MITSUBISHI ELECTRIC

<ORIGINAL>

CE

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.

Note: When connecting HWHP (QAHV) units or chiller units, the following restrictions must be observed.
- Count each HWHP (QAHV) unit as two air conditioning units, and make sure the number of units that are equivalent to the number of air conditioning units will not exceed 50 units.
- When connecting chiller units and other units together, count each chiller unit as three air conditioning units, and make sure the number of units that are equivalent to the number of air conditioning units will not exceed 50 units.
- When connecting chiller units only, up to 24 chiller units can be connected.

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".

Note: Integrated centralized control software (PAC-TG2000A), Electric amount count software (PAC-YG11, 12, 13ATM), and PLC software for demand input (PAC-YG41, 42, 43ATM, PAC-YG91, 92, 93ATM) were discontinued in 2016 and are currently unavailable for purchase. PLC software for general equipment cannot be directly connected to AE-200A/AE-200E/AE-50A/AE-50E/EW-50A/EW-50E.

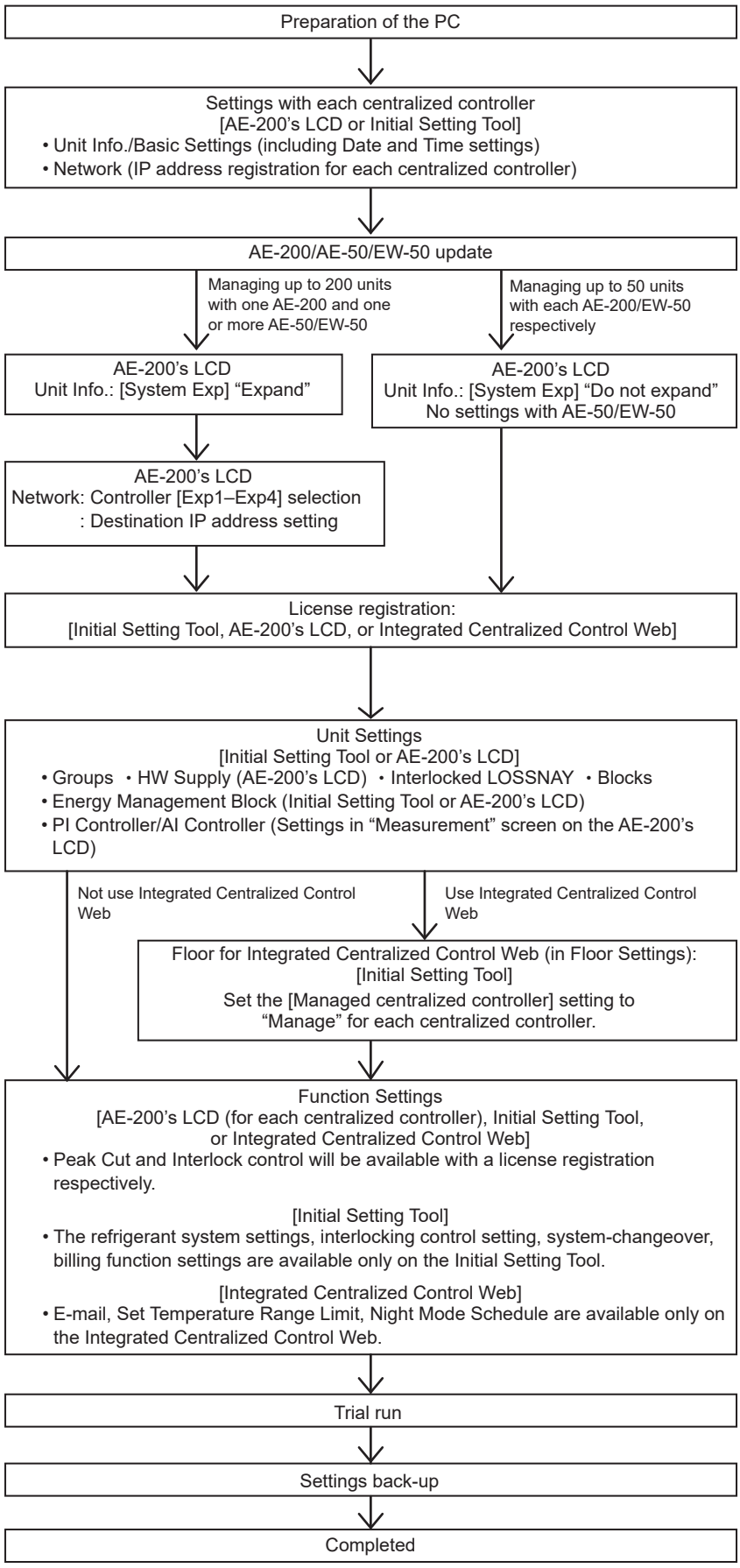
The following restrictions apply to the naming settings, such as group name settings, where any characters can be entered.
- Some characters may not be entered from the LCD.
  Enter such characters from the Initial Setting Tool, and check that they are displayed on the LCD properly.
- The maximum number of characters entered from the LCD may be reduced depending on the characters used.
  The maximum number of characters varies depending on the characters used on the Integrated Centralized Control Web and the Initial Setting Tool.
  Check that the characters you entered are displayed properly on the LCD or the Initial Setting Tool.
- If the characters entered on the Initial Setting Tool reach the maximum character limit, they may not be displayed correctly depending on the characters used.
  In such a case, reduce the number of characters entered to see if they are displayed on the screen properly.

2-1. Terms used in this manual

- "Microsoft® Windows® 8.1" is referred to as "Windows 8.1", "Microsoft® Windows® 10" is referred to as "Windows 10", and "Microsoft® Windows® 11" is referred to as "Windows 11".
- "Centralized Controller AE-200A/AE-200E/TE-200A" is referred to as "AE-200".
- "Centralized Controller AE-50A/AE-50E/TE-50A" is referred to as "AE-50".
- "Centralized Controller EW-50A/EW-50E/TW-50A" is referred to as "EW-50".
- "DIDO controller (PAC-YG66DCA)" is referred to as "DIDO controller".
- "PI controller (PAC-YG60MCA)" is referred to as "PI controller".
- "AI controller (PAC-YG63MCA)" is referred to as "AI controller".
- "City Multi Y, HP, R2, WY, WR2, S" is referred to as "VRF".
- "Hybrid City Multi" is referred to as "HVRF".
- "Hydro branch controller (HBC)" and "Hydro unit" are referred to as "Pump unit".
- "OA Processing unit (LOSSNAY with heater and humidifier)" is referred to as "OA Processing unit".
- "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, QAHV) unit".
- "e-Series chiller unit (EAHV, EACV)" is referred to as "Chiller unit".
- "Chiller unit of MEHITS" is referred to as "MEHT-CH&HP unit."
- Indoor units whose model names end with "-E-OA" are referred to as "outlet air temperature control unit."

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

This explains one example of settings procedures.



Prepare a PC with which to use the Initial Setting Tool.
(See section 10-1.)

(Common: See sections 4-2 and 4-3.
LCD: See sections 5-1-3, 5-1-4, and 5-1-5.
Initial Setting Tool: See section 6-3-2.)

Update the AE-200/AE-50/EW-50, and ensure the software version matches.
(See section 4-4.)

Configure the [System Exp] setting on the AE-200's LCD.
(See section 5-1-4.)

Register the license for the AE-200/AE-50/EW-50.
(See section 4-5.)

Configure unit settings for the AE-200/AE-50/EW-50.
(See sections 5-1 and 5-2.)

(See section 6-5-3.)

(LCD: See sections 5-2 to 5-4.
Initial Setting Tool: See sections 6-7 to 6-8.
Integrated Centralized Control Web: See section 8.)

* Items that can be set will differ depending on settings methods. Refer to section 2-3 and configure, ensuring that no items are omitted.

Carry out a trial run in order to check that the AE-200/AE-50/EW-50 are operating in accordance with settings.

Backup settings, and retain the settings data so that it can be used for recovery in the event of malfunction.
(LCD: See section 8-1.
Integrated Centralized Control Web: See section 8-2.)

* 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 Integrated Centralized Control Web.

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".

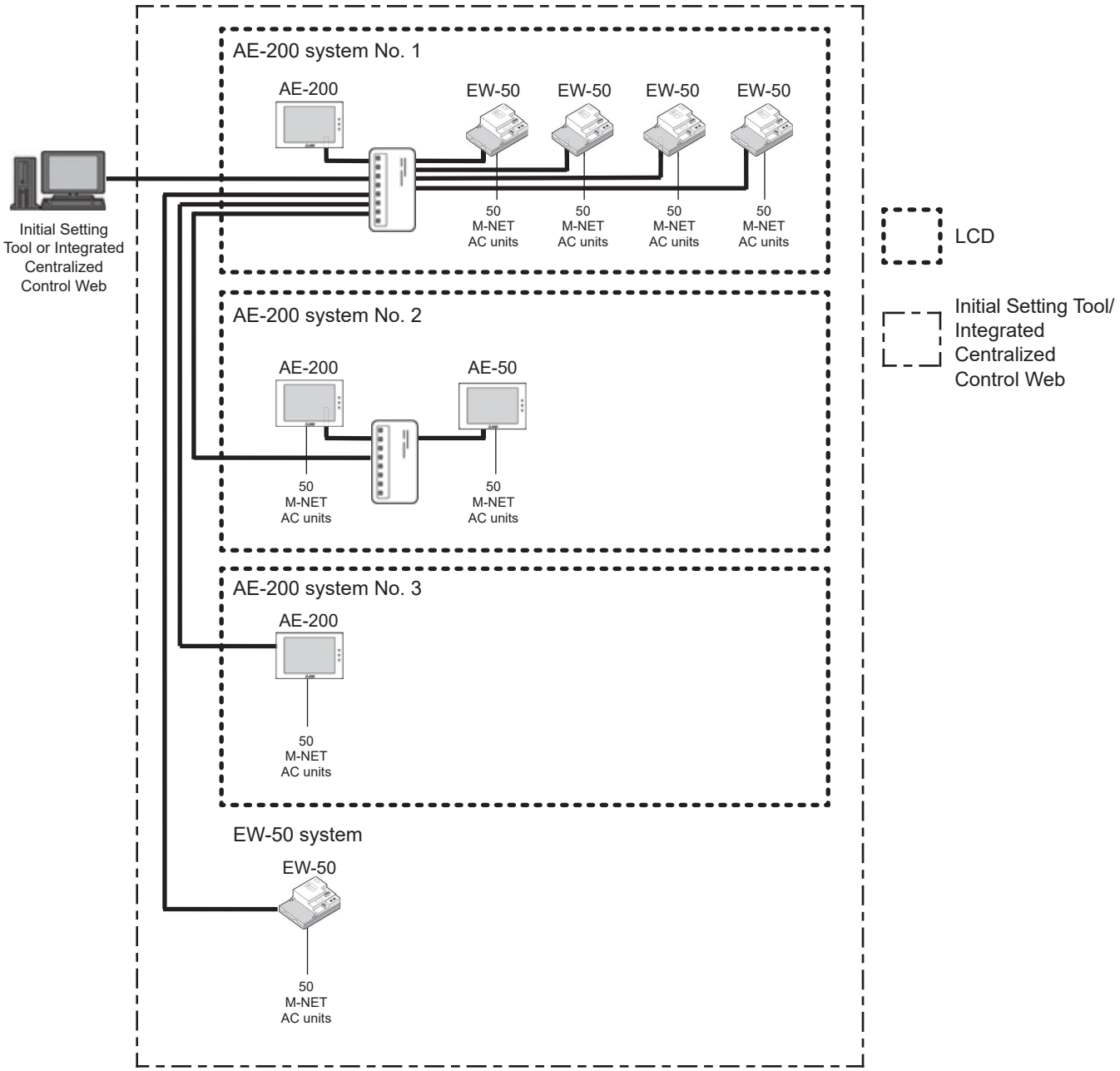
  Note: Configure the expansion controller connection settings from the AE-200's LCD.
  Note: The EW-50 does not have an LCD, therefore it is necessary to configure settings from the Initial Setting Tool or Integrated Centralized Control Web.

- 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.
  A check sheet can be output to be used for trial runs.
  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.

- Integrated Centralized Control Web
  The Integrated Centralized Control Web is used for configuring settings from a PC Web browser.
  This allows separate logins to a single Integrated Centralized Control Web, and configuration of initial settings.
  Methods of setting from the Integrated Centralized Control Web are explained in section 7 "Settings using Integrated Centralized Control Web".

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 Integrated Centralized Control Web are different.

See the table below to check the functions to be used, and configure the settings combining multiple initial settings methods.

Functions that can be set are as follows.

Setting item			Description	LCD	Initial Setting Tool	Integrated Centralized Control Web
Basic settings	Date and time settings		The current date/time and daylight savings time can be set.	V		V
	License registration		Licenses for optional functions can be registered.	V	V *1 *9	V
	Unit information		Basic settings can be made.	V	V *9	
		Language	The language to be used for display can be set.	V		
		M-NET	Whether or not to use an AE-200 M-NET can be selected.	V		
		Expansion controller	Whether or not to use an expansion controller (AE-50/EW-50) can be selected.	V		
		Billing function	Whether or not to use an AE-200 apportioned electricity billing function can be selected.	V *2		
		Advanced settings	“Time Master/Sub”, “Schedule: Season setting”, and “Old model compatibility mode” settings can be made.	V	V	
	Network settings		Settings for the network-related items can be made.	V	V *10	
		IP address of AE-200/AE-50/EW-50 *3	IP address of AE-200/AE-50/EW-50 can be set.	V	V *10	
		IP address of expansion controller	Destination IP address of an expansion controller (AE-50/EW-50) can be set with AE-200.	V		
		Access restriction settings	Access to the centralized controller can be restricted by making an accessible IP address list (white list).		V	
		Reset the list of accessible IP addresses	The accessible IP address list made on the access restriction settings screen can be reset.	V		
Unit settings	Group settings		Air conditioning units, Air To Water (PWFY) units, LOSSNAY units, HWHP (CAHV, CRHV) units, chiller units, MEHT-CH&HP units, general equipment, remote controllers, sub system controllers, and AHC can be registered to a group.	V	V *8	
	HW Supply settings		HWHP (QAHV) units can be registered to a group.	V		
	Refrigerant system settings (for apportioned electricity billing function and System-changeover)		Refrigerant system connection information can be set for the apportioned electricity billing function and System-changeover.		V *2	
Function settings	Interlocked LOSSNAY settings		The operation of indoor units and LOSSNAY units can be interlocked.	V	V	
	Block (operation block) settings		The groups can be registered to a block.	V	V	
	Energy management block settings		The groups can be registered to an energy management block.	V	V	
	PI controller settings		PI controller or Pulse Input (PI) settings such as “electricity meter” or “water supply meter” can be made.	V	V	
	AI controller settings		AI controller “temperature sensor” and “humidity sensor” settings can be made.	V	V	
	E-mail (Out-of-limit alarm)		The destination address and title of e-mail (Out-of-limit alarm) can be set.		V	
	E-Mail		Error notification e-mail and e-mail alarm settings can be made.			V *10
	Peak Cut		Peak Cut method and Peak Cut control details for each control level can be set.	V *4		V *4 *10

Setting item		Description	LCD	Initial Setting Tool	Integrated Centralized Control Web
Function settings	Energy Management settings	Set to use the energy management function to display graphs.	V	V *10	
	Set Temperature Range Limit	Set to restrict the local remote controller set temperature range.			V *10
	Night Mode (quiet operation) Schedule	Set to switch outdoor units to quiet operation for a certain period of time.			V *10
	System-changeover	Set to automatically switch indoor unit operation mode (heating and cooling) based upon room temperature and set temperatures.		V *10	
	External Temperature Interlock	Set to interlock the temperature differential between the set temperature and the outdoor air temperature to use automatic adjustment.	V		V *10
	Night Setback Control	Set to automatically cool or heat if the indoor temperature goes outside a set range at night.	V		V *10
	Interlock control	Set interlock restrictions for interlock operation when conditions have been met.		V *5	
	AHC Port Name settings	Advanced HVAC CONTROLLER (AHC) port name can be set.		V *10	
	Night purge	Set night purge to bring in cooler outside night air.	V		V *10
	BACnet® *6	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 *2	
	Outdoor Unit settings	Set outdoor unit parameters for electric energy apportionment.		V *2	
	Indoor Unit settings	Set indoor unit parameters for electric energy apportionment.		V *2	
	Measurement settings	Set connection relationship for electric energy apportionment metering devices and units.		V *2	
	Charges settings	Time period setting for the seasonal charges can be made.		V *2	
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 *7	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 *11
	Software update	Update AE-200/AE-50/EW-50 software.	V		
Others	Check sheet for air-conditioner ON/OFF trial run	A check sheet to be used for air conditioning unit trial run can be output.		V	

*1 The following two methods can be used to register licenses: registering individually, and registering collectively using a CSV file that contains license information.

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

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

*4 “Energy Management License Pack” is required. (AE-200E/AE-50E/EW-50E only)

*5 “Interlock control” license is required. On version 7.50 and later, make the settings from the Initial Setting Tool.

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

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

*8 MEHT-CH&HP units cannot be set on the Initial Setting Tool.

*9 Available on Ver. 7.6 or later (Initial Setting Tool Ver. 1.4 or later).

*10 Available on Ver. 7.7 or later (Initial Setting Tool Ver. 1.6 or later).

*11 Can be performed for each centralized controller.

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	Qty	Description
License	Required number	Required to operate functions that require a license. Register for each of AE-200/AE-50/EW-50.
AE-200 update file *1	1	Required to update AE-200/AE-50/EW-50 versions. **If AE-200/AE-50/EW-50 versions do not match, then they will not operate.**
AE-50/EW-50 update file *1	1	
Initial Setting Tool *1	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. *2

*1 Contact your dealer regarding the update files.

*2 When performing initial settings using the Initial Setting Tool, it is necessary to ensure that all AE-200/AE-50/EW-50 versions are the same. Depending on the version of AE-200/AE-50/EW-50, the version of the Initial Setting Tool that can be used will differ as shown in the table below.

Initial Setting Tool version	AE-200/AE-50/EW-50 version	.NET Framework version
Ver.2.05	Ver.7.2–8.03	Ver. 4.8 or later
Ver. 1.9 / 2.0	Ver. 7.2–7.98	Ver. 4.8 or later
Ver. 1.8	Ver. 7.2–7.85	Ver. 4.8 or later
Ver. 1.7	Ver. 7.2–7.8	Ver. 4.8 or later
Ver. 1.61	Ver. 7.2–7.7	Ver. 4.8 or later
Ver. 1.5	Ver. 7.2–7.68	Ver. 4.8 or later
Ver. 1.4	Ver. 7.2–7.64	Ver. 4.8 or later
Ver. 1.3	Ver. 7.2–7.5	Ver. 4.8 or later
Ver. 1.2	Ver. 7.2–7.4	Ver. 4.8 or later
Ver. 1.1	Ver. 7.2–7.3	Ver. 4.8 or later
Ver. 1.0	Ver. 7.2	Ver. 4.8 or later
Cannot be used.	Ver. 7.1	–

3-2. Commercially available parts

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

Use a USB memory device that meets the following conditions.

- Supports USB 2.0 (Must be USB 2.0-compatible when using a USB 3.0)
- Formatted with FAT32 or FAT (FAT16)
- Without a security function (locked by a password or encrypted) that prevents the data files from being written to or the function is unused. When using a USB memory device with a security function, its function must be disabled.
  (USB memory device with a fingerprint authentication function may be used.)

3-3. PC requirements

The operating environment for the PC with which to use the Initial Setting Tool and Integrated Centralized Control Web is as below.

As of February 2022

Item	Requirements
CPU	1 GHz or faster (at least 2 GHz recommended)
Memory	1 GB (2 GB or more for Integrated Centralized Control Web)
Screen resolution	1024 x 768 or better (at least 1366 x 768 recommended)
OS	Microsoft® Windows® 11 (64 bit) *1 Microsoft® Windows® 10 (64 bit) *1 Microsoft® Windows® 8.1 (64 bit) *1
Operating environment (only required for Initial Setting Tool)	Minimum system requirements for Windows® 8.1, Windows® 10, or Windows® 11 must be met. .NET Framework 4.8 or later *2 * Required when Microsoft® Excel 2013 (32 bit) /2016 (32 bit) /2019 (32 bit) trial run check sheet is used.
Browser (only required for Integrated Centralized Control Web)	Microsoft® Edge® 96 Google Chrome™ Ver. 96 Safari® 15
Internal LAN port or LAN card	100 BASE-TX or better
Pointing device	Mouse, etc.
USB	Minimum 1 port

*1) Verified to work on the Pro edition

*2) When installing the Initial Setting Tool, the page will jump to the download site if .NET Framework 4.8 or later is not installed.

Note: Microsoft Corporation will end its support for Microsoft® Internet Explorer® 11 in June 2022. Use a browser other than Microsoft® Internet Explorer®.

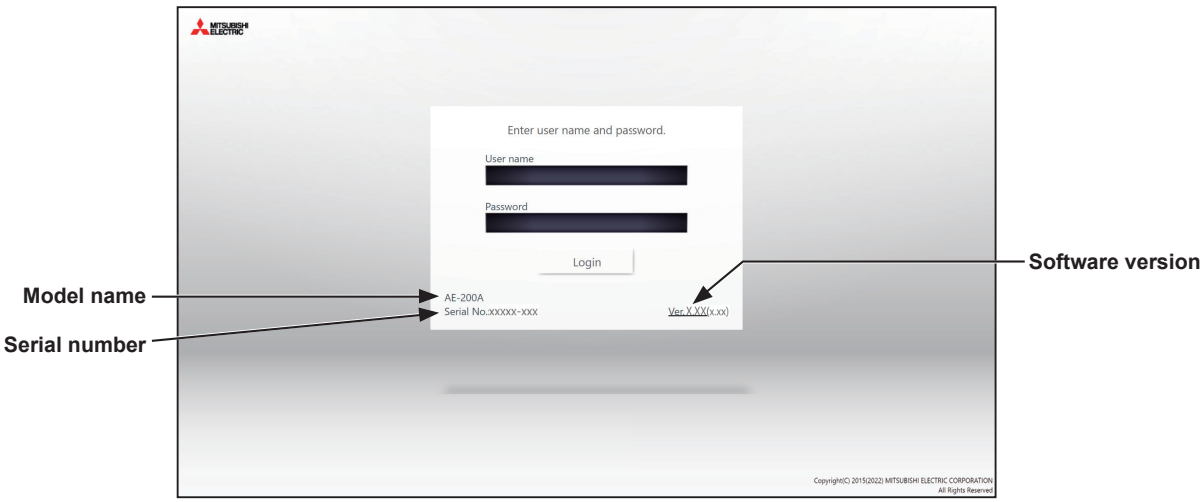
Note: The use of the latest version of the OS is recommended.

4. Preparation

4-1. Logging in to the Integrated Centralized Control Web

(1) Enter the web page address in the address field of the Web browser as follows:
http://[IP address of the login destination AE-200/EW-50]/control/index.html

(2) A login screen will appear.
Model name, serial number, and software version information of the login destination AE-200/EW-50 will appear on Ver. 7.98 and later.



Note: If the IP address of the AE-200/EW-50 is [192.168.1.1], the web page address is [http: //192.168.1.1/control/index.html].
Note: Use an Initial Setting Tool to configure the login destination centralized controller settings.
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 AE-200/EW-50]/control/index.html?zh
English	http://[IP address of AE-200/EW-50]/control/index.html?en
French	http://[IP address of AE-200/EW-50]/control/index.html?fr
German	http://[IP address of AE-200/EW-50]/control/index.html?de
Italian	http://[IP address of AE-200/EW-50]/control/index.html?it
Japanese	http://[IP address of AE-200/EW-50]/control/index.html?ja
Portuguese	http://[IP address of AE-200/EW-50]/control/index.html?pt
Russian	http://[IP address of AE-200/EW-50]/control/index.html?ru
Spanish	http://[IP address of AE-200/EW-50]/control/index.html?es
Turkish	http://[IP address of AE-200/EW-50]/control/index.html?tr

Note: You can add the web page address to your Favorites on the login screen for easy access in the future.
Note: When using the Integrated Centralized Control Web on a tablet, depending on the tablet used, the bottom of the operation screen may be cut off. In the event of this, create a shortcut on the Home screen from which to start the application.
Refer to the Instruction Book (Integrated Centralized Control Web) for details on how to add a shortcut to the Home screen.
Note: Depending on the PC display used, the bottom of the operation screen may be cut off. In the event of this, switch the browser to full screen mode.

(3) Enter the user name and the password in the login screen, and click [Login]. A screen that shows the operation status of the air conditioning units will appear.

Note: The user name and password used for the Integrated Centralized Control Web are different from the ones used for the LCD.
Note: It is recommended to change the default user name and password so that the users other than the building managers will not be able to change the settings.
Note: If the default user name and password of building manager were changed, the changed user name and the password will remain active after the controller is updated to a newer version.
Also, if you import the backup data of the changed settings to another AE-200/EW-50, the changed user name and the password will remain active.

AE-200E/EW-50E

For users in the UK

Ver. 7.99 and earlier

User	Default user name	Default password
Building manager	administrator	admin

Ver. 8.00 and later

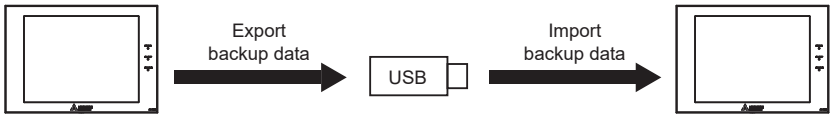
User	Default user name	Default password*1*2	Example default password (DP: ABCDEFGH*3)
Building manager	administrator	ad “DP”	adABCDEFGH

*1 Default password for AE-200E/EW-50E updated to Ver. 8.00 or later from Ver. 7.99 or earlier
See table for AE-200E/EW-50E (Ver. 7.99 and earlier).

*2 Default password for AE-200E/EW-50E to which the backup data from Ver. 8.00 or later was imported
If the settings data are backed up from the AE-200E/EW-50E that was logged in with the default password and are imported to the AE-200E/EW-50E Ver. 8.00 or later, the new password will be DP of the AE-200E/EW-50E to which the data was imported.

AE-200E/EW-50E
Software version: 8.00
DP: ABCDEFGH
Password of building manager: adABCDEFGH

AE-200E/EW-50E
Software version: 8.00
DP: HGFEDCBA
Password of building manager: adHGFEDCBA



*3 DP can be found on the back cover of the following manuals.
AE-200E : the Instruction Book (supplied with the controller)
EW-50E : the Installation and Instructions Manual (supplied with the controller)

For users outside the UK

All versions

User	Default user name	Default password
Building manager	administrator	admin

AE-200A/EW-50A

Ver. 7.97 and earlier

User	Default user name	Default password
Building manager	administrator	admin

Ver. 7.98 and later

User	Default user name	Default password*4*5	Example default password (Serial number: 19672-123*6)
Building manager	administrator	ad “Serial number”	ad19672123

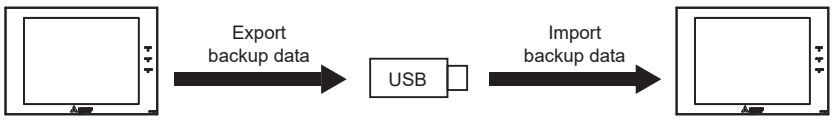
*4 Default password for AE-200A/EW-50A updated to Ver. 7.98 or later from Ver. 7.97 or earlier
The default password varies with the version immediately before the update.
Default password for AE-200A/EW-50A when updated from a version earlier than Ver. 7.98

Version before the update	Default password after the system has been updated to Ver. 7.98 or later
Ver. 7.10–7.12	ad “Serial number”
Ver. 7.23–7.97	admin

*5 Default password for AE-200A/EW-50A to which the backup data from Ver. 7.98 or later was imported
If the settings data are backed up from the AE-200A/EW-50A that was logged in with the default password and are imported to the AE-200A/EW-50A Ver. 7.98 or later, the new password will be the serial number of the AE-200A/EW-50A to which the data was imported.

AE-200A/EW-50A
Software version: 7.98
Serial number: 31C71-101
Password of building manager: ad31C71101

AE-200A/EW-50A
Software version: 7.98
Serial number: 19272-124
Password of building manager: ad19272124

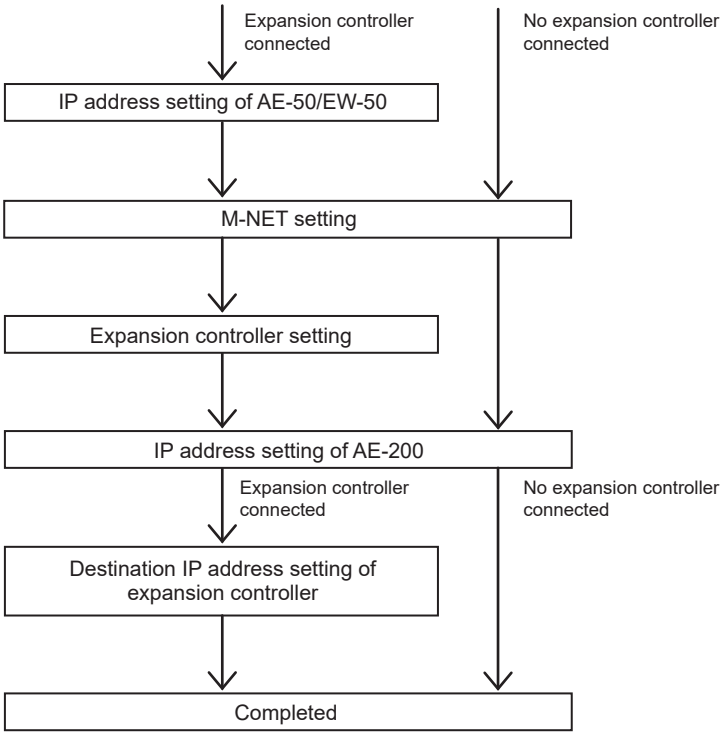


*6 On Ver. 7.98 and later, serial number can be found on the login screen of the Integrated Centralized Control Web.

4-2. 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.



Set the IP address of AE-50 on the LCD, and set the IP address of EW-50 on Initial Setting Tool.
(See section 4-2-1 "Setting IP addresses of AE-50/EW-50".)

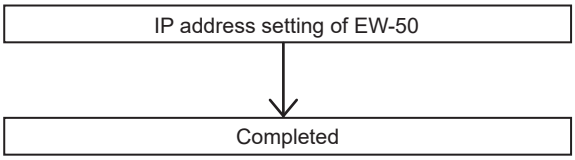
Set whether or not to use an AE-200 M-NET on the AE-200's LCD.
(See section 4-2-2 "Setting IP addresses of AE-200".)

Set whether or not to use an expansion controller on the AE-200's LCD.
(See section 4-2-2 "Setting IP addresses of AE-200".)

Set the IP addresses of AE-200 on the AE-200's LCD or Initial Setting Tool.
(See section 4-2-2 "Setting IP addresses of AE-200".)

Set the connecting IP addresses of expansion controllers on the AE-200's LCD.
(See sections 4-2-2 "Setting IP addresses of AE-200" and 5-1-5 [5] "Communication error detection".)

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



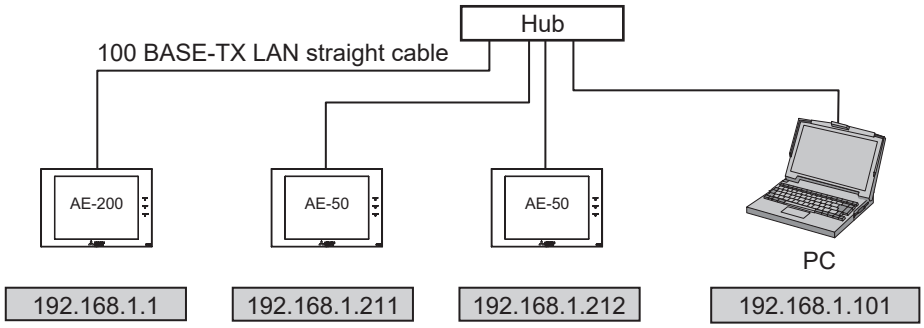
Set the IP addresses of EW-50 on Initial Setting Tool.
(See section 4-2-1 "Setting IP addresses of AE-50/EW-50".)

[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]

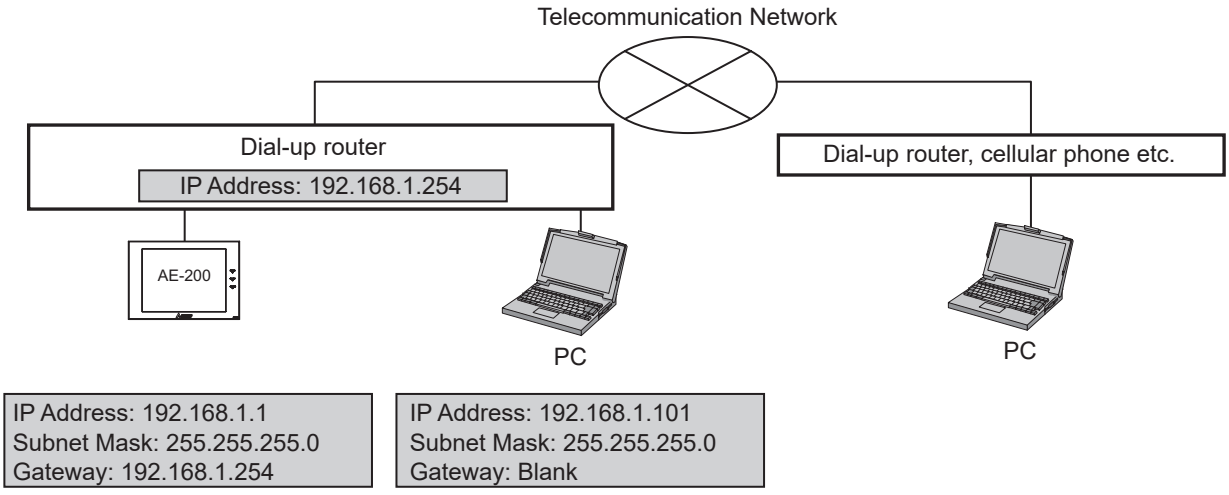


Note: Some hubs have dedicated ports for connection with another hub.
Connect the AE-200/AE-50/EW-50 and PC to the normal ports.

(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.

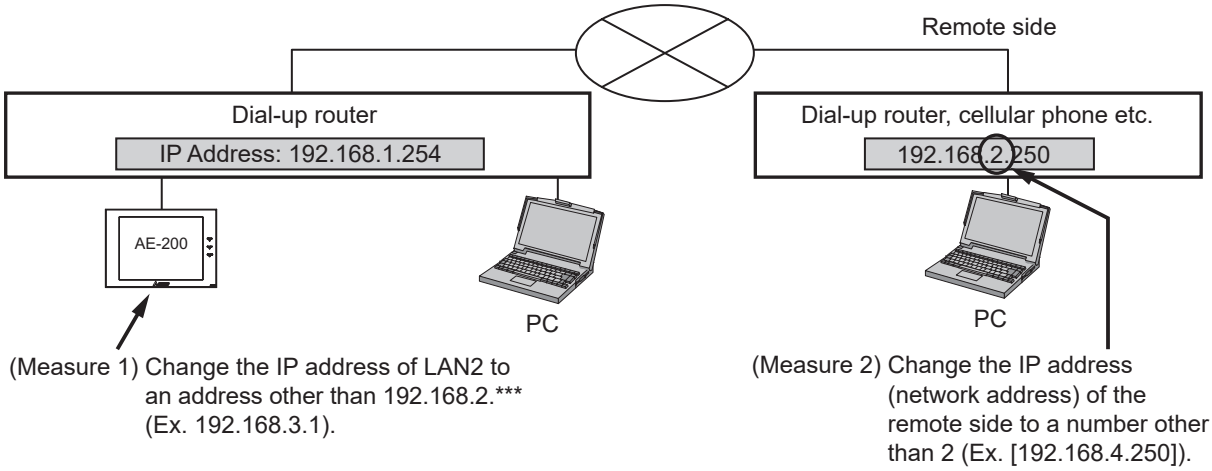
[Remote Monitoring System example]



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.

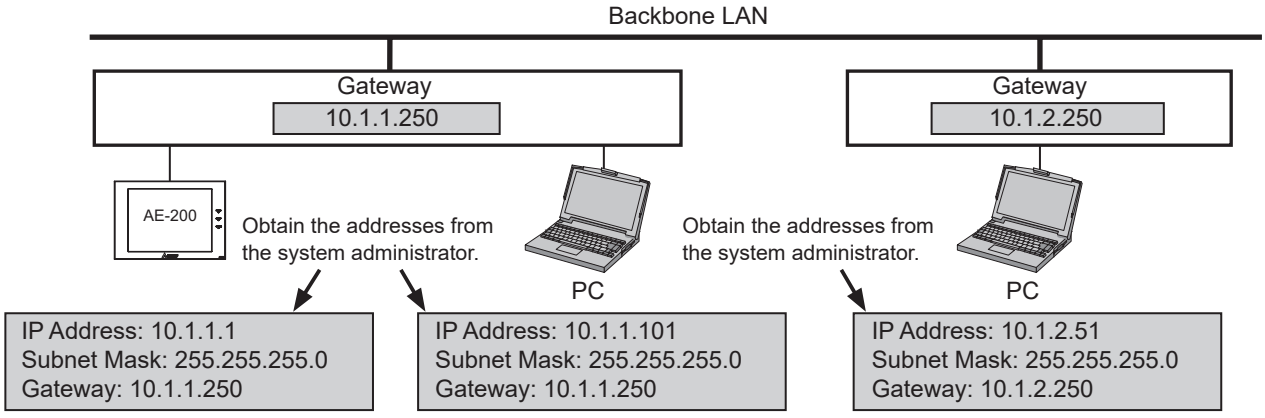
Note: When LAN2 (for exclusive use for BACnet) of AE-200/AE-50/EW-50 is unused, the initial IP address of LAN2 will be 192.168.2.1. If an IP address 192.168.2.*** is used for the remote-side broadband router, connection from the remote side will fail. If any of the networks on the remote-side broadband router has an IP address of [192.168.2.***], take either of the measures 1 and 2 below.
(Measure 1) Change the IP address of LAN2 to an address other than [192.168.2.***] from the Initial Settings Tool.
(Measure 2) Change the remote-side IP address (network address) of the remote-side broadband router to an address other than [192.168.2.***].



[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]



4-2-1. 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

EW-50: Initial Setting Tool

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

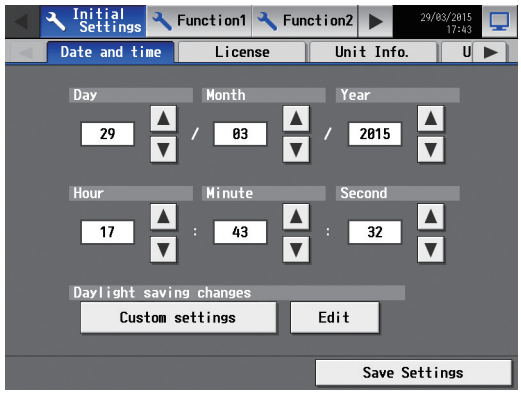
(1) After the power is turned on to the AE-50, a language selection screen will appear.
Select the language to be used for display, and then touch [OK].

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.



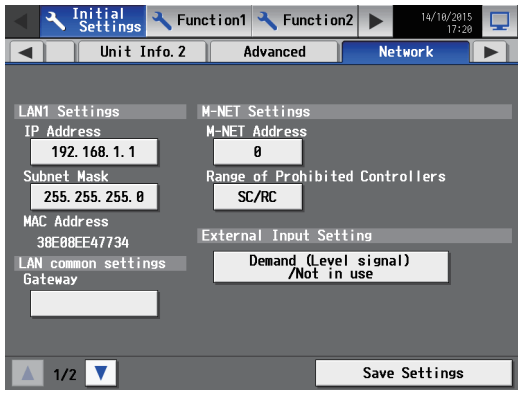
(3) Touch the right triangle button to display the [Network] tab, and touch it.
Referring to section 5-1-5 "Network", set the AE-50's IP address, and then touch [Save Settings].
The AE-50 will reboot.

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>

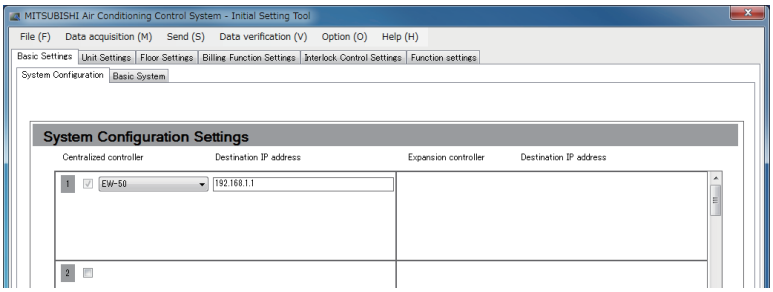
AE-200	192.168.1.1
AE-50	192.168.1.211



[2] When setting on the Initial Setting Tool (EW-50)

(1) Start the Initial Setting Tool.
Click [New], and the Initial Setting Tool screen will be displayed with all setting items unset.

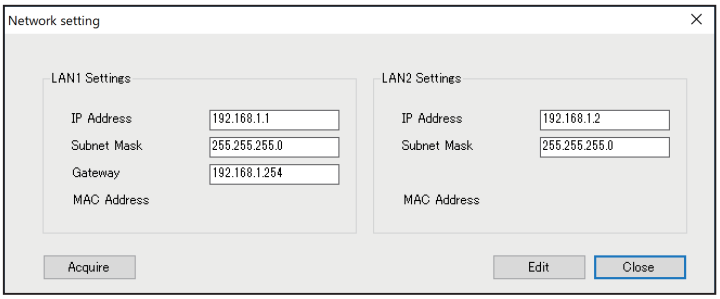
(2) Click [Basic Settings] and then [System Configuration] to open the System Configuration Settings screen.
- Settings of a centralized controller must be made in No.1.
- Click [▼] to open the model selection menu, and select [EW-50].
- Enter the IP address (default: 192.168.1.1) in the “Destination IP address” box.
- Click [Save].



(3) Click [Data acquisition] on the tool bar and select [Acquire] to load the settings of EW-50 to the Initial Setting Tool.

(4) Click [Basic Settings] and then [Basic System] to open the Basic System screen.

(5) Click [Unit Settings] and then [Network setting] to open the Network setting screen.



(6) Click [Acquire] to load the network settings of EW-50.
The factory default IP address and subnet mask are 192.168.1.1 and 255.255.255.0 respectively.

(7) Change the IP address, subnet mask, and gateway under LAN1 settings, and click [Edit].
LAN2 settings are exclusively used for BACnet® function.
To operate EW-50 according to the settings made with the Initial Setting Tool, set the rotary switch (SW1) to “0.”
Then, EW-50 will restart to apply the changes in the network settings to EW-50.

(8) After EW-50 restarted, click [Basic Settings] and then [Basic System] again to open the Basic System screen.
Enter the IP address that has been set in step (7) in the Destination IP address box, and save it.

(9) Click [Unit Settings] and then [Network setting] to open the Network setting screen.

(10) Click [Acquire] to load the network settings of EW-50. Then, check that the changes in the network settings have been applied.
Note: Write down the IP address of the EW-50 because it is not saved to the Initial Setting Tool.

4-2-2. 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].

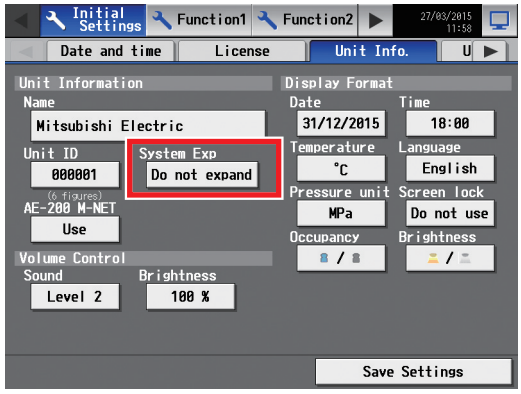
Note: It will take approximately one minute for the display to appear after the power is turned on.
Note: Do not touch the LCD before any settings screen appears.
Note: Once the initial settings have been made, [Monitor/Operation] screen will appear after the power is turned on.



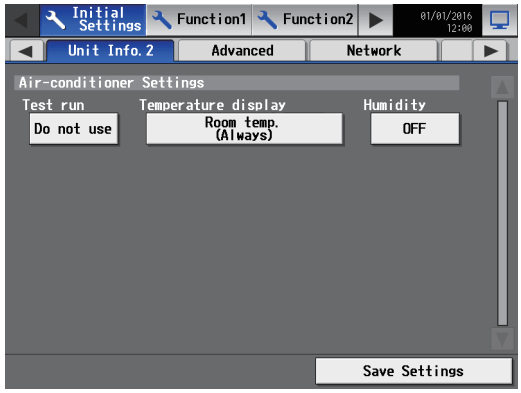
(2) Touch the [Unit Info.] and [Unit Info. 2] tabs.
Referring to section 5-1-4 “Unit Information”, make necessary basic settings, and then touch [Save Settings].

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.

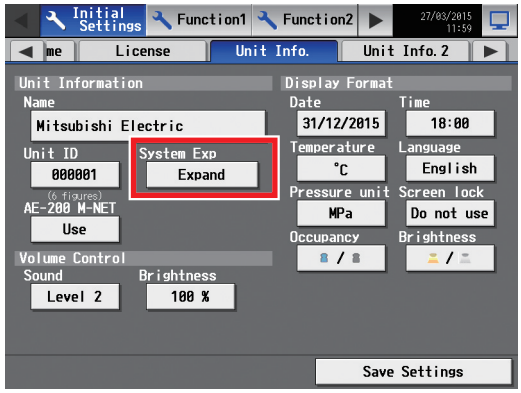


(2) Touch the [Unit Info.] and [Unit Info. 2] tabs.
Referring to section 5-1-4 “Unit Information”, make necessary basic settings, and then touch [Save Settings].

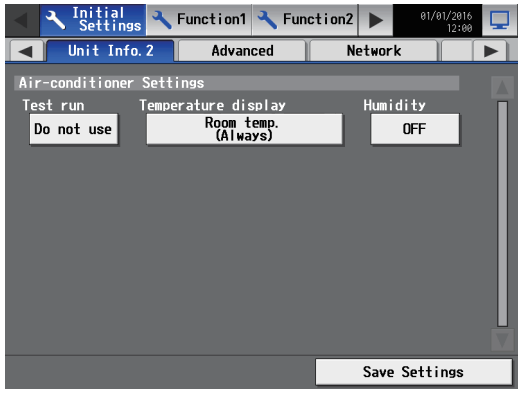
Note: Make sure to set the [System Exp] setting for the AE-200 to [Expand].

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

Unit Info.



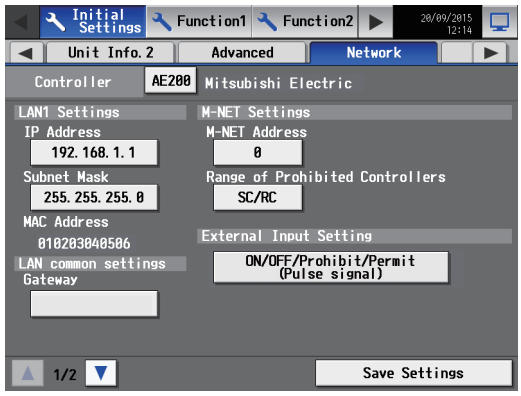
Unit Info. 2



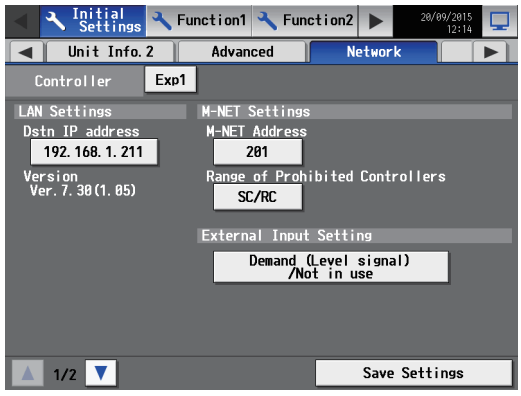
(3) Touch the right triangle button to display the [Network] tab, and touch it.
Referring to section 5-1-5 “Network”, make sure that [AE200] is selected as [Controller], set the AE-200’s IP address and subnet mask, and then touch [Save Settings].
The AE-200 will reboot.
When the reboot process is complete, 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.



(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].



(5) A message “Collecting connected equipment status data. Please wait ...” will appear.

(6) Upon completion of collection of connected equipment status data, a message “Saved successfully.” will appear, and the version of the AE-50/EW-50 will appear.
When a message other than the ones listed above appears, check the IP address setting, LAN wiring, and AE-200/AE-50/EW-50 versions. If there is a mismatch, update the software and match the versions, and then start over from step (4).

Note: When there is a mismatch in the versions, [Unable to send the data due to AE-50/EW-50 communication error.] will appear. Make sure that the versions of AE-200/AE-50/EW-50 match.

Go to the next section.

4-3. 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 Integrated Centralized Control Web.

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.
When setting the clock on multiple centralized controllers, set the clock from the Integrated Centralized Control Web, not from the LCD of AE-200.

Note: Set the date and time periodically. (Once every three month. Once a month recommended)

Note: The “Integrated Centralized Control Web” license is required to set the date and time for multiple centralized controllers. For details, refer to [Settings] – [Initial settings] – [Date and Time Settings] in the Instruction Book (Integrated Centralized Control Web).

Note: When the power is turned on for the first time, the language selection screen will appear. Select a language to use in the system.

[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.

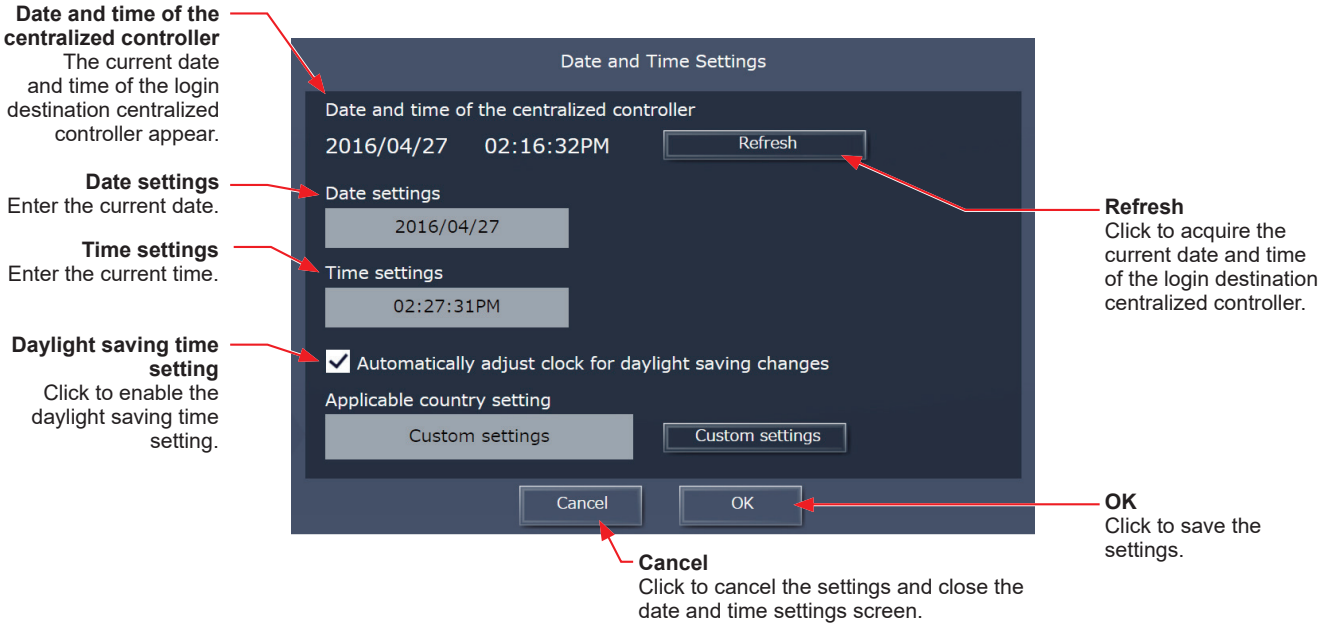
Note: The setting will not be saved until [Save Settings] is touched. Make sure to touch [Save Settings] after the setting is completed.



[2] When setting date and time on the Integrated Centralized Control Web

In [Settings] – [Initial settings] – [Date and Time Settings] in the menu, the current date and time of the login destination centralized controller can be acquired and the current date and time can be set for all centralized controllers.

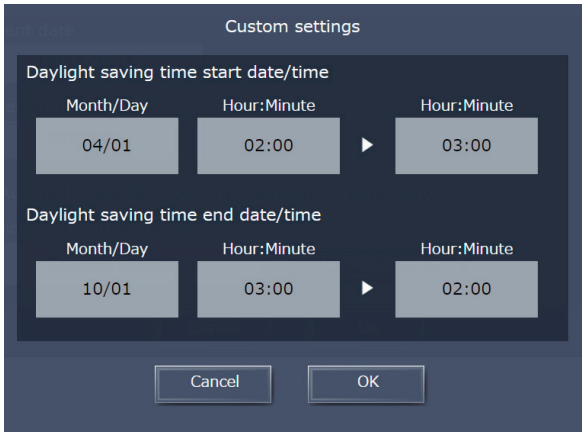
Enter the current date and time, and click [OK] to save the settings to the centralized controllers.



(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, click [Custom settings] on the left, and select the applicable country.

If the applicable country is not there, select [Custom settings] on the right instead to open the Custom settings screen, and configure the daylight saving time setting.



Note: The date and time set on this screen will be sent to all AE-200/AE-50/EW-50 controllers that are managed by the Integrated Centralized Control Web, and be reflected to all air conditioning units connected to them.
- Setting the time on the Date and Time settings will not change the clock on your computer. Set the time on your computer first before setting the time on the Date and Time settings.

Note: Schedule settings are sent to the AE-200/AE-50/EW-50, based on the time of the PC that uses the Integrated Centralized Control Web.
If the current time is moved forward on this screen and the time differs from the PC time, the operation that was scheduled to take place during the time that was skipped will not be performed.

Note: When the daylight saving time is set, time difference may occur between the centralized controllers AE-200/AE-50/EW-50 and the PC, adversely affecting the schedule settings and energy management function. When setting the daylight saving time, be sure to set the same time for the PC time.

Note: The Integrated Centralized Control Web will not function properly if the PC time is not synchronized with the AE-200/AE-50/EW-50 time.

4-4. Software Update

Refer to the AE-200/AE-50 Installation Manual for how to update the software for AE-200/AE-50.
Refer to the EW-50 Installation and Instructions Manual for how to update the software for EW-50.

4-5. License registration for optional functions

There are three ways to register the license — from the AE-200's LCD, the Integrated Centralized Control Web, and the Initial Setting Tool.

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].

