904	System abnormality - System setting error
7905	System abnormality - Version error/Different unit model error

This product is designed and intended for use in the residential,
commercial and light-industrial environment.

The product at hand is based on the following EU regulations:

- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility Directive 2004/108/EC
- Restriction of Hazardous Substances 2011/65/EU

Please be sure to put the contact address/telephone number
on this manual before handing it to the customer.

mitsubishi **MITSUBISHI ELECTRIC CORPORATION**

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