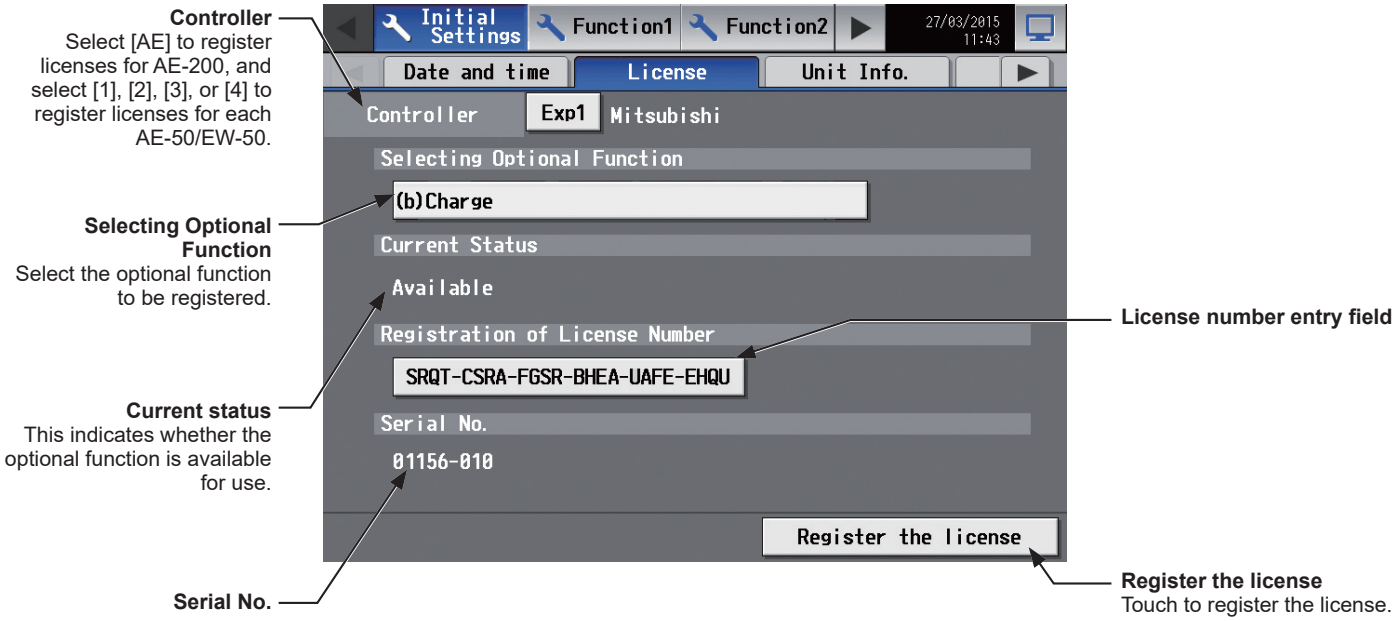
Note: The current date and time settings are required for license registration. Refer to section 5-1-3 "Date and time" for date and time settings.

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.



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

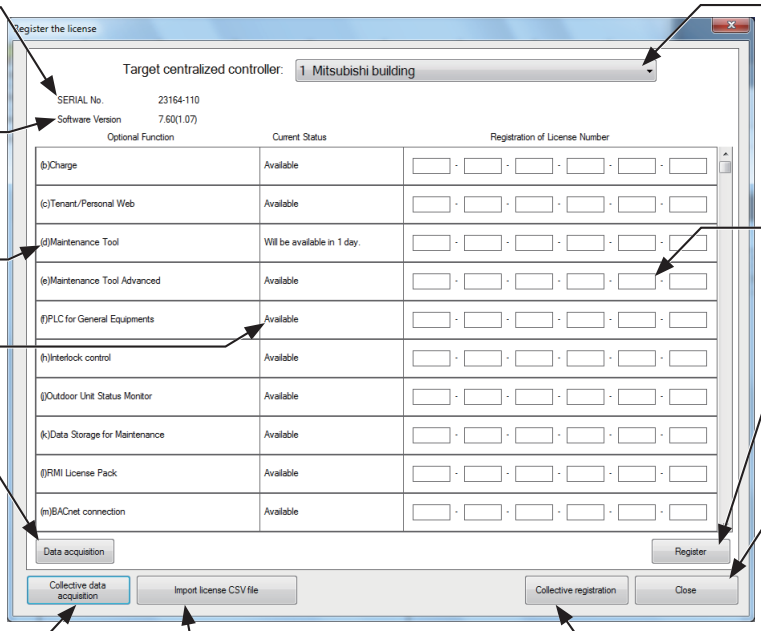
(2) In the "License number entry field" button, enter the license number and touch [Register the license].
In the [Current Status] section, a word [Available] will appear.
If the registration is unsuccessful, verify that the selected optional function and the license number are correct.
Note: Alphabet "O" and "I" are not used for license number.

[2] When registering a license on the Initial Setting Tool

Licenses can be registered either individually on the Initial Setting Tool, or collectively by importing a CSV file that contains license information.

Click [Option] in the tool bar, and then click [License registration].

Note: Contact your dealer as regards the CSV file that contains license information.



SERIAL No.
The serial number of the centralized controller will appear.

Software Version
The software version of the centralized controller will appear.

License name

Current status
This indicates the license usage status.

Data acquisition
Click to acquire the license information of the selected centralized controller.

Collective data acquisition
Click to acquire the license information of all centralized controllers.

Import license CSV file
Click to import the CSV file that contains license information and to automatically register the license numbers.

Collective registration
Click to collectively register the licenses for all centralized controllers.

Close
Click to undo the changes made and return to the previous screen.

Register
Click to register the license for the selected centralized controller.

Registration of License Number
Enter the license number.

Target centralized controller
From the list of the centralized controllers with connection configuration set, select one to register the license.

(A) Individually registering the licenses

(1) From the list of the centralized controllers, select one to register the license.

(2) Click [Collective data acquisition].

(3) Enter the license numbers to be registered, and click [Register].

Note: Make sure to perform [Collective data acquisition] or [Data acquisition] before registering the license.

(B) Collectively registering the licenses by importing the CSV file that contains license information

(1) Click [Collective data acquisition].

(2) Click [Import license CSV file].

(3) Check that the license numbers are displayed in the “Registration of License Number” section, and click [Collective registration].

Note: Make sure to perform [Collective data acquisition] or [Data acquisition] before registering the license.

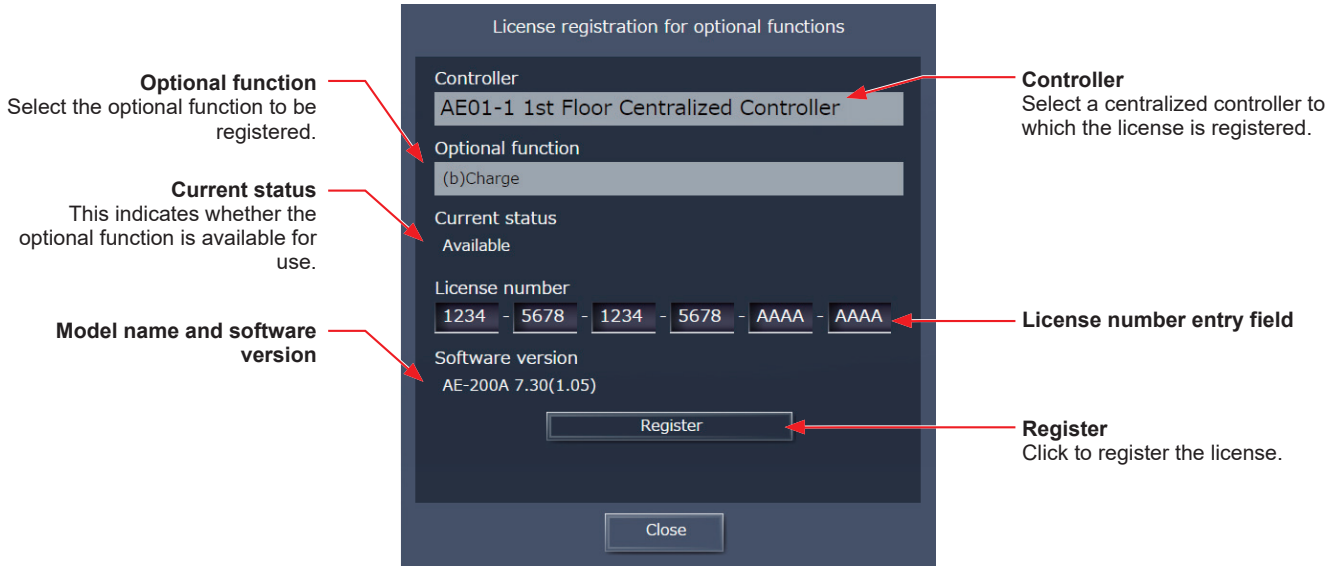
Note: If the CSV file that contains license information is edited using programs such as Microsoft® Excel, the file contents will be altered and the file cannot be imported.

[3] When registering a license on the Integrated Centralized Control Web

In [License Registration], register licenses for optional functions.

Please ask your dealer for how to purchase a license for optional functions.

Note: The license registration is required for all connected centralized controllers AE-200/AE-50/EW-50. Switch the centralized controller in [Controller] to register the license respectively.



(1) After logging in on the login screen, select [Settings] – [Initial settings] – [License Registration] in the menu to display the license registration screen.

(2) In [Optional function], select the optional function to be registered.
The current availability will appear in the “Current status” section.

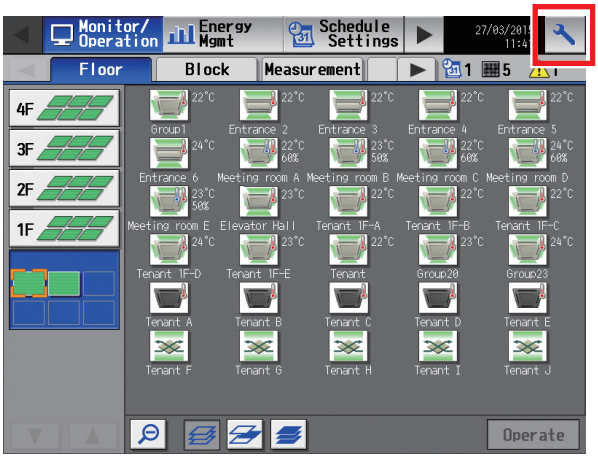
(3) In [License number entry field], enter the license number and click [Register].
In “Current status”, “Available” will appear.
If the registration is unsuccessful, verify that the selected optional function and the license number are correct.
Note: Alphabet “O” and “I” are not used for license number.

5. Settings on the LCD

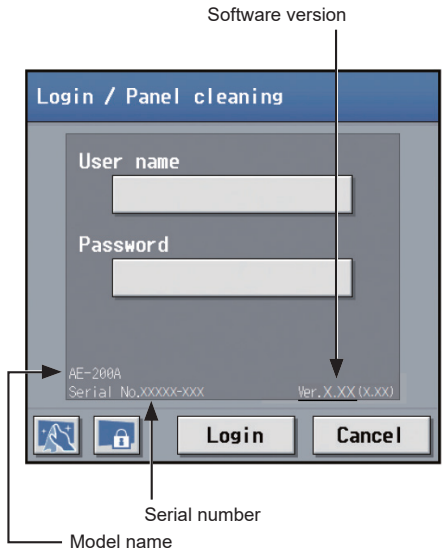
5-1. Initial Settings

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 model name and the serial number will appear in the lower left of the window, and the software version information will appear in the lower right of the window.



Accessible users and available functions are shown in the table below.

User	Available functions
Maintenance user	All functions
Building manager	The items to which access rights have been given on the [User Info] screen are available.

Note: A maintenance user can specify the functions to be made available for building managers. Refer to the Instruction Book (Initial Settings) for details.

Default maintenance/building manager user names and the passwords are shown in the tables below.

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: If the default user name and password of maintenance user and building manager were changed, the changed user name and the password will remain active after the controller is updated to a newer version.
Also, if you import the backup data of the changed settings to another AE-200/AE-50, the changed user name and the password will remain active.

AE-200E/AE-50E

For users in the UK

Ver. 7.99 and earlier

User	Default user name	Default password
Maintenance user	initial	init
Building manager	administrator	admin

Ver. 8.00 and later

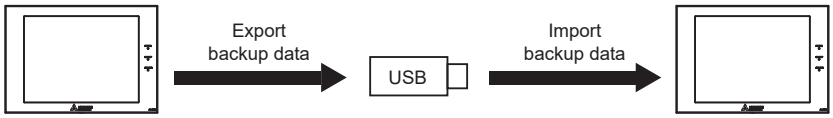
User	Default user name	Default password*1*2	Example default password (DP: ABCDEFGH*3)
Maintenance user	initial	in “DP”	inABCDEFGH
Building manager	administrator	ad “DP”	adABCDEFGH

*1 Default password for AE-200E/AE-50E updated to Ver. 8.00 or later from Ver. 7.99 or earlier
See table for AE-200E/AE-50E (Ver. 7.99 and earlier).

*2 Default password for AE-200E/AE-50E to which the backup data from Ver. 8.00 or later was imported
If the settings data are backed up from the AE-200E/AE-50E that was logged in with the default password and are imported to the AE-200E/AE-50E Ver. 8.00 or later, the new password will be DP of the AE-200E/AE-50E to which the data was imported.

AE-200E/AE-50E
Software version: 8.00
DP: ABCDEFGH
Password of building manager: adABCDEFGH

AE-200E/AE-50E
Software version: 8.00
DP: HGFEDCBA
Password of building manager: adHGFEDCBA



*3 DP can be found on the back cover of the Instruction Book (supplied with the controller).

For users outside the UK

All versions

User	Default user name	Default password
Maintenance user	initial	init
Building manager	administrator	admin

AE-200A/AE-50A

Ver. 7.97 and earlier

User	Default user name	Default password
Maintenance user	initial	init
Building manager	administrator	admin

Ver. 7.98 and later

User	Default user name	Default password*4*5	Example default password (Serial number: 19672-123*6)
Maintenance user	initial	in “Serial number”	in19672123
Building manager	administrator	ad “Serial number”	ad19672123

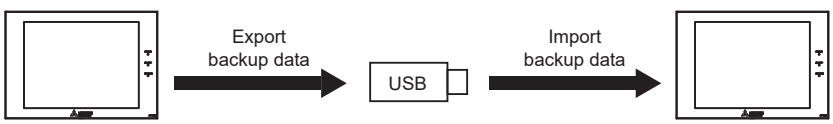
*4 Default password for AE-200A/AE-50A updated to Ver. 7.98 or later from Ver. 7.97 or earlier
The default password varies with the version immediately before the update.
Default password for AE-200A/AE-50A when updated from a version earlier than Ver. 7.98

Version before the update	User	Default user name	Default password after the system has been updated to Ver. 7.98 or later
Ver. 7.10–7.12	Maintenance user	initial	in “Serial number”
	Building manager	administrator	ad “Serial number”
Ver. 7.23–7.97	Maintenance user	initial	init
	Building manager	administrator	admin

*5 Default password for AE-200A/AE-50A to which the backup data from Ver. 7.98 or later was imported
If the settings data are backed up from the AE-200A/AE-50A that was logged in with the default password and are imported to the AE-200A/AE-50A Ver. 7.98 or later, the new password will be the serial number of the AE-200A/AE-50A to which the data was imported.

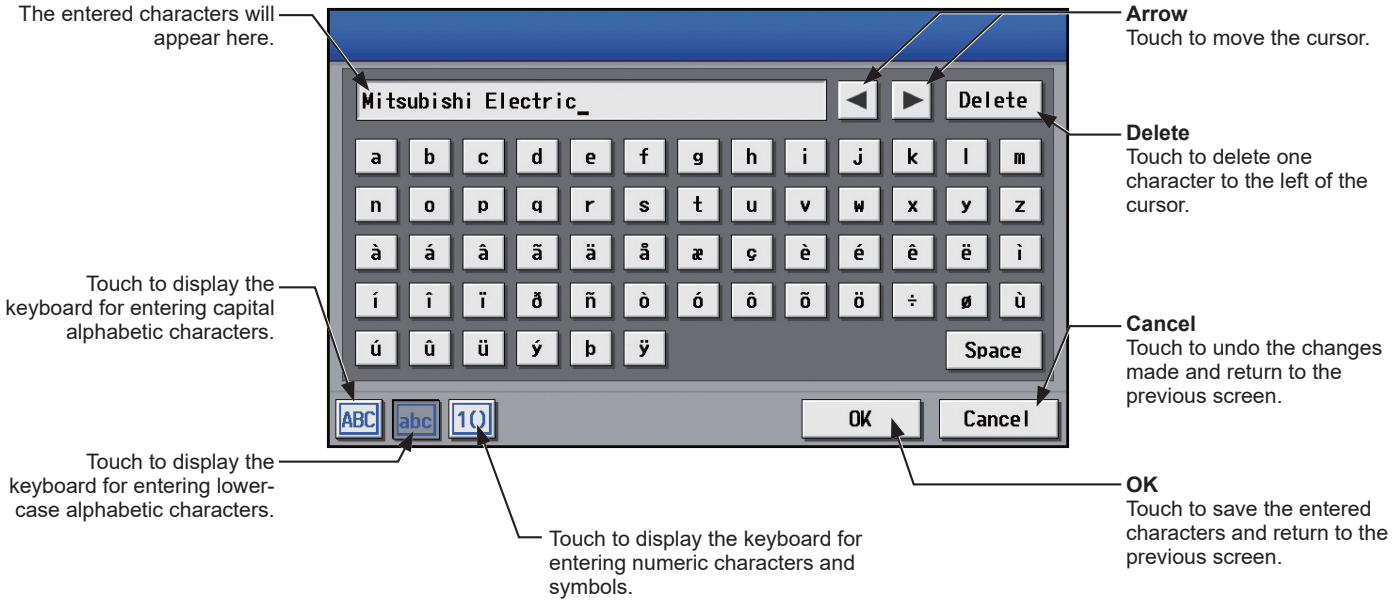
AE-200A/AE-50A
Software version: 7.98
Serial number: 31C71-101
Password of building manager: ad31C71101

AE-200A/AE-50A
Software version: 7.98
Serial number: 19272-124
Password of building manager: ad19272124



*6 Serial number can be found on the login window of the LCD.

[1] Keyboard screen



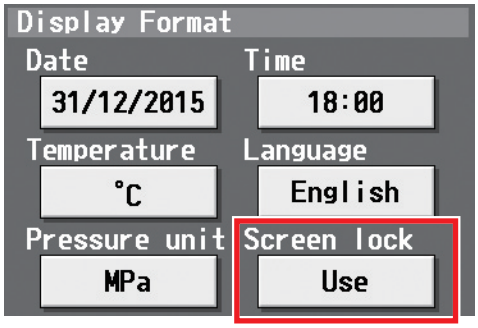
5-1-2. Locking the screen

Locking the screen prevents unauthorized users from accessing.

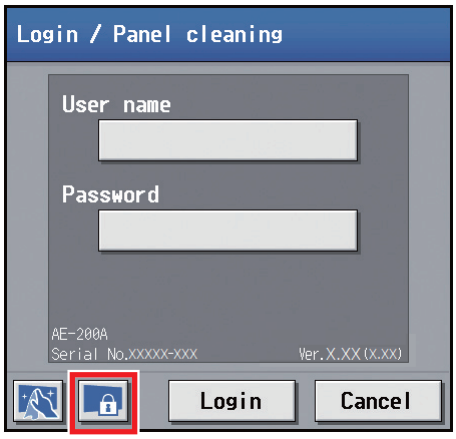
(1) To activate the screen lock function, set the [Screen lock] setting to [Use] on the [Unit Info.] screen under the [Initial Settings] menu.
If the screen lock function is activated, the screen locks when the backlight turns off (after three minutes of not touching the screen).

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.

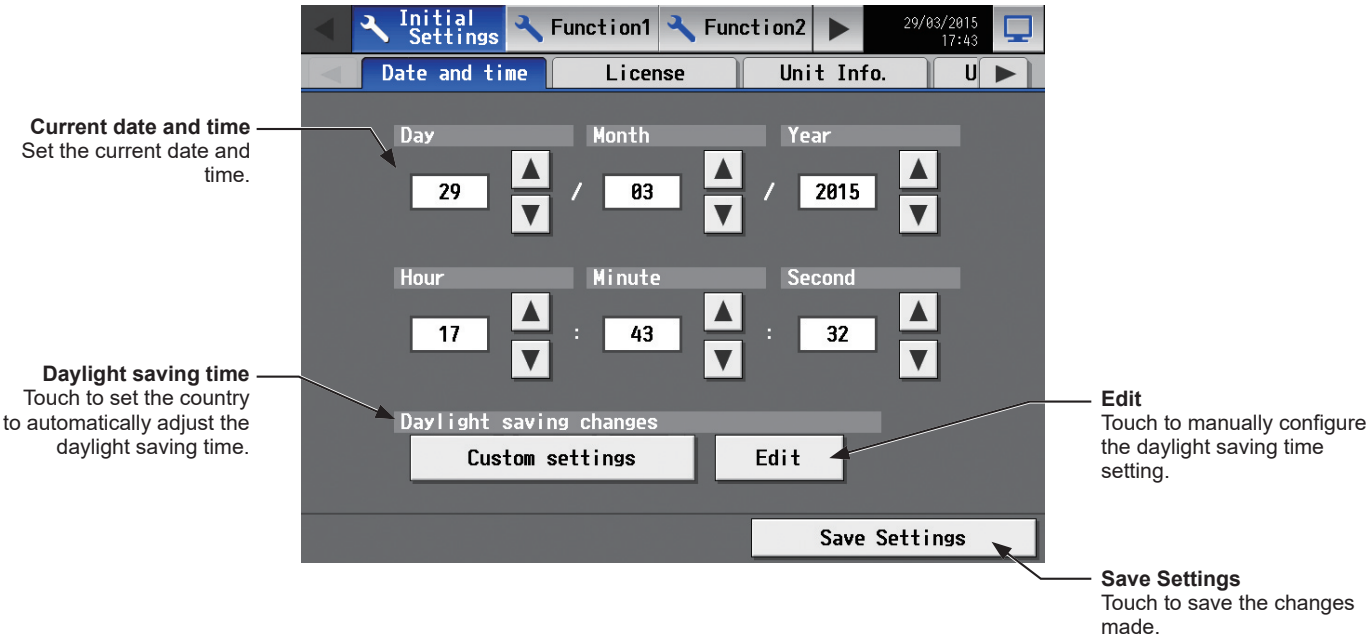
Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.

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.

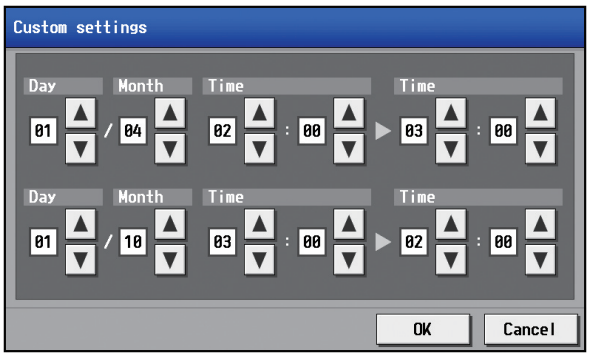


(1) Set the current date and time.

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

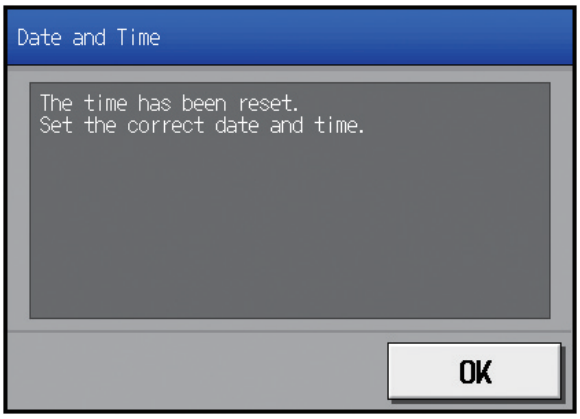
Note: When not using the daylight saving time function, touch “----.”

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].

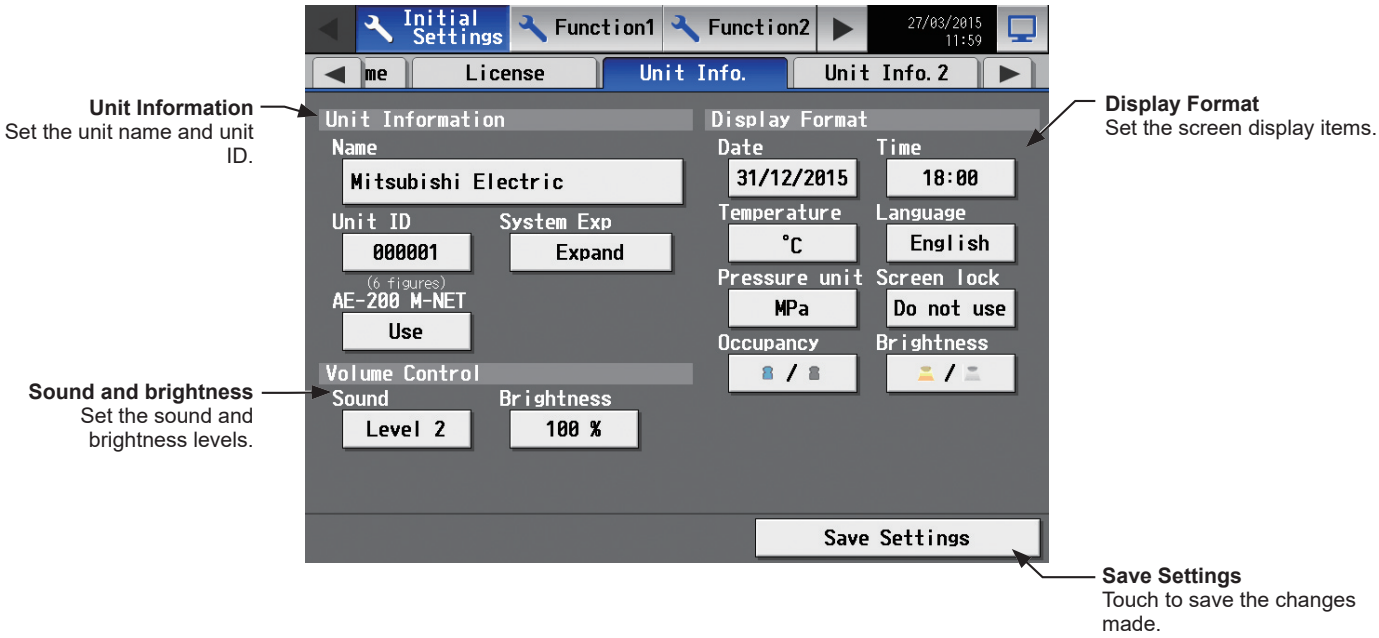
5-1-4. Unit Information

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

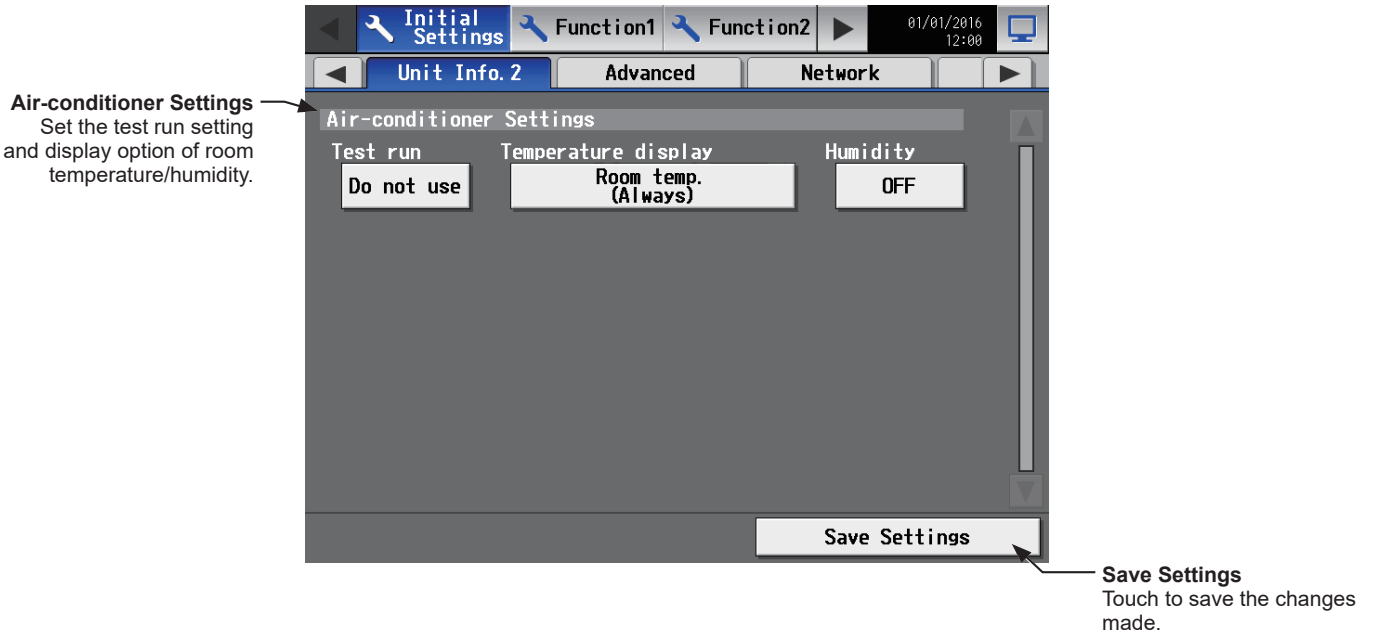
Make necessary basic system settings such as unit settings, display format, sound/brightness settings, use or non-use of test run, and display or non-display of room temperature/humidity, and then touch [Save Settings].

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.

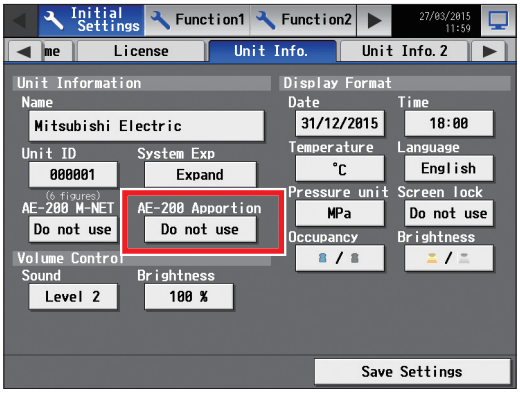
(1) Touch the [Name] button to display the keyboard. Enter the unit name in 40 alphanumeric or symbol characters or less. The name entered here will be used on the screen of the software that controls multiple AE-200 units and will also be used as a sender name in the error notification e-mail and e-mail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

(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 [ºC] or [ºF].

(4) In the [Language] section, select the desired display language.

(5) In the [Pressure unit] section, select [MPa], [PSI], or [kgf/cm^2].

(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.

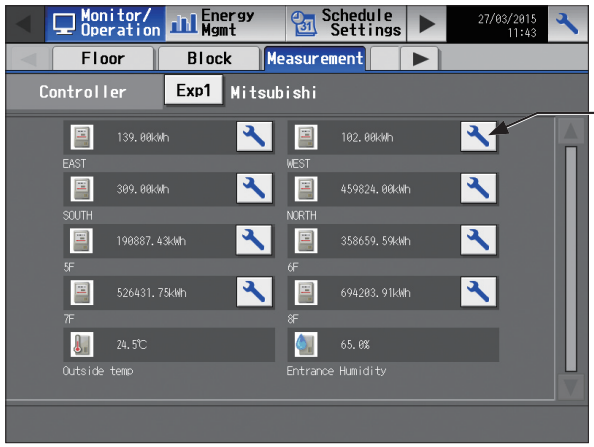
Note: If the ME remote controller has no built-in brightness sensor, the brightness/darkness icons will not be displayed on the [Floor] or [Block] display.

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

[4] Air-conditioner Settings

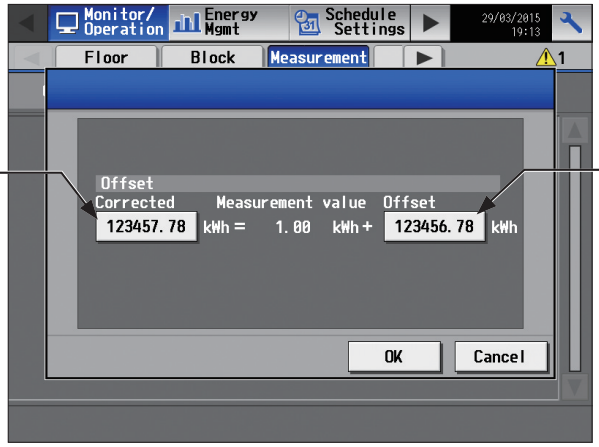
(1) In the [Test run] section, select [Use] or [Do not use]. Select [Use] when performing a test run from the operation settings screen, or when editing the electricity meter reading value on the [Measurement] display.

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 AE-200/AE-50 is turned off or restarted, or 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 [Temperature display] section, select the desired display option for the room temperature or the set temperature to be used on the [Floor] or [Block] display.
Select [Room temp. (Always)] to display the room temperature at all times, [Room temp. (During operation)] to display the room temperature only during operation, [Set temp.] to display the set temperature at all times, [Room temp.(Always)/Set temp.] to display both the room temperature and set temperature at all times, [Room temp.(During op.)/Set temp.] to display the room temperature only during operation and to display the set temperature at all times, and [Hide] not to display the room temperature or the set temperature.

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

Note: The room temperature shown may be higher than the actual temperature especially when the unit is stopped during the Heat mode. Therefore, selecting [Room temp. (During operation)] is recommended when displaying the room temperature.

Note: The outlet air temperature is displayed for the room temperature of outlet air temperature control units.

(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.

Note: The table below summarizes the items that are displayed on the Monitor/Operation screen according to the combination of the settings for “Temperature display” and “Humidity.”

Humidity	Temperature display			
	[Room temp. (Always)] or [Room temp. (During operation)]	[Set temp.]	[Room temp.(Always)/ Set temp.] or [Room temp.(During op.)/ Set temp.]	Hide
OFF	Upper: Room temp. Lower: N/A	Upper: Set temp. Lower: N/A	Upper: Room temp. Lower: Set temp.	Upper: N/A Lower: N/A
ON	Upper: Room temp. Lower: Humidity	Upper: Set temp. Lower: Humidity	Upper: Room temp. Lower: Set temp.	Upper: N/A Lower: Humidity

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.

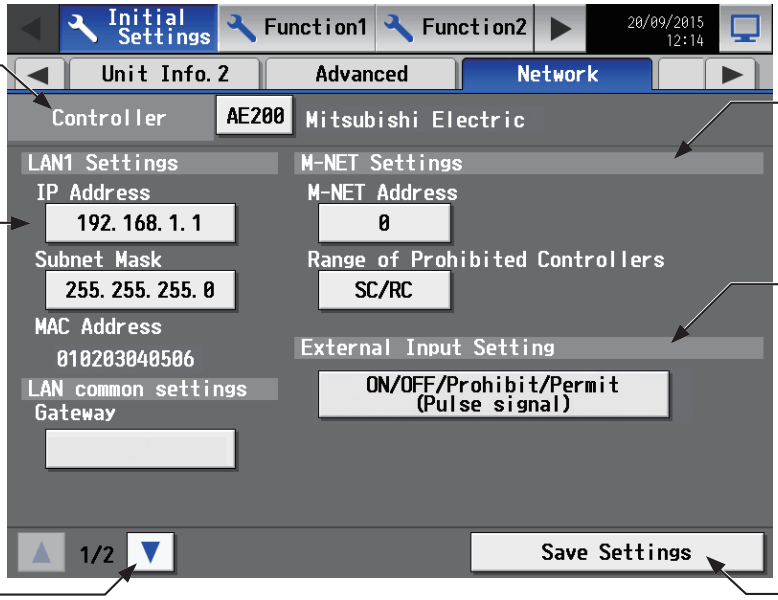
Note: The Network settings may not be accessible if logged in as a building manager.

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.

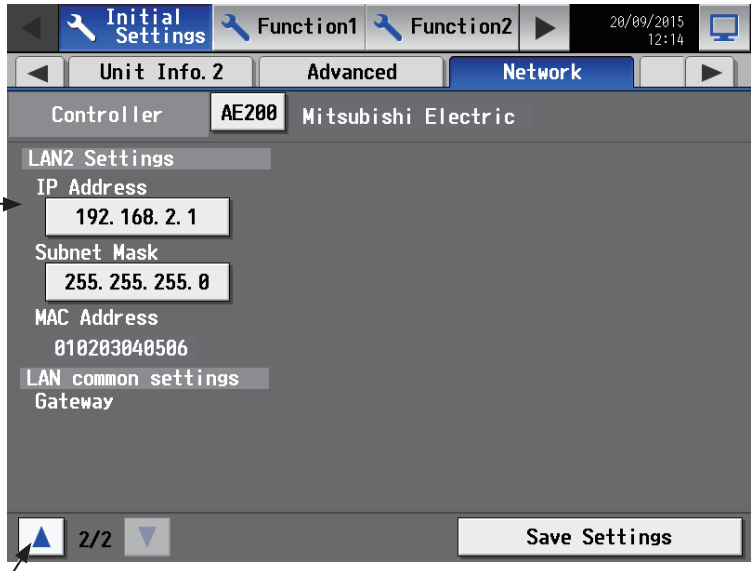
Touch to go to the next page.

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.

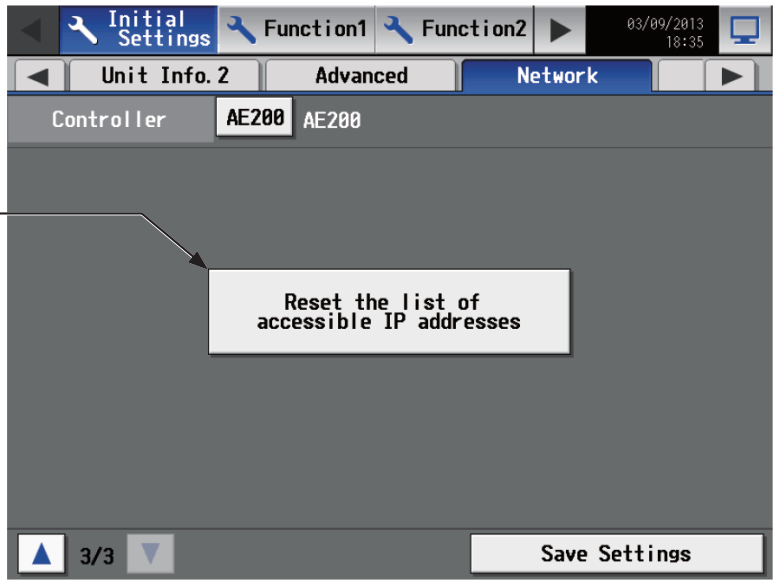
2nd page



LAN2 Settings
Exclusively used for BACnet® function *1.

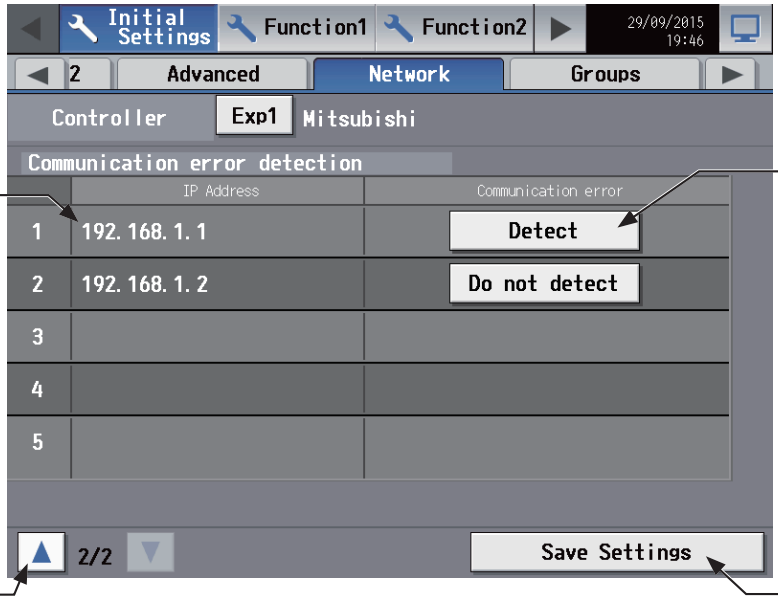
Touch to go to the previous page.

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



Reset the list of accessible IP addresses
Touch to reset the accessible IP address list.

(When connecting one or more expansion controllers)

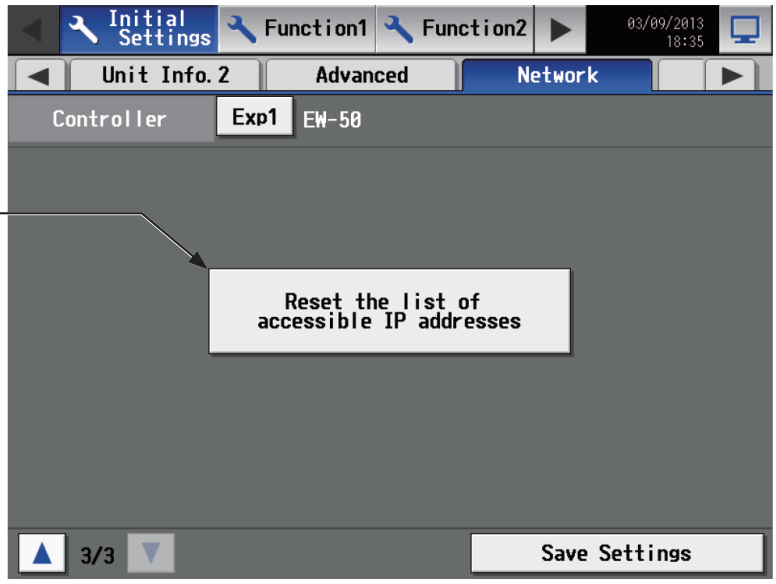


IP address

Detect communication error

Touch to go to the previous page.

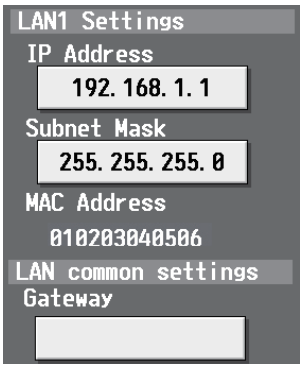
Save Settings
Touch to save the changes made.



Reset the list of accessible IP addresses
Touch to reset the accessible IP address list.

[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 cable 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.

Note: A communication error "6920" will be detected by the AE-50/EW-50 when the AE-200's IP address is changed with the AE-50/EW-50 connected. In the [Communication error detection] section in the [Network] screen, change the communication error detection setting for the previous IP address from "Detect" to "Do not detect."

(3) Enter [255.255.255.0] in the [Subnet Mask] field (only when the IP address is [192.168.1.*]).

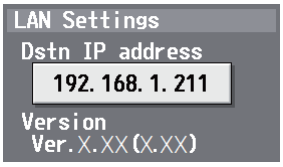
Note: If [255.255.255.0] is entered, set the IP addresses of all AE-50 units to [192.168.1.*].

(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 IP address does not match the ones that have been set on the AE-50/EW-50.

Note: AE-50/EW-50 will not operate properly and the AE-50/EW-50 software version will not appear if the versions of AE-200 and AE-50/EW-50 do not match regardless of the correctness of the entered IP address. Update the software so that the versions match.

(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.



(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.)



(1) Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to make settings for each AE-200, AE-50, and EW-50 individually.

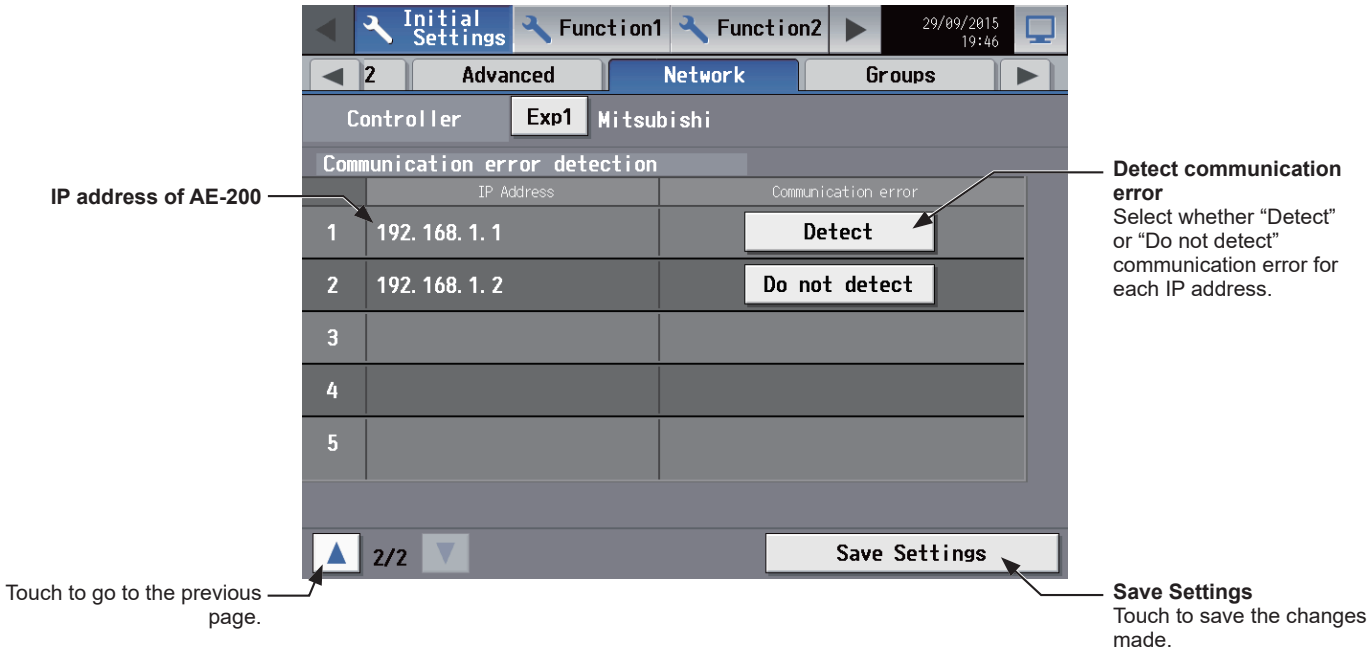
(2) Select [Demand (Level signal)/Not in use], [Emergency Stop (Level signal)], [ON/OFF (Level signal)], or [ON/OFF/Prohibit/Permit (Pulse signal)]. Refer to the Technical Manual for details.

[5] Communication error detection

By switching the communication error detection setting, communication error between AE-200 and AE-50/EW-50 (6920) can either be detected or not detected by the AE-50/EW-50.

Note: This settings screen will appear when making the settings for AE-50/EW-50 on the AE-200's LCD, or when making the settings on the AE-50's LCD.

Note: When the IP address of AE-200 is changed, make sure to set the communication error detection setting for the IP address of the AE-200 before change to "Do not detect." If not set, AE-50/EW-50 will detect a "6920" error for the IP address of the AE-200 before change.



(1) Select whether "Detect" or "Do not detect" communication error for each IP address.
Select "Detect" for the IP address of the AE-200 that is connected.
Select "Do not detect" for the IP address of the AE-200 that is not currently connected.

[6] Reset the list of accessible IP addresses

You can reset the list of accessible IP addresses that is made on the access restriction settings screen of the Initial Setting Tool.
Use this function if you forget the IP address to connect the centralized controller from the Initial Setting Tool or in similar situations.

(1) Select the device of which accessible IP address list you want to reset by touching the controller selection button.

(2) Touch [Reset the list of accessible IP addresses], and the selected device will restart.



Note: If you select an expansion controller, it will restart when you return to the operation screen.

5-1-6. Groups

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

Register the groups of air conditioning units (including outlet air temperature control units), LOSSNAY units (ventilators), Air To Water (PWFY) units, AHC, HWHP (CAHV, CRHV) units, chiller units, MEHT-CH&HP units, or general equipment to be connected to the AE-200/AE-50/EW-50, and then touch [Save Settings].

Note: Register HWHP (QAHV) units by following the procedure in section 5-1-7 “HW Supply”.

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

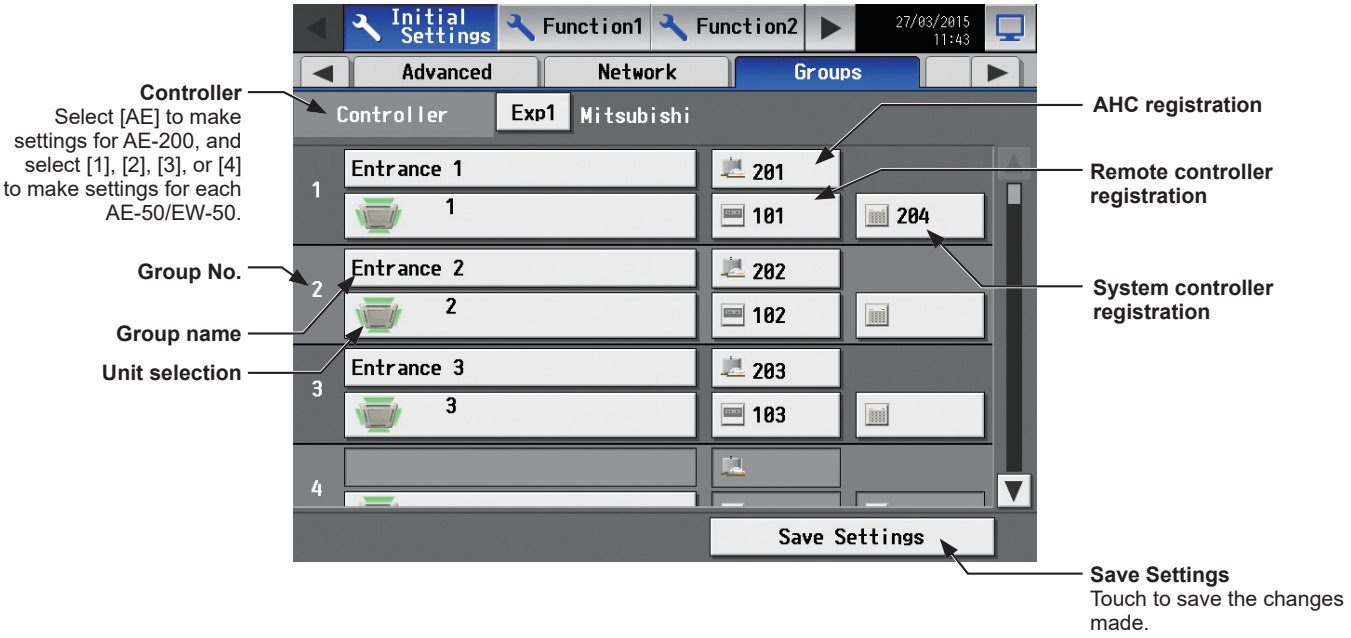
Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.

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.

Note: When registering LOSSNAY units or OA Processing units, do not combine the units that support Night Purge function and the units that do not in one group.

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.



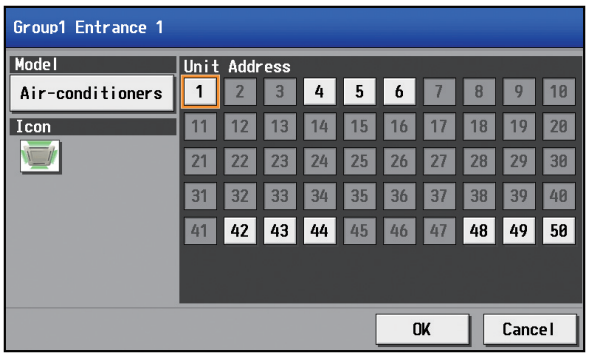
[1] Setting group names

(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, HWHP (CAHV, CRHV) units, chiller units, or MEHT-CH&HP units to a group

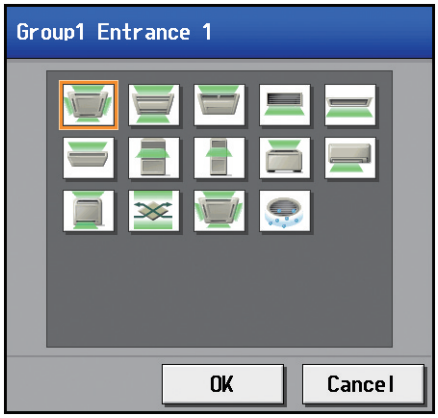
(1) To register air conditioners, Air To Water (PWFY) units, LOSSNAY units, HWHP (CAHV, CRHV) units, chiller units, and MEHT-CH&HP units to each group, touch the “Unit selection” button under the target group name. A screen to select the units will appear.



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 of air conditioners, Air To Water (PWFY) units, LOSSNAY units, and HWHP (CAHV, CRHV) units can contain up to 16 units.
Note: Each group of chiller units can contain up to 6 units. Register chiller units EACV-P900*** and EACV-P1500/1800*** to different groups. As for EACV-P1500/1800*** units, register system leader units and simultaneous operation units to different groups.
Note: Each group of MEHT-CH&HP units can contain up to 1 unit.
Note: Units other than general equipment cannot be combined with general equipment in one group. To register general equipment to a group to which units other than general equipment are already registered, delete the existing registration first before registering general equipment to it.
Note: Units other than outlet air temperature control units cannot be combined with outlet air temperature control units in one group.
Note: The addresses of the units that have been registered to other groups will appear with a gray background and cannot be selected.
Note: When connecting chiller units and other units together, count each chiller unit and MEHT-CH&HP unit as three air conditioning units, and make sure the number of units that are equivalent to the number of air conditioning units will not exceed 50 units.

(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].

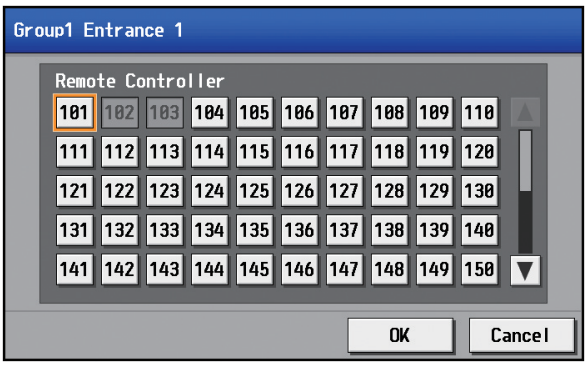


[3] Registering remote controllers to a group

(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.

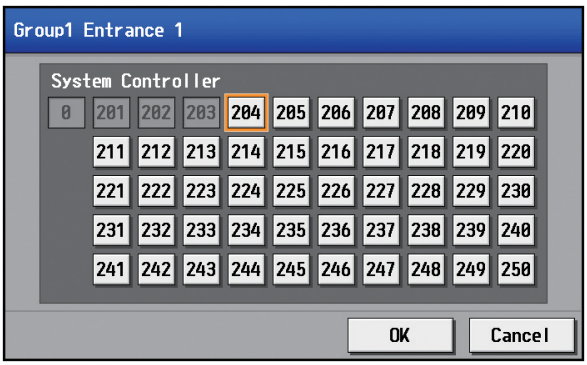


[4] Registering system controllers to a group

(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.

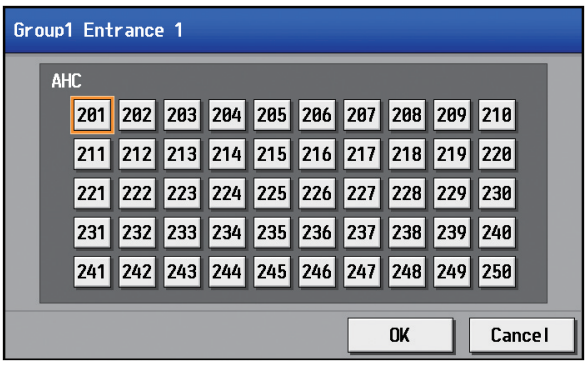


[5] Registering AHC to a group

(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.

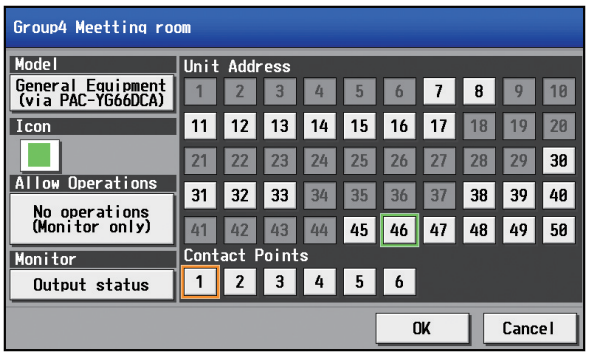
Select the address number of the AHC to be registered.
The selected unit address will appear with an orange frame. Touch again to deselect.

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 units other than air conditioners are registered.



[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.

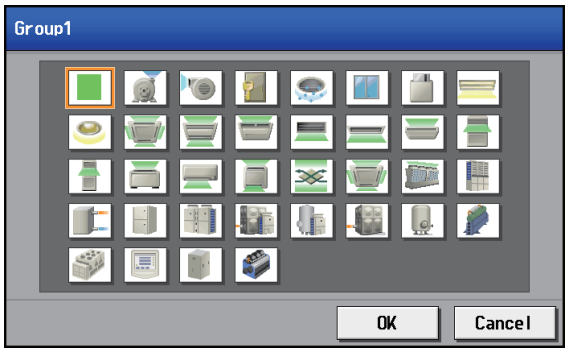
The selected number will appear with an yellow-green frame.

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: Units other than general equipment cannot be combined with general equipment in one group. To register general equipment to a group to which units other than general equipment are already registered, delete the existing registration first before registering general equipment to it.
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. HW Supply

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

Set the address, group names, and detail settings for each group of HWHP (QAHV) unit that is connected to AE-200/AE-50/EW-50. Touch [Save Settings] when done.

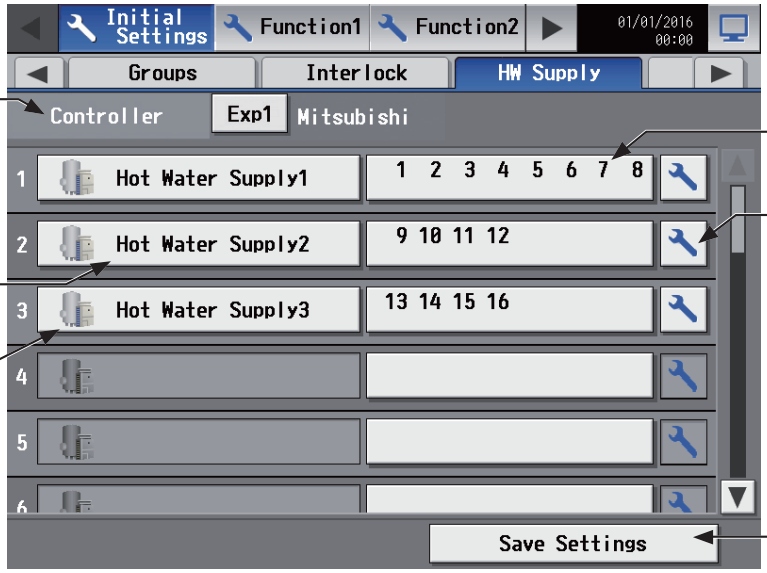
Note: Group settings for HWHP (QAHV) units can only be set on the AE-200/AE-50's LCD.

Note: The HW Supply 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

- Settings must be made while communication between HWHP (QAHV) and AE-200/AE-50/EW-50 is established. HWHP (QAHV) units cannot be connected in the EW-50 system.
- 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.



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.

Group name

Group icon
Indicates group's operation status (normal/error). A question mark indicates that the initial startup procedure has not been completed.

Unit selection

Detail settings

Save Settings
Touch to save the changes made.

[1] Setting group names

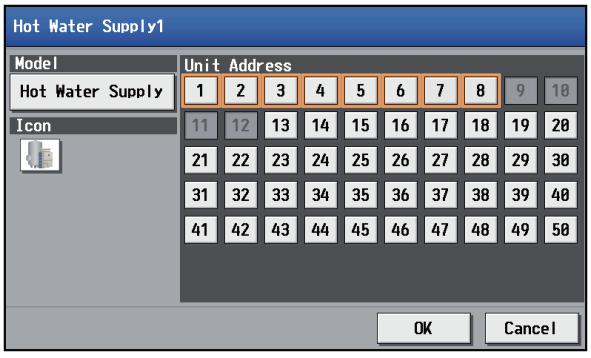
(1) Touch the "Group name" button to display the keyboard. Enter the group name in 20 alphanumeric or symbol characters or less.

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

[2] Registering HWHP (QAHV) units to a group

(1) To register HWHP (QAHV) units to each group, touch the "Unit selection" button located at the right of the target group name.
A screen to select the units will appear.

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

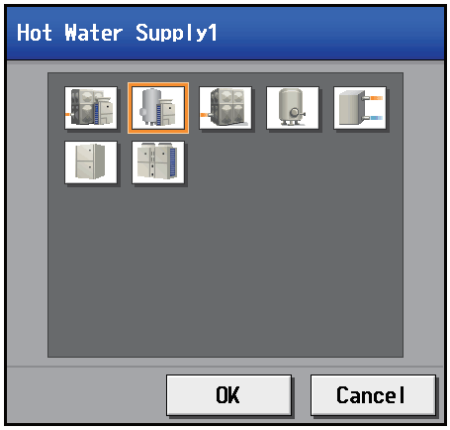


Note: Up to 16 HWHP (QAHV) units can be registered to each group, and up to 24 systems can be registered to each AE-200/AE-50/EW-50.

Note: When controlling HWHP (QAHV) units, air conditioning units, and other equipment under the same AE-200/AE-50/EW-50, count each HW Supply units as equivalent to two air conditioning units, and make sure the number of units that are equivalent to the number of air conditioning units will not exceed 50 units.

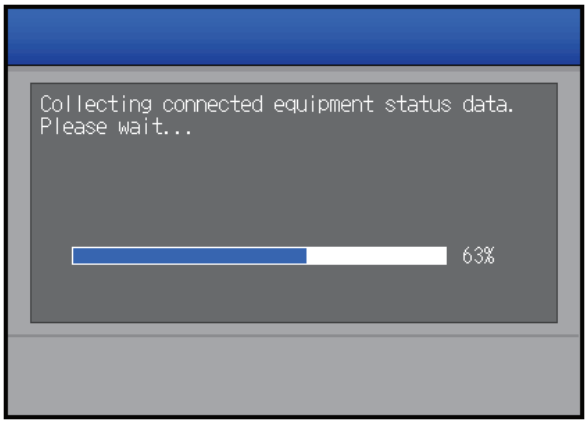
Note: HWHP (QAHV) units and other models of units cannot be registered to the same group.

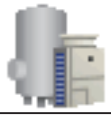
(2) To change the unit icon to be used, touch the icon.
A screen to select an icon will appear. Select an icon to be used, and touch [OK].



[3] Initial startup of HWHP (QAHV)

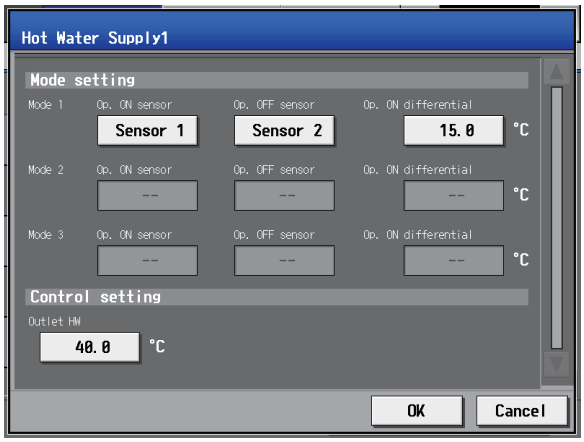
(1) When done registering all HW Supply unit groups, touch [Save Settings].
Initial startup procedure for HW Supply units will start.
When the process is completed, the icon will change to indicate its completion.
Note: Initial startup procedure will take 2 to 5 minutes.
Note: If an error occurs during the initial startup procedure, check HWHP (QAHV) units for proper connections.



Initial startup procedure not complete	Initial startup procedure complete	Error
		

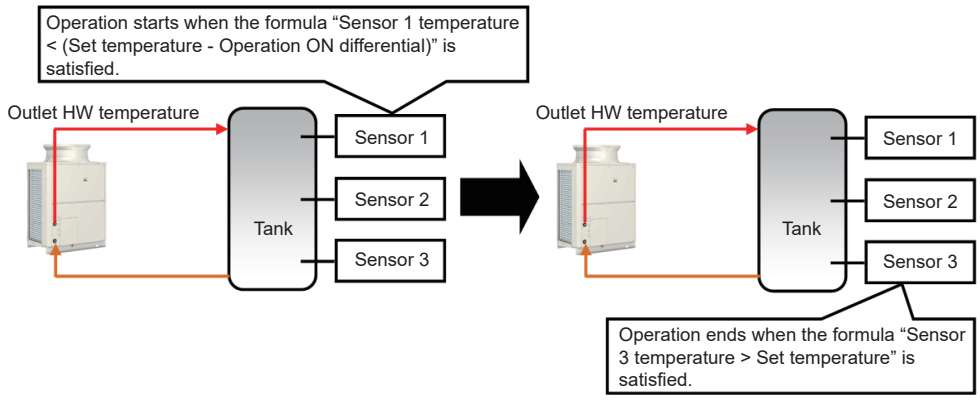
[4] Detail settings for HWHP (QAHV) units

(1) In the [HW Supply] screen, touch the “Detail settings” button.
The detail settings window will appear.
Note: Only the “Detail settings” buttons for the HW Supply groups whose initial startup procedure has been completed are available for selection.

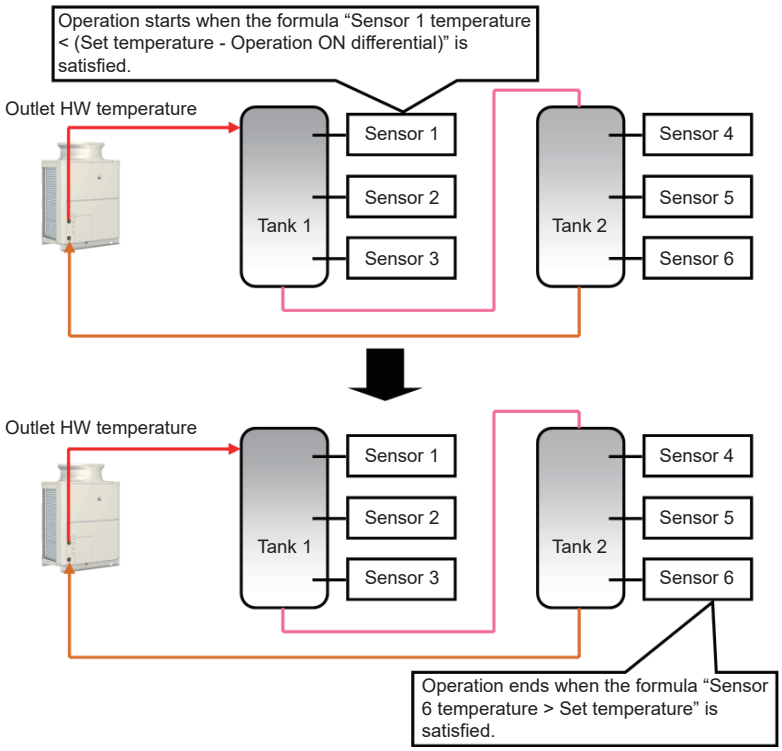


(2) Set the settings that are related to operation modes under “Mode setting.”
Set the number corresponding to the sensor to be used to determine the “Thermo-ON” status under “Operation ON sensor.”
Set the number corresponding to the sensor to be used to determine the “Thermo-OFF” status under “Operation OFF sensor.”
Set “Operation ON differential” to a temperature between 0.5ºC (1ºF) and 23.0ºC (46ºF).
Units will start operating when the differential between the set temperature and the temperature setting for “Operation ON sensor” exceeds the value set for “Operation ON differential.”

Note: Specify the “Operation ON sensor” with a number equal to or smaller than that of the “Operation OFF sensor.”
Note: Operation will be carried out as shown in the figure below when “Sensor 1” is set for “Operation ON sensor” and “Sensor 3” is set for “Operation OFF sensor” in [Mode setting] for 3-sensor-type model of units.



Note: Operation will be carried out as shown in the figure below when “Sensor 1” is set for “Operation ON sensor” and “Sensor 6” is set for “Operation OFF sensor” in [Mode setting] for 6-sensor-type model of units.



(3) Set “Outlet HW ” to a temperature between 40.0ºC (104ºF) and 90.0ºC (194ºF).

(4) Touch [OK] to enable the settings.

[5] Completing the settings for HWHP (QAHV) units

(1) When done setting the detail settings for all HW Supply unit groups, touch [Save Settings].
Note: It takes 2 to 5 minutes to transmit the settings.

5-1-8. Interlocked LOSSNAY

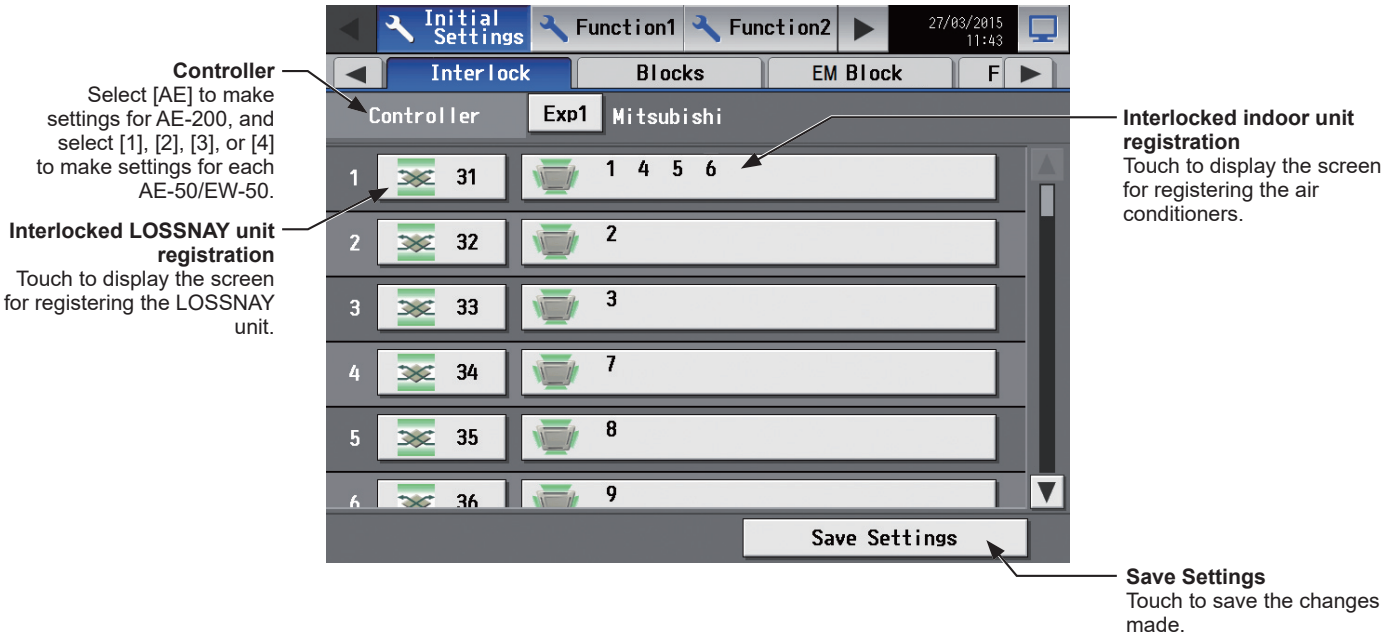
The ON/OFF status of the LOSSNAY unit can be interlocked with the operation of indoor units.

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].

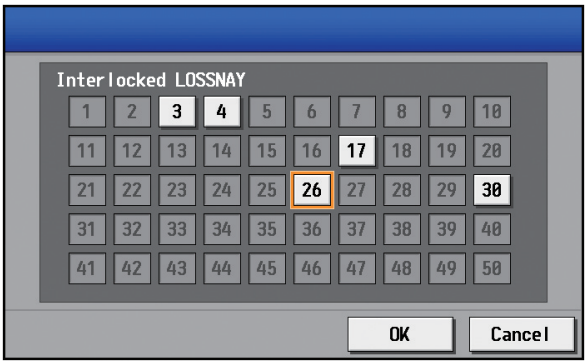
Note: The Interlocked LOSSNAY settings may not be accessible if logged in as a building manager.
Note: If the system is connected to a TG-2000A, make or change the settings from the TG-2000A.
Note: The ON/OFF status of the indoor units are not interlocked with the ON/OFF status of the LOSSNAY unit.
Note: 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 LOSSNAY settings between the units connected to the AE-200 and the AE-50/EW-50 cannot be made on this screen, but can be made on the Interlock Control settings screen. (Refer to section 6-7 "Interlock Control" for details.)

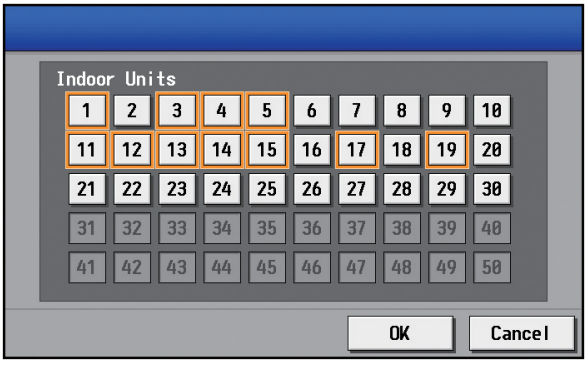


(1) Touch the "Interlocked LOSSNAY unit registration" button. A screen to select the units will appear.
Select the address number of the LOSSNAY unit to be registered. The selected unit address will appear with an orange frame.
Touch again to deselect.



(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 air conditioners.



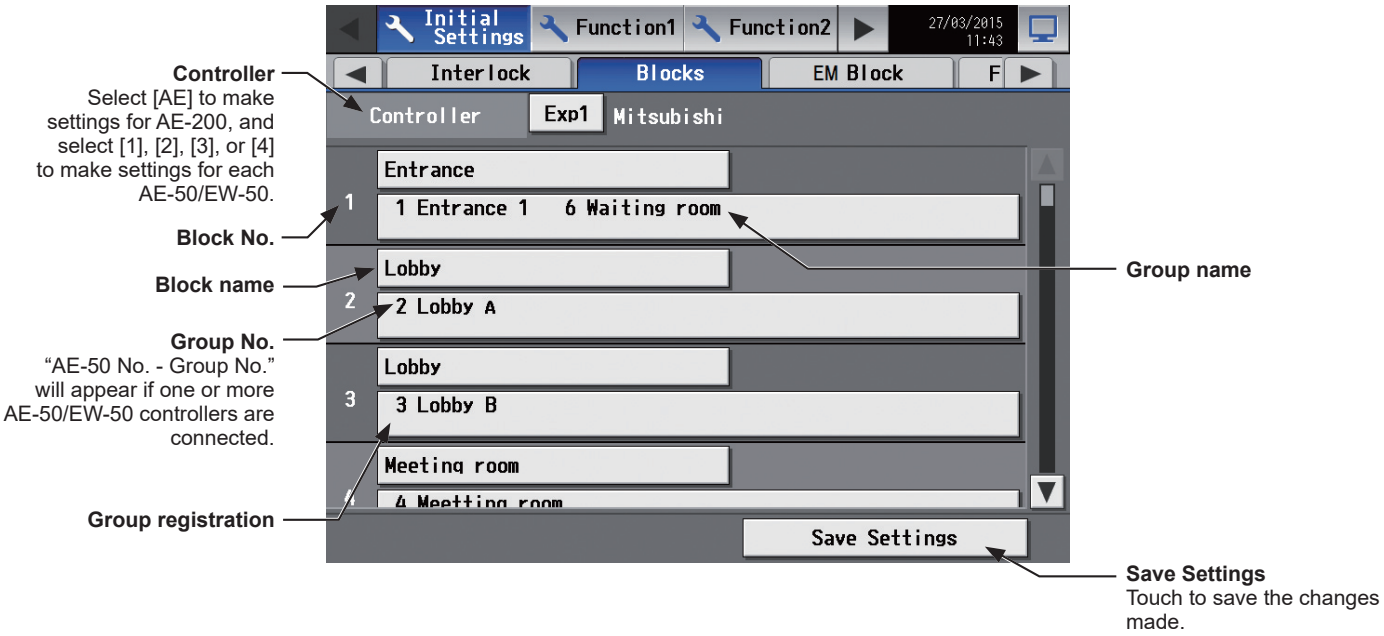
5-1-9. Blocks

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.
Note: The ventilation will stop when the Peak Cut control runs for the LOSSNAY units or OA Processing units that perform Night purge operation. For this reason, do not register the LOSSNAY units and OA Processing units that perform Night purge operation in the same block.

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.

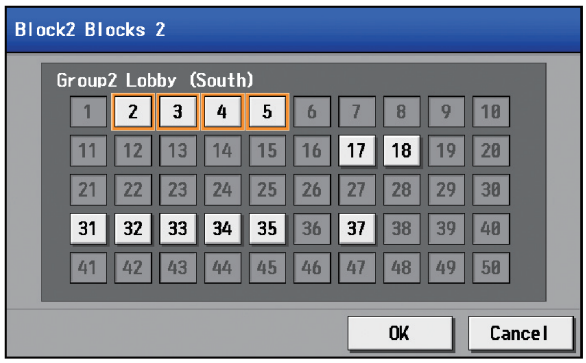


(1) Touch the "Block name" button to display the keyboard. Enter the group name in 20 alphanumeric or symbol characters or less.

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

(2) 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, QAHV) unit groups, chiller unit groups, and MEHT-CH&HP unit groups cannot be registered to a block.

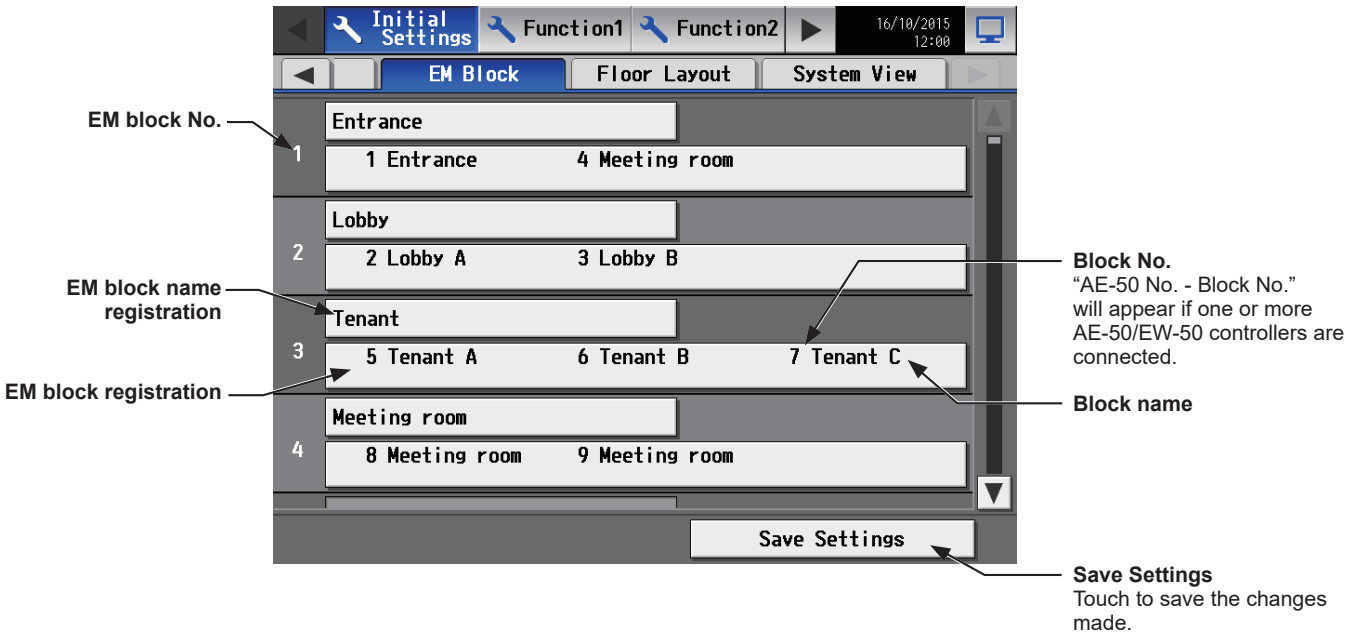


5-1-10. EM Blocks

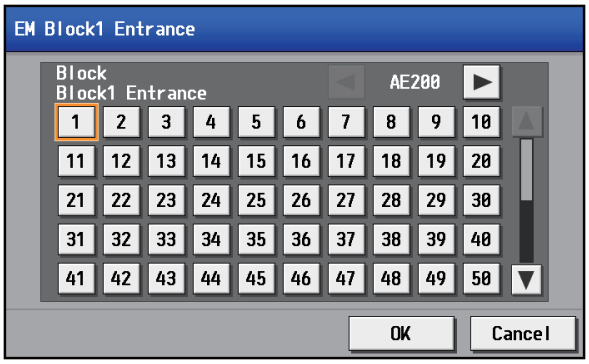
Carrying out EM block (energy management block) settings enables batch status monitoring and operation of multiple blocks covering AE-200/AE-50/EW-50.

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.

(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 '

5-1-11. Floor Layout

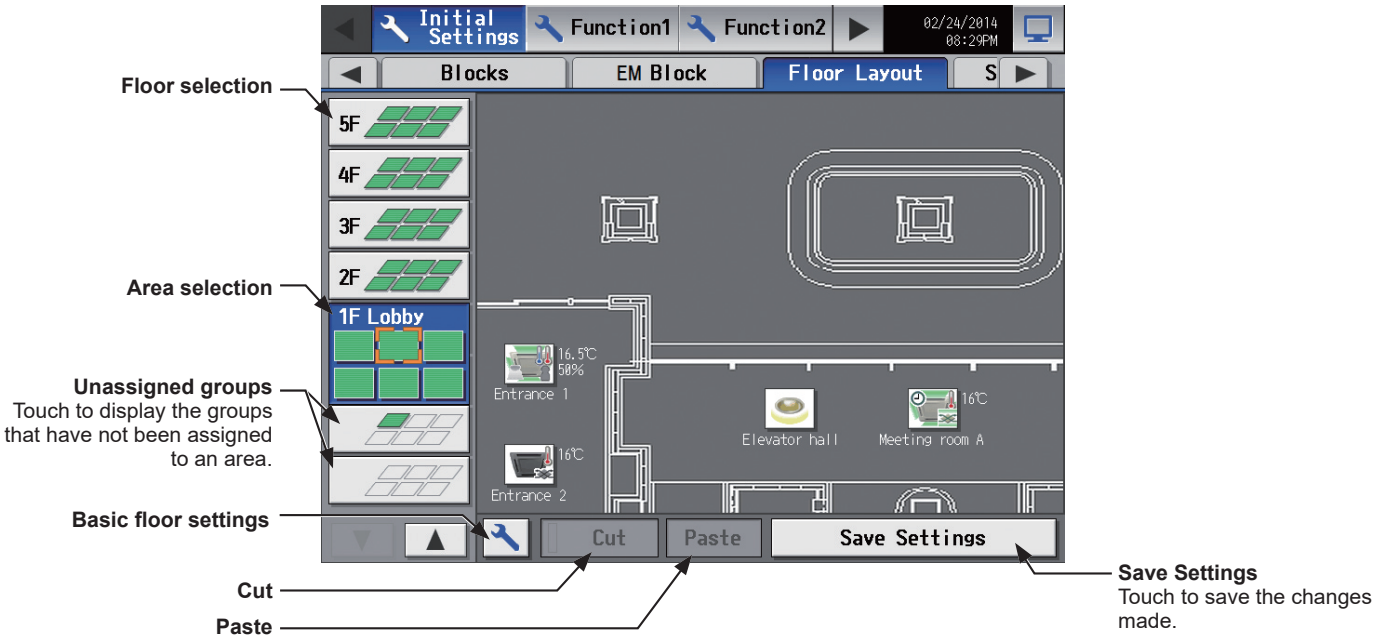
The floor layout on the [Floor] display under the [Monitor/Operation] menu can be changed, and the display position of the groups on the floor can be changed.

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.
Note: Groups of air conditioners, Air To Water (PWFY) units, LOSSNAY units, and general equipment can be assigned to the floor layout.

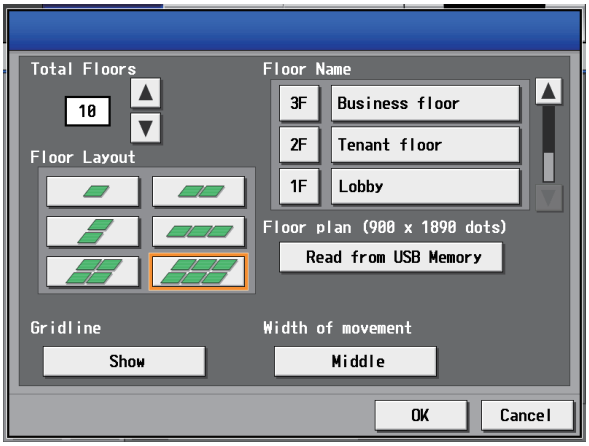
Important

- 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.)



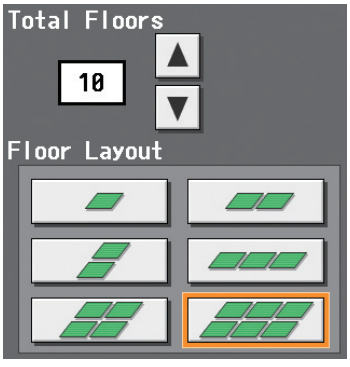
[1] Basic floor settings

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

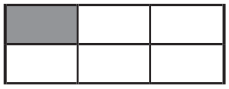
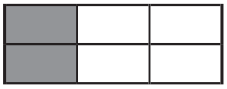


(2) Touch ▲ ▼ to set the total number of floors, and select the floor layout to be used.

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 registerted.

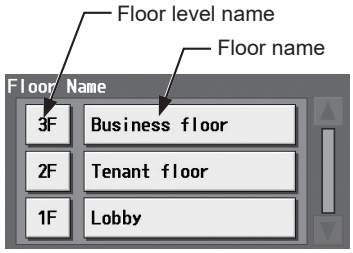


The display range of the area on the [Floor Layout] screen vary, depending on the selected floor layout.

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.

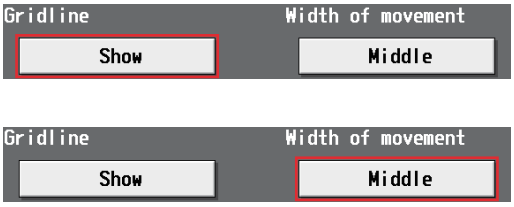


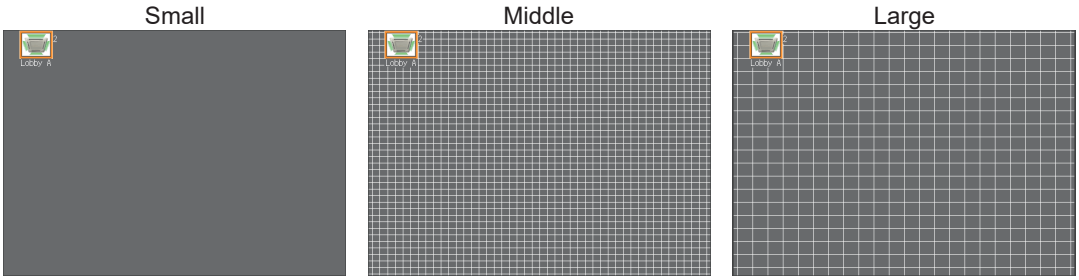
(4) To read floor plan files from the USB memory, touch [Read from USB Memory]. Refer to [2] below for the restrictions on the floor plan files to be read.



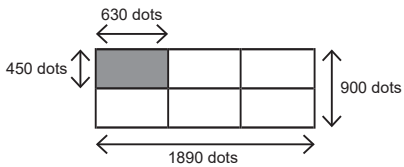
(5) To set the width of the gridlines on the floor layout screen, touch [Gridline], and switch between [Do not show] and [Show].

(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	900 (height) × 1890 (width) dots for each floor plan 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.) 
File format	gif Note: Files that contain extension data (metadata such as XMP, transparent GIF, interlace GIF, animated GIF) cannot be read.

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 file

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

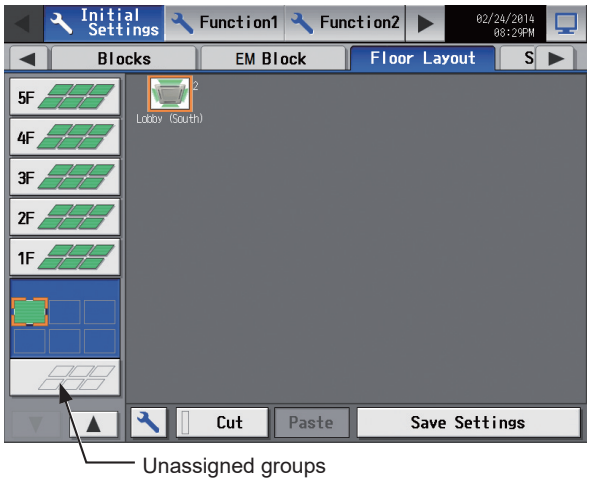
R	G	B
195	195	195
193	193	193
191	191	191
189	189	189
185	185	185
179	179	179
173	173	173
171	171	171
169	169	169
166	166	166
161	161	161
154	154	154
148	148	148
143	143	143
133	133	133
129	129	129
103	103	103
82	82	82
70	70	70
64	64	64
58	58	58
51	51	51
44	44	44
41	41	41
34	34	34
4	4	4
0	0	0
255	170	63
255	203	131

* 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].

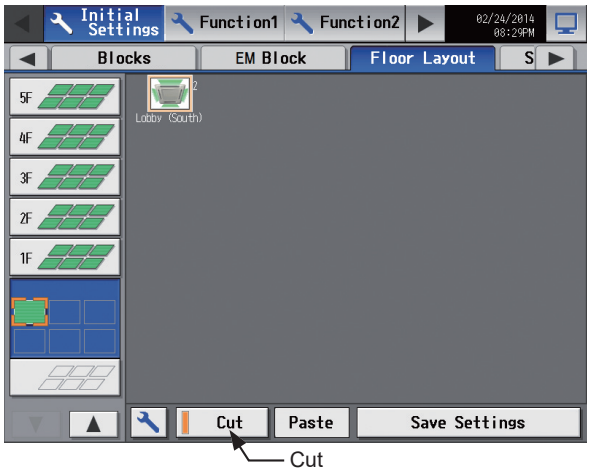
[3] Moving a group to other areas

(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.)

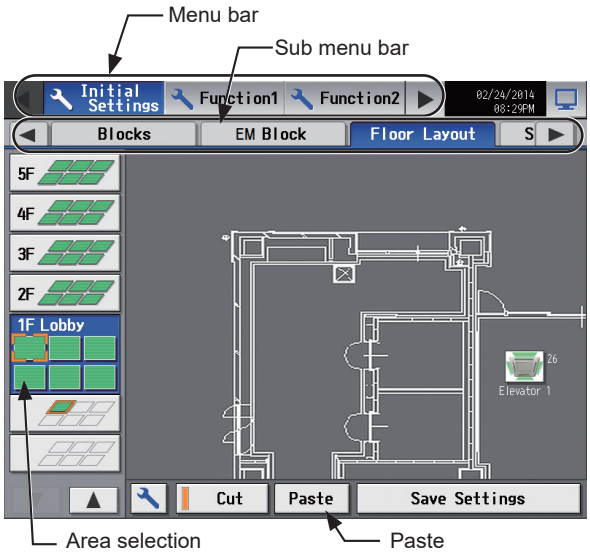


(2) Touch [Cut].
The orange frame will change to a pale orange frame.



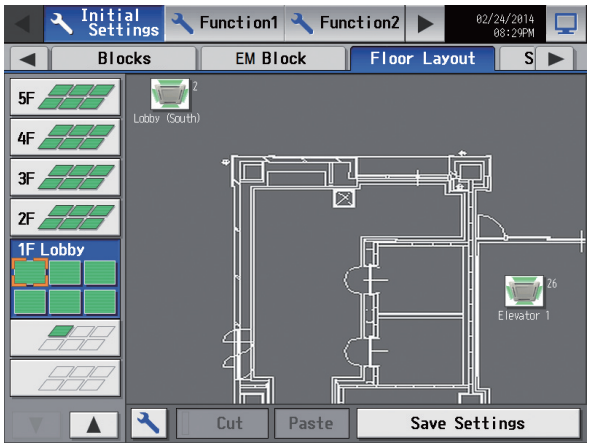
(3) With the pale orange frame being displayed, select the area to move the group to, and touch [Paste] to move the selected group to the selected area.

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].

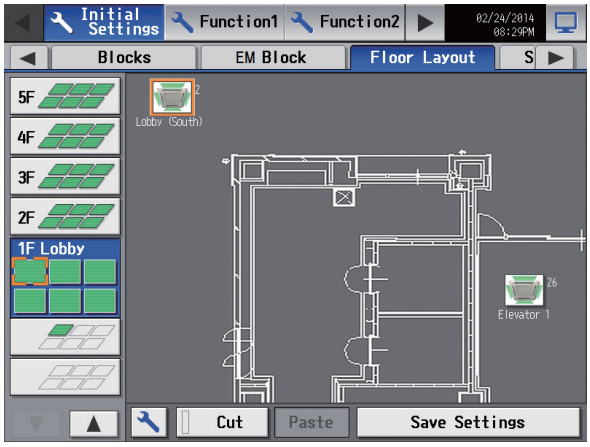
Note: To move the pasted group icon within the area, refer to [4] “Moving a group within the area” below.



[4] Moving a group within the area

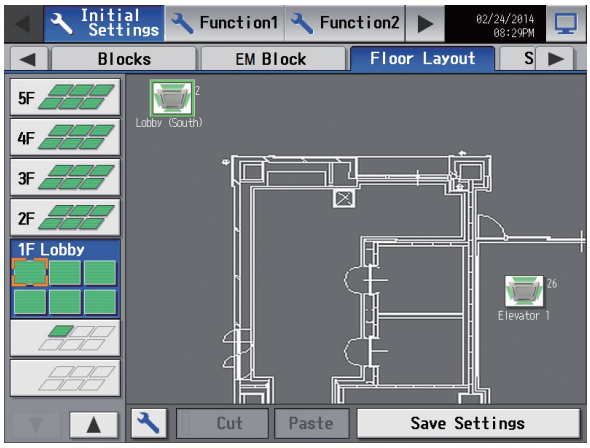
Note: It is recommended to use a commercially available touch pen.

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

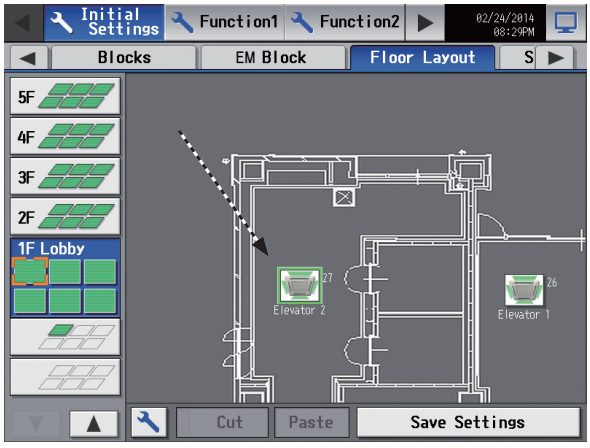


(2) Touch and hold the group icon for one second. The orange frame will change to an yellow-green frame.

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



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



(4) Touch [Save Settings].

5-1-12. System View

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

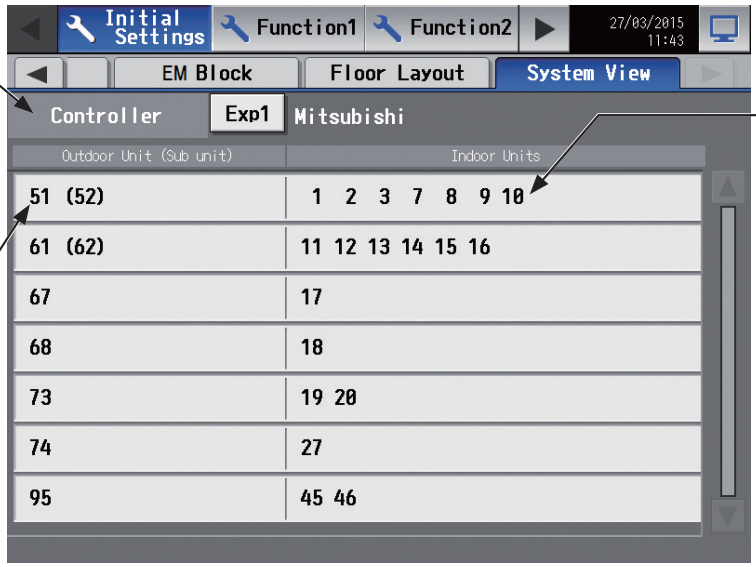
Touch [Initial Settings] in the menu bar, and then touch [System View].

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.



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, HWHP (CAHV, CRHV, QAHV) units, chiller units, and MEHT-CH&HP units will not appear.

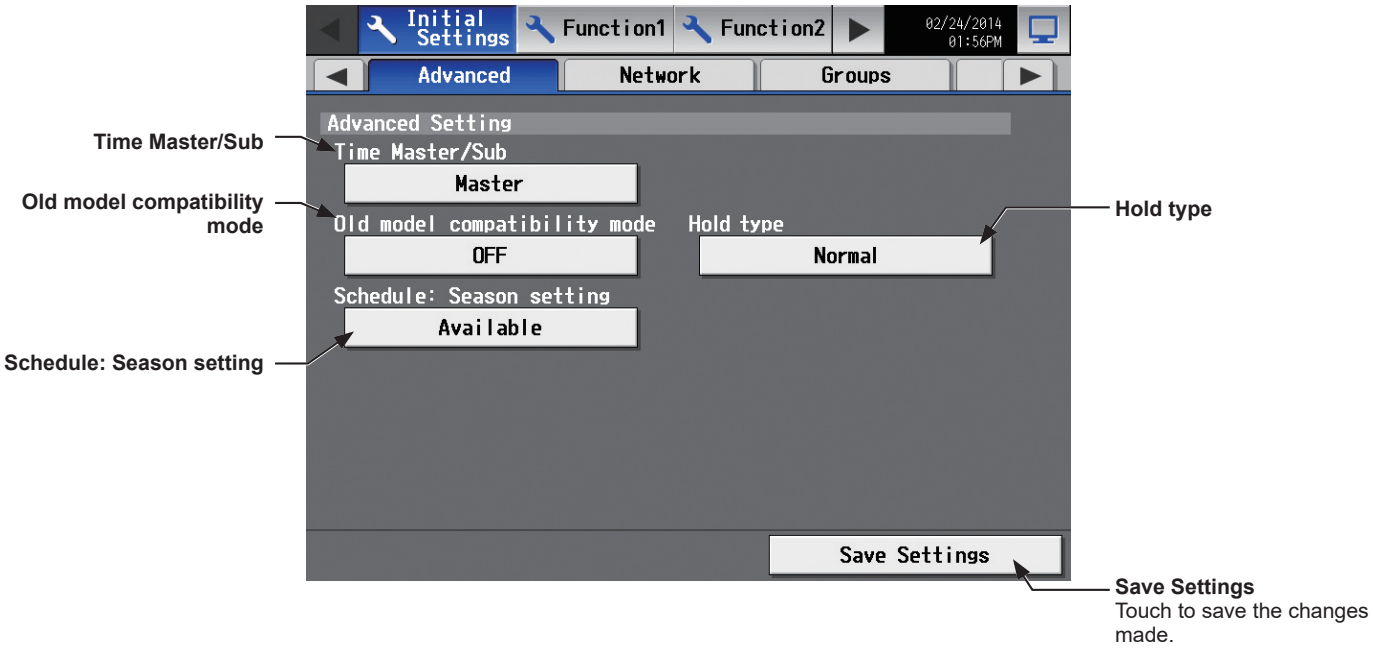
(1) Switch the [Controller] setting between [AE200] and [Exp1] through [Exp4] to check the system information for each AE-200, AE-50, and EW-50 individually. (Only on the AE-200's LCD)

5-1-13. 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).

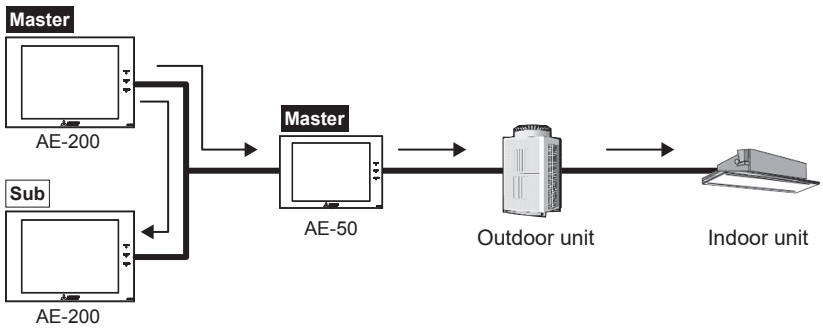
System configuration

→ : Time setting flow

Master Sub : [Time Master/Sub] setting

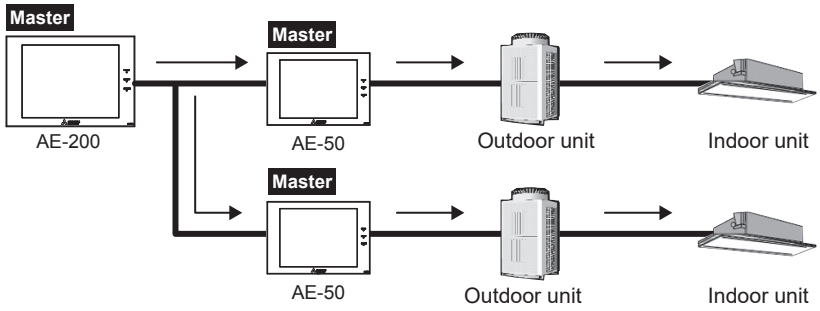
(1) System with multiple AE-200 controllers connected to an AE-50 controller

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



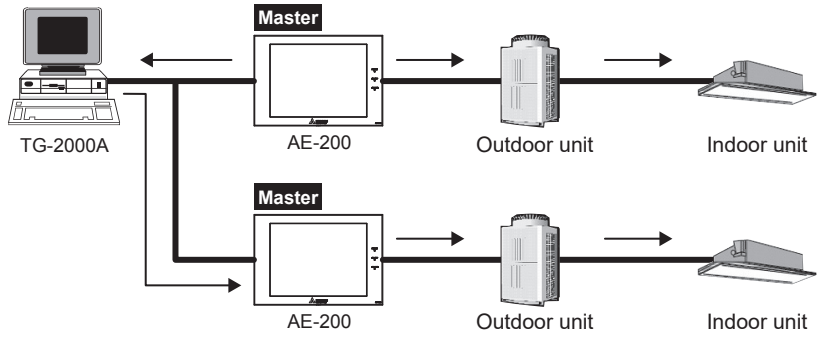
(2) System with an AE-200 controller connected to AE-50 controllers

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].
Selecting [ON] will exclude the functions that require the indoor units to support the auto dual set point mode. This function is useful when new and old indoor units that support or do not support the auto dual set point mode exist in a given system, or when connecting a high-level building management system that does not support the auto dual set point mode is connected via the BACnet® function.
When [ON] is selected, the Dual set point function and Prohibit Remote Controller function (Timer, Air Direction, Fan Speed) cannot be used.

The following functions are available.

○ : Available

Setting	Old model compatibility mode	OFF		ON	
	Model	New indoor unit	Old indoor unit	New indoor unit	Old indoor unit
Set temperature	Auto dual set point mode	○			
	Auto single set point mode		○	○	
Prohibit remote controller	ON/OFF	○	○	○	
	Operation mode	○	○	○	
	Set temperature	○	○	○	
	Filter sign reset	○	○	○	
	Air direction	○			
	Fan speed	○			
	Timer	○			

Note: If the setting is changed, the controller will reboot.
Note: When changing the old model compatibility mode while this mode is used, note the following.

- The set temperature will go back to the default setting value. Write down the current set temperature of each group to reconfigure the set temperature settings later.
- The set temperature for the schedule settings will be cleared. Write down the current set temperature of each group for schedule settings to reconfigure the set temperature settings later.
- Some equipment whose operation is to be interlocked with another equipment support the dual set point function in the Auto mode. Reconfigure the Interlock Control setting if it is affected by the change of the old model compatibility mode.

[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.

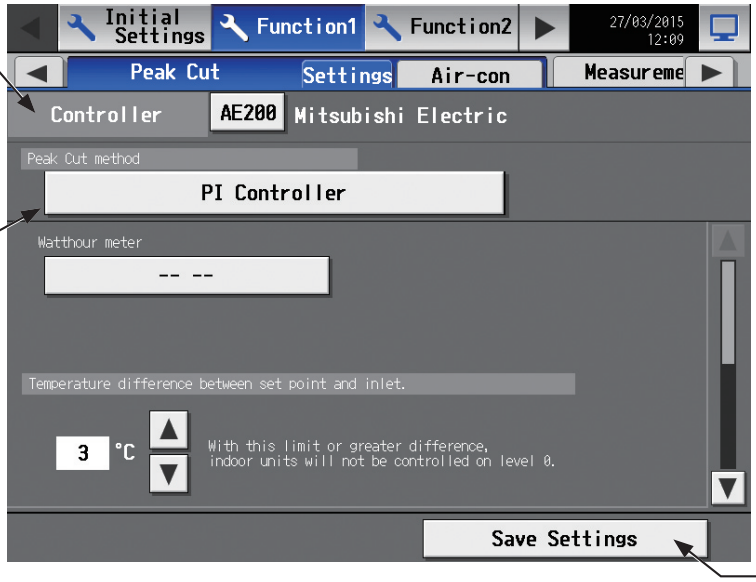
Note: Some settings may not be accessible if logged in as a building manager.

Note: Peak Cut control cannot be performed on DIDO controller (PAC-YG66DCA), AHC, Air To Water (PWFY) unit, HWHP (CAHV, CRHV, QAHV) unit, chiller unit, or MEHT-CH&HP 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)”.



Controller
Select [AE200] to make settings for AE-200, and select [1], [2], [3], or [4] to make settings for each AE-50/EW-50.

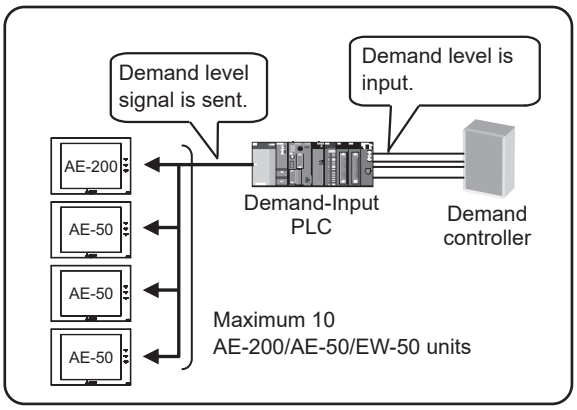
Peak Cut method

Save Settings
Touch to save the changes made.

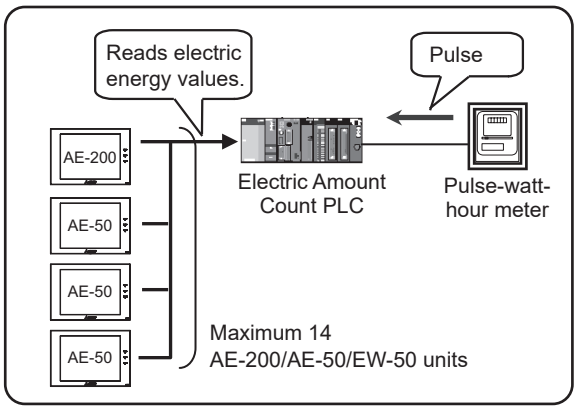
5-2-1-1. Peak Cut method

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

[PLC Software for Demand Input]

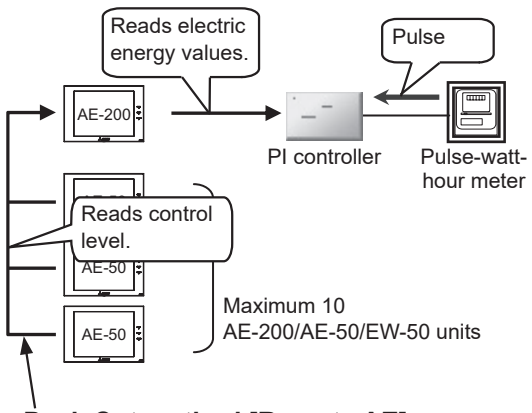


[Electric Amount Count Software]

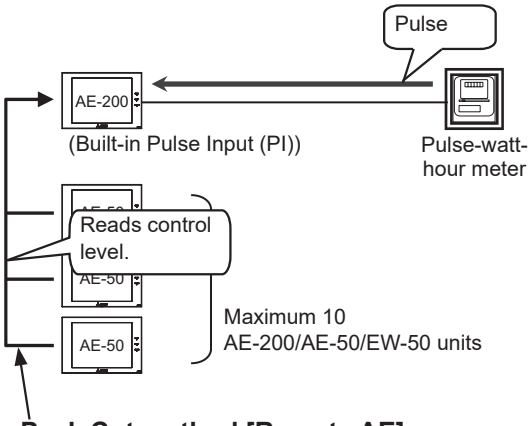


[PI Controller]

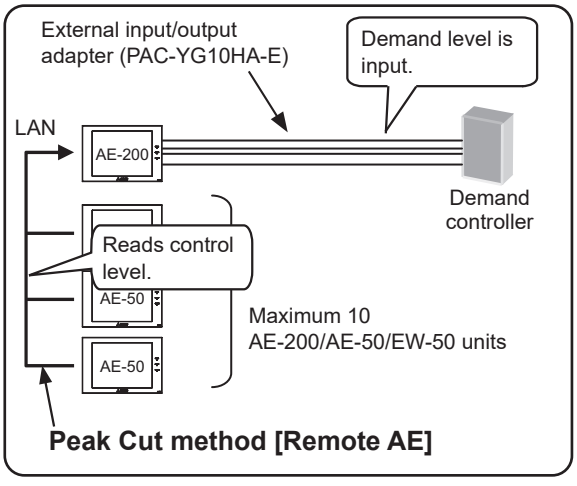
<When a PI controller (PAC-YG60MCA) is used>



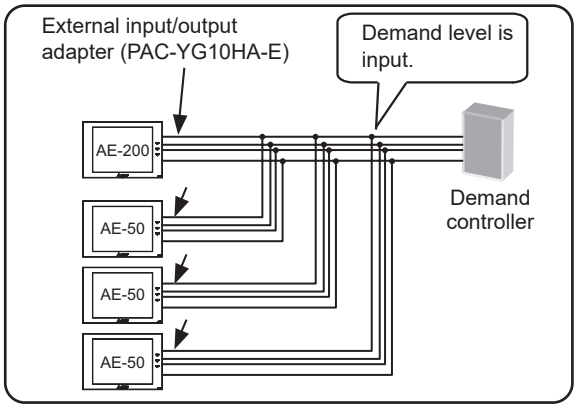
<When a built-in Pulse Input (PI) is used>



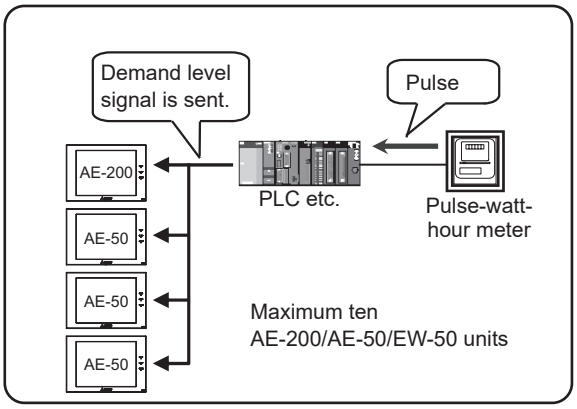
[External Contact point input] (1)



[External Contact point input] (2)



[From external system]

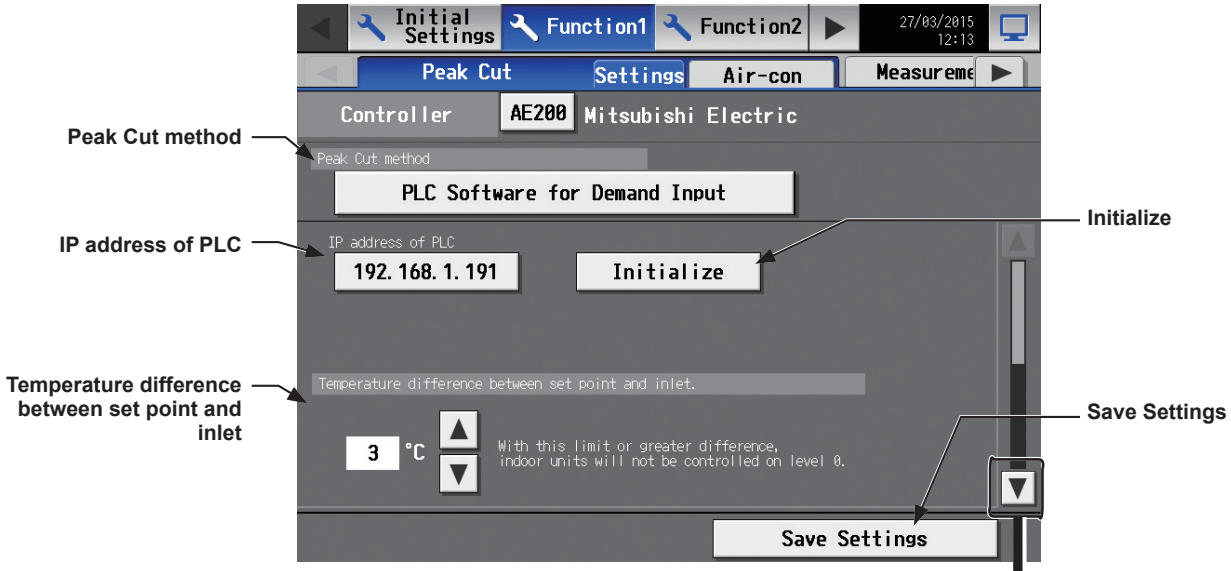


Note: After setting the energy-save control and peak-cut control settings, make sure the AE-200/AE-50/EW-50 have received the Demand level signal (electric energy values) and are operating as intended on the LCD of AE-200 (AE-50) and the Integrated Centralized Control Web (WEB).

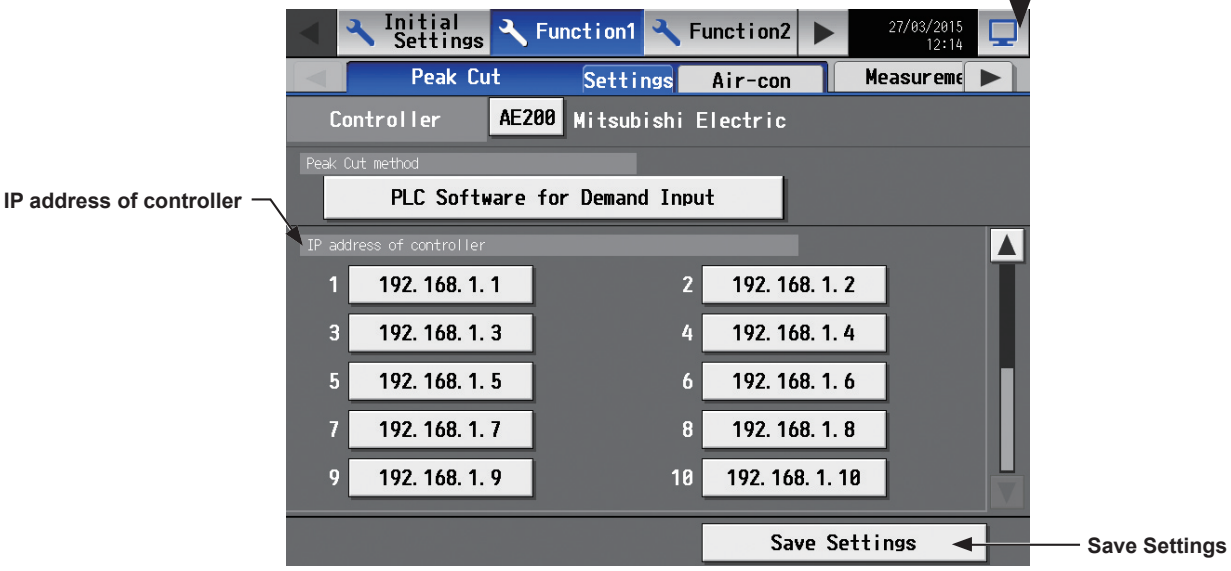
Note: The following settings need to be set when updating the system from an AG-150A + PAC-YG50ECA system.
Although the control level input and the connection settings only need to be set for AG-150A in an AG-150A + PAC-YG50ECA system, in an AE-200 + AE-50 (EW-50) system, the Demand level signal (electric energy values) input and peak-cut methods need to be set for both AE-200 and AE-50 (EW-50).
If it is not feasible to change the system configuration and it is not possible to input the Demand level signal (electric energy values) to AE-50 (EW-50), select [Remote AE] from the peak-cut method selection for AE-50 (EW-50).

(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: This setting is not effective for the outlet air temperature control units.

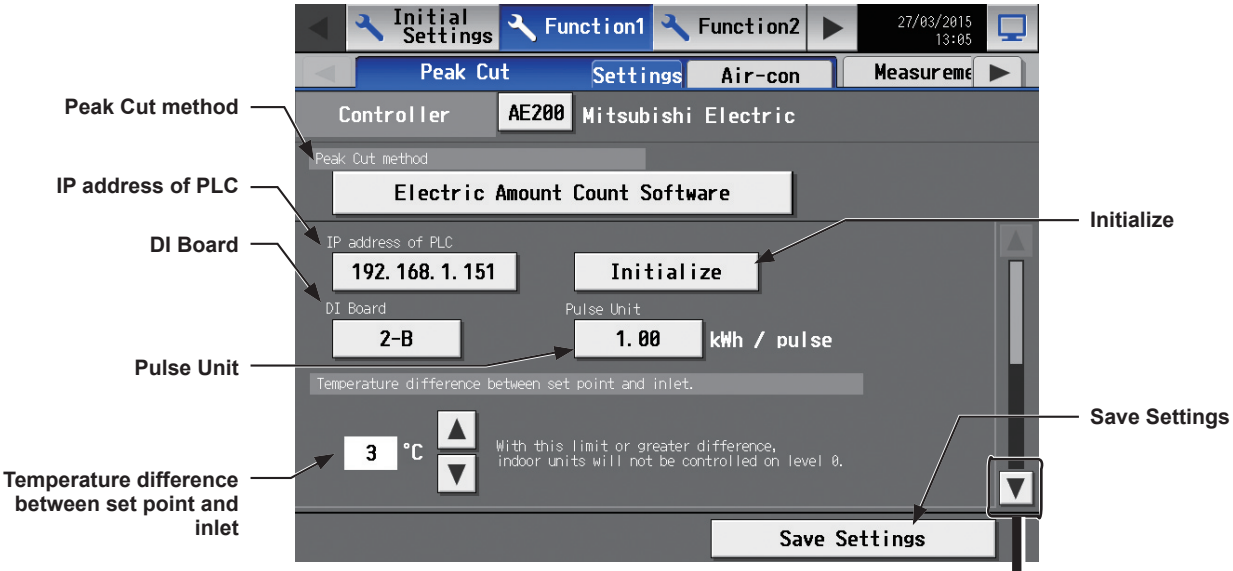
Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(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.

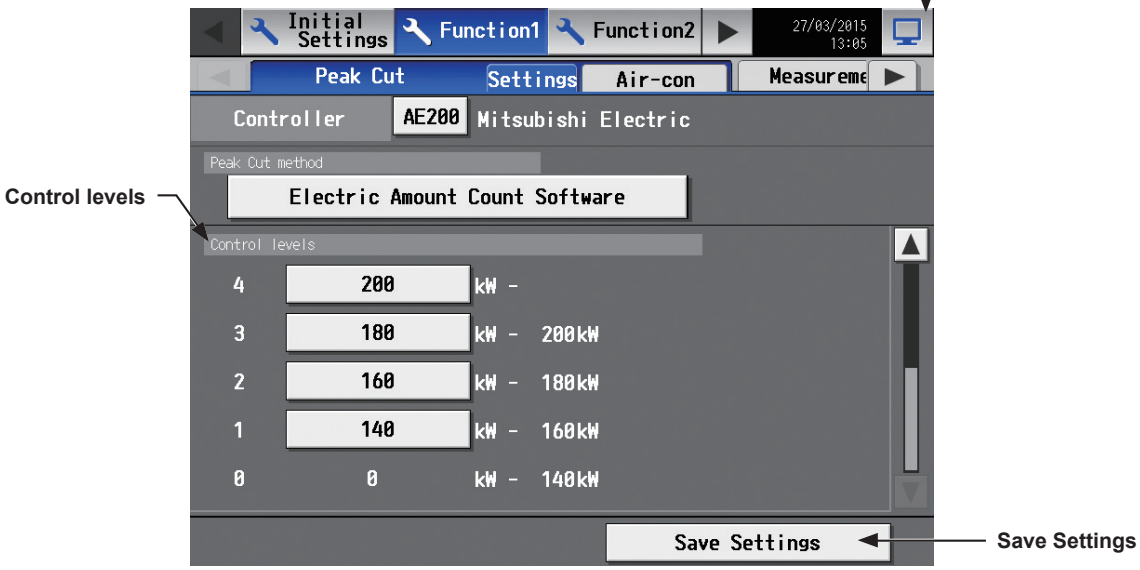
Note: Control targets and the IP addresses can be displayed or set only while the communication with the demand PLC is established.

(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.

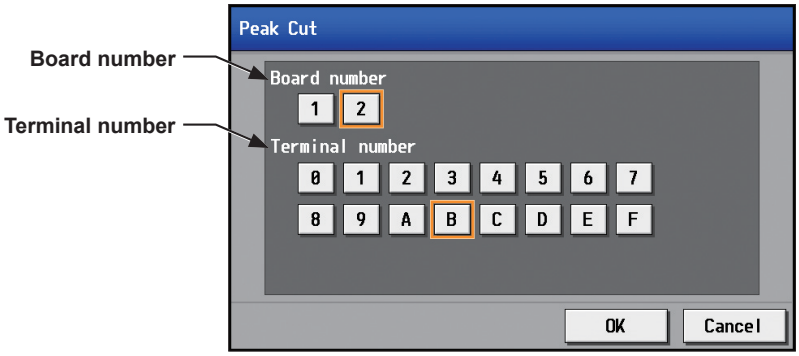
Note: This setting is required for each AE-200/AE-50.

(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.

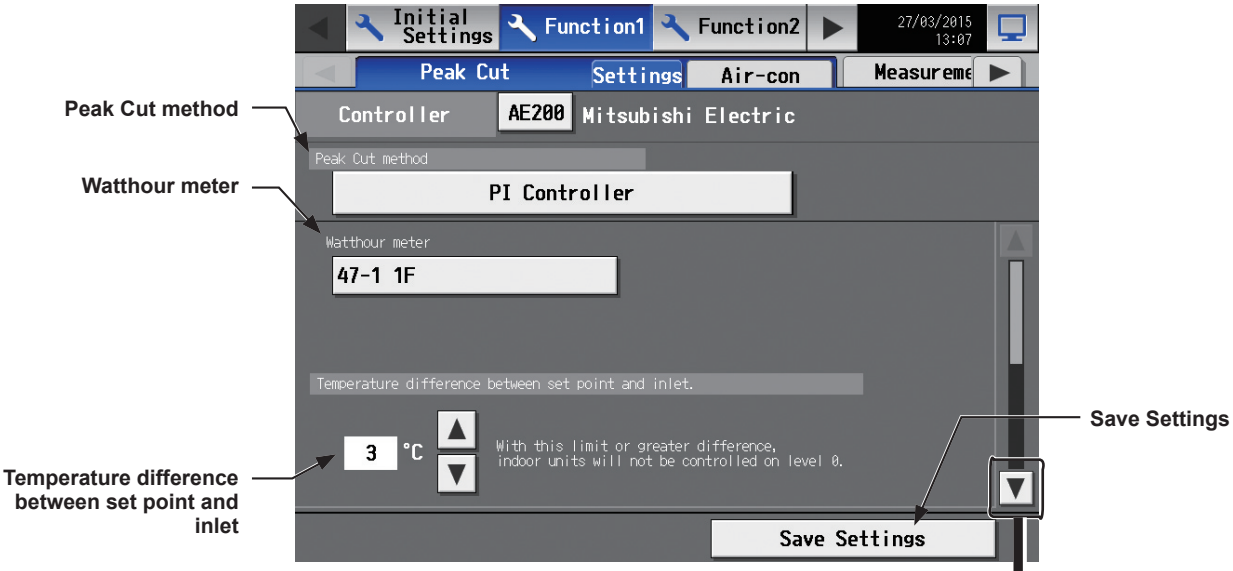
(6) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between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

Note: This setting is not effective for the outlet air temperature control units.

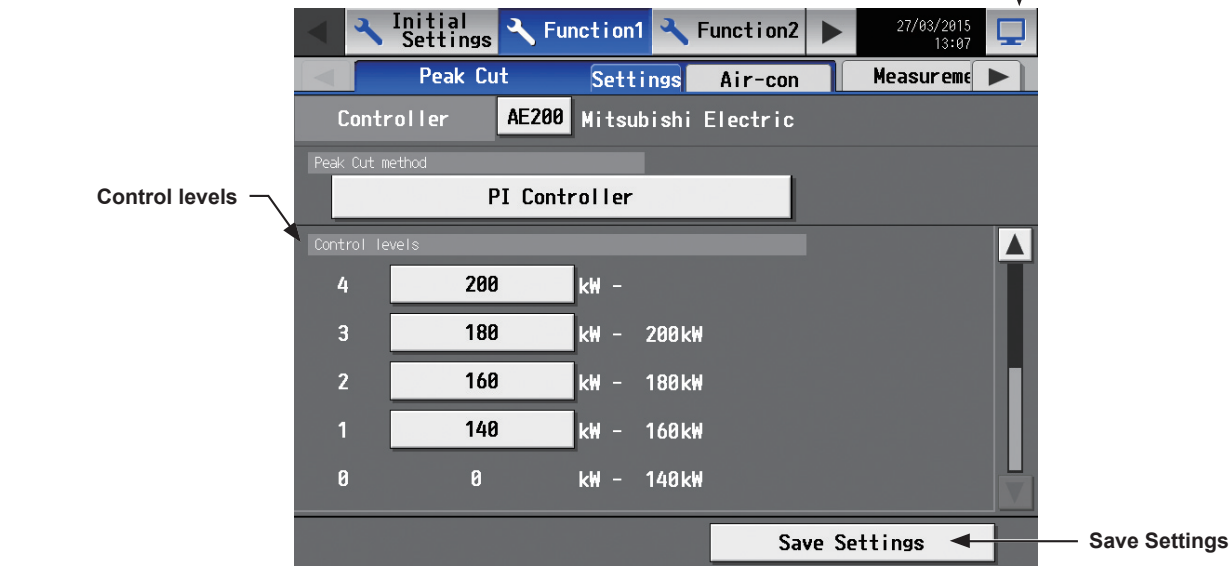
Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

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

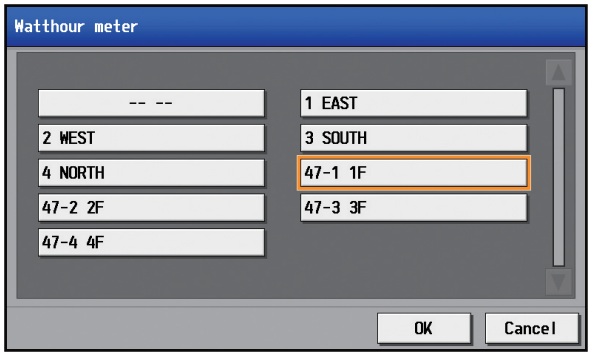
1st page



2nd page



(1) Touch the [Watthour 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: This setting is not effective for the outlet air temperature control units.

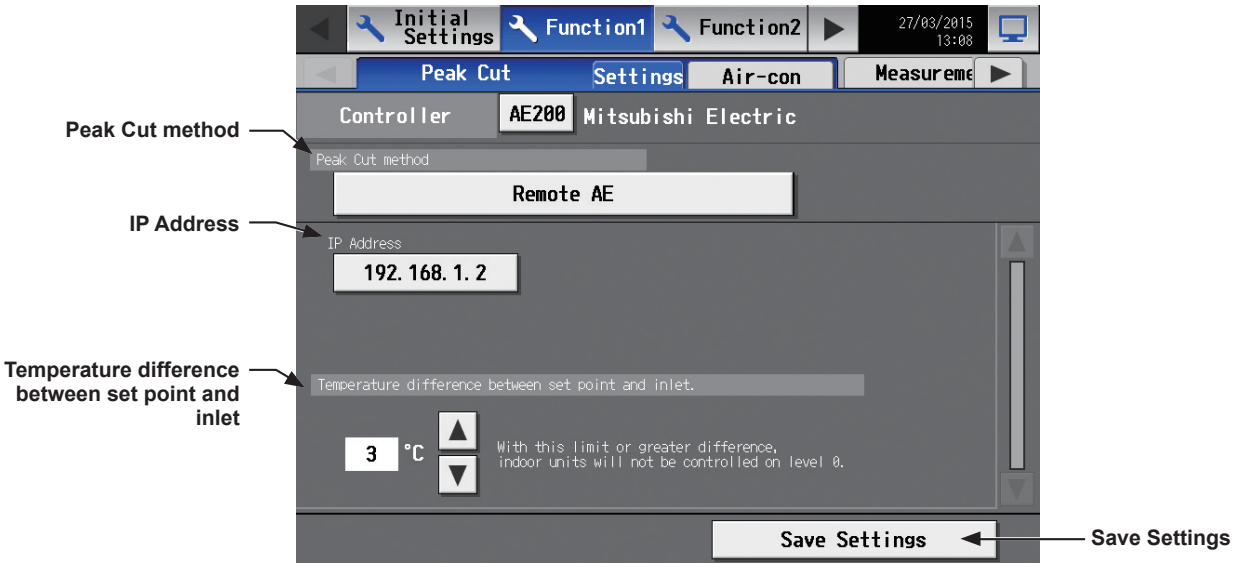
Note: The Peak Cut control setting that corresponds to the control levels 1 to 4 will be effective regardless of the temperature differential setting.

(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 ten 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 eleven 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 (E) “When the Peak Cut method [External Contact point input] is selected”. Increase the number of AE-200/AE-50/EW-50 units to which pulse signals of watt-hour meters, PI controllers, or external contact inputs are connected.

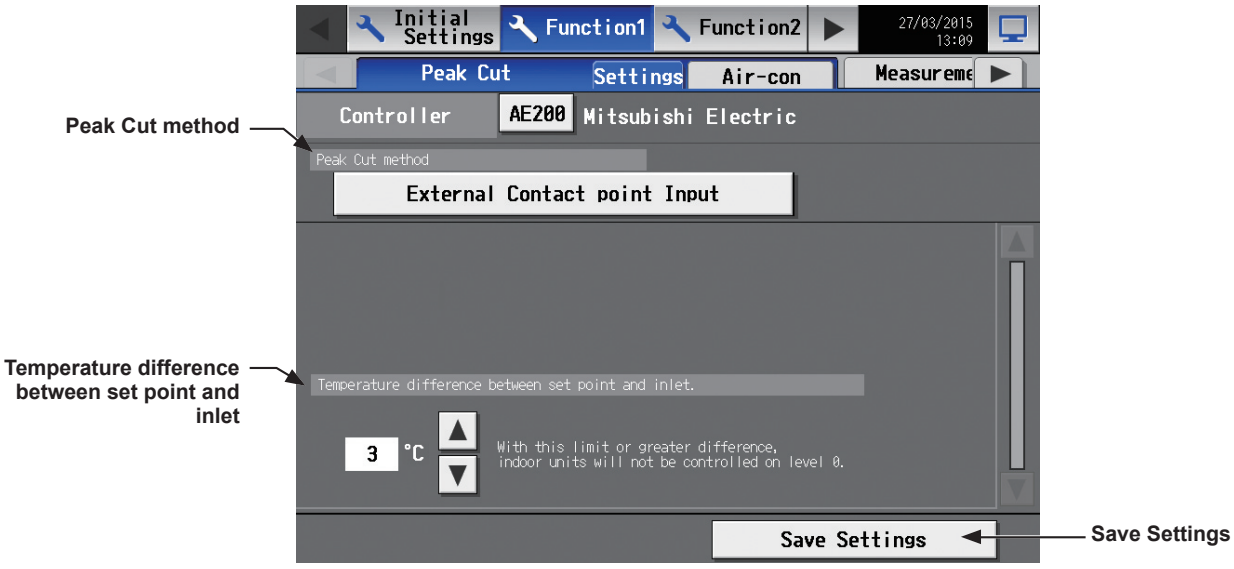
(2) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between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

Note: This setting is not effective for the outlet air temperature control units.

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.

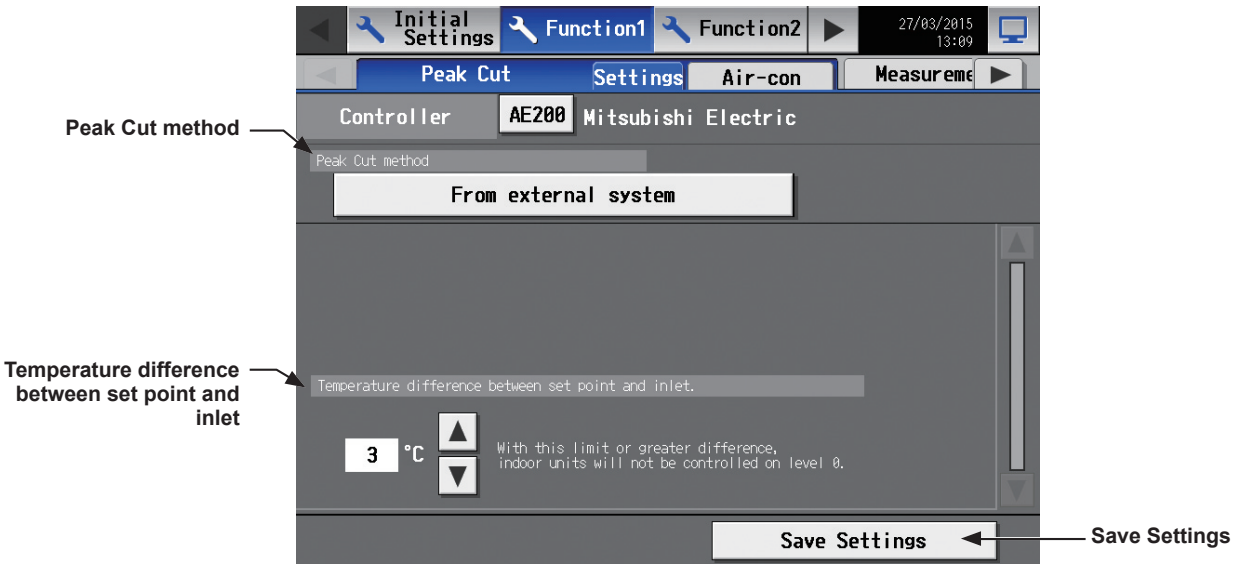


(1) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between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

Note: This setting is not effective for the outlet air temperature control units.

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: This setting is not effective for the outlet air temperature control units.

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.

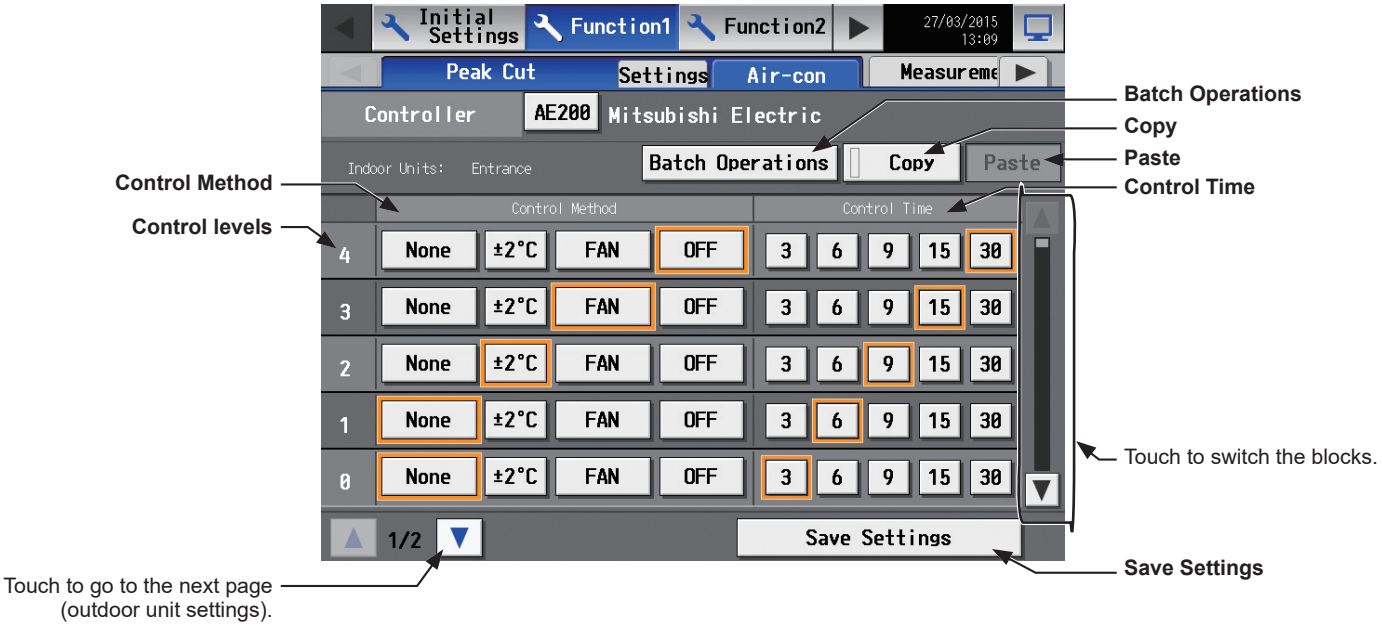
(1) Control details for blocks of indoor units

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 5-1-9 “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)



(1) 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.

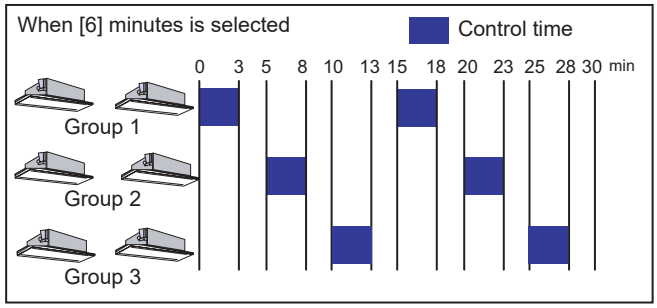
Note: Only the control method “OFF” is effective for Air To Water (PWFY) units. Other methods can be selected, but are not effective.

Table: Indoor Unit Control Method

Control Method	Control details
None	Peak Cut control will not be performed.
±2°C (±4°F)	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). Note: Peak Cut control will not be performed during the Fan or Auto mode. 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. Note: The set temperature will be adjusted within the set temperature restrictions settings made on the Set Temperature Range Limit screen (accessible via the Integrated Centralized Control Web). Refer to section 7-1-3 “Set Temperature Range Limit” for details.
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	During the Peak Cut control, the units will stop. 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.

*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)

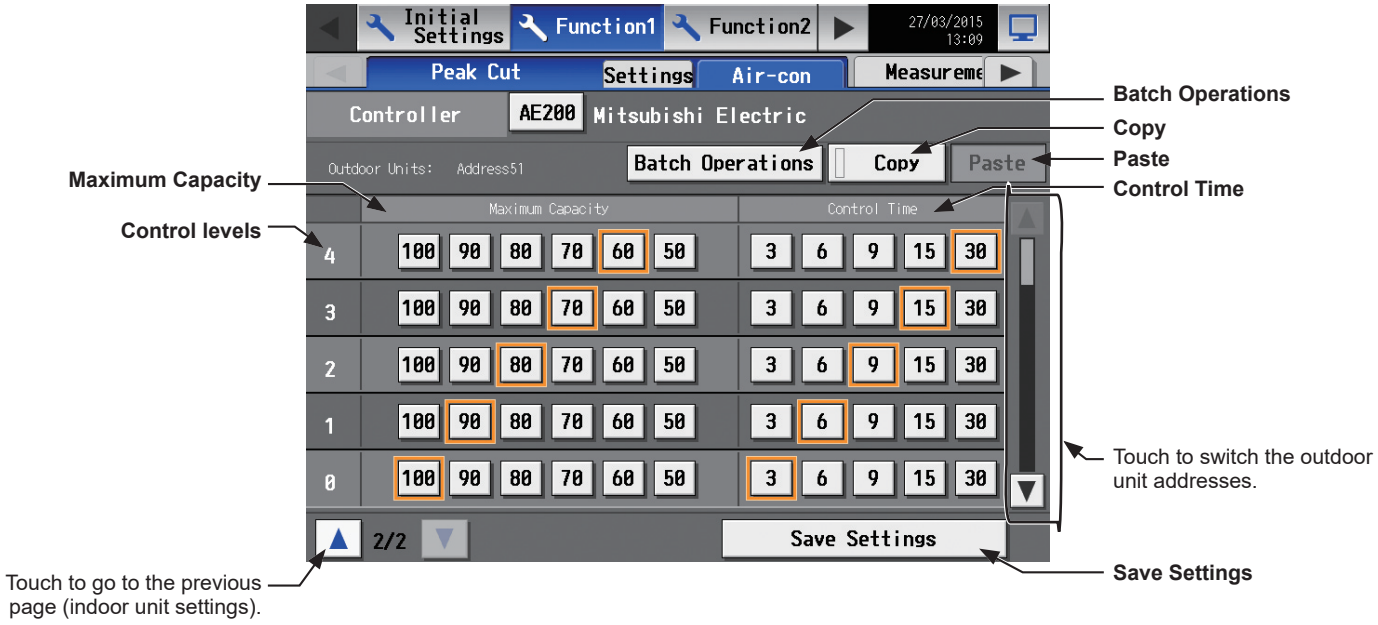
Follow the instructions below to make the Peak Cut control settings for each control level for given outdoor units.

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.

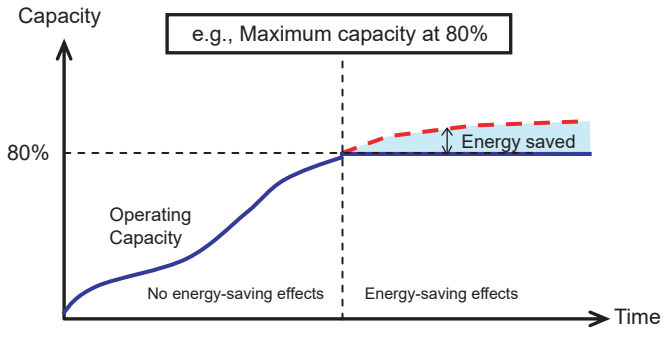
Note: Do not make the Peak Cut control settings for heat pump models of outdoor units or some types of outdoor units.

2nd page (Outdoor unit settings)



(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.

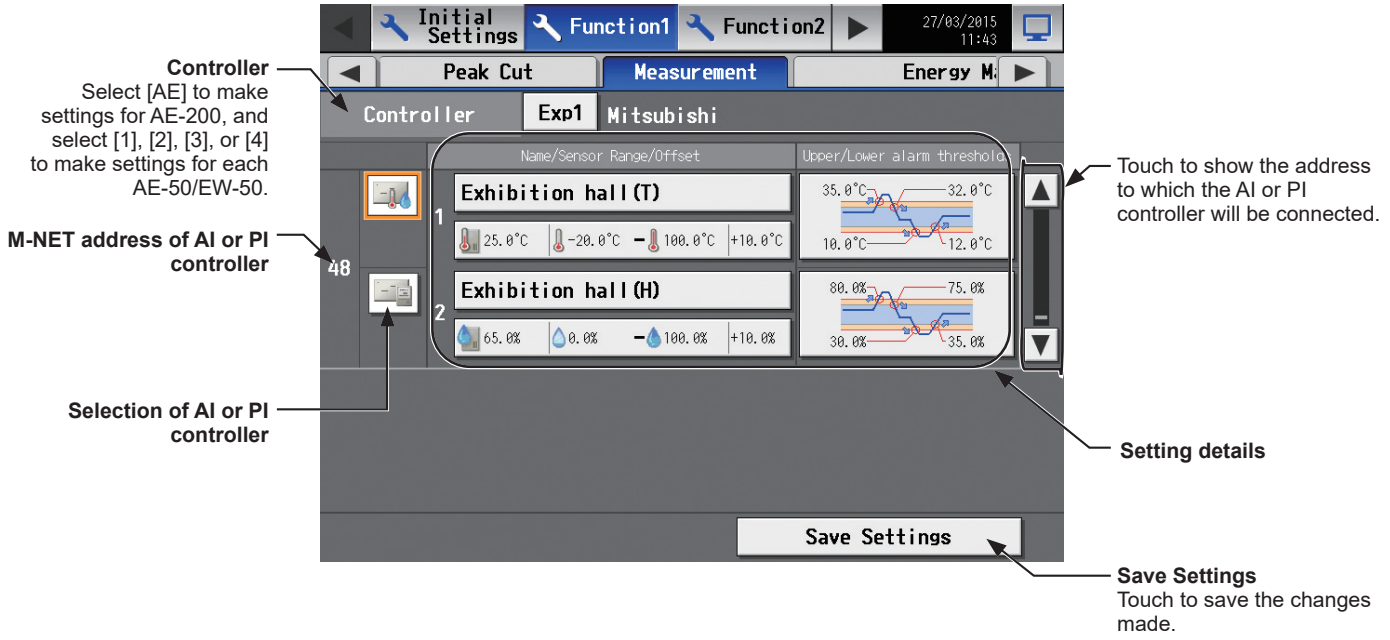
5-2-2. Measurement

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.

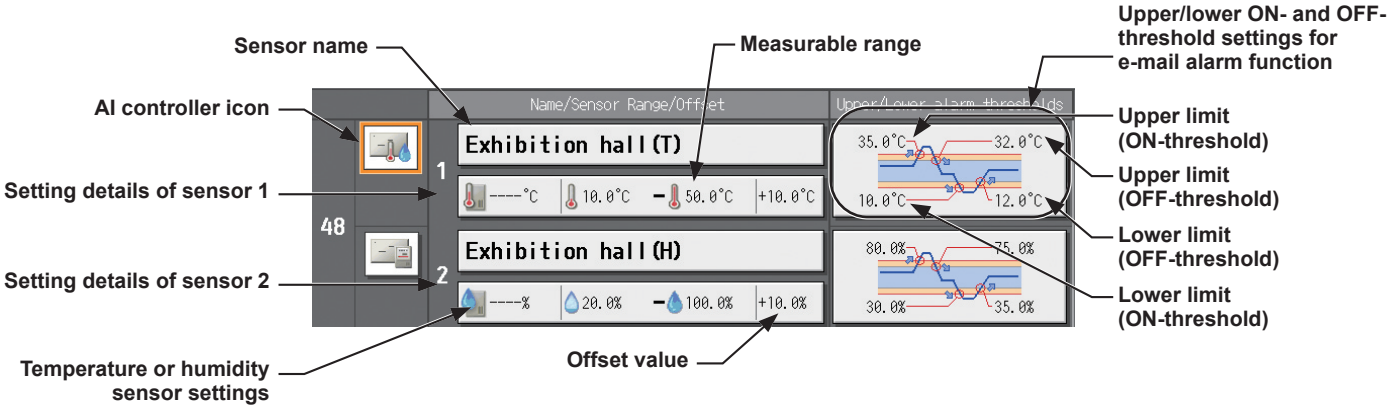
Important

- 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.



[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).



(1) Touch ▲ or ▼ to select the address to which the AI controller (PAC-YG63MCA) will be connected.

(2) Select the AI controller icon ( ).

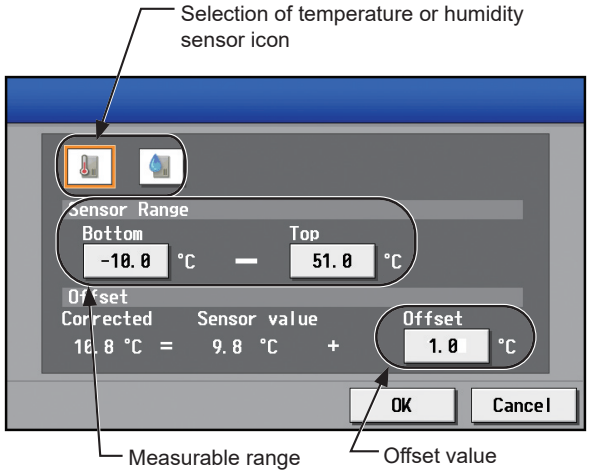
Note: Touch again to deselect.

(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 -100.0ºC (-148.0ºF) and +100.0ºC (+212.0ºF), and for the humidity sensor is between 0.0% and +100.0%.

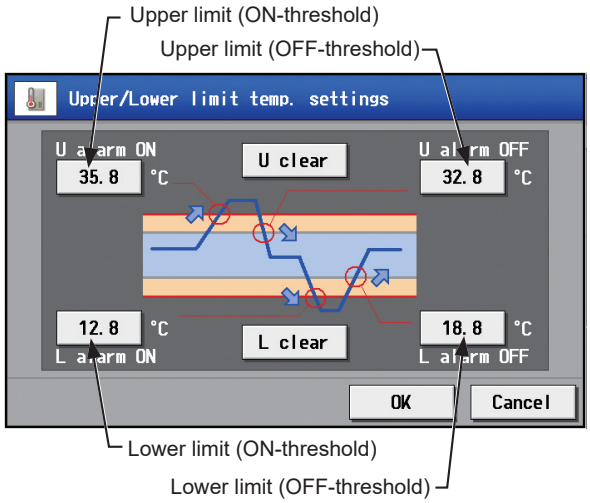
Note: When the Pt100 sensor is connected, the range must be between -30ºC (-22ºF) and +60ºC (+140ºF).
When the sensors other than the Pt100 sensors are connected, enter the ranges that are described in the operation manuals of the sensor.



(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 -10.0ºC (-18.0ºF) and +10.0ºC (+18.0ºF), 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 1ºC (2ºF).

(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.

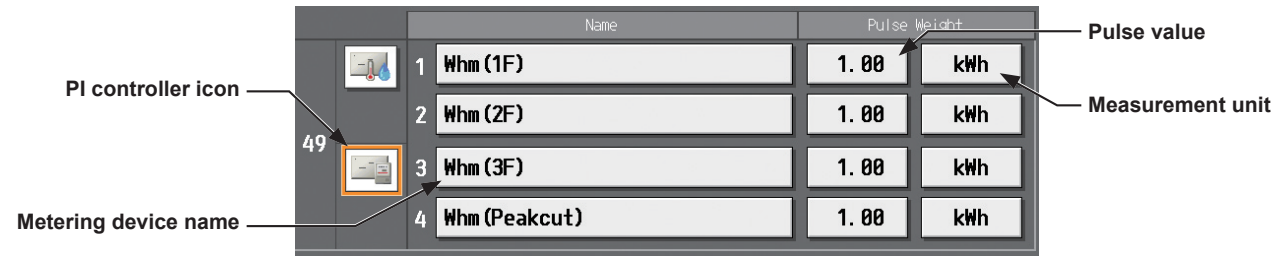
Follow the instructions below to make the system settings of the metering devices. Up to four metering devices can be connected to a PI controller (PAC-YG60MCA) or CN7 of AE-200/AE-50/EW-50.

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.

Note: The measurement values for which “--(no unit)” has been selected will not be plotted on a graph on the Energy Use Status screen.

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.

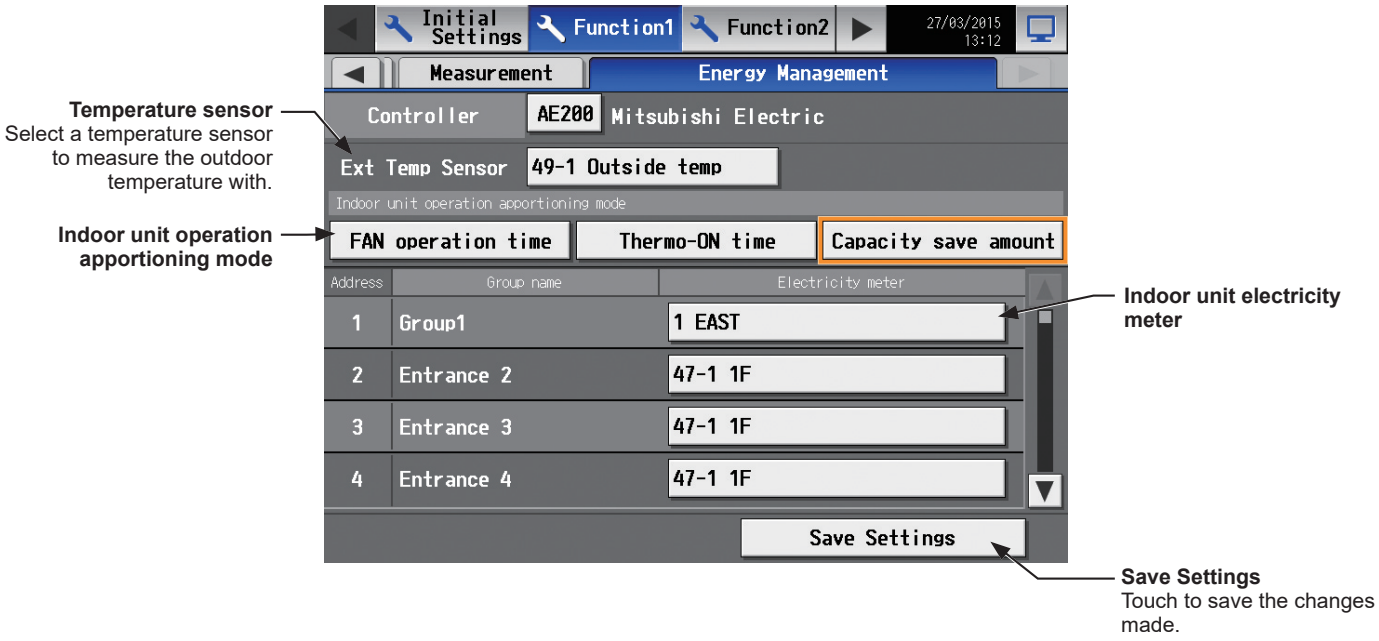
Touch [Function1] in the menu bar, and then touch [Energy Management].

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

Note: HWHP (CAHV, CRHV, QAHV) units, chiller units, and MEHT-CH&HP units do not support this function.

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.

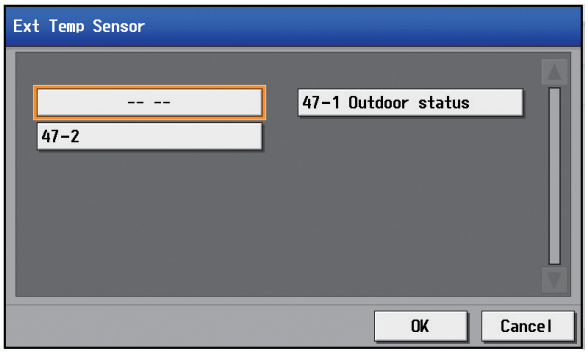


(1) Touch the “Temperature Sensor” button. The name of the temperature sensor that is connected to the AI controller or the AHC will appear.
Select a temperature sensor to measure the outdoor temperature with, and then touch [OK].

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.

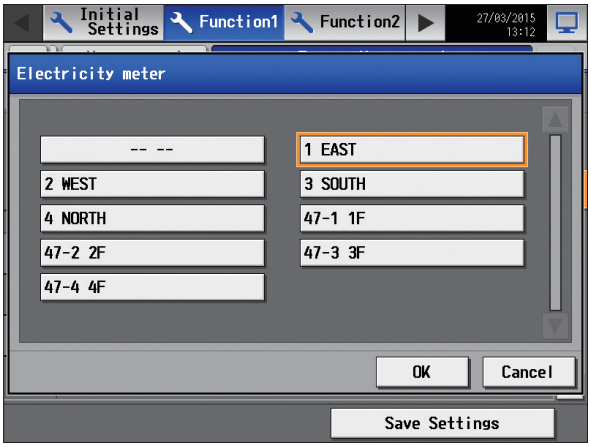
Note: This setting is interlocked with the temperature sensor setting on the [External Temperature Interlock] screen.



(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.

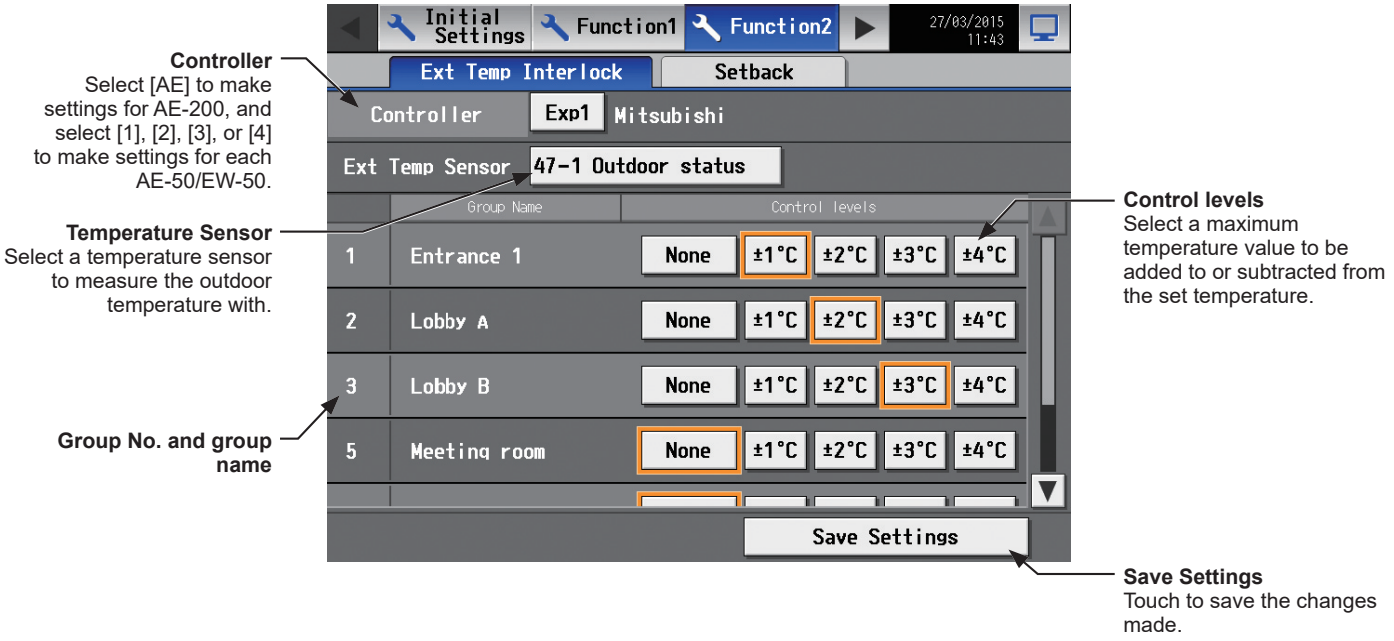
Note: The External Temperature Interlock settings between the units connected to the AE-200 and the AE-50/EW-50, as well as between the units connected to different AE-50/EW-50 controllers, cannot be made.

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.

Note: This function is not available for the outlet air temperature control units.

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.

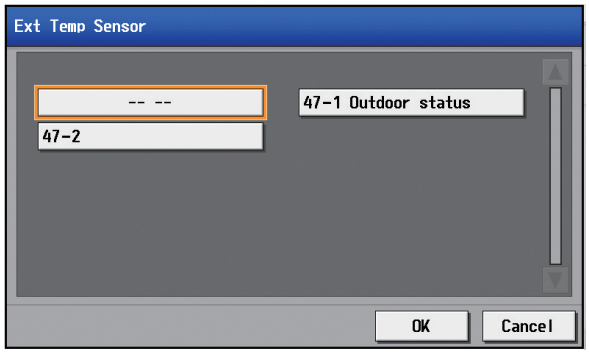


(1) Touch the "Temperature Sensor" button. The name of the temperature sensor that is connected to the AI controller or the AHC will appear.
Select a temperature sensor to measure the outdoor temperature with, and then touch [OK].

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.



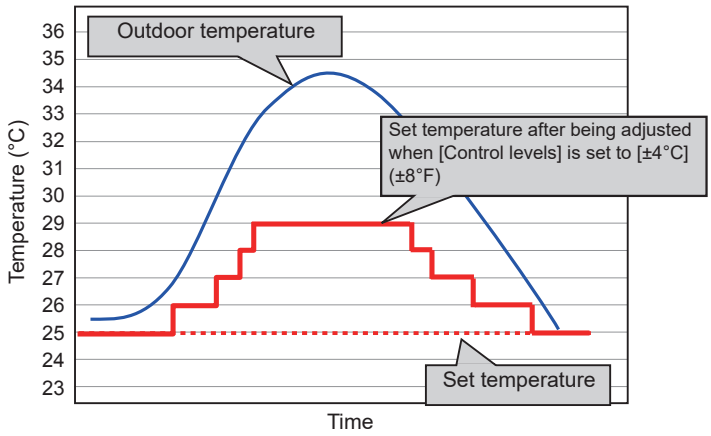
(2) In the [Control levels] section, select a maximum temperature value for each group to be added to or sabtracted from the set temperature.
For example, when [±4°C] (±8°F) is selected and the set temperature for the Cool or the Dry mode is set to 24°C (75°F), the set temperature will be adjusted to a maximum of 28°C (83°F) based on the temperature difference between the set temperature and the outdoor temperature. When [±2°C] (±4°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 2ºC is used for the calculation first, and then the temperature in Celsius is converted into the temperature in Fahrenheit.

(3) Touch [Save Settings].

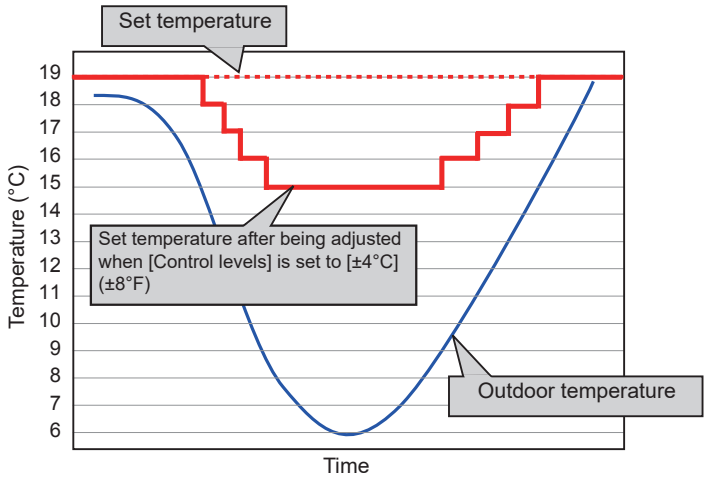
When the External Temperature Interlock function is active, the set temperature will be adjusted as shown below.

■ “Cool” and “Dry” modes



Outdoor temperature conditions	Set temperature after being adjusted
Outdoor temperature ≥ Set temperature + 1.5°C (3°F)	Set temperature + 1°C (2°F)
Outdoor temperature ≥ Set temperature + 4.5°C (9°F)	Set temperature + 2°C (4°F)
Outdoor temperature ≥ Set temperature + 6.5°C (12°F)	Set temperature + 3°C (6°F)
Outdoor temperature ≥ 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 ≤ Set temperature - 4.0°C (8°F)	Set temperature - 1°C (2°F)
Outdoor temperature ≤ Set temperature - 6.0°C (11°F)	Set temperature - 2°C (4°F)
Outdoor temperature ≤ Set temperature - 8.0°C (15°F)	Set temperature - 3°C (6°F)
Outdoor temperature ≤ 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.

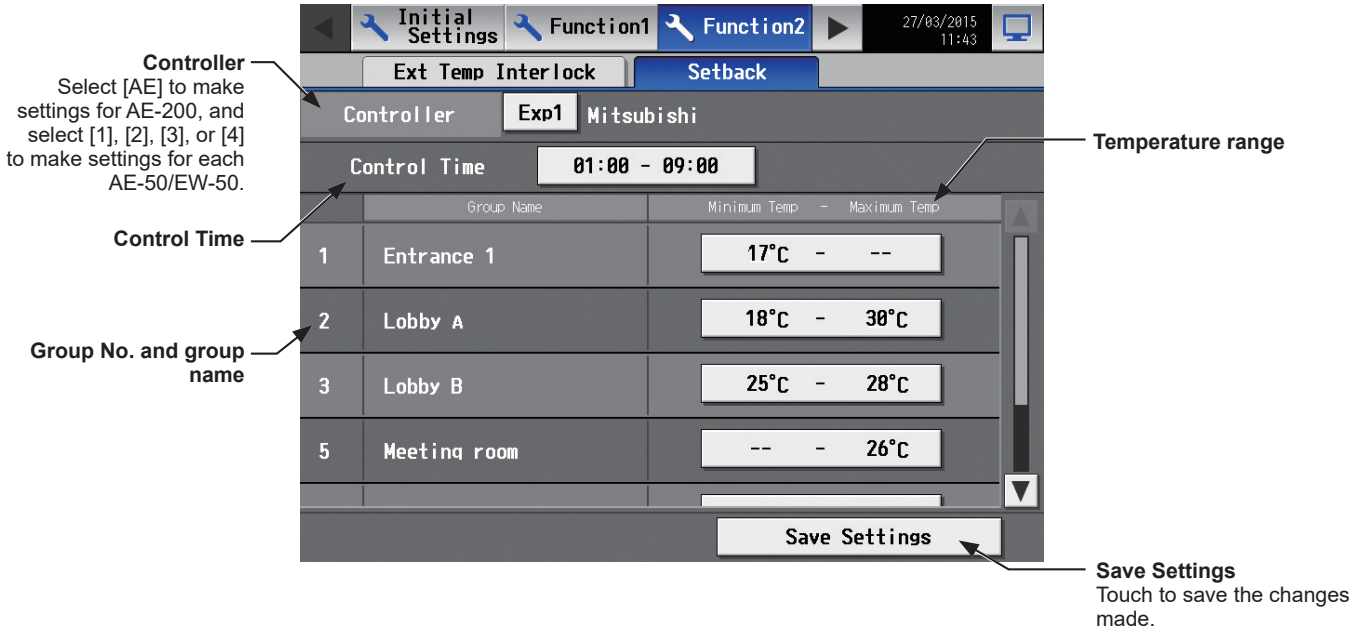
Note: The Setback Control may not be accessible if logged in as a building manager.

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.

Note: This function is not available for the outlet air temperature control units.

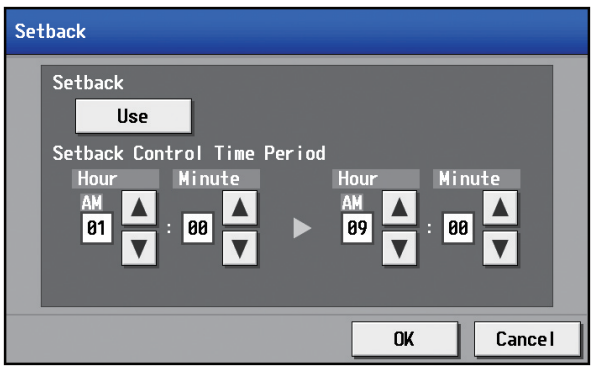
Important

- 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.

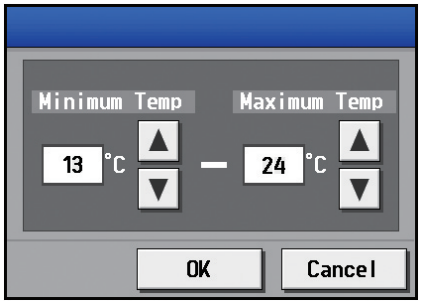


(1) Touch the [Control Time] button to display the settings screen.
Set the [Setback] setting to [Use], set the time period in which Setback Control is performed, and then touch [OK].

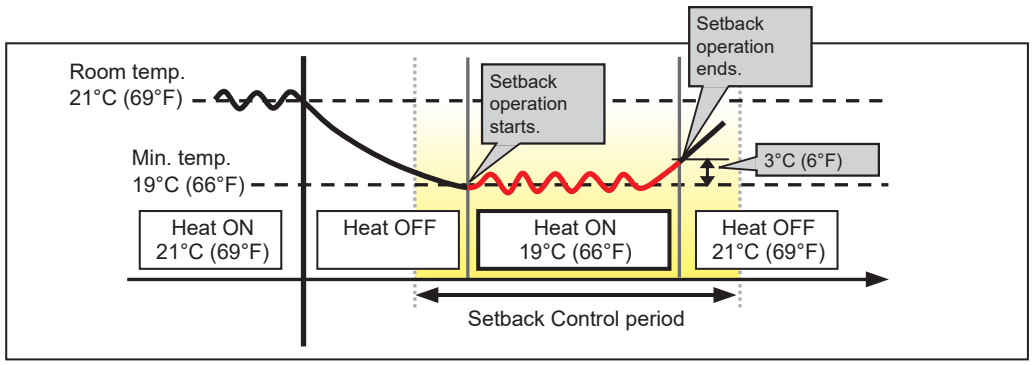
Note: When [00: 00 - 00: 00] is selected, Setback Control is active for 24 hours.



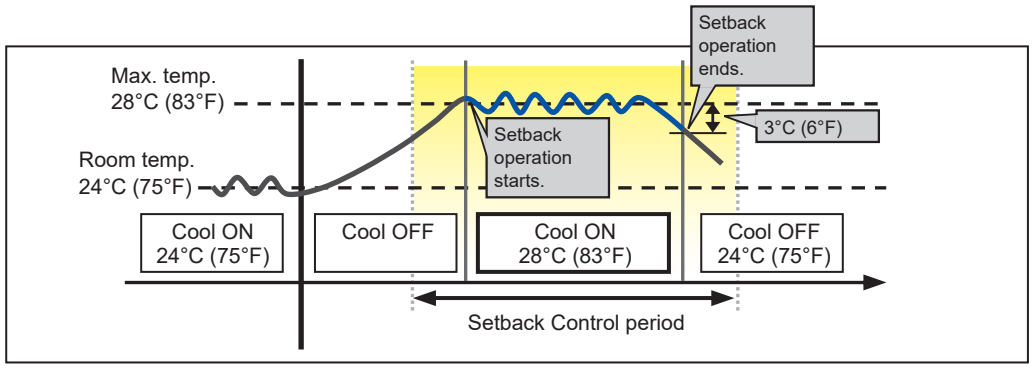
(2) Touch the “Temperature range” button to display the settings screen.
Set the maximum and minimum temperatures for each group.
For example, if [Control Time] is set to [01:00 - 05:00] and “Temperature range” is set to [12°C - --°C] ([53°F - --°F]), heating operation starts automatically when the room 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, LOSSNAY units operate in the Bypass mode.

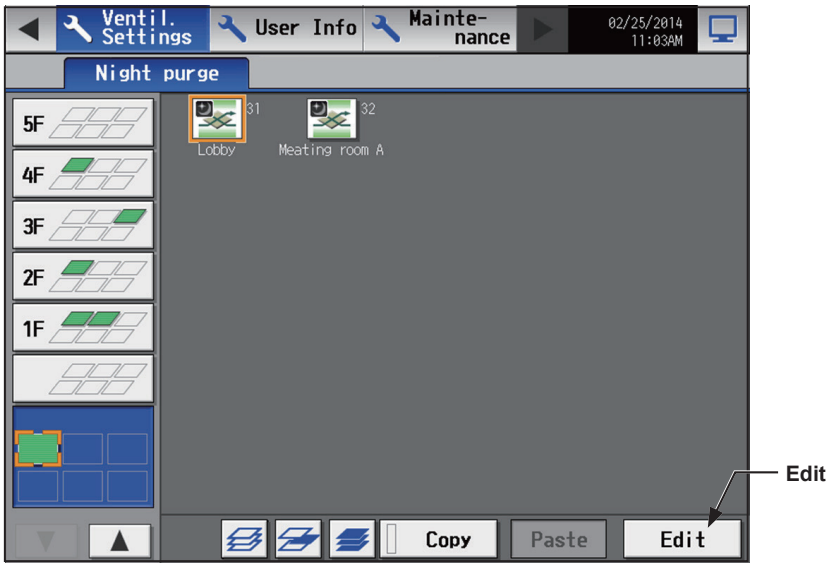
Note: Night purge setting cannot be made from AE-200 for the LOSSNAY units that are connected to the AE-50/EW-50 in communication error.

Note: Some models of LOSSNAY units 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 LOSSNAY unit.

[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 LOSSNAY unit groups that support the Night purge function from AE-200 will appear.

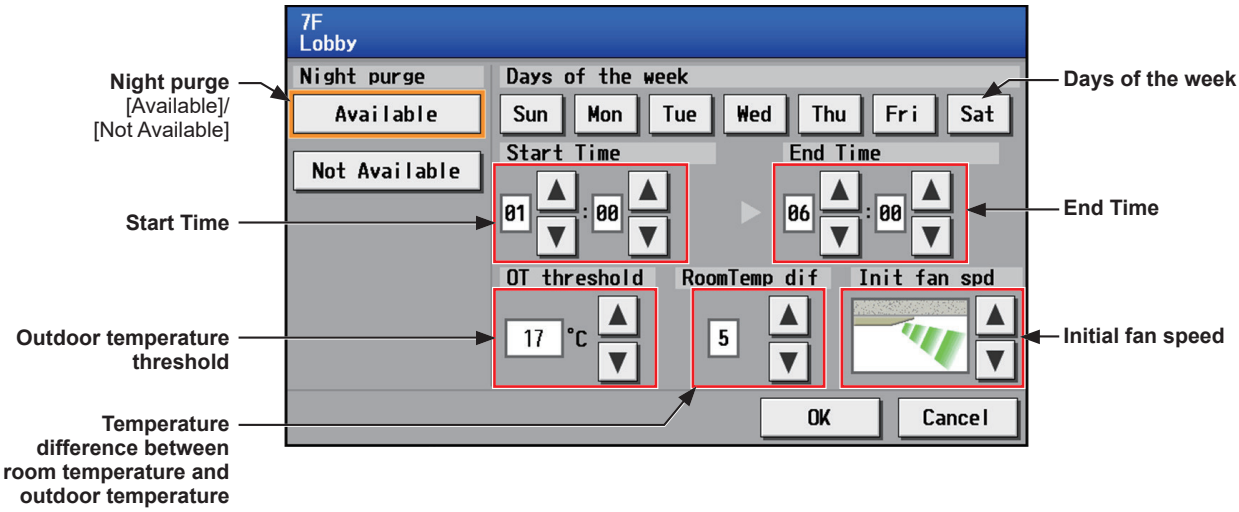
(1) Touch one or more group icons whose settings are to be made, and then touch [Edit].

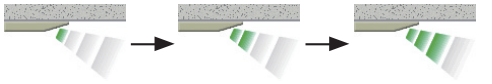


(2) In the [Night purge] section, select [Available] to enable the Night purge settings, make detail settings (days of the week, start time, end time, outdoor temperature threshold, temperature difference between room temperature and outdoor temperature, initial fan speed), and then touch [OK].

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.	<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 * If the [Edit] button is touched with the multiple group icons selected, all days of the week are selected when the settings window opens.
(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 1ºC increments. The settable temperature is between 15ºC and 30ºC.
(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 1ºC increments. The settable temperature is between 0ºC and 7ºC.
(7)	Initial fan speed	Touch ▲ ▼ to set the fan speed to be set when the Night purge operation activates.	 (Fan speed 1) (Fan speed 2) (Fan speed 3 or 4) * 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.

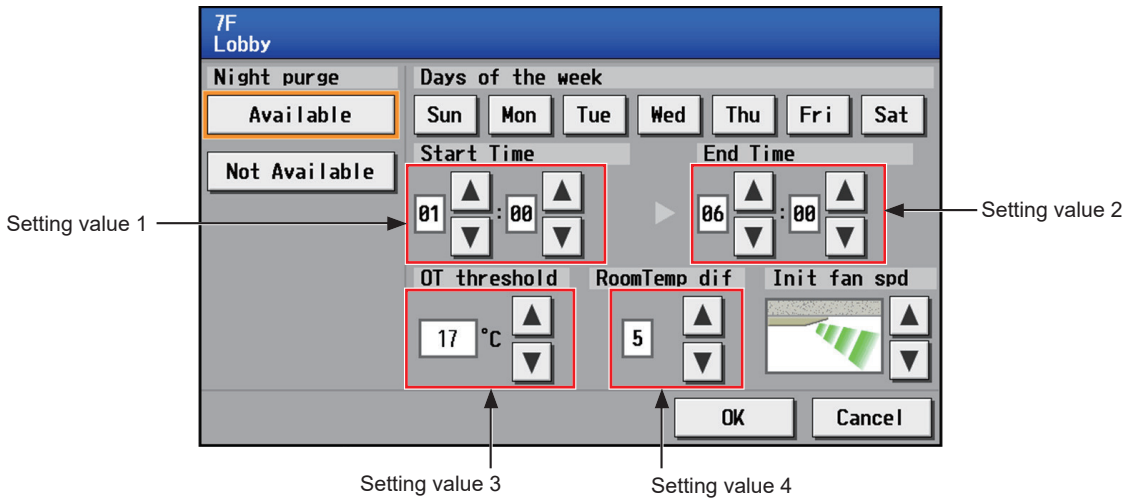
Note: Setting the “Night purge” setting to [Not Available] during the Night purge operation will stop the Night purge operation of the ventilation units (LOSSNAY).

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.



Starting condition

Condition #1: LOSSNAY units stop at 20:00.

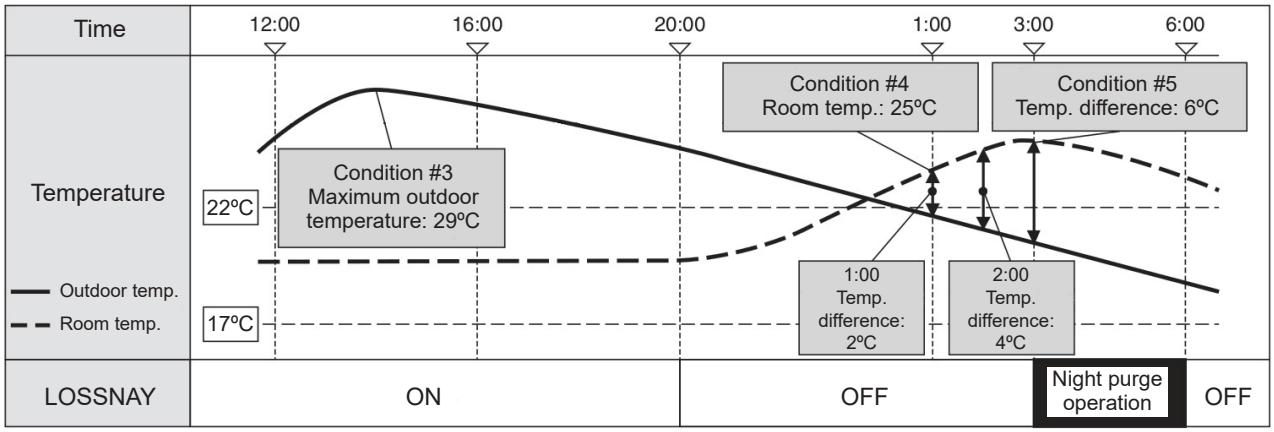
Condition #2: Between the start time 1:00 (setting value 1) and the end time 6:00 (setting value 2)

Condition #3: LOSSNAY units detected the outdoor temperature threshold 17ºC (setting value 3) or higher in the past 24 hours.

Condition #4: The current room temperature is higher than 22ºC. (The temperature 22ºC cannot be set from AE-200.)

Condition #5: The temperature difference between room temperature and outdoor temperature is greater than the temperature difference 5ºC (setting value 4).

- LOSSNAY units start the Night purge operation at 3:00 when the temperature difference between room temperature and outdoor temperature exceeds 5ºC.
- 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 5ºC.

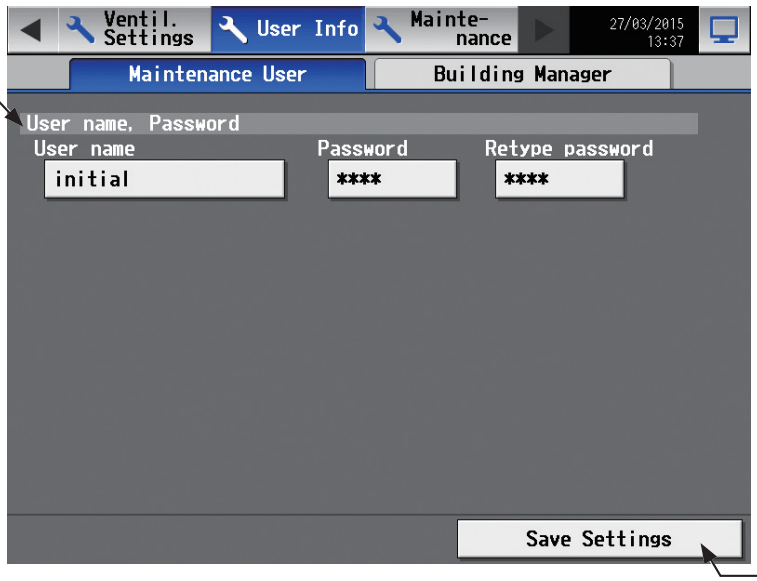


5-5. User Information

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.



Maintenance user name and password
User name and password can be changed.

Save Settings
Touch to save the changes made.

(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].

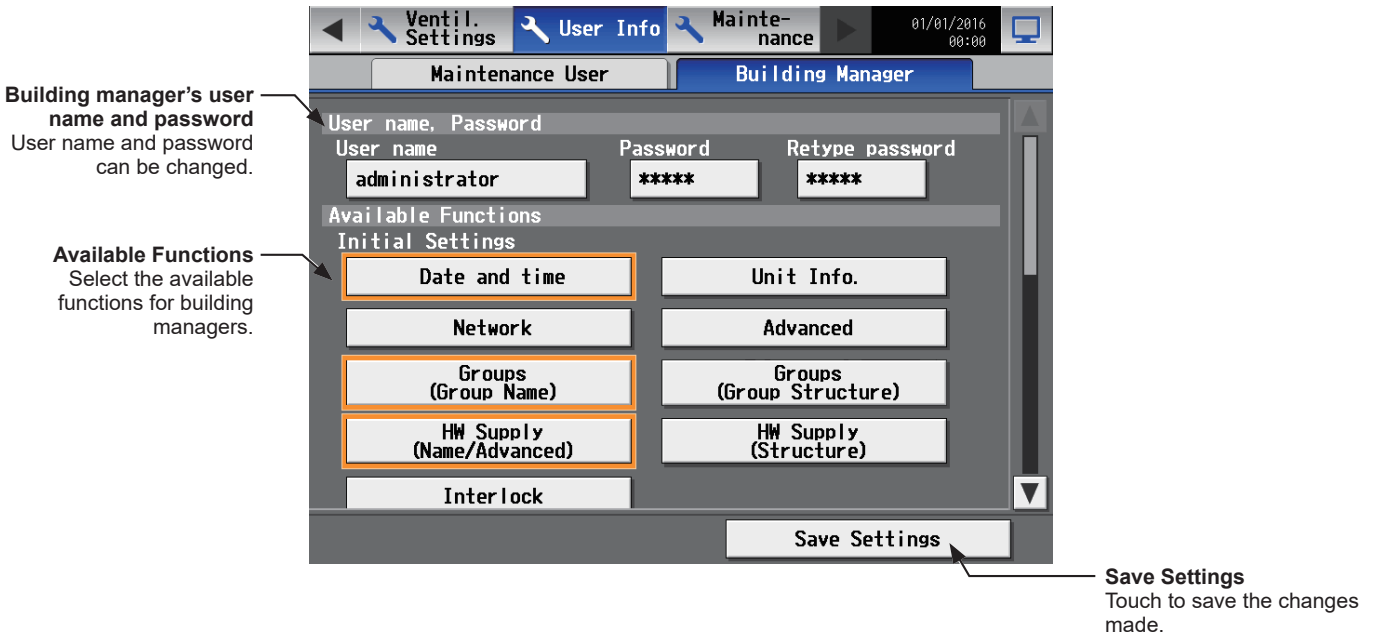
5-5-2. Building Manager

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.

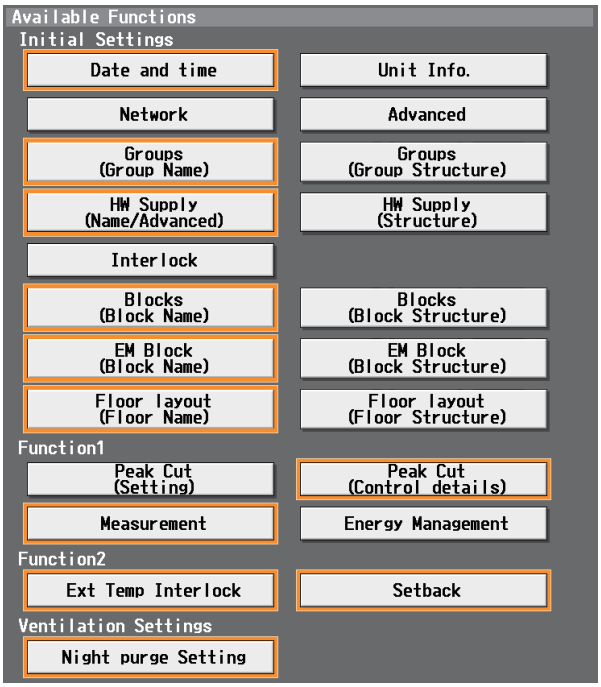


(1) To change the building manager's user name or password, touch the [User name], [Password], and [Retype password] buttons. Enter new information on the keyboard.

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.



(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 5-1-13 “Advanced settings” for details.
	Network *1		Refer to section 5-1-5 “Network” for details.
	Groups	Group Name	Refer to section 5-1-6 “Groups” for details.
		Group Structure *1	
	HW Supply *1		Refer to section 5-1-7 “HW Supply” for details.
	Interlock *1		Refer to section 5-1-8 “Interlocked LOSSNAY” for details.
	Blocks	Block Name	Refer to section 5-1-9 “Blocks” for details.
		Block Structure *1	
	Energy Management Blocks	Name	Refer to section 5-1-10 “EM Blocks” for details.
		Structure *1	
	Floor layout	Floor Name	Refer to section 5-1-11 “Floor Layout” for details.
		Floor Structure *1	
Function1	Peak Cut	Setting	Refer to section 5-2-1 “Peak Cut (Energy-save control function)” for details.
		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.

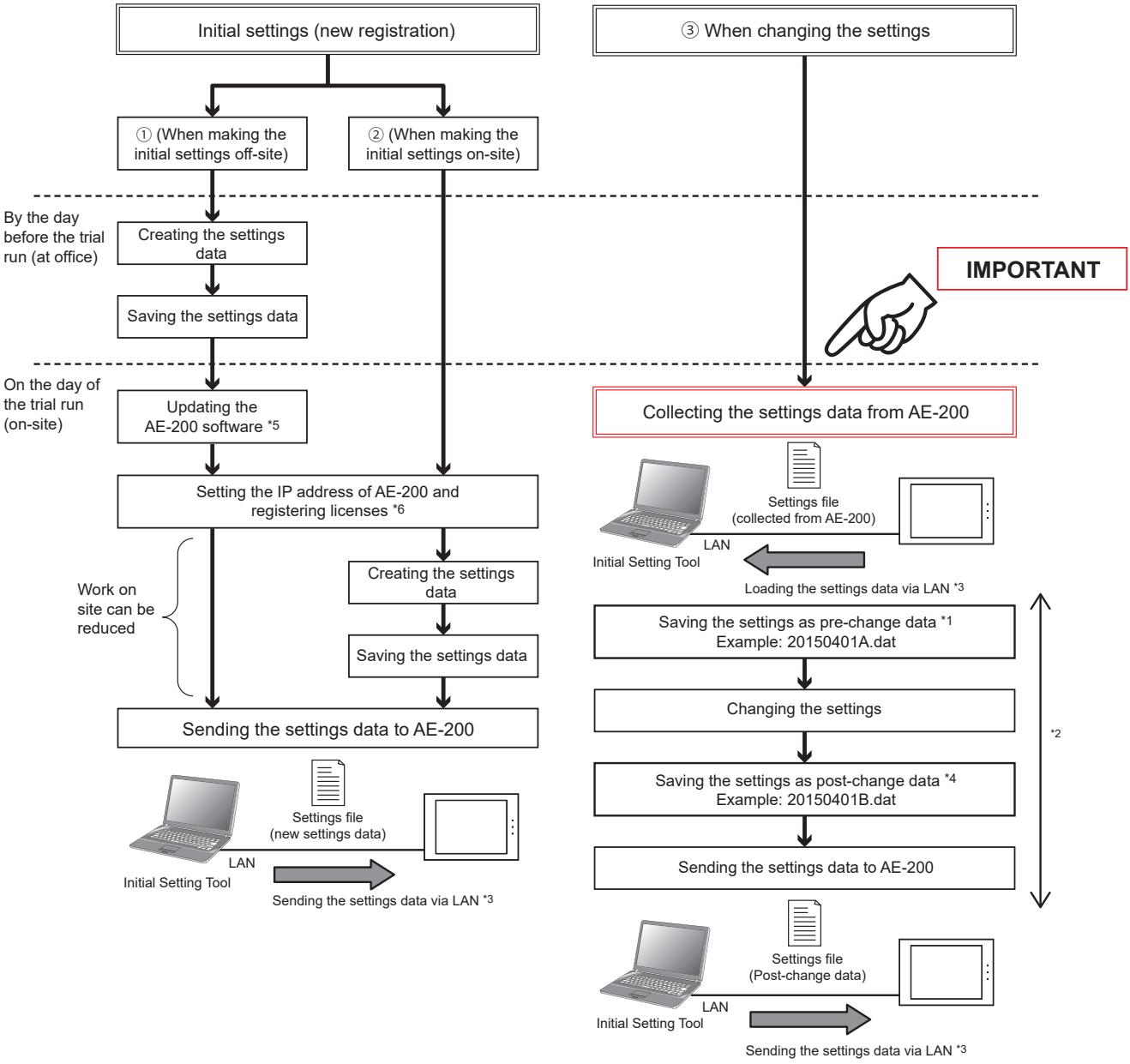
6. Settings using Initial Setting Tool

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. When changing the settings, collect the settings data from AE-200 before the change as shown in step ③ .

To change the existing AE-200/AE-50/EW-50 settings, make sure to **collect the settings data from AE-200** before the change. If this process is skipped, incorrect settings data will overwrite the existing settings.



*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 until you finish sending the setting changes data.

*3 The settings data created on the Initial Settings Tool cannot be imported to or overwritten to by using a USB memory as explained in chapter 8 "Maintenance", or to the Integrated Centralized Control Web.

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

*5 Refer to the AE-200/AE-50 Installation Manual for how to update the software for AE-200/AE-50. Refer to the EW-50 Installation and Instructions Manual for how to update the software for EW-50.

*6 Refer to section 4-2 "IP address settings" for how to change the IP address. Refer to section 4-5 "License registration for optional functions" for how to register licenses.

6-2. General descriptions of Initial Setting Tool

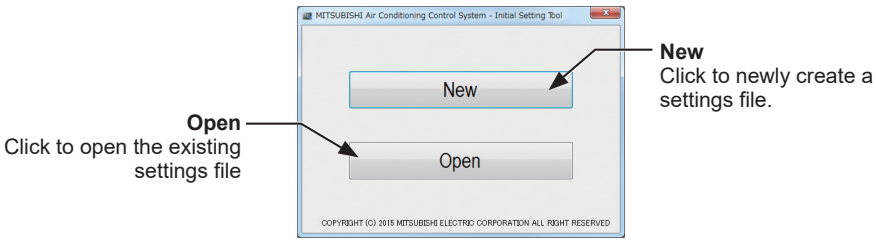
This section explains operation methods that are common to all setting screens of Initial Setting Tool.

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



AE-200 Initial Setting Tool

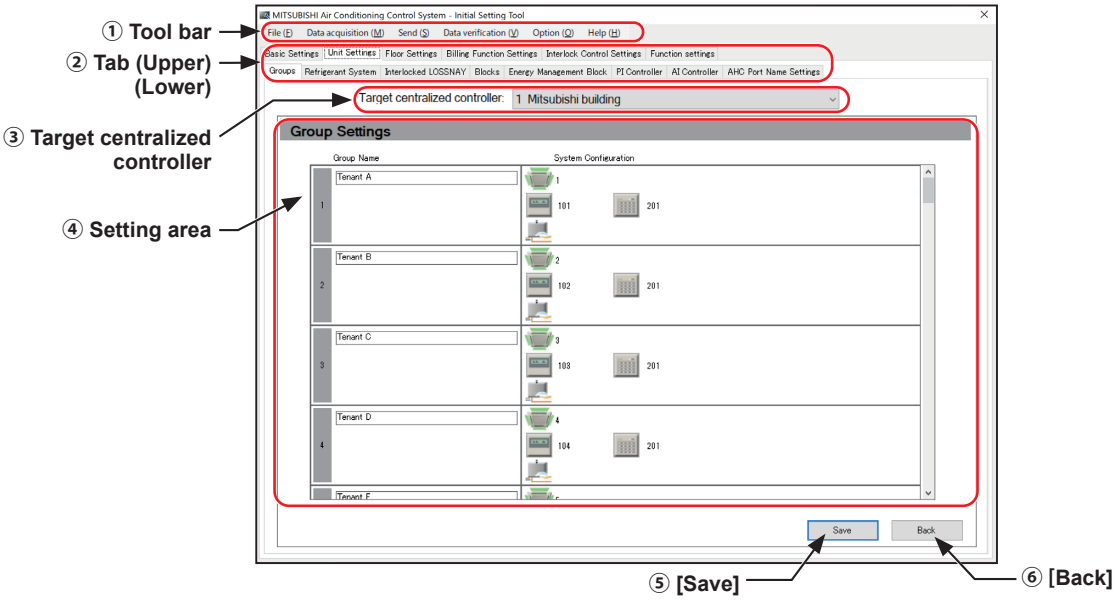
The screen below will appear when the Initial Setting Tool is started up.



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.

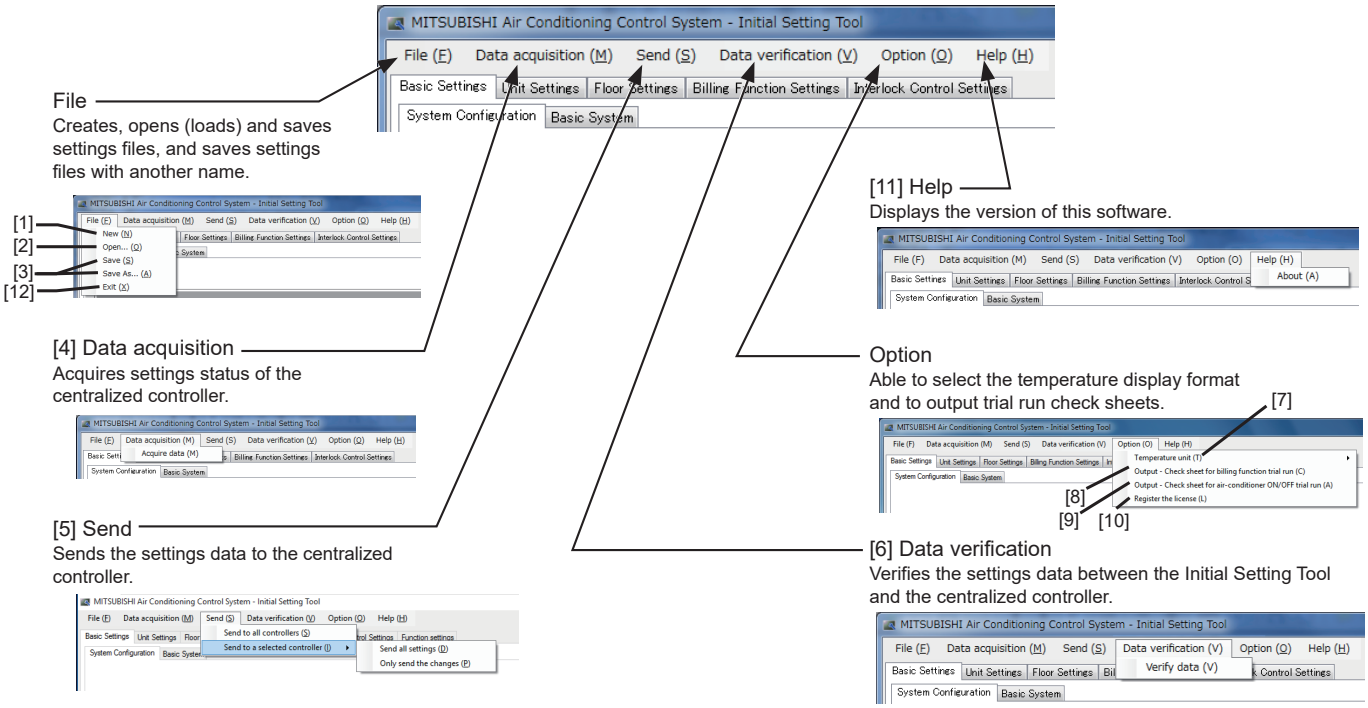
Note: When [Open] is clicked, the “Library” > “Documents” folder will be selected for the first time. Select the file saved on the Initial Setting Tool.

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”, 6-5 “Floor Settings”, 6-6 “Billing function settings”, and 6-7 “Interlock Control” for how to make settings.
⑤	[Save]	Click to save the settings in the Initial Setting Tool. (The settings will not be sent.)	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] 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

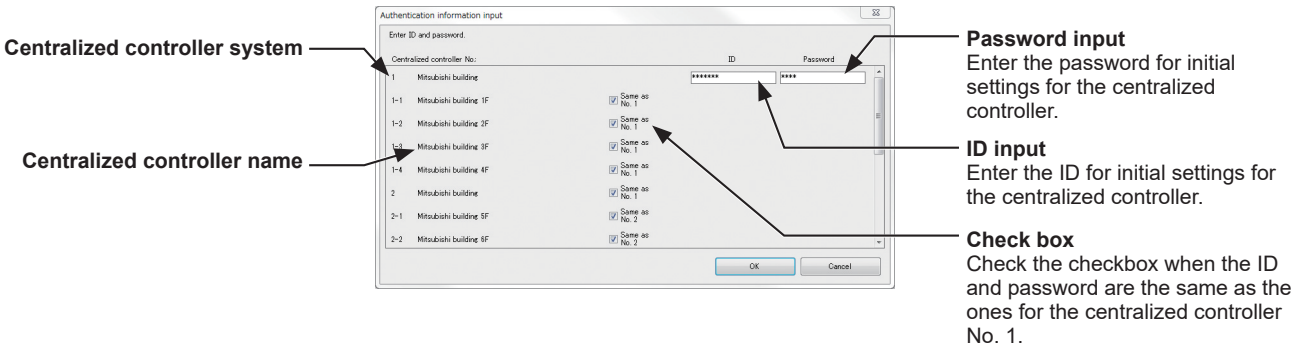
Loads the AE-200/AE-50/EW-50 settings data on the Initial Setting Tool.

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.



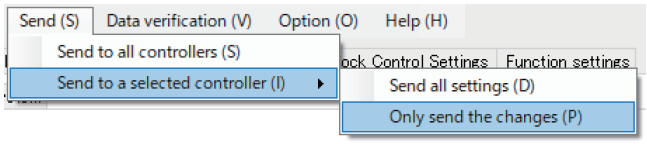
(4) Enter the maintenance user ID and password of the centralized controller from which the data is to be acquired.
If the ID and password are the same as ones for the centralized controller No. 1, check the “Same as No.1” checkbox.

(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

Send the settings to the centralized controller. Select the one that suits your usage from the three options below.



(1) Initial settings

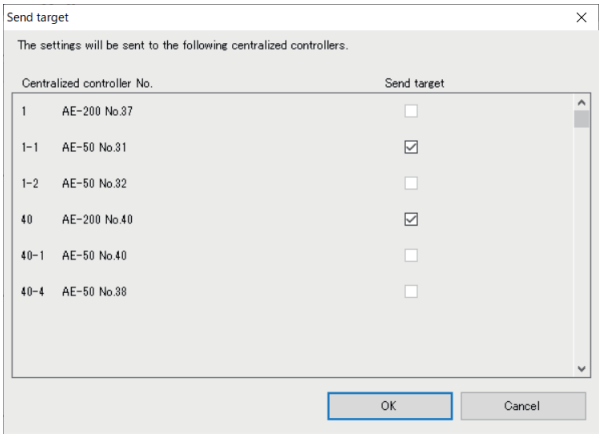
Click [Send] > [Send to all controllers] in the tool bar.

(2) Adding a unit or replacing the centralized controller due to malfunctions

Click [Send] > [Send to a selected controller] > [Send all settings] in the tool bar.

(3) Other than above

Click [Send] > [Send to a selected controller] > [Only send the changes] in the tool bar.



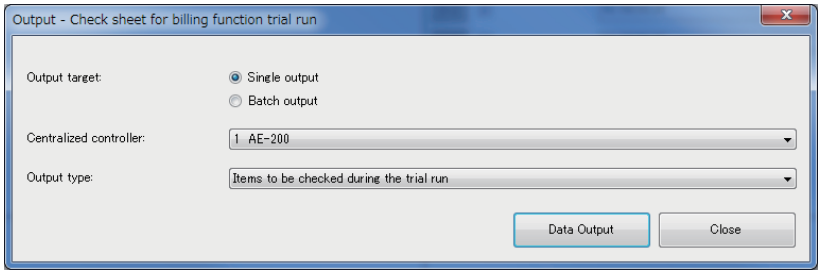
When step (1) above is taken, the settings will be sent to all centralized controllers.
When step (2) or (3) above is taken, the send-target centralized controller will appear after all the centralized controllers are scanned for. (The send-targets cannot be selected.) Click [OK] to send the setting changes to the target centralized controllers.

Note: This sends the settings data to all the centralized controller IP addresses set in “System Configuration” at once.
Note: Before sending the settings data, check that all the required settings are correctly made. All the items that are not set yet will be sent to the centralized controller as unset items.
Note: To change the settings, first save the acquired settings and make the setting changes before sending the settings data.
Note: When you change the settings related to the IP addresses or system configuration by selecting [Send to all controllers] or [Send to a selected controller], the send-target centralized controllers will restart.

[6] Data verification

Checks whether there are mismatched data in the billing-related settings between the Initial Setting Tool and the centralized controller.

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



[7] 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).

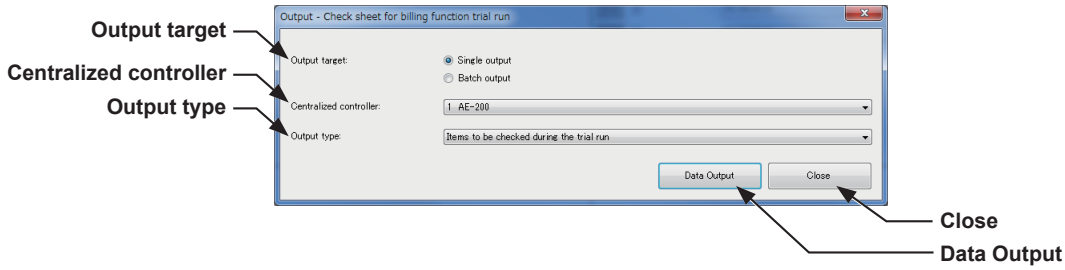
Note: Switching between Celsius and Fahrenheit consists of changing the unit shown on the Initial Setting Tool and does not set the unit used on each of the centralized controllers. To change the unit shown on the centralized controllers, make the settings in “Unit of temperature” setting in [Basic Settings]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

[8] 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”.
Note: To output the check sheet for all centralized controllers and all output types at once, select [Batch output] for “Output target”.

(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].

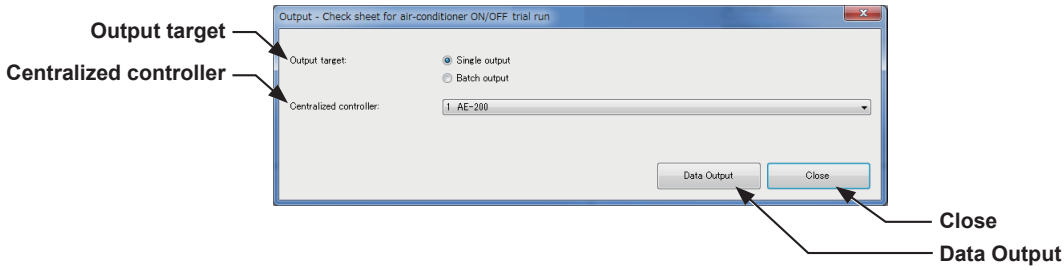
Note: Refer to the Instruction Book (Apportioned Electricity Billing Function) for details of the check sheet.

[9] Output - Check sheet for air-conditioner ON/OFF trial run

Click [Option] > [Output - Check sheet for air-conditioner ON/OFF trial run] in the tool bar to output the check sheet used for air-conditioner ON/OFF 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 air-conditioner ON/OFF trial will not run correctly. Be sure to complete [5] “Send” before starting the trial run.

(1) Click [Option] > [Output - Check sheet for air-conditioner ON/OFF 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”.
Note: To output the check sheet for all centralized controllers at once, select [Batch output] for “Output target”.

(3) Click [Data Output].

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

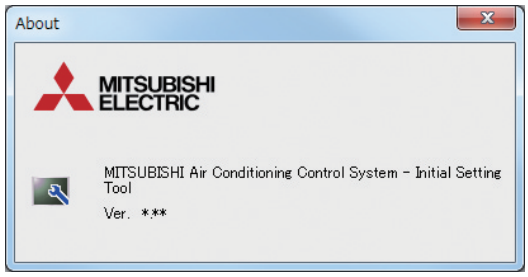
Note: Refer to “Appendix 1: Air-conditioner ON/OFF trial run” for the contents of the check sheet.
Note: When the PC with Initial Setting Tool installed and the centralized controller are connected via a LAN, the license registration status can be output in the check sheet.

[10] Register the license

Licenses can be registered for each centralized controller individually, or collectively by importing a CSV file that contains license information. Refer to section 4-5 “License registration for optional functions” for details.

[11] Help

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



[12] Exit

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

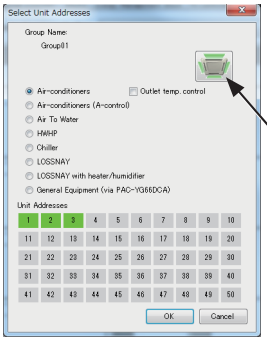
6-2-4. Unit address selection screen

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.

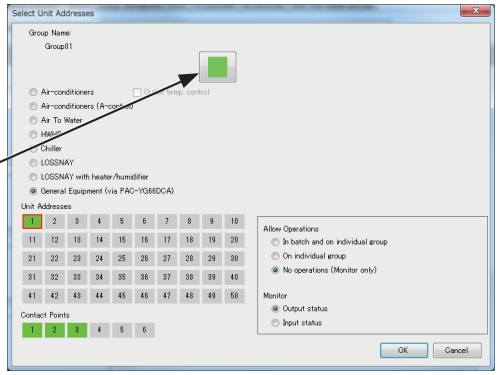
On unit address selection screen displayed from the group settings screen, an icon can be changed. To change an icon, click the icon selection button. Select the desired icon on the group icon selection screen. The selected icon will be displayed on the AE-200/AE-50's LCD and in the AE-200/AE-50/EW-50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

Group other than general equipment group

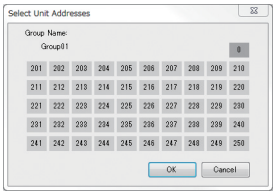


Icon selection

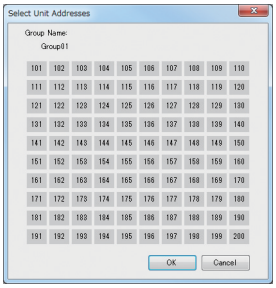
General equipment group



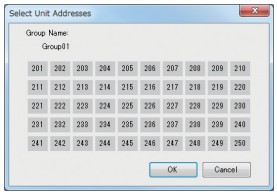
System controller



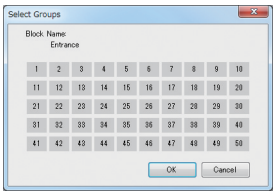
Remote controller



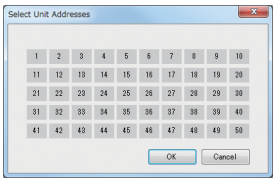
AHC



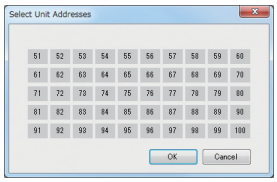
Block settings



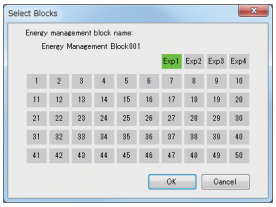
Refrigerant system (indoor unit) settings, Interlocked LOSSNAY settings, AI controller settings



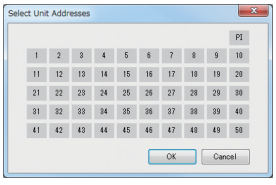
Refrigerant system (outdoor unit) settings



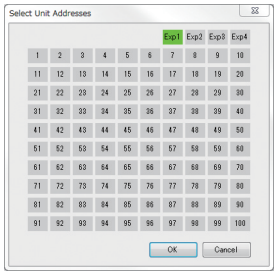
Energy management block settings



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”, 6-5 “Floor Settings”, 6-6 “Billing function settings”, 6-7 “Interlock Control”, and 6-8 “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 to all controllers] 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.

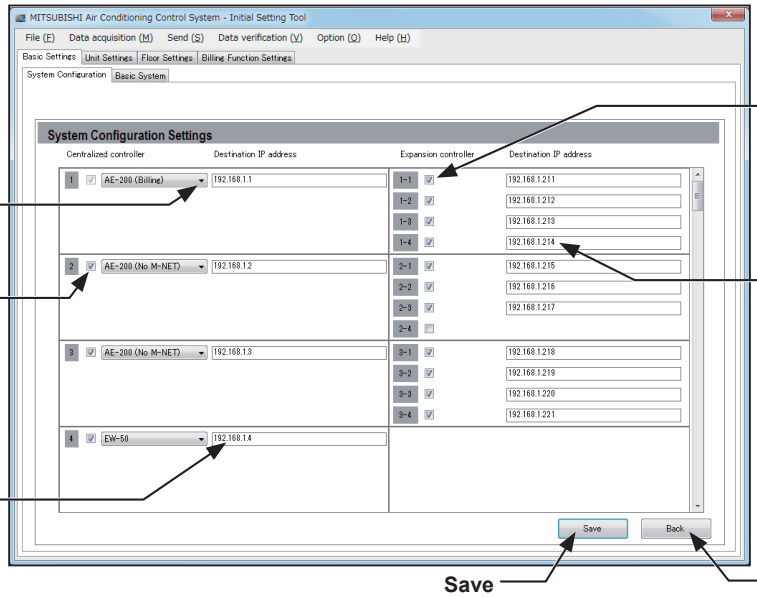
(4) Enter the IP address of the AE-50/EW-50 in “Destination IP address”.

(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 and expansion controller connection settings 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, Initial setting tool or the quick IP address setting switch (EW-50 only). To increase the number of expansion controllers to be connected, set the setting on the LCD of the AE-200.



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.

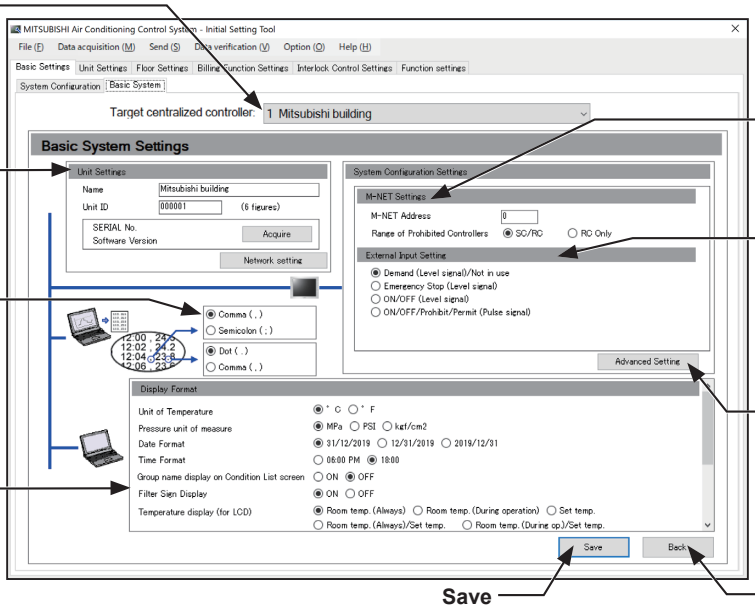
Save
Click to save the settings.

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

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.

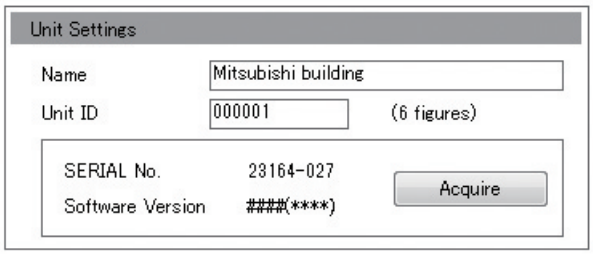
Save
Click to save the settings.

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.



(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 7.70 (1.07), the update file name is “AE200_FW0770_0107.dat”.

[2] Network setting

Click the [Network setting] button to access the network settings screen.

Note: LAN2 is exclusively used for BACnet® function. For BACnet® function settings, refer to the Instruction Book (BACnet® function).

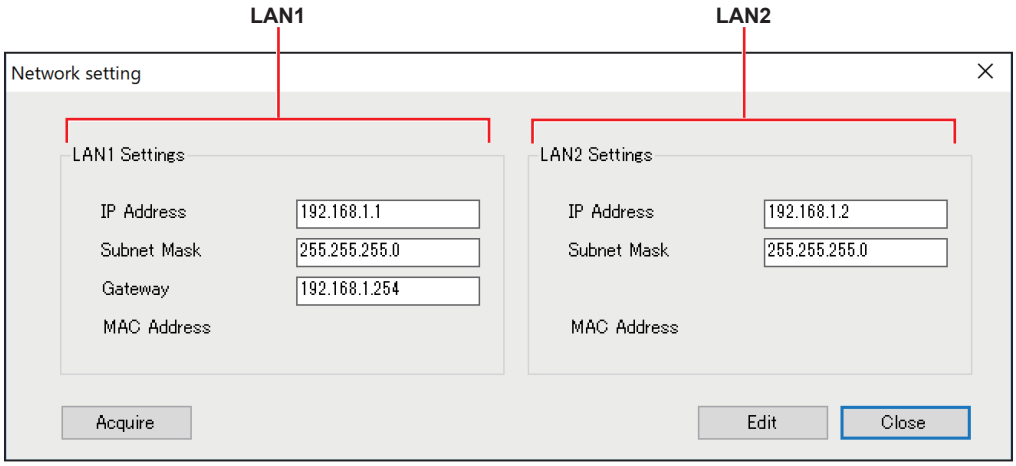
Note: Although the settings for LAN1 and LAN2 will appear on the screen, only the settings for LAN1 is required. However, only when the LAN1 IP address is required to be set to [192.168.2.1], change the default LAN2 IP address to avoid address overlap.

Note: To operate EW-50 according to the settings made with the Initial Setting Tool, set the rotary switch (SW1) to "0."

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

Clicking [Acquire] will communicate with AE-200/AE-50/EW-50 selected as "Target centralized controller," and display the current network settings.

Clicking [Edit] will reflect the network settings to the target centralized controller, then the target centralized controller will be reset.



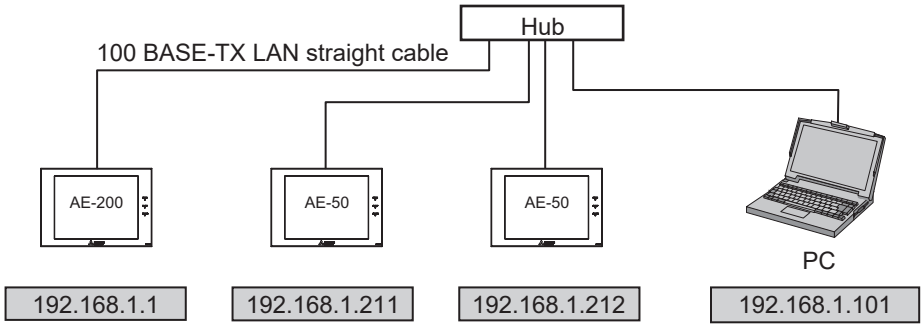
(1) Settings for connecting the AE-200/AE-50/EW-50 to a dedicated LAN

(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]

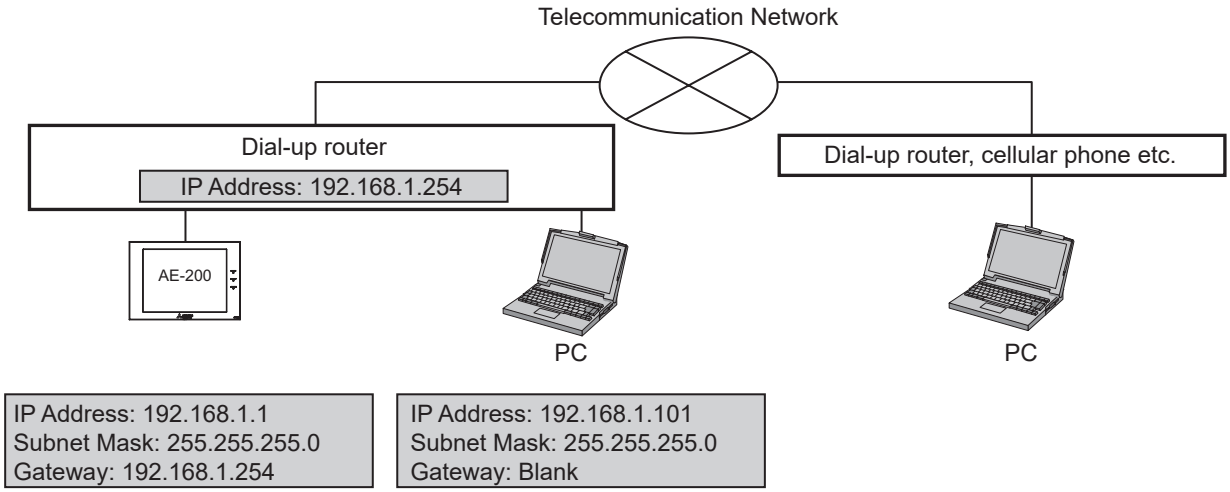


Note: Some hubs have dedicated ports for connection with another hub.
Connect the AE-200/AE-50/EW-50 and PC to the normal ports.

(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]

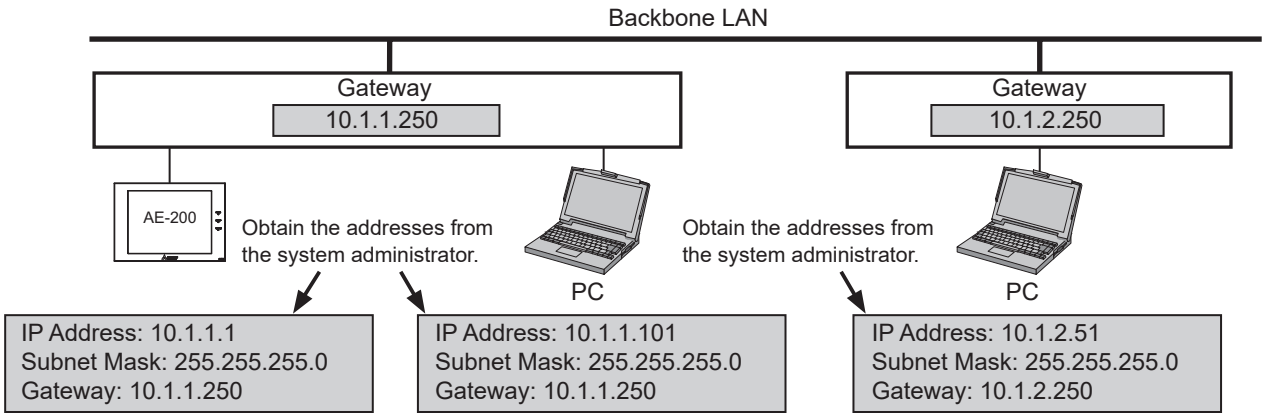


Note: [192.168.1.254] is recommended for use as the IP address of the dial-up router. Refer to the dial-up router instruction manual for details of how to set the IP address.
Note: The use of a dial-up router with no modem requires a modem (for analog or ISDN) to be connected between the router and the public phone line.

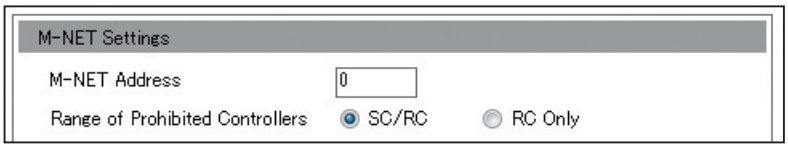
(2) Settings for connecting the AE-200/AE-50/EW-50 to an existing LAN

(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]



[3] M-NET settings



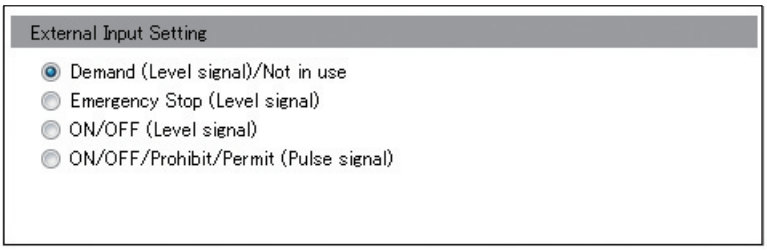
(1) Enter [0] in “M-NET Address” (unless otherwise specified).

(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.

[4] 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).

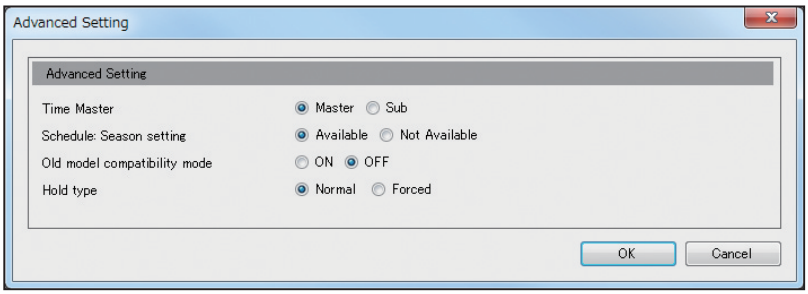
Note: Peak Cut control is performed based on the demand level signal (level 1 to 4) input from the connected demand controller.
Note: A separate license is required to use the Peak Cut function.
Note: The external input setting is required for each AE-200/AE-50/EW-50.



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

[5] Advanced Settings

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



(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].
Selecting [ON] will exclude the functions that require the indoor units to support the auto dual set point mode. This function is useful when new and old indoor units that support or do not support the auto dual set point mode exist in a given system, or when connecting a high-level building management system that does not support the auto dual set point mode is connected via the BACnet® function.
Select [ON] when not using a Dual set point function and the Prohibit Remote Controller function (Timer, Air Direction, Fan Speed).
The following functions are available.

○ : Available

Setting	Old model compatibility mode	OFF		ON	
	Model	New indoor unit	Old indoor unit	New indoor unit	Old indoor unit
Set temperature	Auto dual set point mode	○			
	Auto single set point mode		○	○	
Prohibit remote controller	ON/OFF	○	○	○	
	Operation mode	○	○	○	
	Set temperature	○	○	○	
	Filter sign reset	○	○	○	
	Air direction	○			
	Fan speed	○			
	Timer	○			

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.

Note: When changing the old model compatibility mode while this mode is used, note the following.
- The set temperature will go back to the default setting value. Write down the current set temperature of each group to reconfigure the set temperature settings later.
- The set temperature for the schedule settings will be cleared. Write down the current set temperature of each group for schedule settings to reconfigure the set temperature settings later.
- Some equipment whose operation is to be interlocked with another equipment support the dual set point function in the Auto mode. Reconfigure the Interlock Control setting if it is affected by the change of the old model compatibility mode.

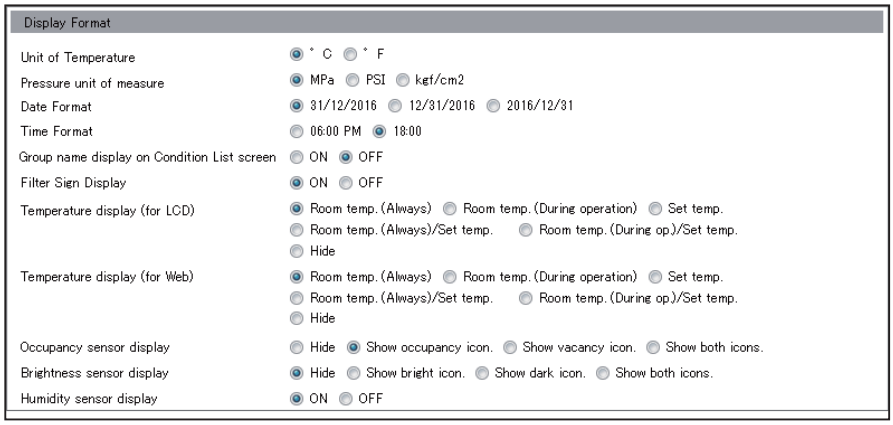
(4) Hold type

(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).

[6] Display Format

Set the items in “Display Format”.



(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 the [Temperature display (for LCD)] section, select the desired display option for the room temperature or the set temperature to be used on the [Floor] or [Block] display on the LCD.
In the [Temperature display (for Web)] section, select the desired display option for the room temperature or the set temperature to be used on the [Floor Layout] screen on the Integrated Centralized Control Web.
Select [Room temp. (Always)] to display the room temperature at all times, [Room temp. (During operation)] to display the room temperature only during operation, [Set temp.] to display the set temperature at all times, [Room temp.(Always)/Set temp.] to display both the room temperature and set temperature at all times, [Room temp.(During op.)/Set temp.] to display the room temperature only during operation and to display the set temperature at all times, and [Hide] not to display the room temperature or the set temperature.

Note: The room temperature shown may be higher than the actual temperature especially when the unit is stopped during the Heat mode. Therefore, selecting [Room temp. (During operation)] is recommended when displaying the room temperature.

Note: The outlet air temperature is displayed for the room temperature of outlet air temperature control units.

(8) 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.

Note: The table below summarizes the items that are displayed on the Monitor/Operation screen according to the combination of the settings for “Temperature display” and “Humidity sensor display.”

Humidity sensor display	Temperature display			
	[Room temp. (Always)] or [Room temp. (During operation)]	[Set temp.]	[Room temp.(Always)/ Set temp.] or [Room temp.(During op.)/ Set temp.]	Hide
OFF	Upper: Room temp. Lower: N/A	Upper: Set temp. Lower: N/A	Upper: Room temp. Lower: Set temp.	Upper: N/A Lower: N/A
ON	Upper: Room temp. Lower: Humidity	Upper: Set temp. Lower: Humidity	Upper: Room temp. Lower: Set temp.	Upper: N/A Lower: Humidity

(9) 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.

(10) 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.

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

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

Important

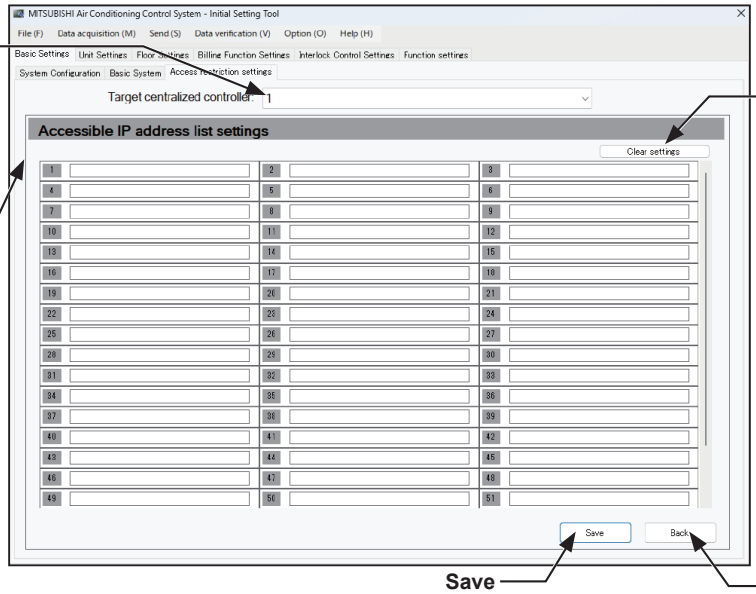
- This setting must be the same with the “Decimal point character for CSV file” and “Separator character for CSV file” settings on the [Advanced Settings] screen on the Charge Calculation Tool. If the settings are not the same, an error message “The CSV file format is not appropriate. Check the directory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

[8] Saving the settings

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

6-3-3. Access restriction settings

Click [Basic Settings] – [Access restriction settings] to display the access restriction settings screen. On this screen, you can make a list of IP addresses that are allowed to access each centralized controller.



Target centralized controller
Select the centralized controller for which you want to make access settings.

Accessible IP address list settings
Enter IP addresses that are allowed to access the target centralized controller.

Clear settings
Click to clear the settings displayed on the accessible IP address list.

Save
Click to save the settings.

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

[1] Accessible IP address list settings

You can make a list of IP addresses that are allowed to access the target centralized controller. Once the list is made, IP addresses not on the list cannot access the target centralized controller.

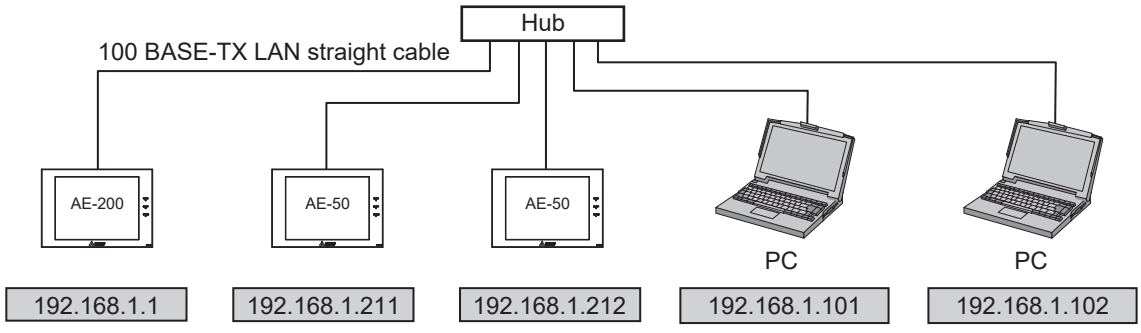
Note: All fields are blank by default. If all fields are blank, all IP addresses can access the centralized controller.
Only when you want to restrict the access, make the accessible IP address list.

Note: Enter the IP addresses of the PCs that access via LAN, such as the PCs that use the Initial Setting Tool and the PCs that access the centralized controller via the Web.
You do not need to enter the IP addresses of the AE-200, AE-50, or EW-50 that you configured on the system configuration settings screen because they are automatically set as accessible IP addresses.

Note: This list applies both to LAN1 and LAN2.

Note: If you change the settings, the target centralized controller will restart.

(1) Enter the IP addresses of the PCs that are allowed to access the centralized controller in entries 1 to 60 in the list.
In the example below, enter “192.168.1.101” and “192.168.1.102” in the accessible IP address list for each centralized controller.
You can specify a range of IP addresses using an asterisk as a wildcard character.
Example) To specify an IP address range of “192.168.1.1” to “192.168.1.255,” enter “192.168.1.*.”



(2) After completing the list, click [Save].

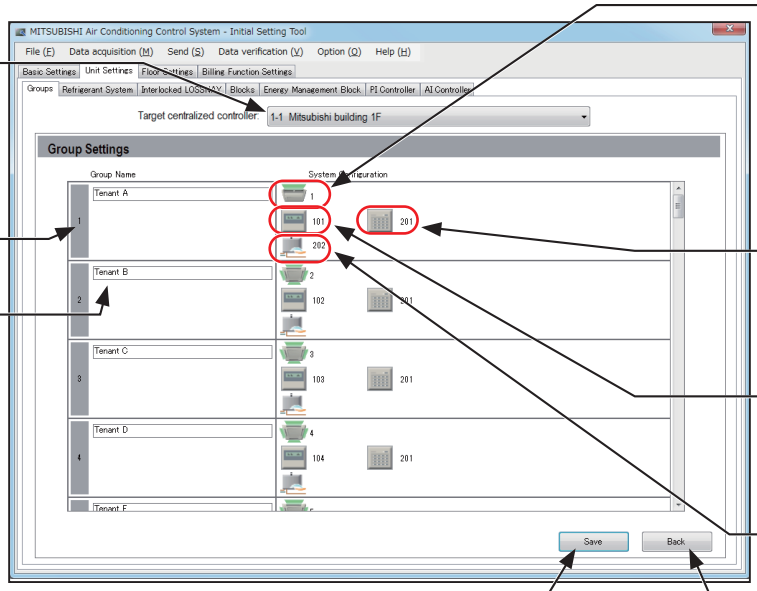
6-4. Unit settings

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, OA Processing units, Air To Water (PWFY) units, HWHP (CAHV, CRHV) units, chiller units, and general equipment groups cannot be combined in one group.
Note: HWHP (QAHV) units cannot be registered from the Initial Setting Tool. Register the HWHP (QAHV) units on the LCD.
Note: When registering LOSSNAY units or OA Processing units, do not combine the units that support 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 Refrigerant System settings, 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, OA Processing units, Air To Water (PWFY) units, HWHP (CAHV, CRHV) units, chiller 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, OA Processing units, HWHP (CAHV, CRHV) units, chiller 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], [Chiller], [LOSSNAY], [LOSSNAY with heater and humidifier], or [General Equipment (via PAC-YG66DCA)]. To register outlet air temperature control units, select [Air-conditioners], and then check the checkbox next to [Outlet temp. control].

(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.

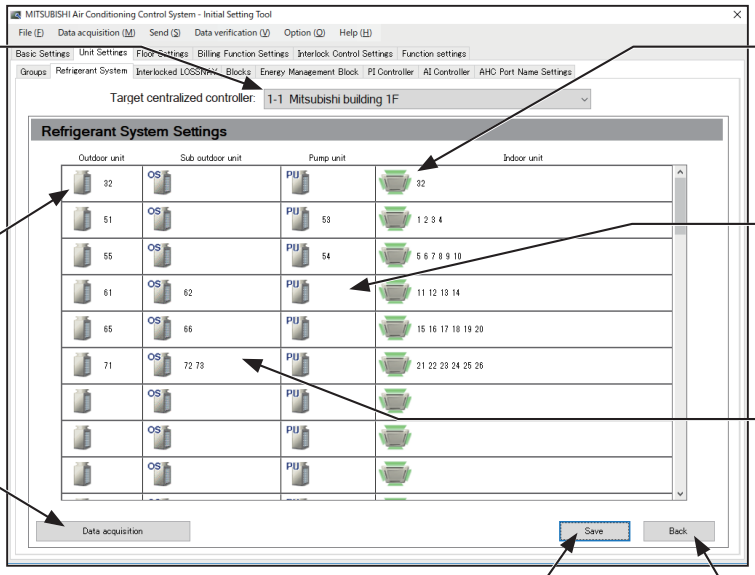
(16) Select the address number of the AHC to be registered, and click [OK].
Note: Each group can contain one AHC.

(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 register general equipment to a group to which units other than general equipment are already registered, delete the existing registration first before registering general equipment to it.
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-200/AE-50/EW-50 and replace the settings.

Indoor unit registration
Click to display the screen for registering the indoor units.

Pump unit registration
Click to display the screen for registering the pump 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) (HVRF system only) Click the icon in “Pump unit registration” ( ) to display the unit address selection screen.

(8) (HVRF system only) Select the address number of the pump unit to be registered, and click [OK].

(9) Click the icon in “Indoor unit registration” ( ) to display the unit address selection screen.

(10) Select the address number of the indoor unit to be registered, and click [OK].

(11) 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.

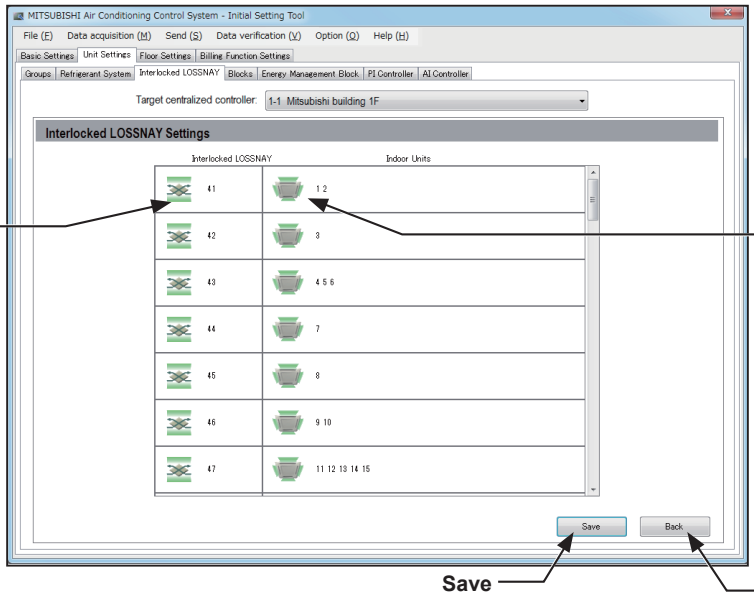
Note: If the displayed information acquired from the centralized controller differs from the actual system, restart the centralized controller or check the air conditioning units.

6-4-3. Interlocked LOSSNAY settings

The ON/OFF status of the LOSSNAY or OA Processing units 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.



Interlocked LOSSNAY registration
Click to display the screen for registering the LOSSNAY unit to be interlocked.

Interlocked indoor unit registration
Click to display the screen for registering the air conditioners with whose operations are to be interlocked.

Save
Click to save the settings.

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

(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 air conditioners 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.

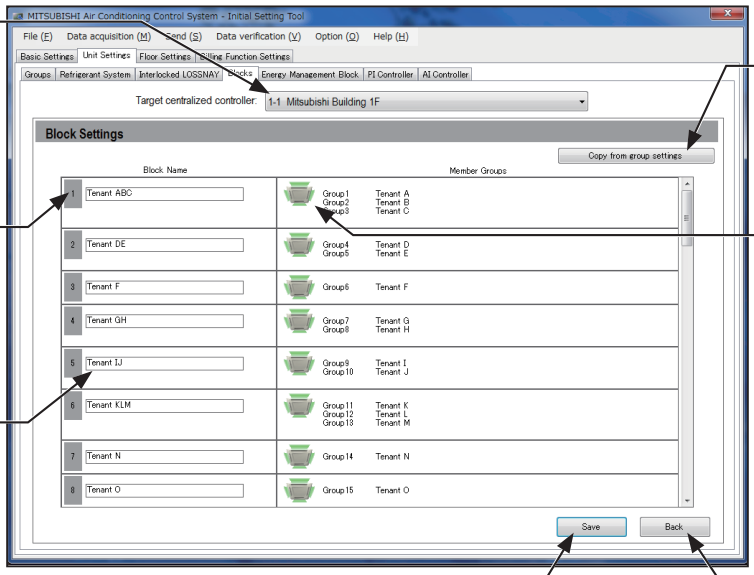
6-4-4. Block settings

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.

Note: To use the energy-save control (Peak Cut), make block settings.
The ventilation will stop when the Peak Cut control runs for the LOSSNAY units or OA Processing units that perform Night purge operation. For this reason, do not register the LOSSNAY units and OA Processing units that perform Night purge operation to the same block.

Note: HWHP (CAHV, CRHV, QAHV) unit groups and chiller unit groups cannot be registered to a block.

(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

Copy from group settings
Click to create a block with the settings copied from the group settings.

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.

(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.
Note: Click [Copy from group settings] to create a block with the settings copied from the group settings.

(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.

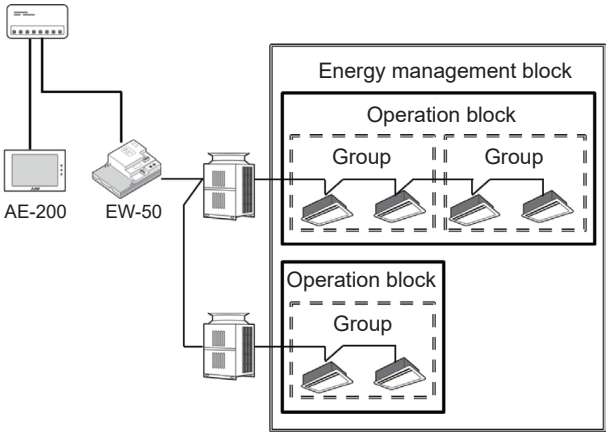
6-4-5. Energy management block settings

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. (When EW-50 controllers are used without an AE-200, operation blocks belonging to different EW-50 controllers cannot be included in the same energy management block.)
- An operation block is a collection of groups.



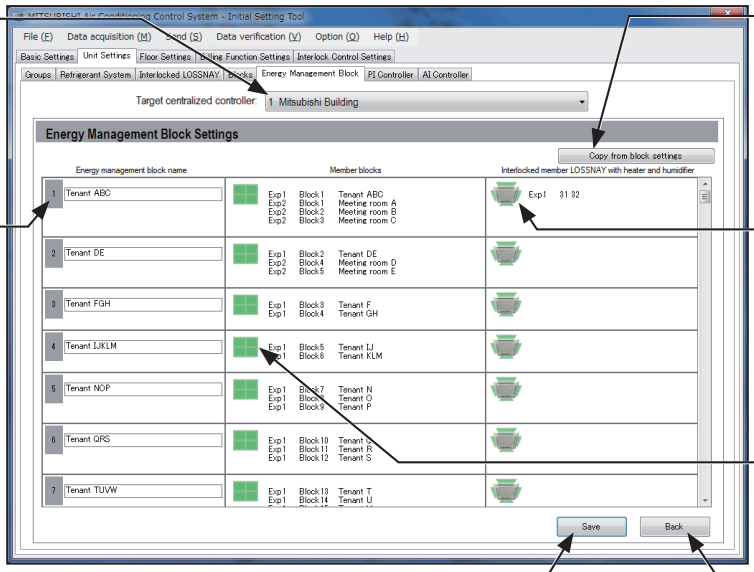
(2) LOSSNAY (including OA Processing unit) settings

Make the settings based on the LOSSNAY system configuration.

	Usage		Energy management block setting method
LOSSNAY	When not interlocked with the operation of indoor units		To apportion the electric energy, set as energy management block (tenant). (See [2] (3).)
	When interlocked with the operation of indoor units		No settings are required (cannot be set as a target for billing function). Note: The LOSSNAY electric energy will be apportioned based on the operating status of the interlocked indoor units.
OA Processing unit	When not interlocked with the operation of indoor units		Set as energy management block (tenant). (See [2] (3).)
	When 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. (See [2] (6).)
		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. (See [2] (6).) <Method 2> Exclude these units from the tenant settings. In this case, the electric energy for OA Processing units 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.



(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.

Note: Click [Copy from block settings] to create an energy management block with the settings copied from the block settings. Then, make the setting for the OA Processing units in steps (6) through (8).

(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 “Interlocked member LOSSNAY with heater/humidifier registration” ( ) to display the OA Processing unit address selection screen.

Note: The setting for the OA Processing units in steps (6) through (8) is required only when the apportioned electricity billing function is used.

(7) Select the controller ([AE200], [Exp1] through [Exp4]) of the OA Processing unit to be registered.

(8) Select the unit address of the OA Processing unit 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

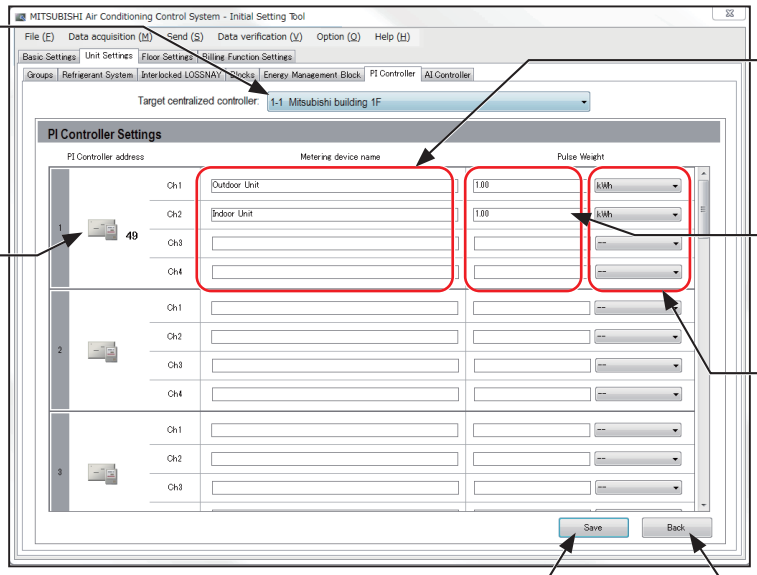
To use metering device on the centralized controller, follow the instructions below to register PI controllers (PAC-YG60MCA) and to make measurement settings.

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, the Refrigerant System settings, 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.

Note: The measurement values for which “--(no unit)” has been selected will not be plotted on a graph on the Energy Use Status screen.

(6) Click [Save] to save the settings.

Important

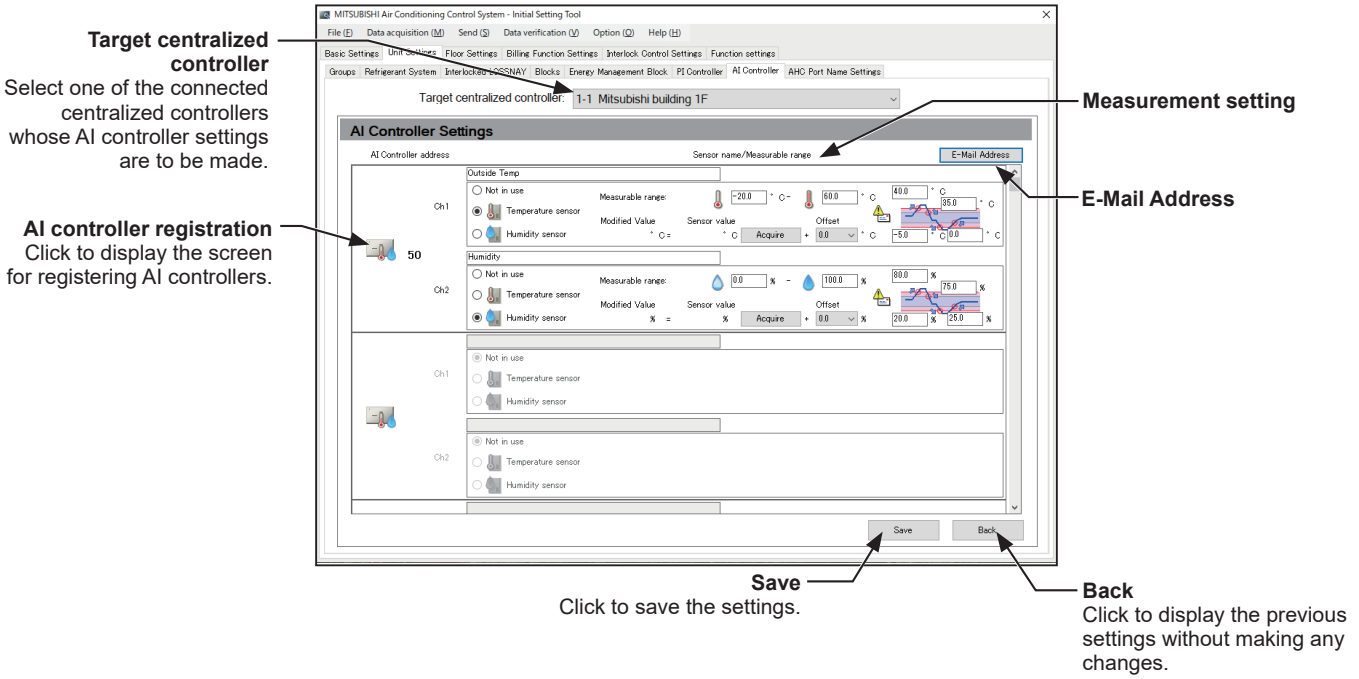
- Set the pulse weight according to the metering device to be used. To ensure proper settings, first check the value measured by the metering device and the value counted by the built-in Pulse Input (PI) of AE-200/AE-50/EW-50 or the PI controller. Then, after a certain time, check that both values have 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.

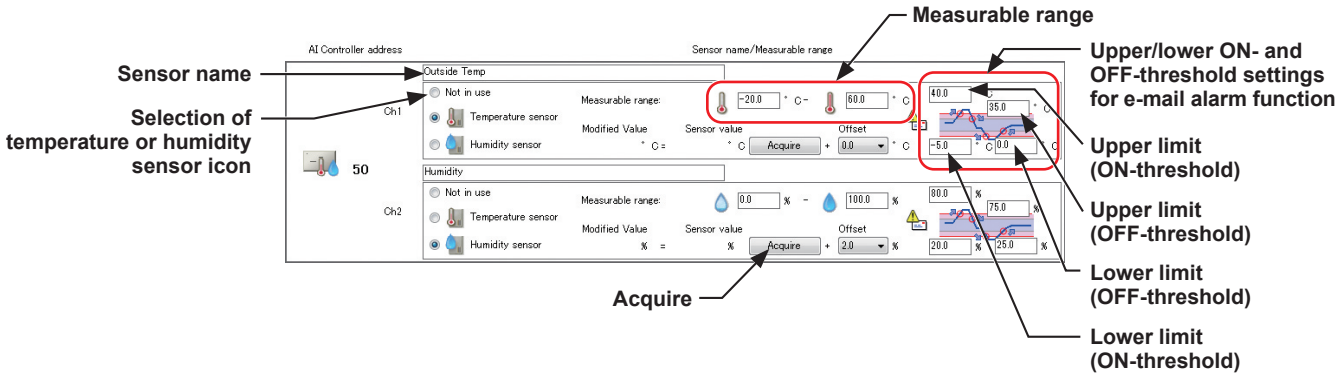
6-4-7. AI controller settings

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, the Refrigerant System settings, interlocked LOSSNAY, or PI controller setting screens are available for selection.

(1) Click [Unit Settings] > [AI Controller] to access the AI controller settings screen.





(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 -30ºC (-22ºF) and +60ºC (+140ºF).
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 1ºC (2ºF).

(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 acquireing 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 -10.0ºC (-18.0ºF) and +10.0ºC (+18.0ºF).

Note: The default offset value for humidity sensor is “0.0”. The settable offset value range is between -10.0% and +10.0%.

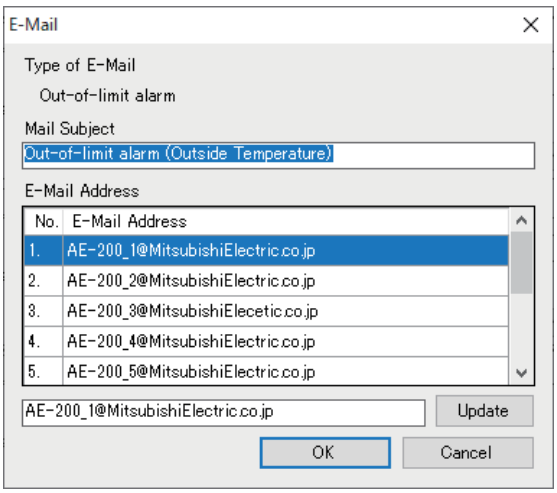
[2] E-mail alarm function settings

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 [Mail Subject] field, enter the e-mail subject.

Note: The following characters cannot be used in the [Mail Subject] field: <, >, &, “, or ‘

(2) In the [E-Mail Address] field, select the row whose address is to be changed, enter the e-mail address, and then click [Update].



An e-mail alarm will be sent in the format shown below.

From: Mitsubishi Building(000001)
Date/Time: 2014/03/14 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

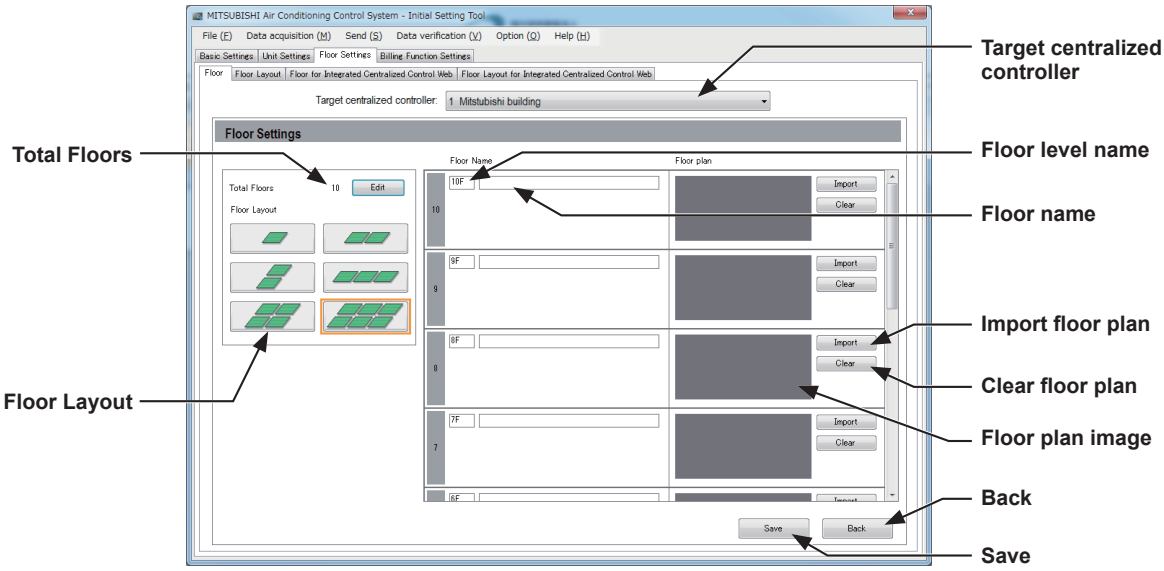
From	AE-200/AE-50/EW-50 name + Unit ID Note: The AE-200/AE-50/EW-50 unit name and unit ID entered in section 6-3-2 “Basic System settings” will appear.
Date/Time	yyyy/mm/dd hh:mm:ss Note: The date and time will appear in the format selected in section 6-3-2 “Basic System settings”.
Address	M-NET address 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)

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.

(1) Click [Floor Settings] > [Floor] to access the LCD's floor settings screen.

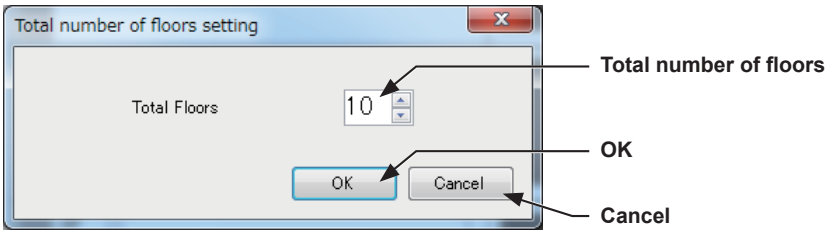


(2) In [Target centralized controller], select a target centralized controller.
The floor level settings for the selected centralized controller will appear.

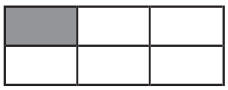
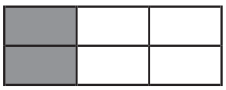
Note: The target centralized controller No. is the number shown in 6-3-1 "System Configuration settings". The controller name is the name registered in unit settings in Basic System settings.

(3) Click [Edit] in [Total Floors] to display the "Total number of floors setting" screen.

(4) Set the total number of floors by entering the number on the keyboard or by clicking ▲ ▼ buttons.



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 registerted.
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
			
			
			

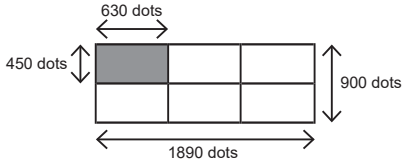
(5) In [Floor Layout], select the floor layout to be used.

(6) In [Floor level name], enter the floor level name in 3 alphanumeric or symbol characters or less.

(7) In [Floor name], enter the floor name in 20 alphanumeric or symbol characters or less.

(8) 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.

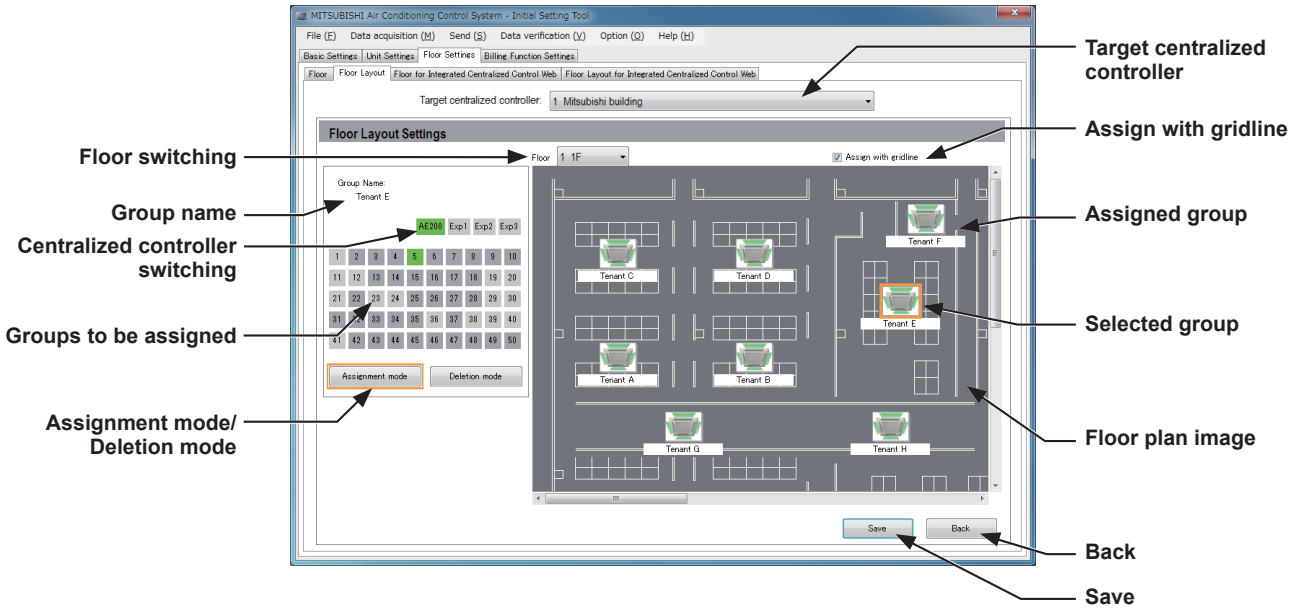
Restrictions on the floor plan files to be read

<table>
<tr><td>File size</td><td>900 (height) × 1890 (width) dots for each floor plan
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.)
 
</td></tr>
<tr><td>File capacity</td><td>Max. 600 KB for each floor plan</td></tr>
<tr><td>File format</td><td>gif
Note: Files that contain extension data (metadata such as XMP, transparent GIF, interlace GIF, animated GIF) cannot be read.</td></tr>
<tr><td>Available colors (RGB) to be used in the file</td><td>
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<tr><td>165</td><td>145</td><td>185</td></tr>
<tr><td>33</td><td>37</td><td>57</td></tr>
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<tr><td>6</td><td>35</td><td>160</td></tr>
<tr><td>6</td><td>28</td><td>122</td></tr>
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<tr><td>12</td><td>45</td><td>176</td></tr>
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<tr><td>211</td><td>214</td><td>227</td></tr>
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</table>
* 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].
</td></tr>
</table>

(9) 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.
Note: Groups of air conditioners, Air To Water (PWFY) units, LOSSNAY units, OA Processing units, and general equipment can be assigned to the floor layout.

(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].

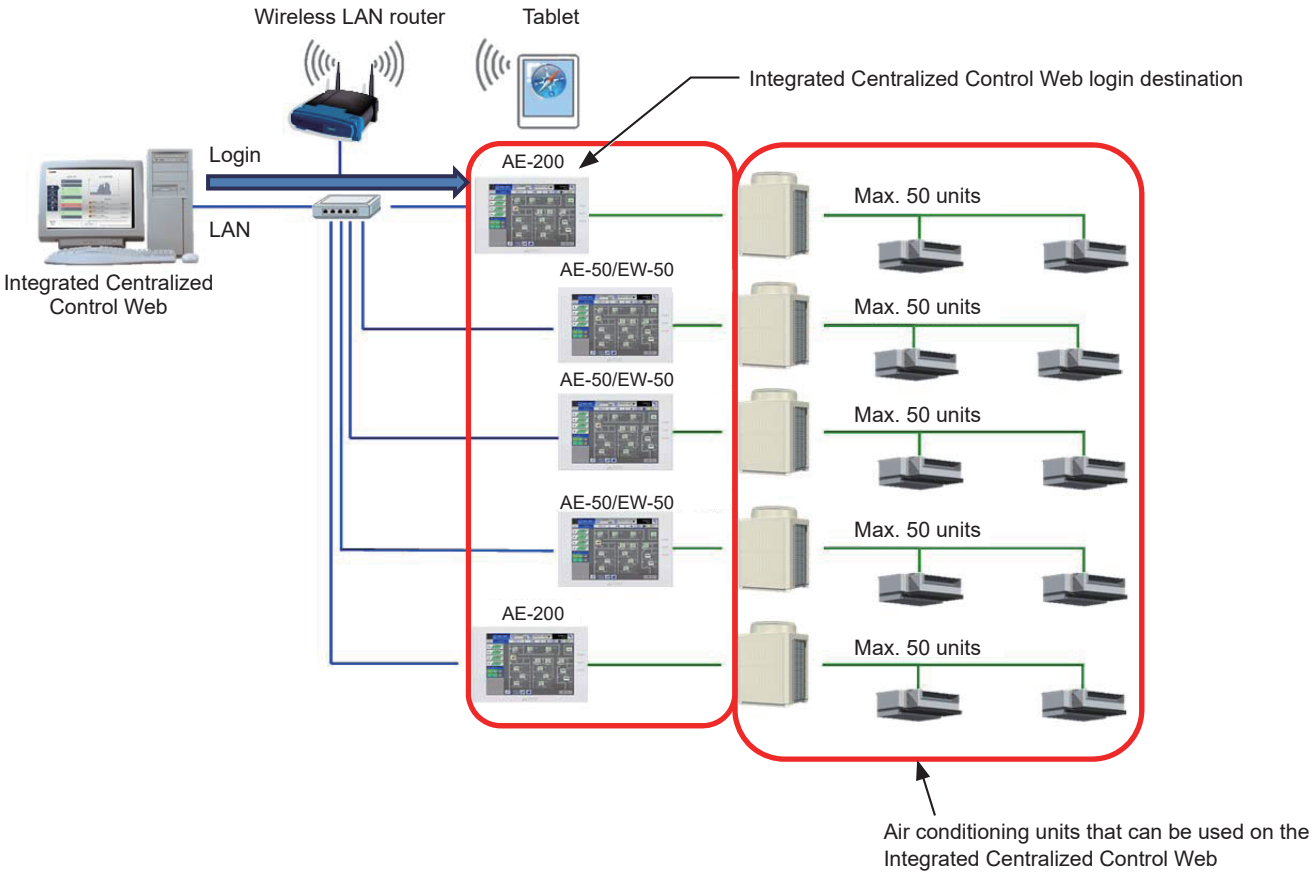
(2) Click the assigned group icon, and this will return to the selectable group.

(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

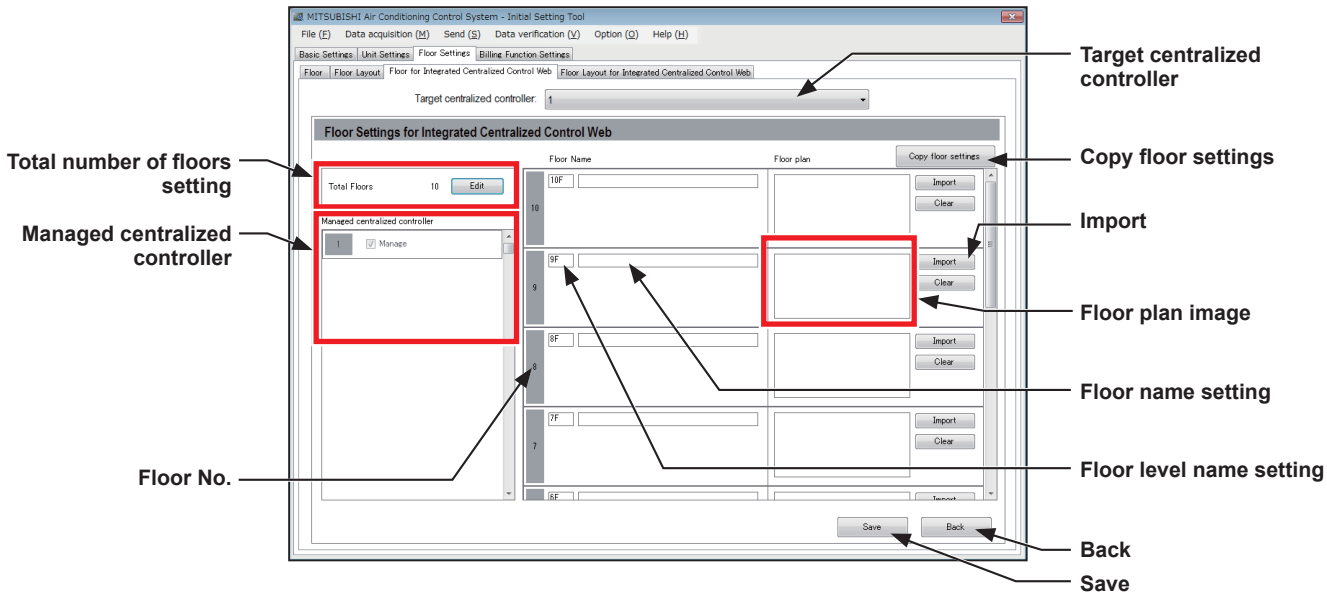
Configure floor-related settings for when monitoring and operating air conditioning units with centralized controllers using the Integrated Centralized Control Web. Logging in to the centralized controller set as the login destination using a Web browser enables monitoring and operating of all air conditioning 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.



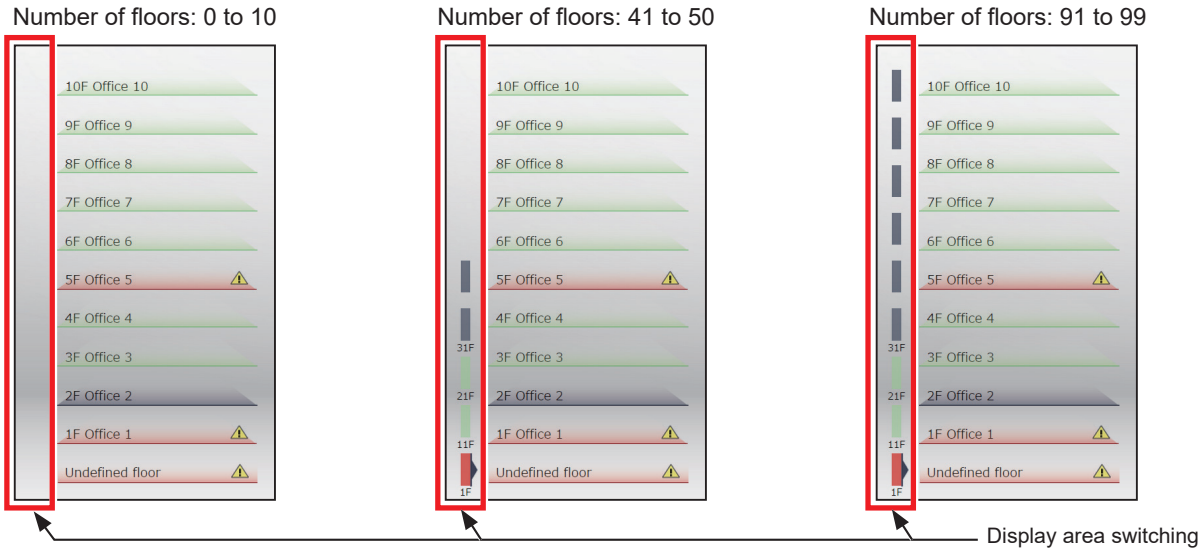
(1) Click [Floor Settings] > [Floor for Integrated Centralized Control Web] to access the Integrated Centralized Control Web's floor settings screen.



(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.

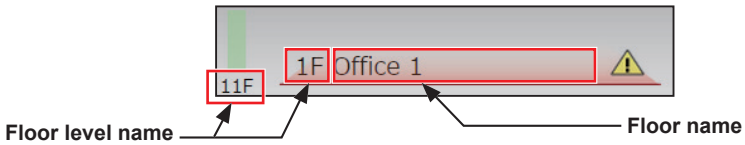
Note: If the total number of floors is set to "0," all groups will appear as unassigned groups.



(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

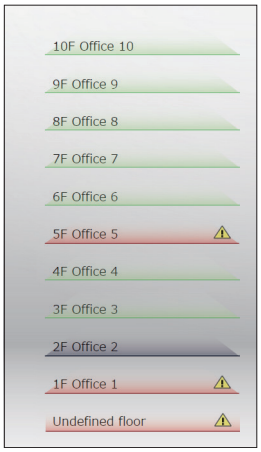
(7) After the settings are completed, click [Save].

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.



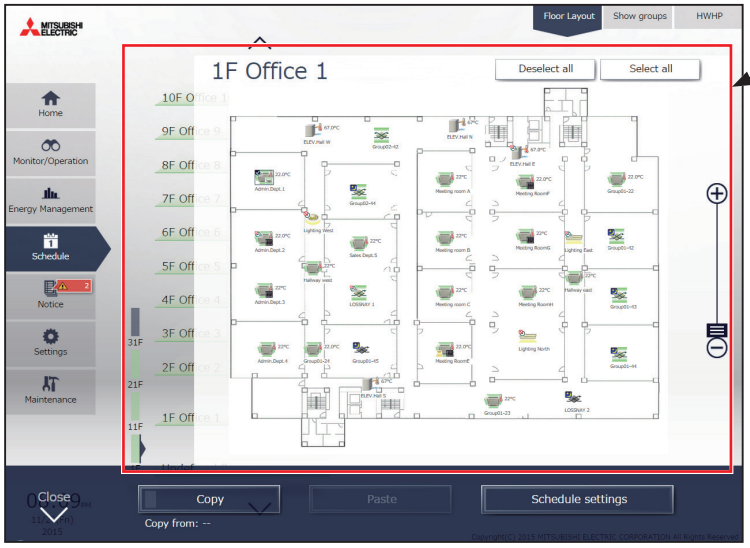
Setting contents
Total number of floors: 25
Floor level name: No. 1 = A, No. 11 = B, No. 21 = C
Floor name: No. 1 to No. 8 = 1F **** to 8F *****
No. 11 to No. 20 = 1F **** to 10F *****
No. 21 to No. 25 = 1F **** to 5F *****



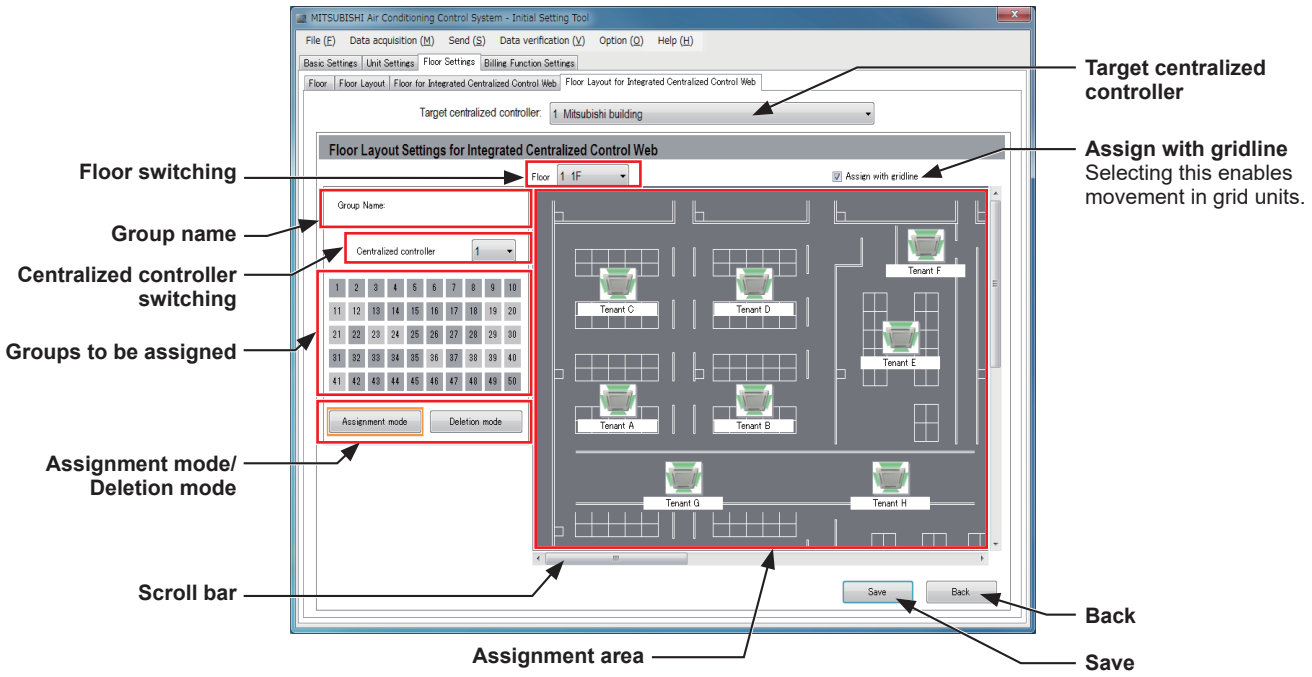
6-5-4. Floor Layout settings for Integrated Centralized Control Web

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.

Note: Groups of air conditioners, Air To Water (PWFY) units, LOSSNAY units, and general equipment can be assigned to the floor layout.

(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.

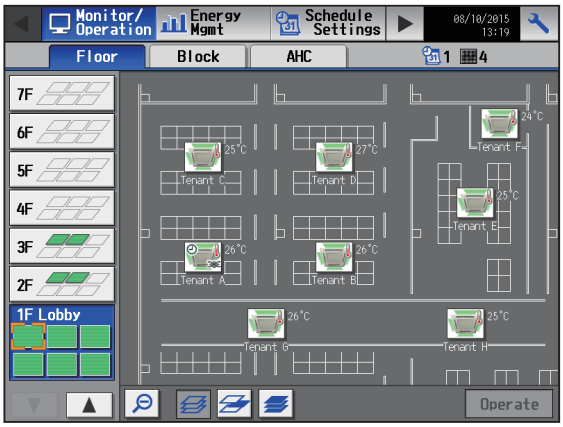
Note: When no floor layout is registered, a white floor will appear.

6-5-5. Convenient usage methods

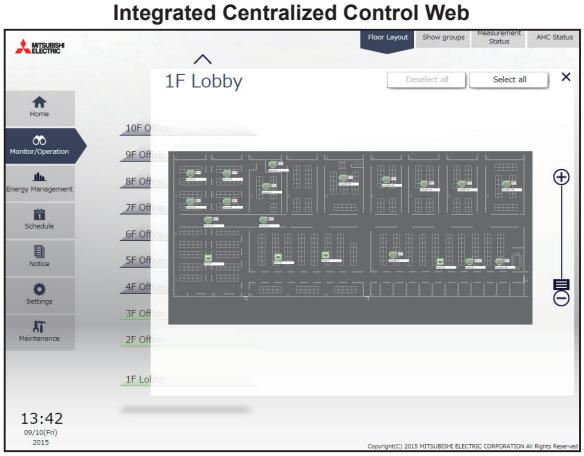
[1] Matching the AE-200's LCD and the Integrated Centralized Control Web floor layout

Use the Integrated Centralized Control Web to configure the settings to use the floor layout which is the same as on the LCD.

LCD



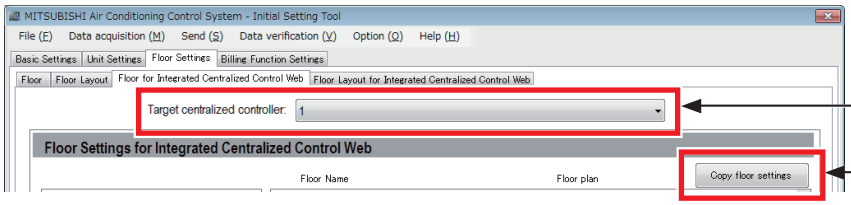
Integrated Centralized Control Web



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.

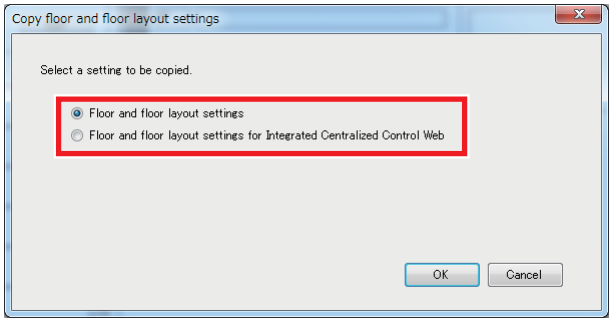
(2) Configure the floor settings for the Integrated Centralized Control Web.
From [Floor Settings], click [Floor for Integrated Centralized Control Web], and from [Target centralized controller], select the centralized controller set in (1) above.



Select a centralized controller set in "Floor settings for LCD."

Copy floor settings

(3) Click [Copy floor settings] and select [Floor and floor layout settings].

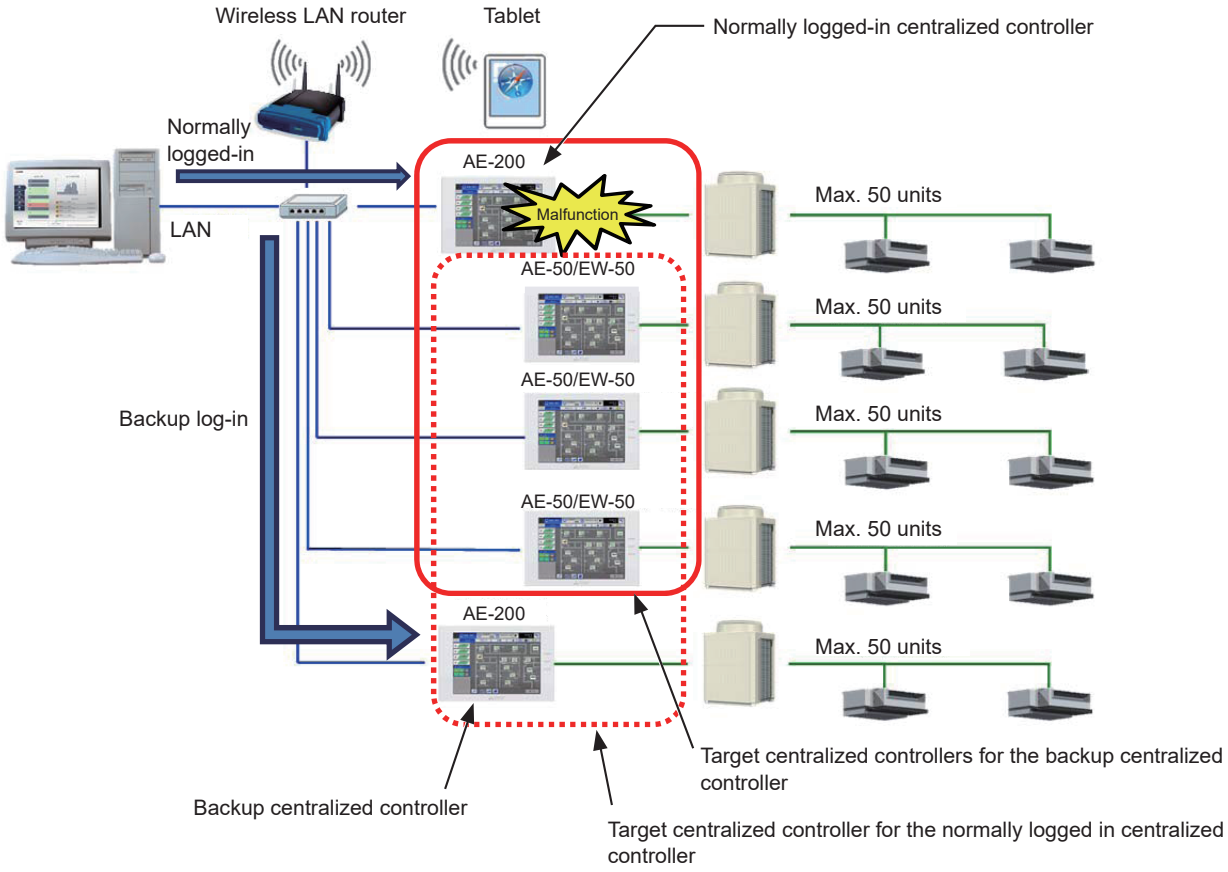


(4) Click [OK].
The settings details for 6-5-1 "Floor settings for LCD" and 6-5-2 "Floor Layout settings for LCD" for the centralized controller set in (1) above are copied to the 6-5-3 "Floor settings for Integrated Centralized Control Web" and 6-5-4 "Floor Layout settings for Integrated Centralized 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.

[2] Creating the login destination centralized controller for backup

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.

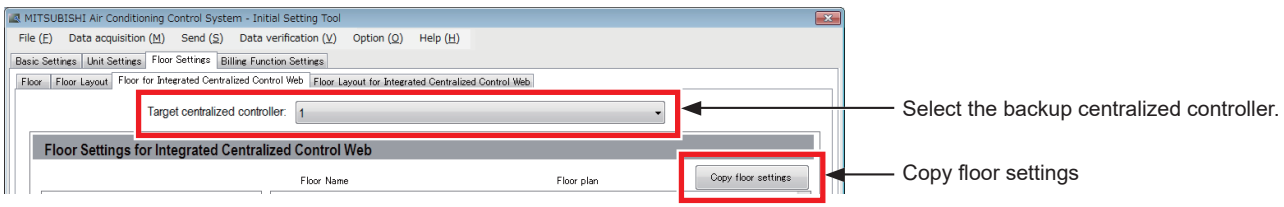


Note: Air conditioning unit groups managed by a malfunctioning centralized controller are not covered by monitoring and operation.
In the event of a malfunction, promptly replace with a new product and configure.

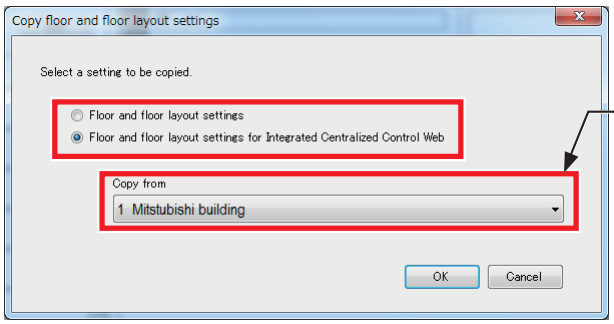
(1) Add an IP address of the backup centralized controller in 6-3-1 “System Configuration settings”.

(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).



Copy from
Select a centralized controller to be normally logged in.

(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).

6-7. Interlock Control

Set the Interlock Control setting to interlock the operation of multiple units.

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: When [External Input Setting] on the AE-200/AE-50/EW-50 that controls the equipment whose operation is to be interlocked with another equipment is set to [Emergency Stop (Level signal)] (see section 6-3-2 “Basic System settings”) and the external input contact is ON, or when the indoor unit is stopped due to the Peak Cut control (see section 7-1-2 “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.

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.

Note: For how to connect general equipment to the free contact, refer to the AE-200/AE-50/EW-50 Technical Manual.

Up to 200 Interlock Control settings from No.1 through No.200 can be set for each AE-200/AE-50/EW-50. (Up to 800 Interlock Control settings can be made when one AE-200 and three AE-50/EW-50 controllers are connected. Up to 1000 Interlock Control settings can be made when one AE-200 (No M-NET) and four AE-50/EW-50 controllers are connected.)

The Interlock Control verifies the state changes in an ascending order of No.1 to No.200 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.

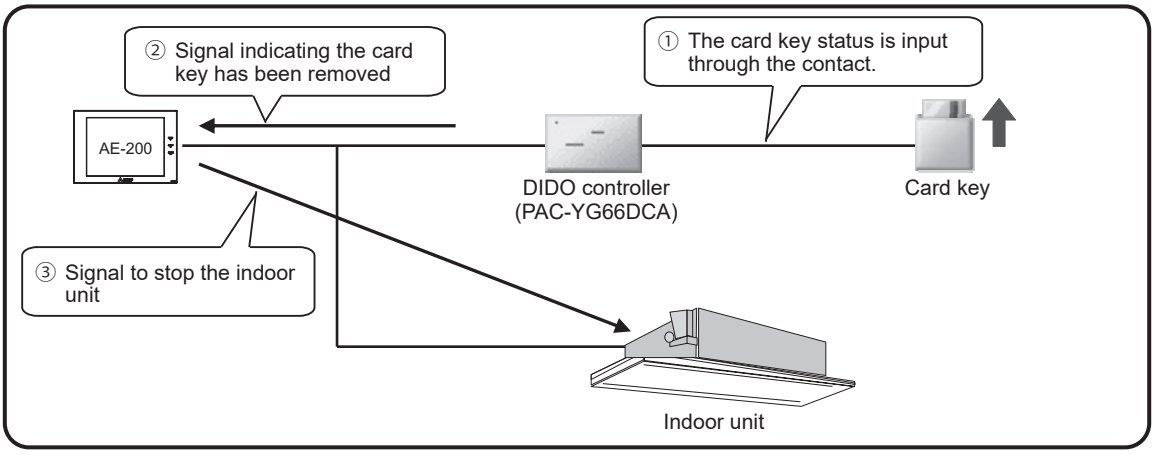
Caution:

Before using the Interlock Control function, you must agree to the following.

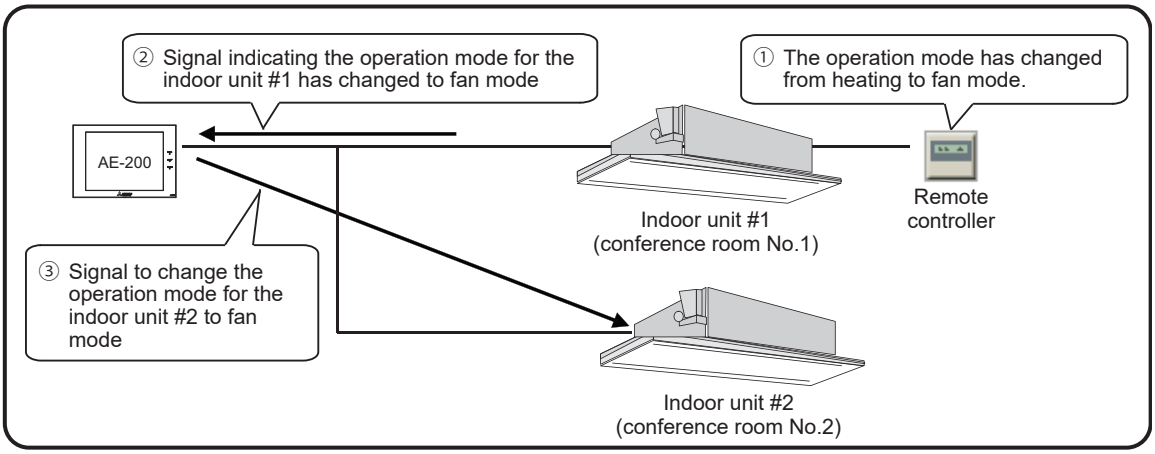
1. This function must not be used for disaster prevention or security purposes unless a backup device is provided in case of failure of this function. (This function should never be used in the way that would put people's lives at risk.)
2. The interlocking action settings that are not supported by the interlocked output units must not be made on the [Set up Actions] screen. Failure to observe this precaution may result in malfunctions.
3. Both the Interlock Control settings set from AE-200 and from expansion controllers AE-50/EW-50 will run. To avoid their settings competing against each other, make the setting from expansion controllers AE-50/EW-50 if the setting is only for units under the control of the same expansion controller.
4. After completing each Interlock Control setting, perform a test run and confirm proper settings and operation.
5. 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.

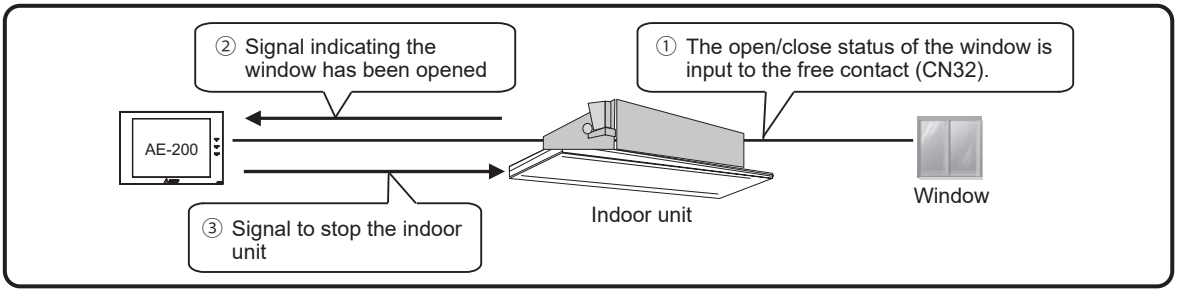
Example 1: Interlocked operation of indoor unit and card key via a DIDO controller



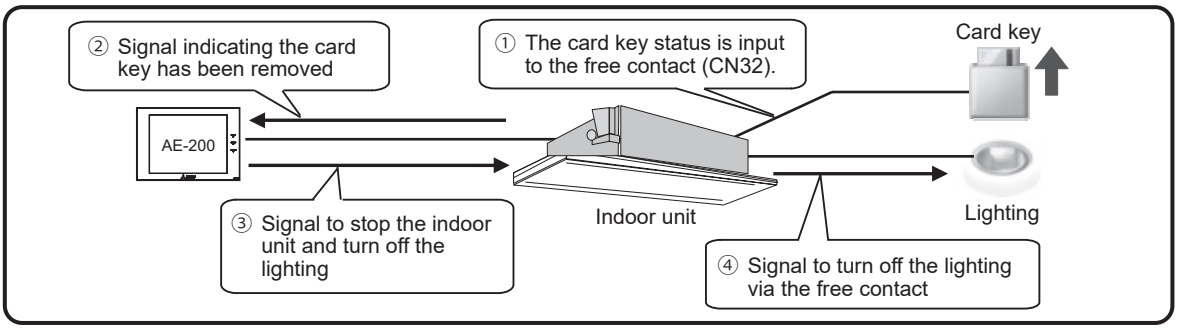
Example 2: Interlocked operation of operation mode between indoor units



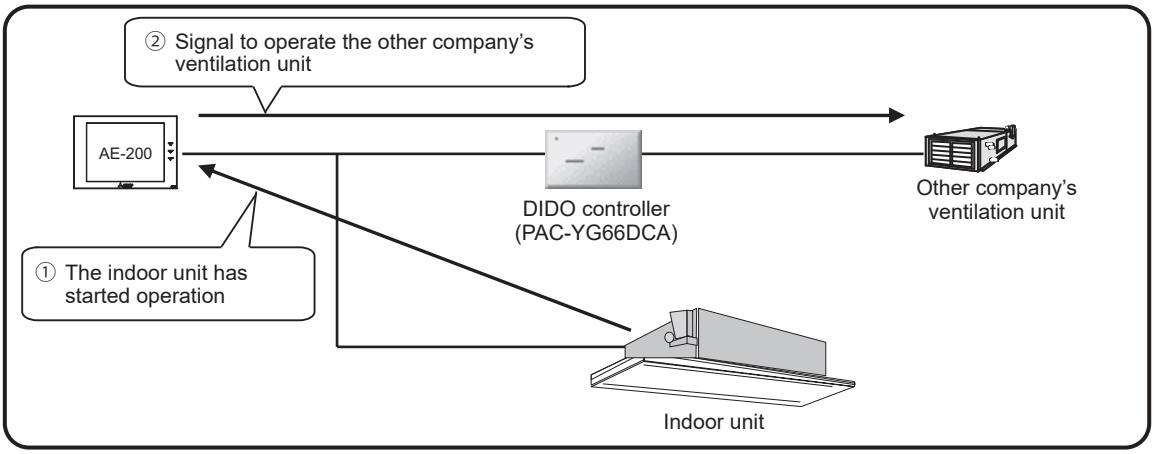
Example 3: Interlocked operation of indoor unit and window through the free contact on an indoor unit



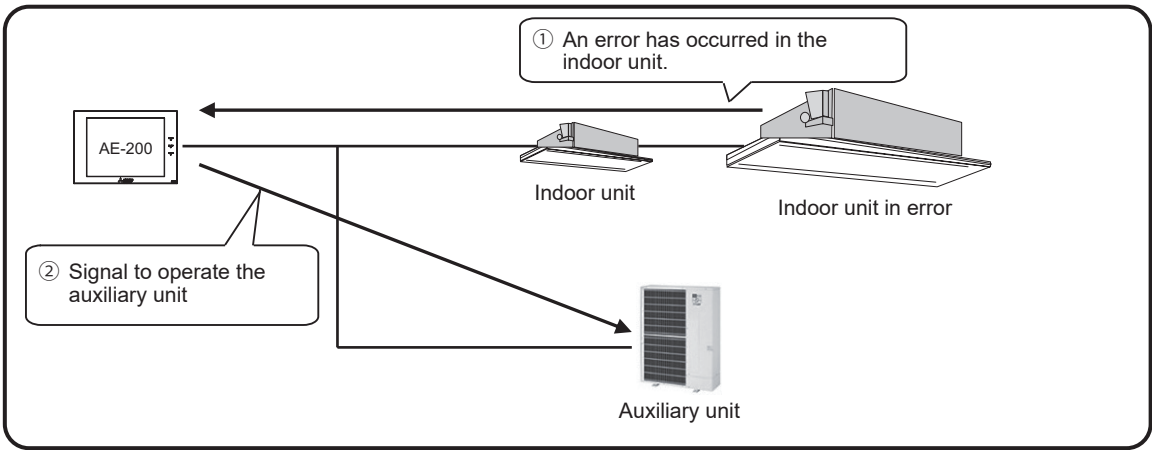
Example 4: Interlocked operation of indoor unit, lighting, and card key through the free contact on an indoor unit



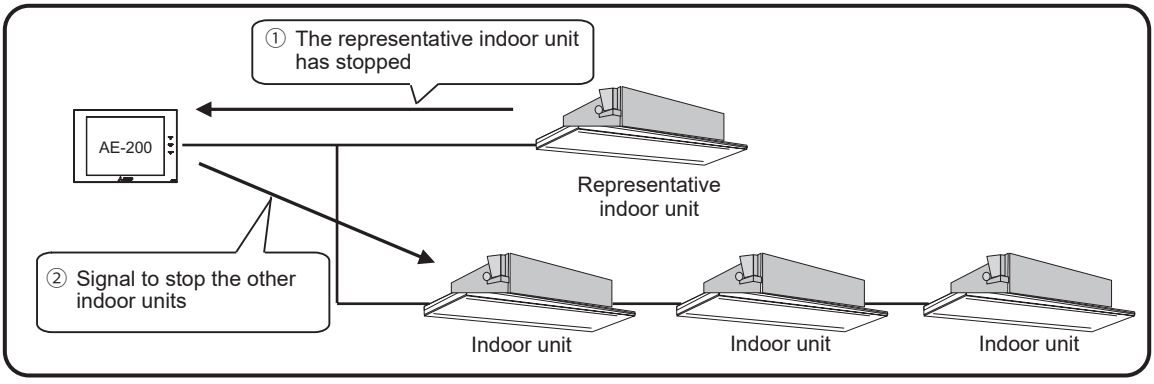
Example 5: Interlocked operation of indoor unit and other company's ventilation unit via a DIDO controller



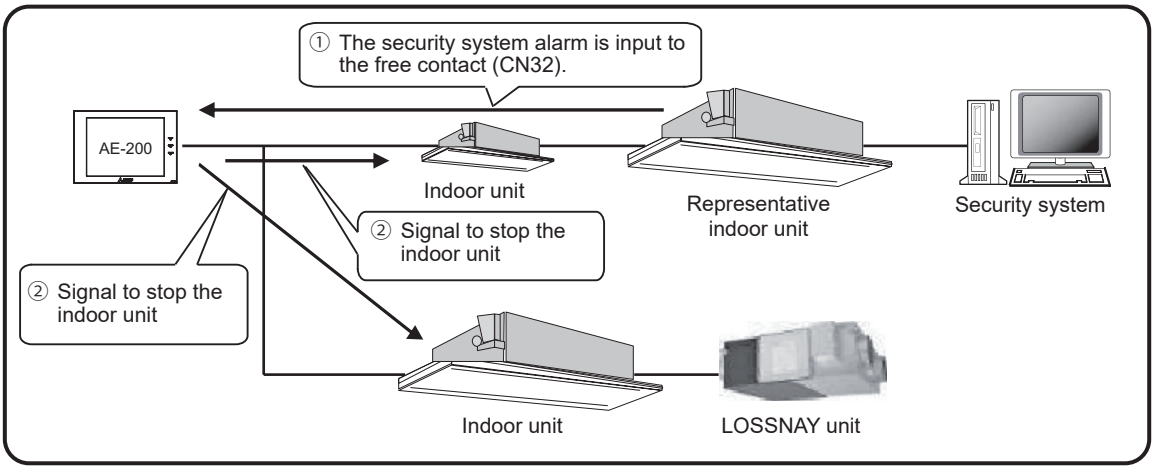
Example 6: Interlocked operation of the indoor unit in error and the auxiliary unit



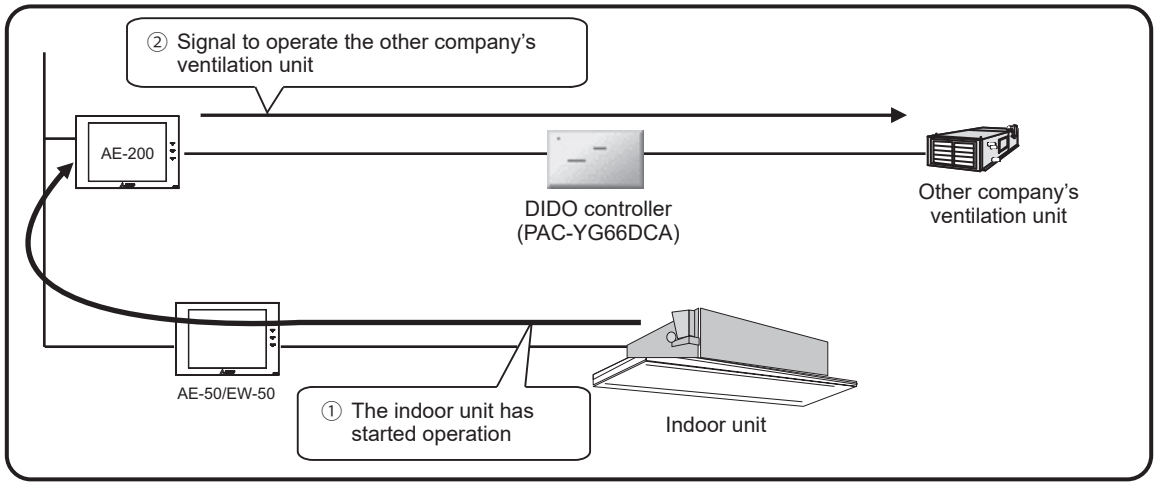
Example 7: Interlocked operation of the indoor units



Example 8: Interlocked operation of the security system and the connected units

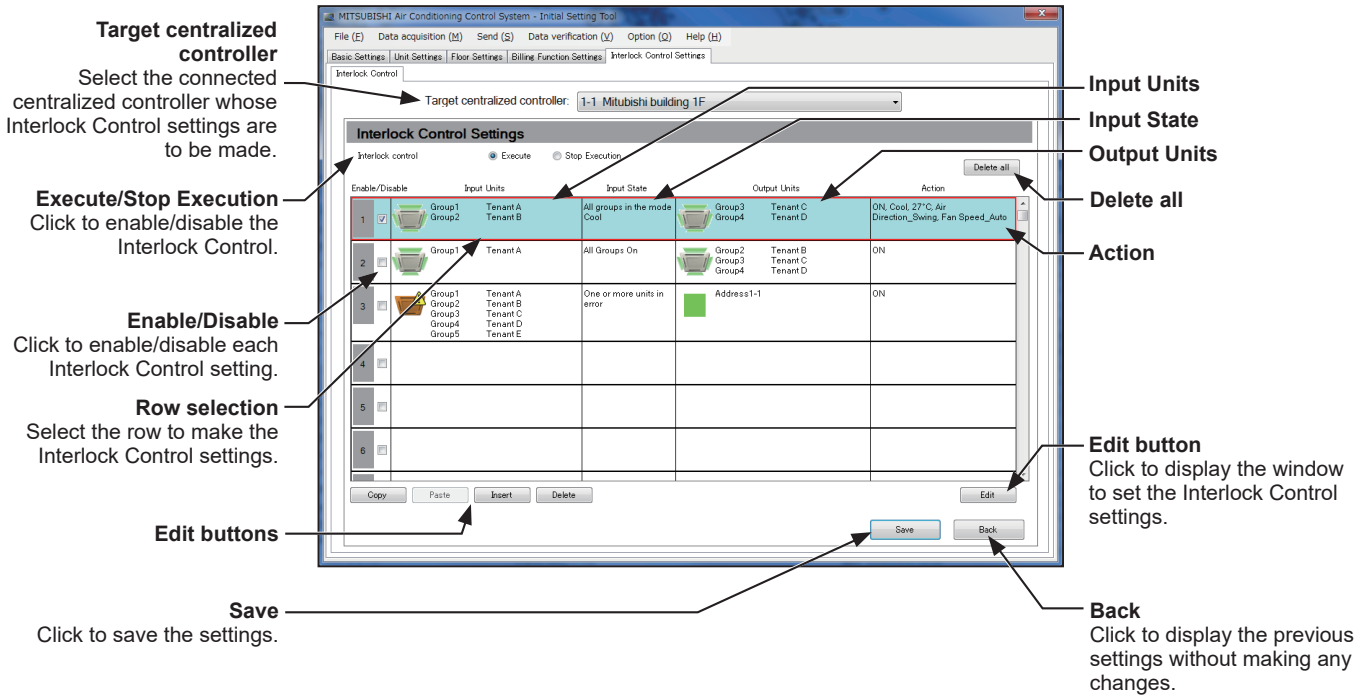


By connecting expansion controllers to AE-200, operation of units that are connected to different expansion controllers can be interlocked.



Make the settings for AE-200 when interlocking the operation of units that are under the control of different expansion controllers.
Make the settings for the expansion controller when interlocking the operation of units within the control of the same expansion controller.

Click [Interlock Control] in the menu bar, and then click [Interlock Control] to access the Interlock Control settings screen.



[1] Selecting the Interlock Control setting to be made

(1) Select the row to make the settings for. A frame will appear around the selected item.

(2) Click [Settings] to display the window for setting the detail settings for Interlock Control.

[2] Disabling/Enabling Interlock Control settings

Interlock Control setting of each item can be enabled or disabled by checking “Enabled (checked)” or “Disabled (unchecked).” No actions will be taken for the Interlock Control setting that is set to [Disable].

[3] Temporarily disabling the Interlock Control

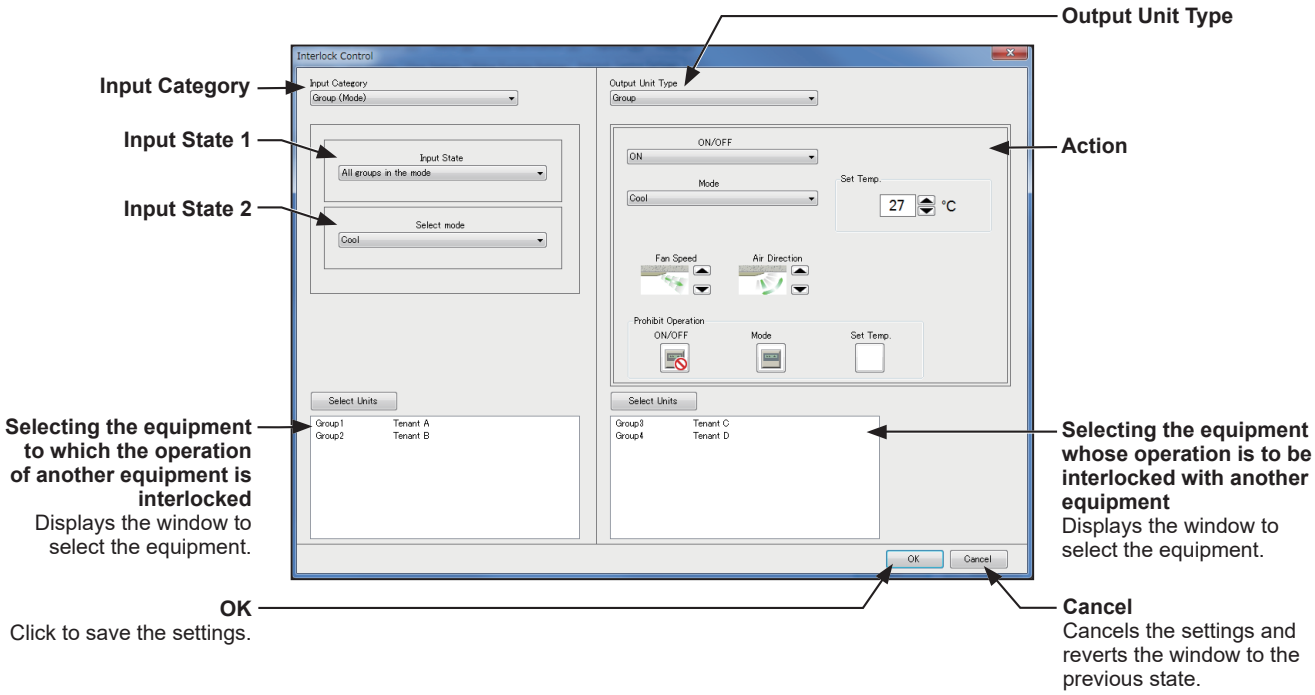
Click the [Stop Execution] button to temporarily disable the Interlock Control. Click [Execute] to resume the Interlock Control.

[4] Editing Interlock Control settings

Use the Edit buttons to edit each row of Interlock Control setting.

Button name	Function
Delete all	Deletes all Interlock Control settings.
Copy	By selecting the row to be copied and clicking [Copy] and then clicking [Paste] on the paste destination, the settings of a given row can be pasted to another row.
Paste	
Insert	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	Deletes the Interlock Control settings of the selected row. Whether to move up the row below the deleted row or not can be selected.

Set the Interlock Control settings on the window for setting the detail settings for Interlock Control.



[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, chiller 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] on the AE-200/AE-50/EW-50 that controls the equipment whose operation is to be interlocked with another equipment is set to [Emergency Stop (Level signal)] (see section 6-3-2 “Basic System settings”) and the external input contact is ON, or when the indoor unit is stopped due to the Peak Cut control (see section 7-1-2 “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.

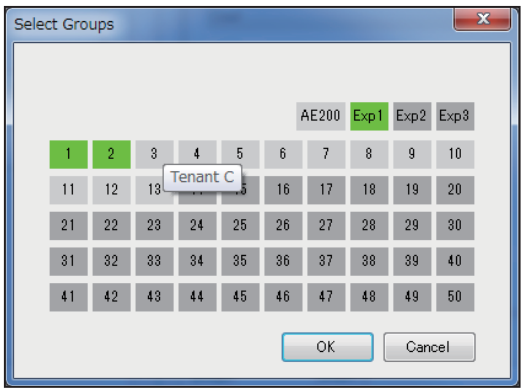
(2) Selecting the input units

Click [Select Input Units] to display one of the following screens, depending on the selected Input Category.

Note: Operation of the units under the control of different expansion controllers can be selected only when the settings are made for AE-200.

(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].

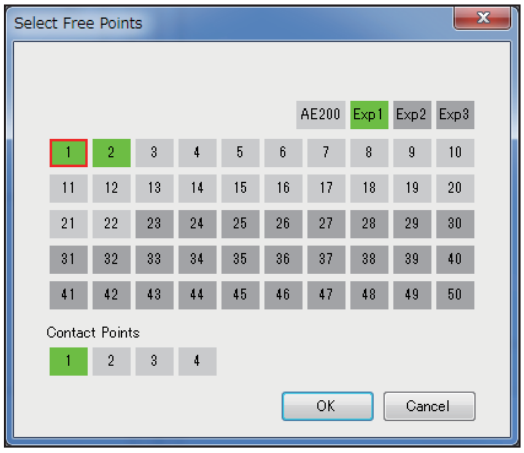
To select a block of groups, click [Select a Block]. Select a block name and press [OK]. The groups that are registered to the block will appear with a yellow-green background.

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, chiller 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.

[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 *4	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.

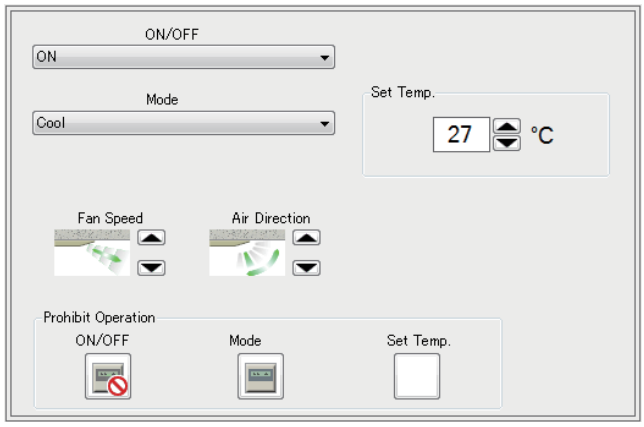
*4 Set the outlet air temperature for the outlet air temperature control units.

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.

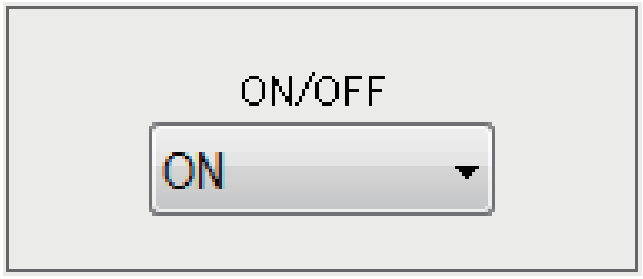
Set the interlocking actions to be taken when the interlocking conditions are met.



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: When making the set temperature setting for the Auto mode, set two different set temperatures for both cooling and heating in [Set temp.] for the units that support the dual set point function, and set the single set temperature in [Set temp. (Single set point model)] for the units that do not support the dual set point function.
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.



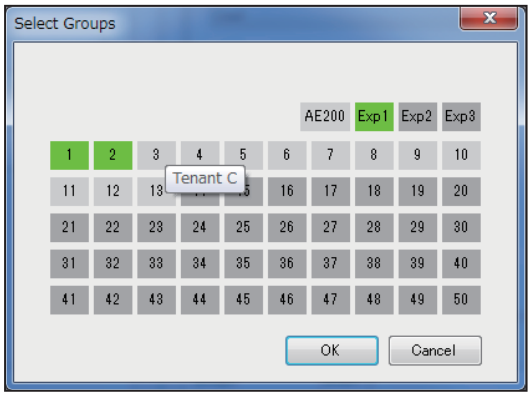
(2) Selecting the output units

Click [Select Output Units] to display one of the following screens, depending on the selected Output Unit Type.

Note: Operation of the units under the control of different expansion controllers can be selected only when the settings are made for AE-200.

(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].

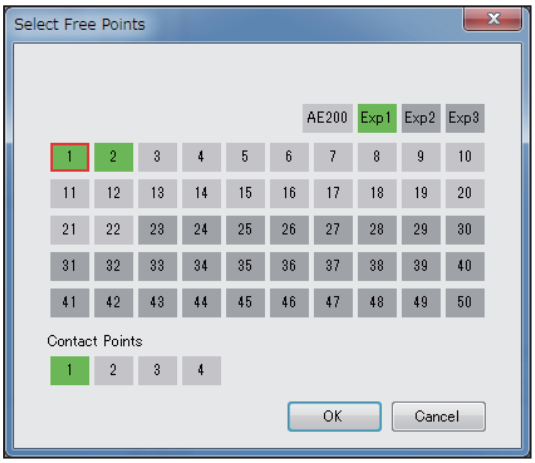
To select a block of groups, click [Select a Block]. Select a block name and press [OK]. The groups that are registered to the block will appear with a yellow-green background.

Note: If the Output Unit Type is set to [Group], air conditioning unit groups, outlet air temperature control unit groups, LOSSNAY unit groups, Air To Water (PWFY) unit groups, HWHP (CAHV, CRHV) unit groups, chiller 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, outlet air temperature control unit groups, LOSSNAY unit groups, Air To Water (PWFY) unit groups, HWHP (CAHV, CRHV) unit groups, chiller 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.

[3] Saving the Interlock Control detail settings

Click [OK] to save the settings.

6-8. Function settings

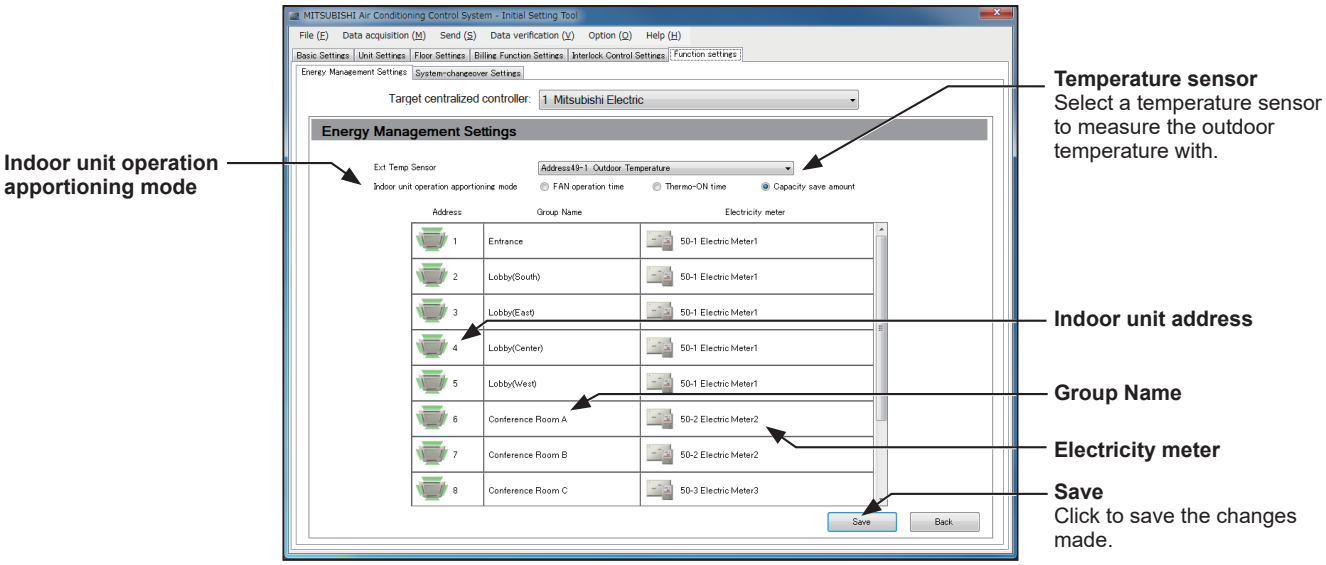
6-8-1. Energy Management Settings

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 [Function settings] in the menu bar, and then click [Energy Management Settings] to access the energy management settings screen.

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.



(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 [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, [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] to save the settings.

6-8-2. System-changeover

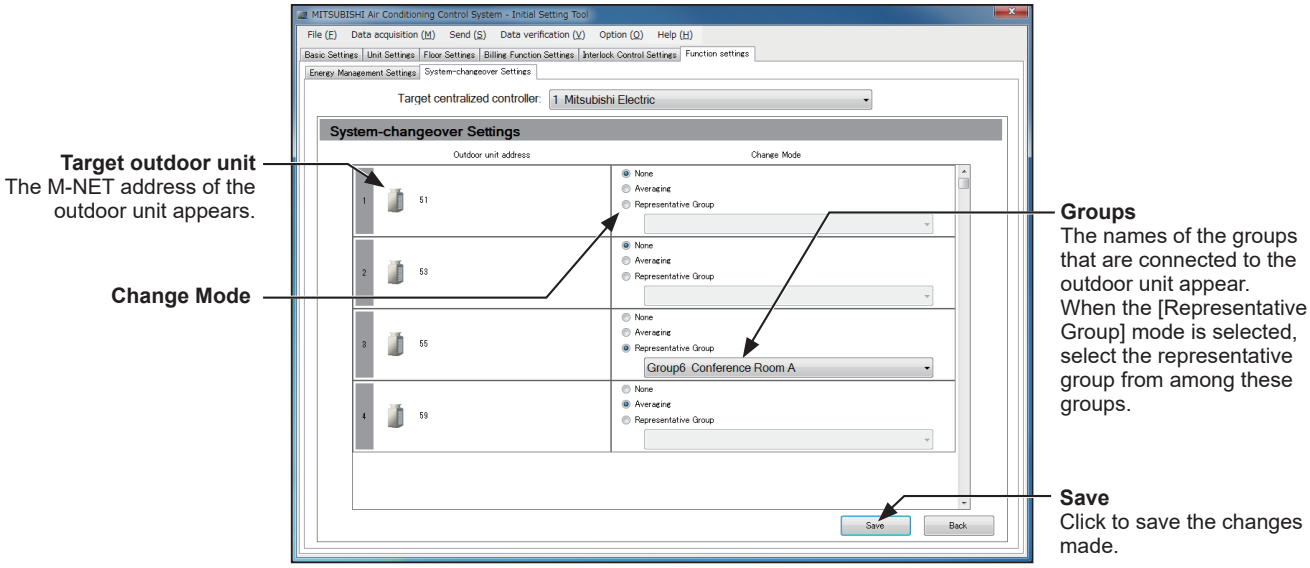
The System-changeover function switches the operation modes of the indoor units connected to the same outdoor unit between cooling and heating based on the room temperature and the set temperature. Click [Function settings] in the menu bar, and then click [System-changeover Settings] to access the System-changeover 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: 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.

Note: This function is not available for the outdoor unit to which an outlet air temperature control unit is connected.

Note: Group settings and refrigerant system settings are required to configure the System-changeover settings. Refer to section 6-4-1 “Group settings” and 6-4-2 “Refrigerant System settings”.



(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] to save the settings.

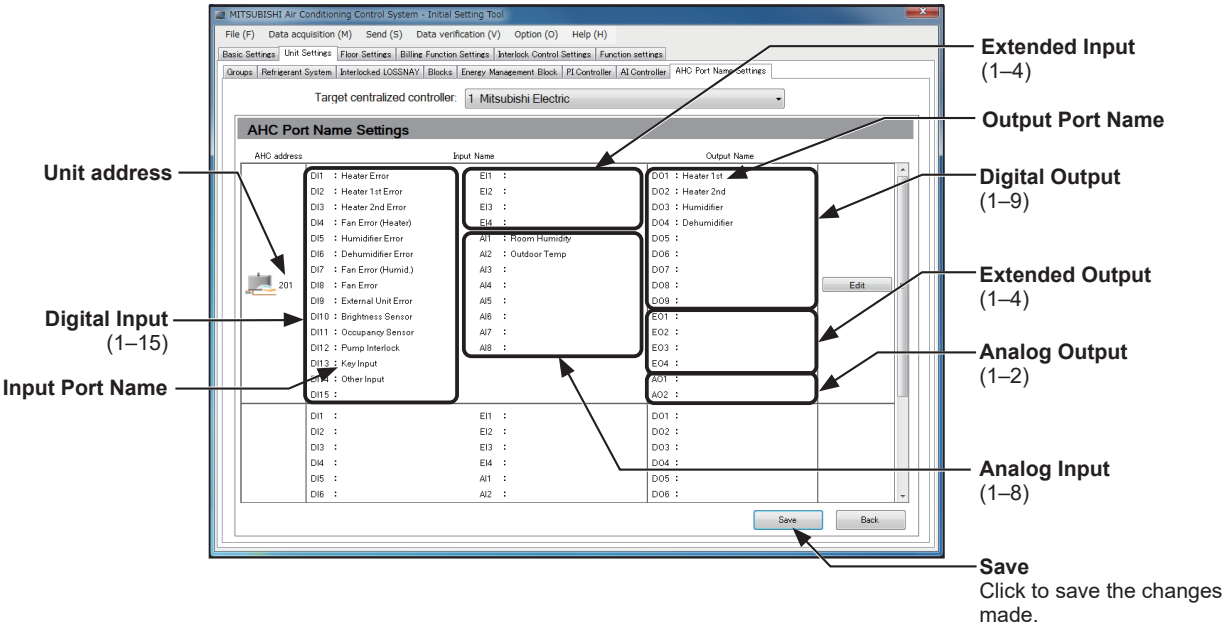
6-8-3. AHC Port Name Settings

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 [Function settings] in the menu bar, and then click [AHC Port Name Settings] to access the AHC Port Name Settings screen.

> 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.



(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] to save the settings.

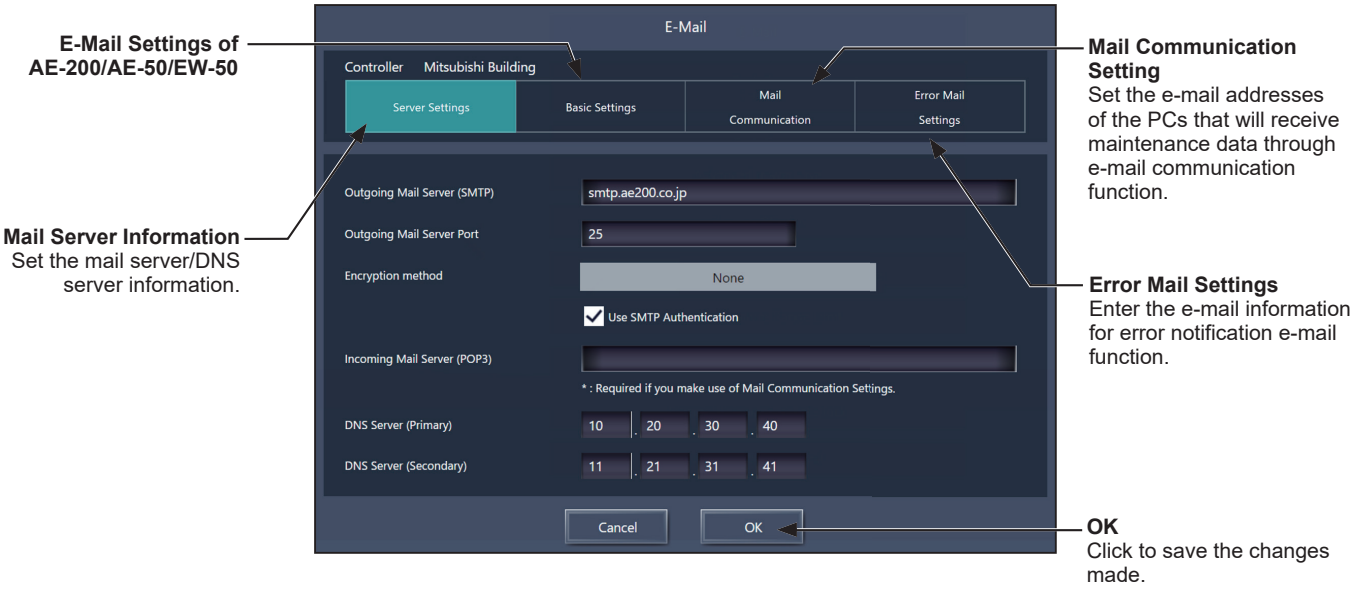
7. Settings using Integrated Centralized Control Web

7-1. Function settings

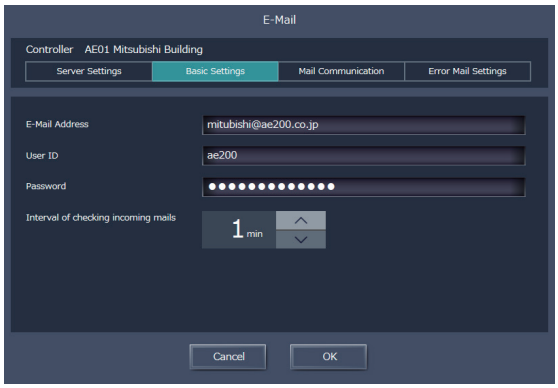
7-1-1. E-Mail

E-mail settings must be configured properly to use the error notification e-mail 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 [Function] 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 [OK].



[1] E-Mail Settings of AE-200/AE-50/EW-50



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.

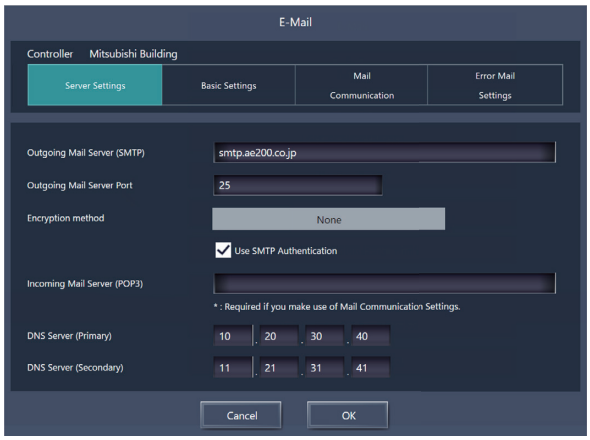
Note: A contract with the ISP is required to send e-mail via an ISP.
User ID must be up to 30 single-byte characters.

Table: Items required to be set (E-Mail Settings of AE-200/AE-50/EW-50)

Item	Without SMTP authentication	With SMTP authentication
E-Mail Address	V	V
User ID	-	V
Password	-	V
Interval of checking incoming mails	-	-

(V) Required to be set, (-) Not required to be set

[2] Mail Server Information



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 as a port number, make sure to check the checkbox next to [Use SMTP Authentication].
Note: When “465” is entered as a port number, make sure to select [SSL/TLS] for the encryption method.

Table: Items required to be set (Mail Server Information)

Item	Without SMTP authentication	With SMTP authentication
Outgoing Mail Server (SMTP) *3	V IP address or host name	V Host name
Outgoing Mail Server Port	V	V
Encryption method *2	[None] or [SSL/TLS]	
Use SMTP Authentication	-	V
Incoming Mail Server (POP3)	-	-
DNS Server (Primary)	(V) *1	V
DNS Server (Secondary)	(V) *1	V

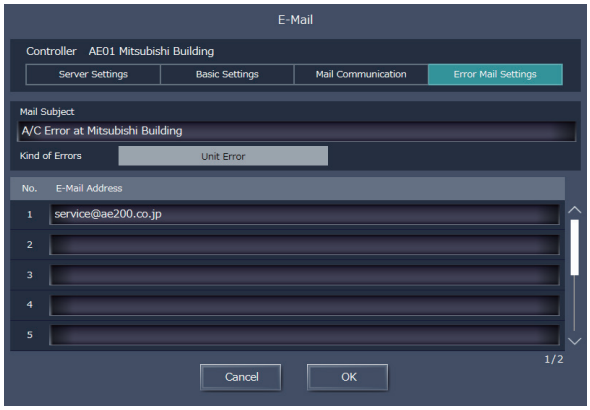
(V) Required to be set, (-) Not required to be set

*1 Required if the host name is entered in the [Outgoing Mail Server (SMTP)] or [Incoming Mail Server (POP3)] field.

*2 When not encrypting e-mails, select [None]. When encrypting e-mails, select [SSL/TLS]. (Factory setting: None)
Note that TLS ver. 1.1 and later or STARTTLS are not supported.

*3 Enter the IP address or the host name of a reliable server.

[3] Error Mail Settings

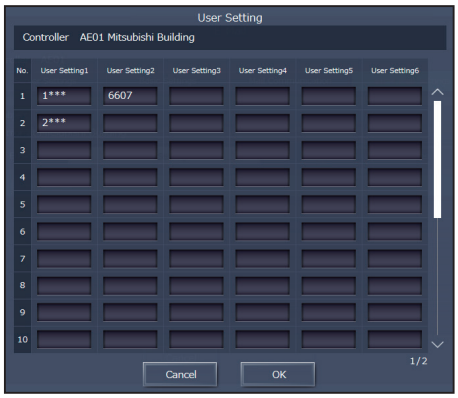


(1) In the [Mail Subject] field, enter the mail subject to be used for the error notification e-mail function in 40 characters or less.

Note: The following characters cannot be used in the [Mail Subject] field: <, >, &, “, or ‘

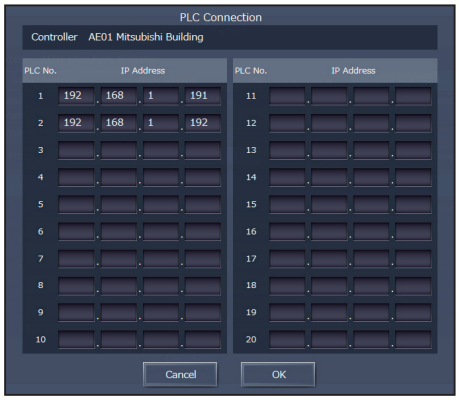
(2) In the [Kind of Errors] field, select the error type out of the following: [Unit Error], [Preliminary Unit Error], [Communication Error], [General Equipment], and [User Setting 1] through [User Setting 6]. Then, in the [E-Mail Address] field, enter the e-mail addresses of the recipients of the error 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.

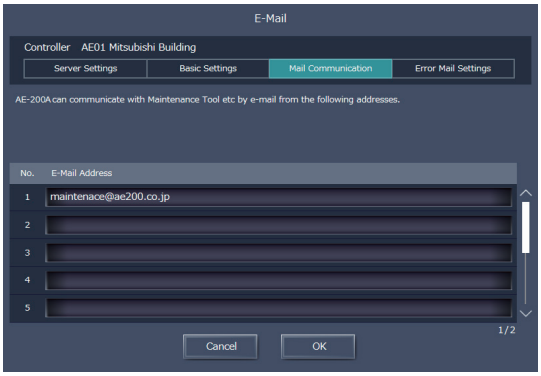
(4) If [General Equipment] is selected in the [Kind of Errors] field, a [PLC Connection] button will appear. To send error notification e-mail upon occurrences of errors on the general equipment that are connected to PLC Software for General Equipment, click [PLC Connection] to display the [PLC Connection] 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 7-1-1 "E-Mail" [3] will appear.
From	The AE-200/AE-50/EW-50 unit name and unit ID entered in section 6-3-2 "Basic System settings" will appear.
Date	Error occurrence date and time will appear in the format entered in section 6-3-2 "Basic System settings".
Error unit	- 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. * PLC number indicates the row number on the [PLC Connection] screen. (Refer to section 7-1-1 "E-Mail" [3].) 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.)
Error code	Error code (4-digit) will appear. - 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.

[6] Conducting an error email trial run

(1) Create an error such as a communication error.

(2) Check the sending results of an error email by clicking [Maintenance] - [Send Mail Log] on the Integrated Centralized Control Web.

(3) If the error email is successfully sent, the trail run is complete. Confirm that the error email was received at the send destination address.

(4) Check the following if transmission failed. (An error message will appear approximately 30 minutes after an occurrence of the error.)

(4)-1 Check the network for problems
- Between the AE-200 and the public network
  Check to see if other computers are connectable to the Internet.
- Between the public network and the outgoing mail server and incoming mail server
  Operational status of outgoing and incoming mail servers

(4)-2 Check the email settings.
- Server settings
  Check the outgoing mail server (SMTP), outgoing mail server port, encryption method, and DNS server.
- Basic settings
  Check the email addresses, user IDs, and passwords.
- Error mail settings
  Check the send destination email address.

7-1-2. 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 [Function] in the menu bar, click [Peak Cut], and then click [Advanced] that corresponds to the target unit to access the Peak Cut control settings screen. Make necessary settings, and then click [OK].

> 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.

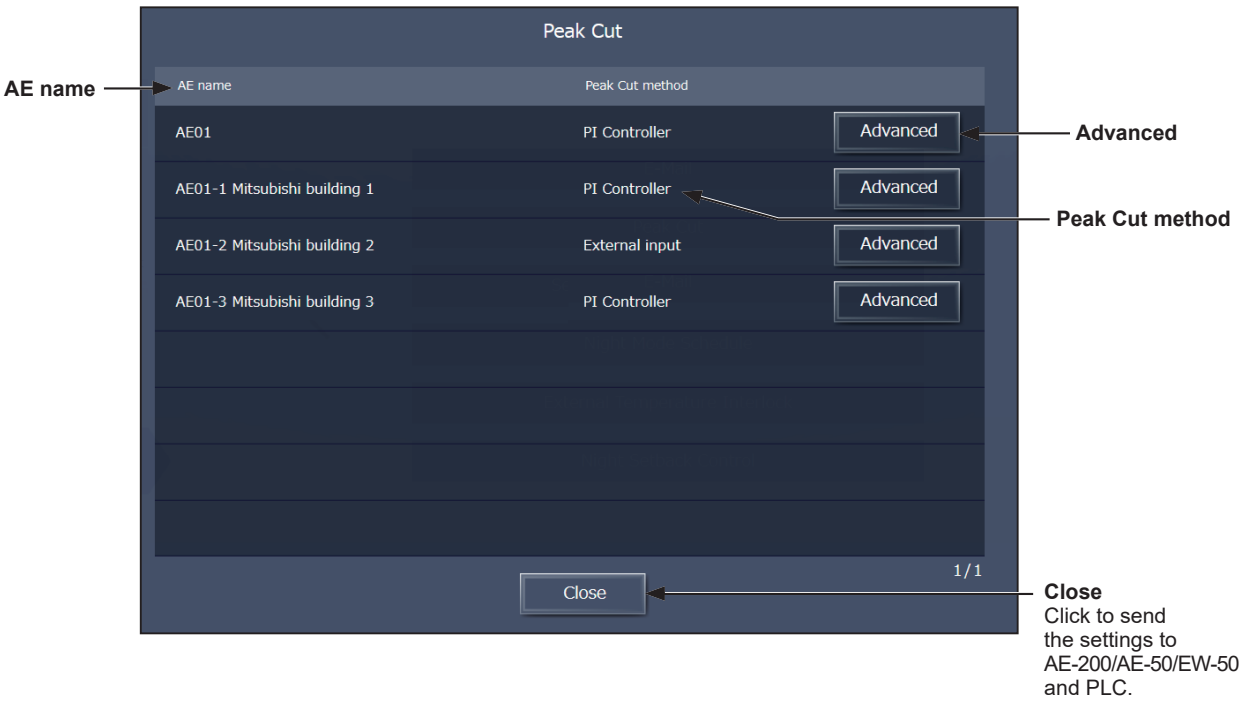
Note: After completing the settings, perform a test run and confirm proper connections of equipment before using the Peak Cut function.

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: Peak Cut control cannot be performed on DIDO controller (PAC-YG66DCA), AHC, Air To Water (PWFY) unit, HWHP (CAHV, CRHV, QAHV) unit, chiller unit, or MEHT-CH&HP unit.

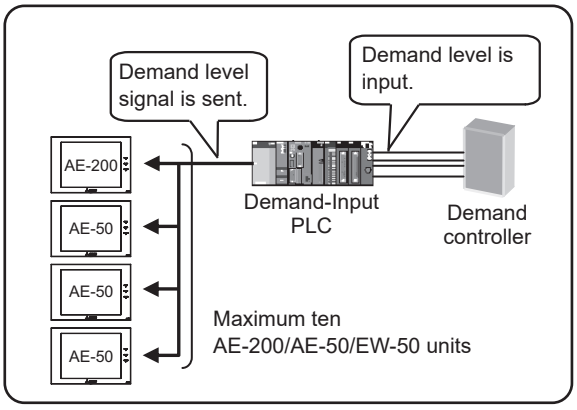
Note: The Peak Cut control of indoor units is performed per block. Be sure to make block settings to use the Peak Cut function.

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.

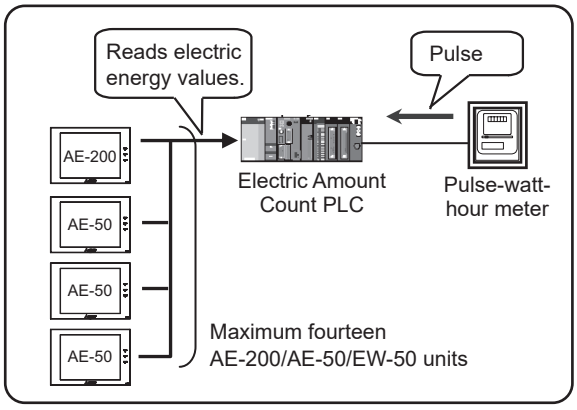


[1] Peak Cut method

[Demand-Input PLC]

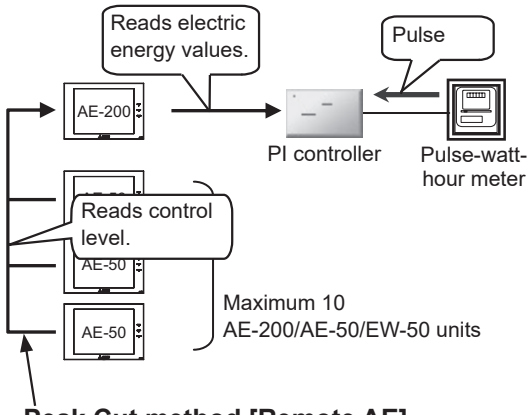


[Electric Amount Count PLC]



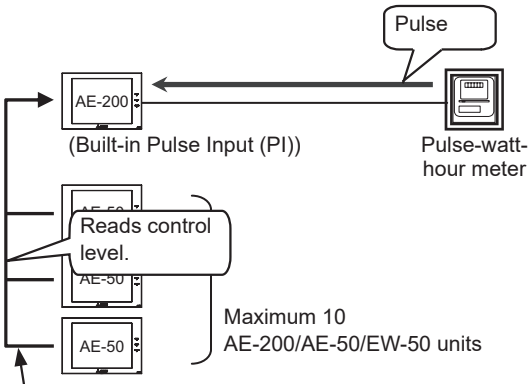
[PI Controller]

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



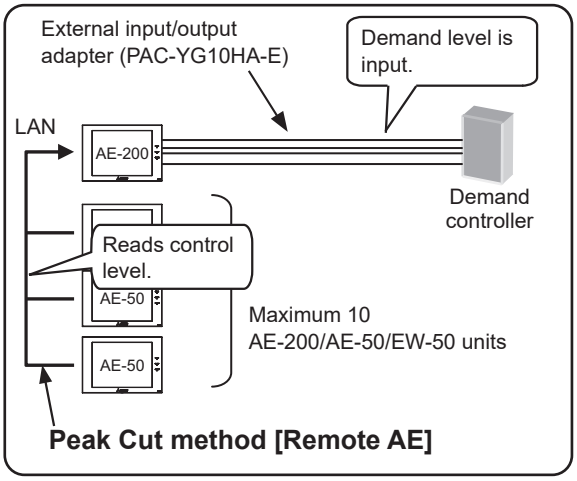
Peak Cut method [Remote AE]

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



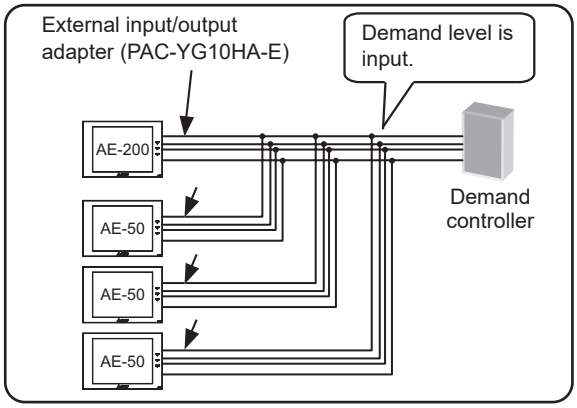
Peak Cut method [Remote AE]

[External Contact point input] (1)

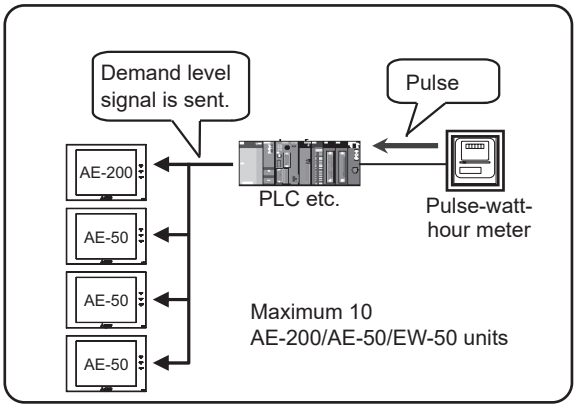


Peak Cut method [Remote AE]

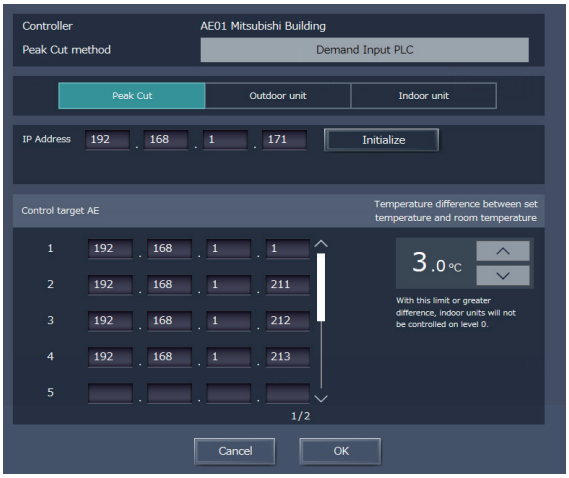
[External Contact point input] (2)



[From external system]



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



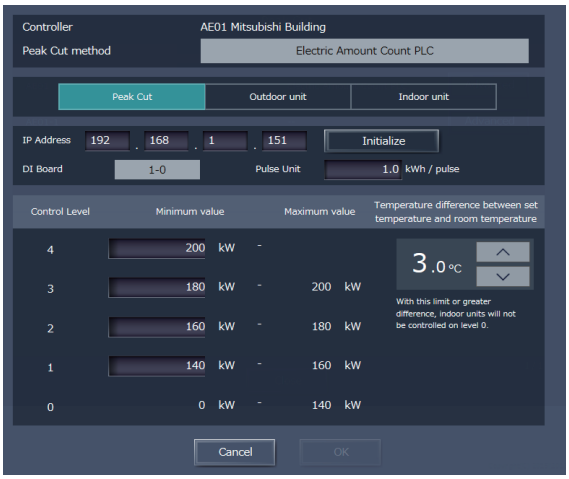
(1) In the [IP Address] field, enter the IP address of the Demand-Input PLC.

(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: This setting is not effective for the outlet air temperature control units.
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



(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.)

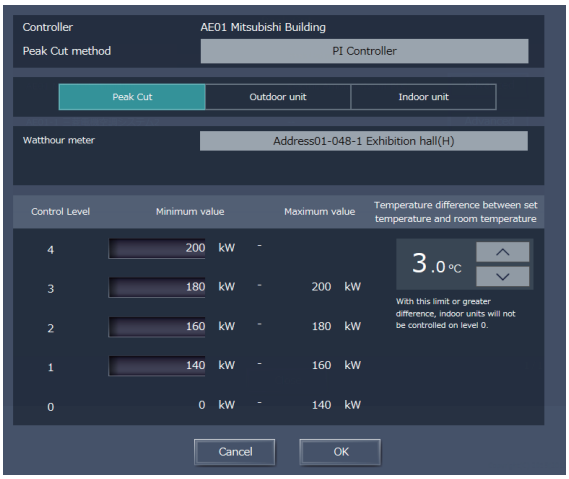
Note: The optimum setting depends on the system configuration of the electric equipment and on the indoor environment in each building. Determine the appropriate values accordingly.

(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: This setting is not effective for the outlet air temperature control units.

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



(1) In the [Watthour 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 6-4-6 “PI controller settings” 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.

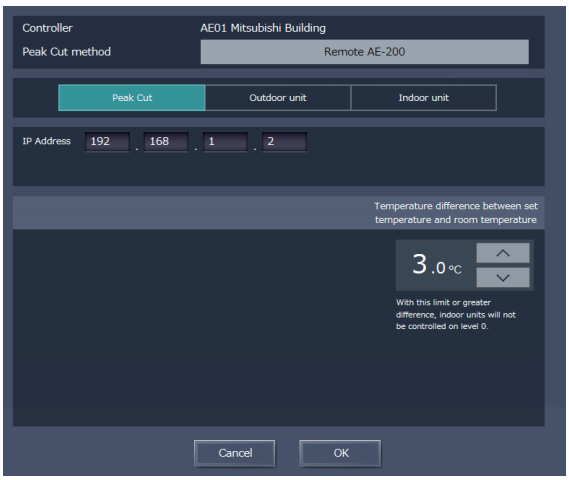
(3) In the [Temperature difference between set point and inlet] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature difference between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

Note: This setting is not effective for the outlet air temperature control units.

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



(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 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 ten 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 eleven 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 (E) “When the Peak Cut method [External input] is selected”. Increase the number of AE-200/AE-50/EW-50 units to which pulse signals of watt-hour meters, PI controllers, or external contact inputs are connected.

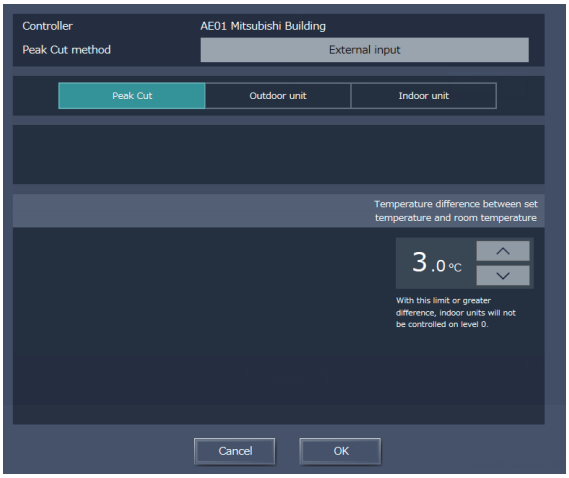
(2) In the [Temperature difference between set temperature and room temperature] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature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

Note: This setting is not effective for the outlet air temperature control units.

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 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.



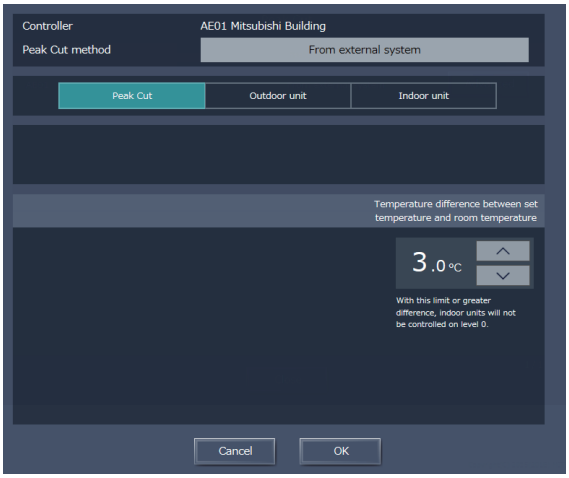
(1) In the [Temperature difference between set temperature and room temperature] section, a temperature differential can be set to between 3 and 9 as necessary. The Peak Cut control setting that corresponds to the control level 0 will be disregarded for the indoor unit groups in which the temperature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

Note: This setting is not effective for the outlet air temperature control units.

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



(1) In the [Temperature difference between set temperature and room temperature] 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: This setting is not effective for the outlet air temperature control units.

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

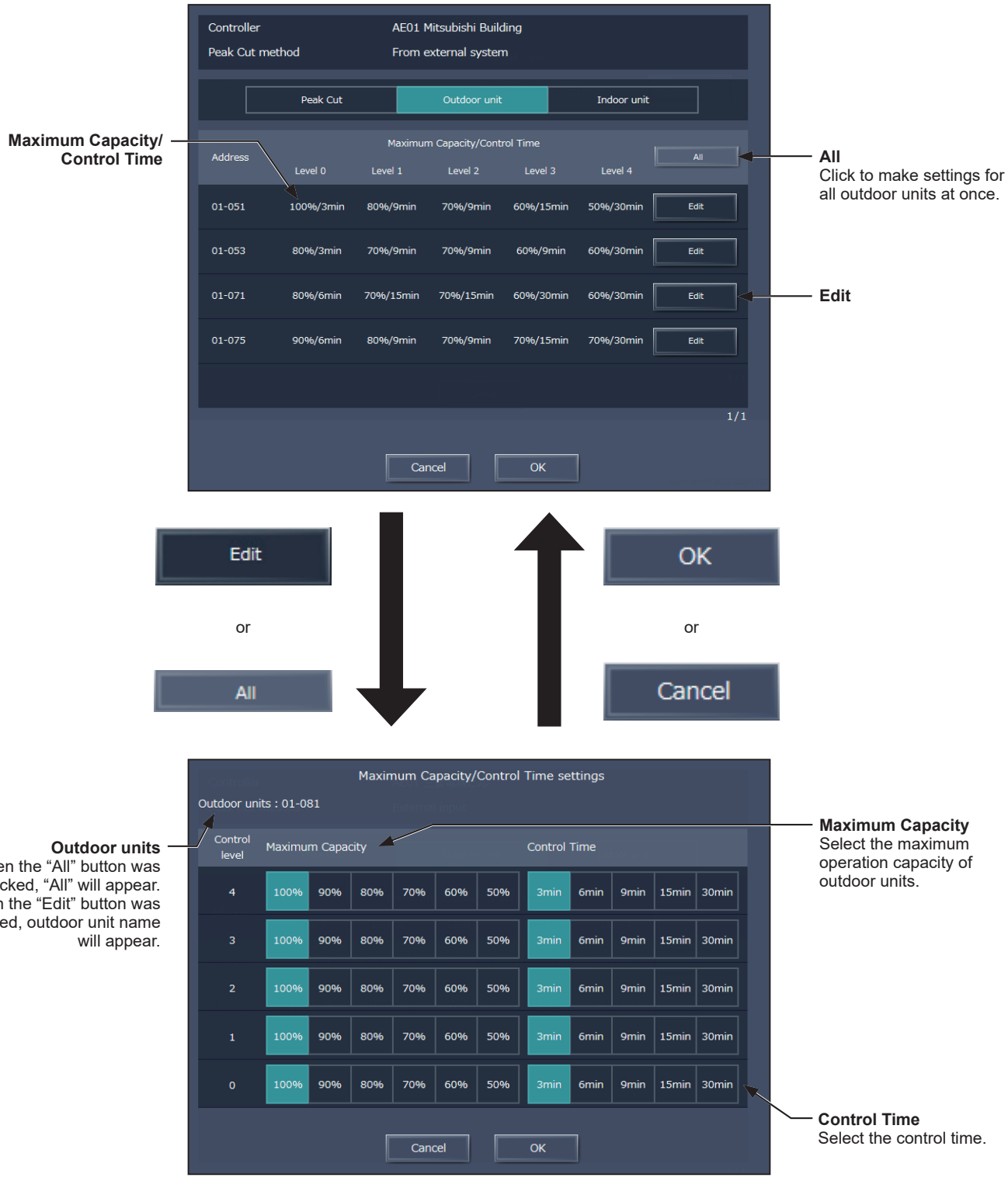
[2] Control details for outdoor units (All Peak Cut methods)

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.

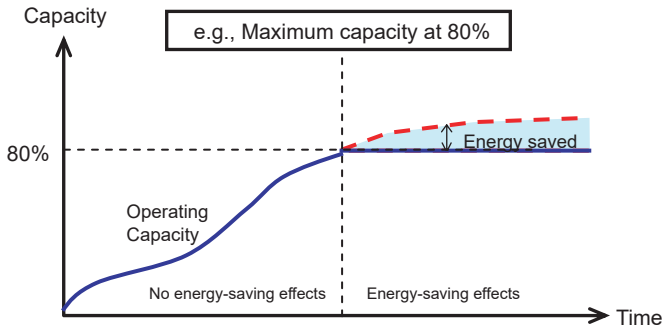


(1) To make settings for all outdoor units at once, click [All].
Then, set the maximum operating capacity for each control level.
The smaller the maximum operating capacity, the more energy will be saved.

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.

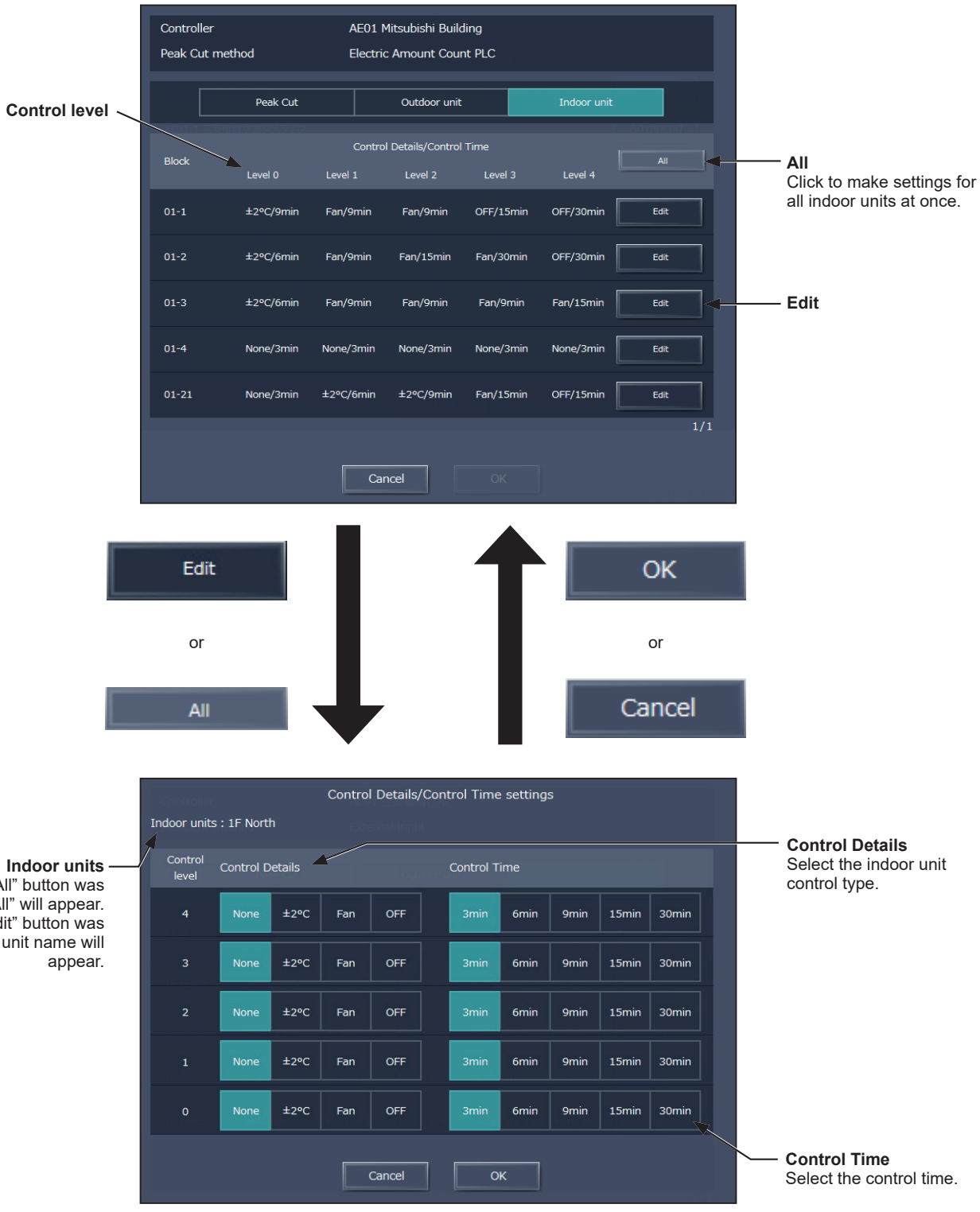


(2) For each control level, set the total time in which the Peak Cut control is performed during every 30 minutes.
Setting the time to [30] or [15] minutes is preferable, for shorter control time is not likely to bring much benefit.
If any time other than [30] minutes is selected, the outdoor units will operate in rotation so that they will not perform the Peak Cut control at the same time.

[3] Control details for blocks of indoor units

Click [Edit], and 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 6-4-4 “Block settings” for how to make the block settings.



(1) Display the block whose settings are to be made. To make settings for all blocks at once, click [All]. 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.
±2ºC (±4ºF)	During the Peak Cut control, the set temperature in the Cool or Dry mode will be offset by +2ºC (+4ºF), and the set temperature in the Heat mode will be offset by -2ºC (-4ºF). Note: Peak Cut control will not be performed during the Fan or Auto mode. Note: When the unit of temperature is Fahrenheit, the set temperature may not be offset by ±4ºF exactly because 2ºC is used for the calculation first, and then the temperature in Celsius is converted into the temperature in Fahrenheit. Note: The set temperature will be adjusted within the set temperature restrictions settings. Refer to section 7-1-3 “Set Temperature Range Limit” for details.
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	During the Peak Cut control, the units will stop. 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.

*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.

7-1-3. 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 [Function] 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.

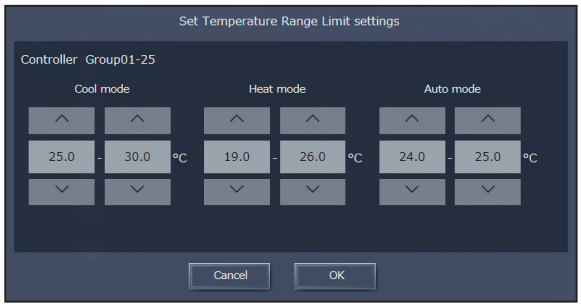
Note: The set temperature limit range for the AUTO mode cannot be set for the groups that support the dual set point function in the AUTO mode. The set temperature ranges for the normal cooling and heating modes will be used for the ones for cooling and heating in the Auto (dual set point) mode.



(1) Display the group whose settings are to be made. To make settings for all groups at once, click [All].
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 2ºF increments.

Note: The temperature range for Dry mode will be the same as the one for cooling mode.

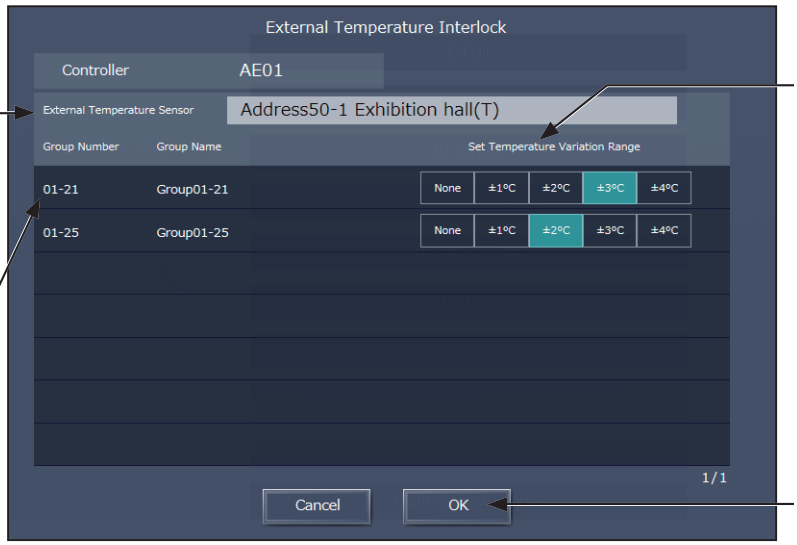


(2) Click [OK] to save the settings.

7-1-4. 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 [Function] 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: This function is not available for the outlet air temperature control units.



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

Group No. and group name

Set Temperature Variation Range
Select a maximum temperature value to be added to or subtracted from the set temperature.

OK
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.

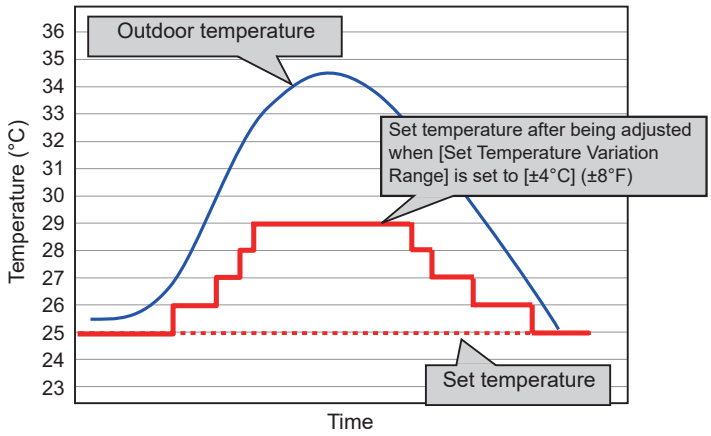
(2) In the [Set Temperature Variation Range] section, select a maximum temperature value for each group to be added to or subtracted from the set temperature.
For example, when [±4°C] (±8°F) is selected and the set temperature for the Cool or the Dry mode is set to 24°C (75°F), the set temperature will be adjusted to a maximum of 28°C (83°F) based on the temperature difference between the set temperature and the outdoor temperature. When [±2°C] (±4°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 2ºC is used for the calculation first, and then the temperature in Celsius is converted into the temperature in Fahrenheit.

(3) Click [OK] to save the settings.

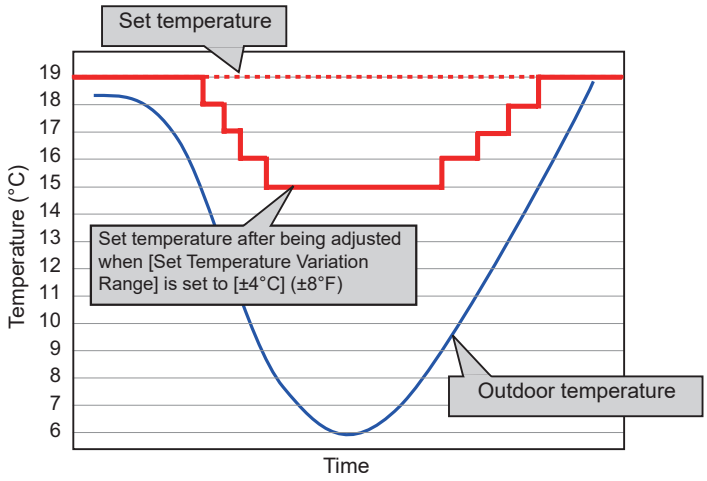
When the External Temperature Interlock function is active, the set temperature will be adjusted as shown below.

■ “Cool” and “Dry” modes



Outdoor temperature conditions	Set temperature after being adjusted
Outdoor temperature ≥ Set temperature + 1.5°C (3°F)	Set temperature + 1°C (2°F)
Outdoor temperature ≥ Set temperature + 4.5°C (9°F)	Set temperature + 2°C (4°F)
Outdoor temperature ≥ Set temperature + 6.5°C (12°F)	Set temperature + 3°C (6°F)
Outdoor temperature ≥ 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 ≤ Set temperature - 4.0°C (8°F)	Set temperature - 1°C (2°F)
Outdoor temperature ≤ Set temperature - 6.0°C (11°F)	Set temperature - 2°C (4°F)
Outdoor temperature ≤ Set temperature - 8.0°C (15°F)	Set temperature - 3°C (6°F)
Outdoor temperature ≤ Set temperature - 10.0°C (18°F)	Set temperature - 4°C (8°F)

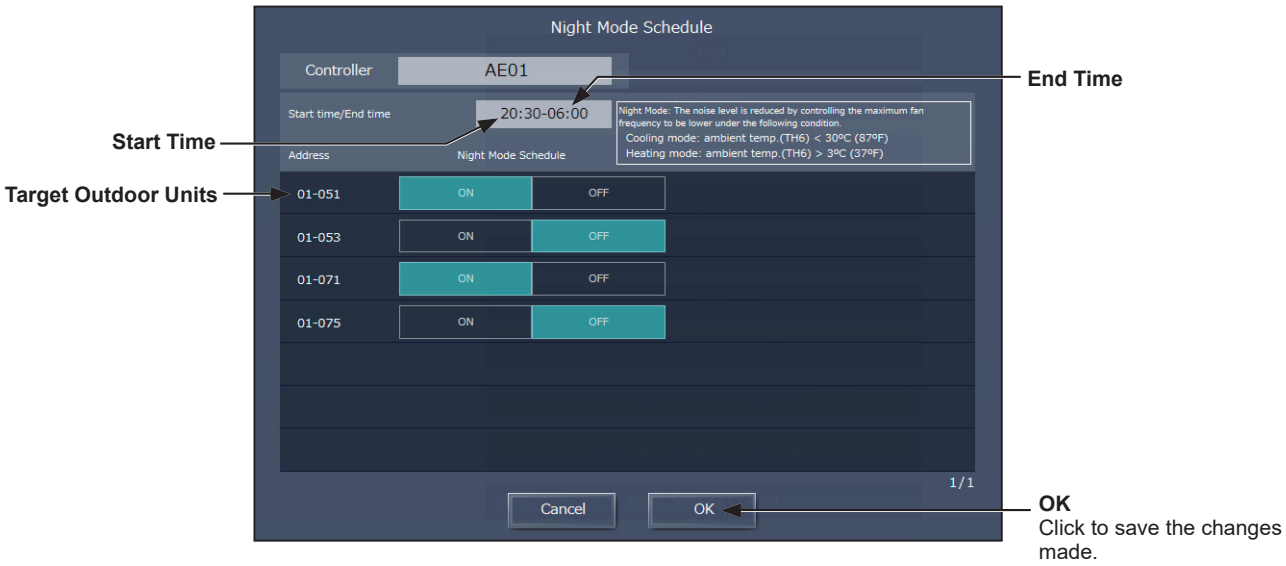
7-1-5. Night Mode (quiet operation) Schedule

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 [Function] 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.



(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) Select the Night Mode Schedule setting “ON” or “OFF” for each outdoor unit.

(3) Click [OK] to save the settings.

7-1-6. Night Setback Control

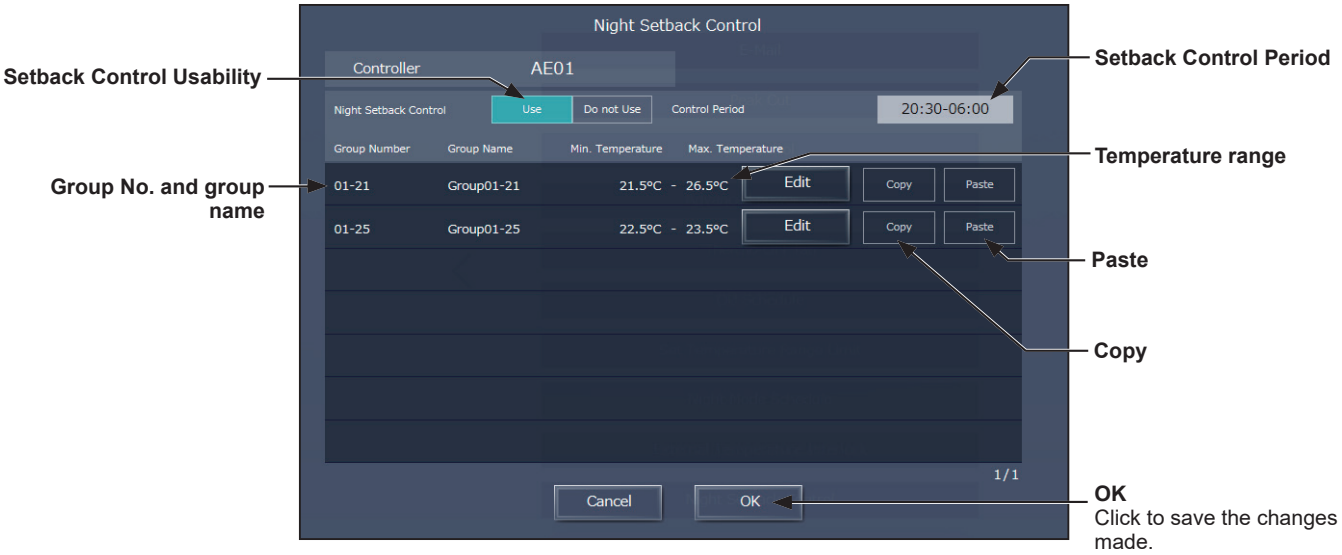
The Night Setback Control function (hereafter abbreviated as Setback Control) prevents indoor condensation by performing heating operation automatically when the room temperature goes outside of the specific range during the night. Click [Function] in the menu bar, click [Night Setback Control], and then select the target centralized controller in the [Controller] section.

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: This function is not available for the outlet air temperature control units.

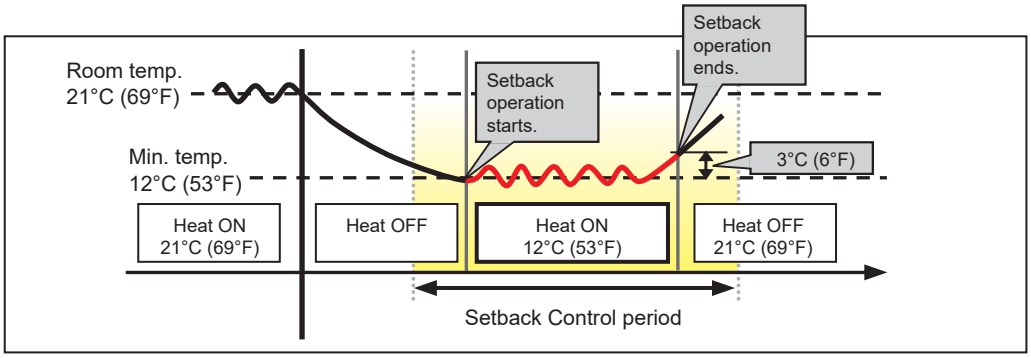


(1) Select [Use] and set the time period in which Setback Control is performed.

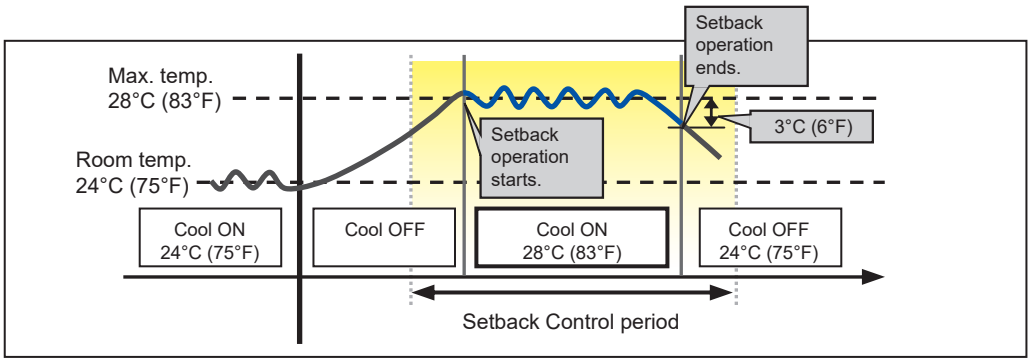
Note: When [00: 00 - 00: 00] is selected, Setback Control is active for 24 hours.

(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 [OK] to save the settings.

7-2. Ventilation Settings

7-2-1. 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.

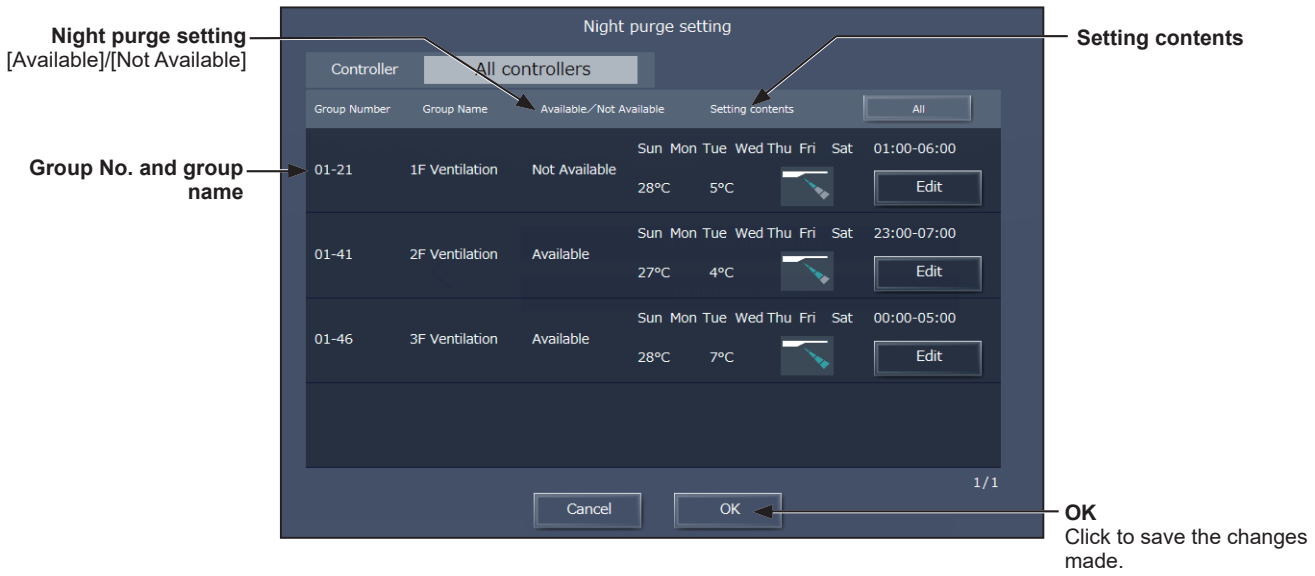
Click [Ventilation Settings] in the menu bar, and then click [Night purge Setting] to access the Night purge settings screen.

All LOSSNAY unit groups that support the Night purge function from AE-200 will appear.

Note: During the Night purge operation, LOSSNAY units operate in the Bypass mode.

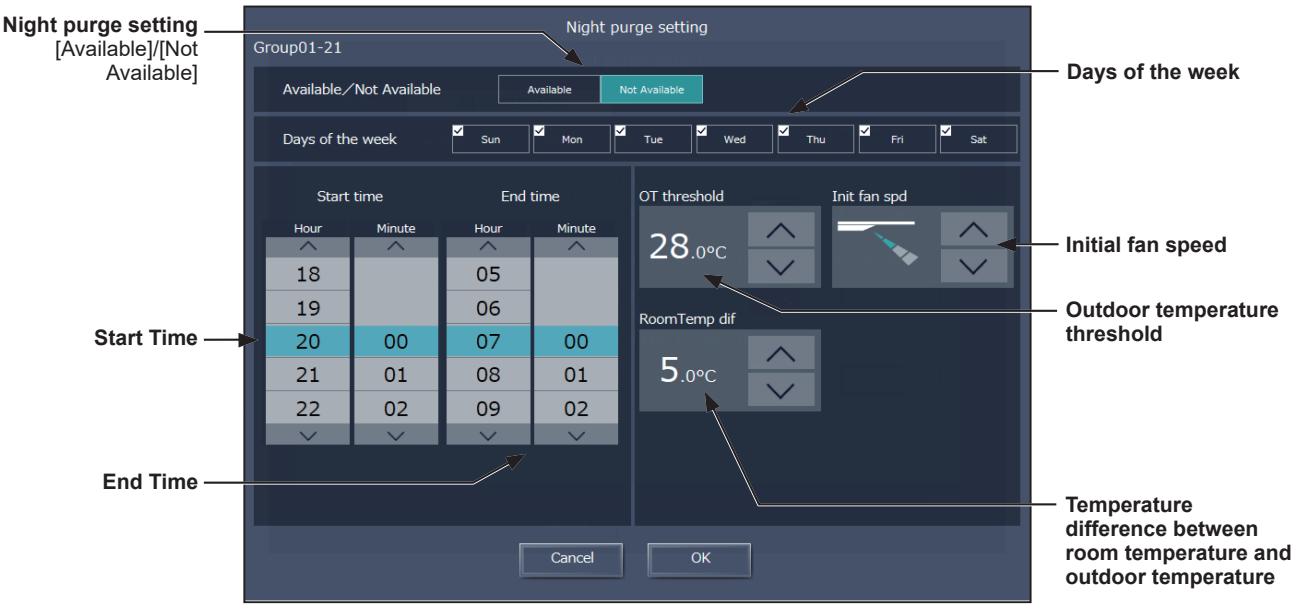
Note: Night purge setting cannot be made from AE-200 for the LOSSNAY units that are connected to the AE-50/EW-50 in communication error.

Note: Some models of LOSSNAY units 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 LOSSNAY unit .



(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 [All].



(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 15ºC and 30ºC.

(6) Set the temperature difference as a condition for activating the Night purge operation.
* The settable temperature is between 0ºC and 7ºC.

(7) Set the fan speed to be set when the Night purge operation activates.

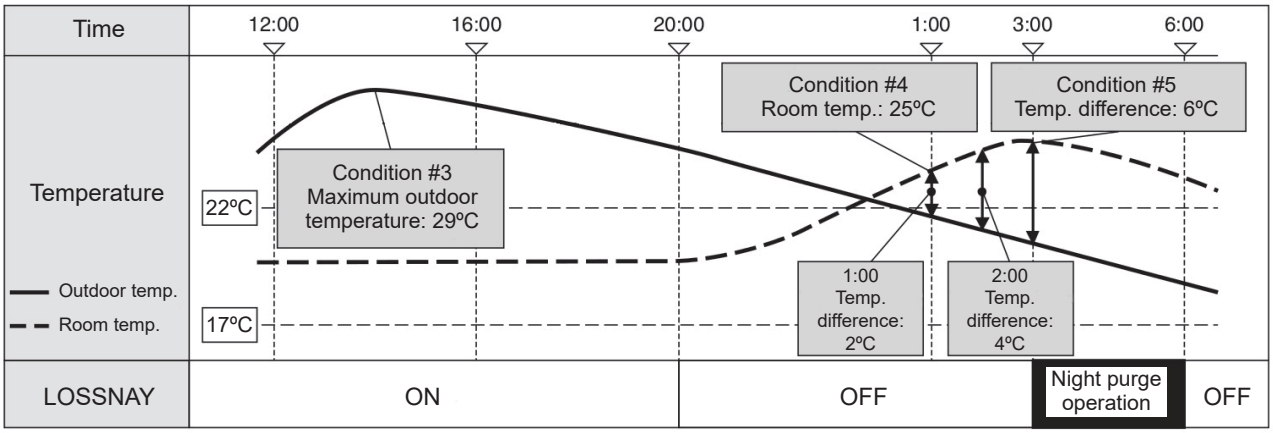
(8) Click [OK] to go back to the previous screen.

(9) After the settings are completed, click [OK] 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 17ºC or higher in the past 24 hours.
Condition #4: The current room temperature is higher than 22ºC. (The temperature 22ºC cannot be set from AE-200/AE-50/EW-50.)
Condition #5: The temperature difference between room temperature and outdoor temperature is greater than the temperature difference 5ºC.

- LOSSNAY units start the Night purge operation at 3:00 when the temperature difference between room temperature and outdoor temperature exceeds 5ºC.
- 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 5ºC.



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 Integrated Centralized Control Web.
The settings data backed up to a USB memory from the LCD and the settings data backed up from the Integrated Centralized Control Web are compatible.

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.

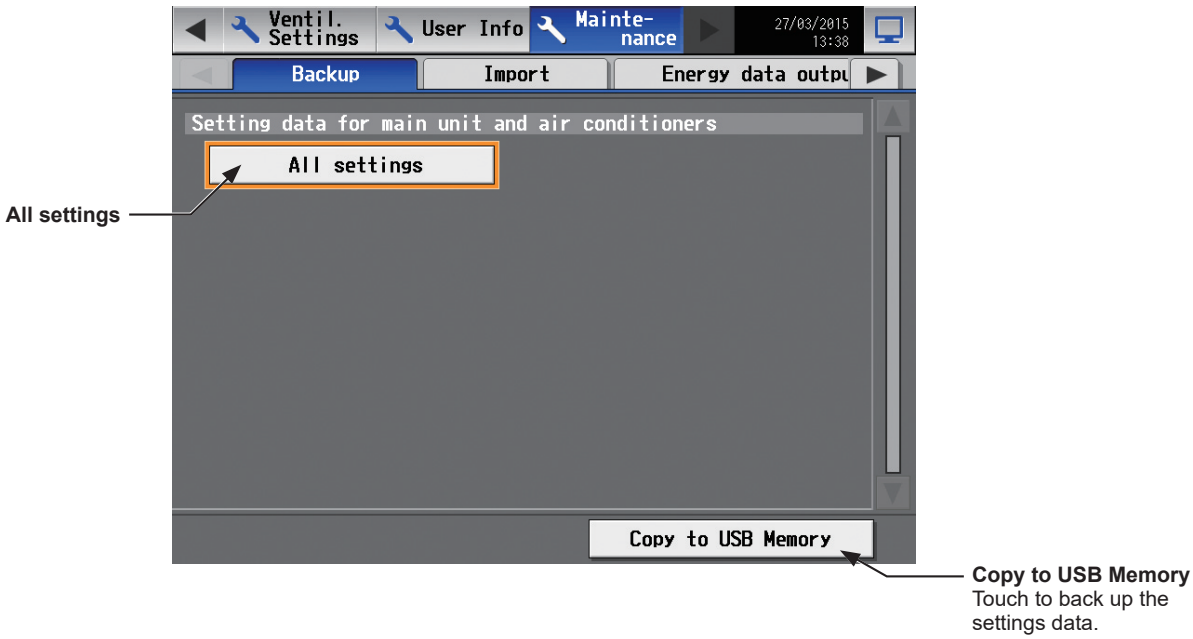
Note: Test the USB memory device several times before use and verify that the device functions properly. Reading data from or writing data to a USB memory device that has not been confirmed to work may cause unexpected problems. (If the data cannot be output to the USB memory device after a writing error 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.)

Note: License registration information cannot be backed up.

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.

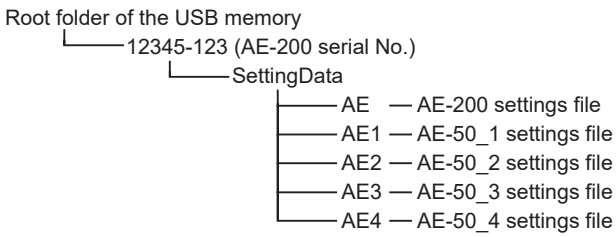
(2) Touch [All settings], then touch [Copy to USB Memory].
The settings data file will be created in the root folder of the USB memory.

■ 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>

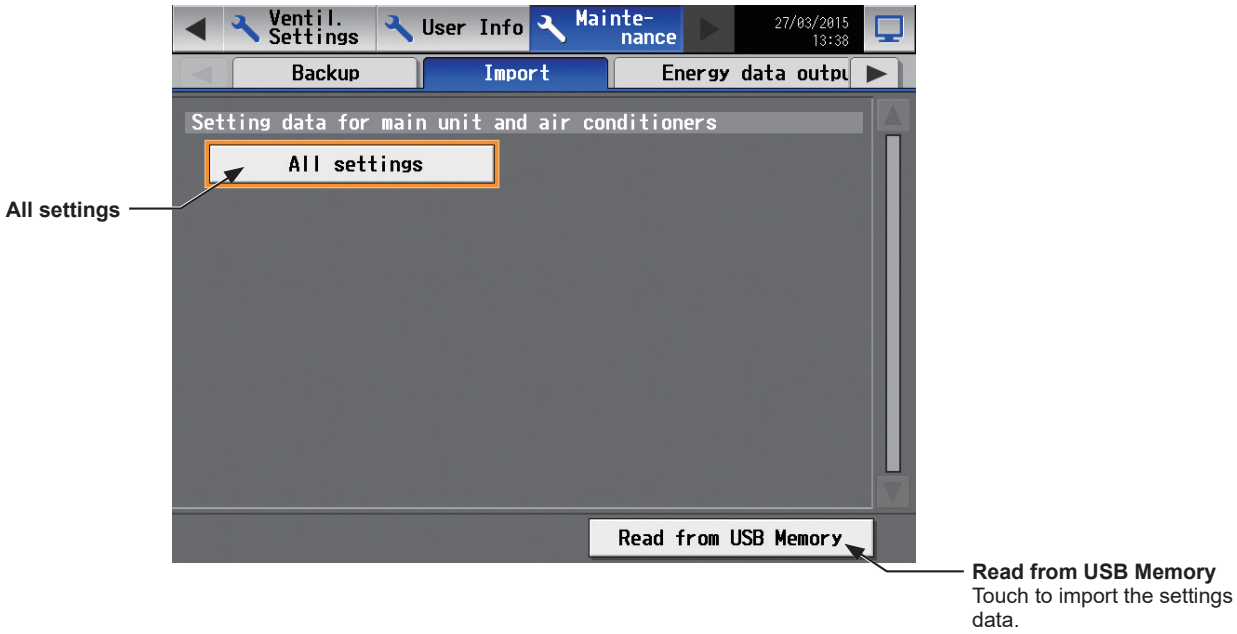


Note: It will take a few minutes to create the settings data.
Note: Do not remove the USB memory device while the data is being output.

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. (common to both AE-200/AE-50)

■ 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 connecting AE-50/EW-50 to AE-200

<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.

Note: Files that were backed up from the Integrated Centralized Control Web are importable.

Note: The [IP address] shown above will be set to [192_168_1_12] when the IP address of AE-200 is [192.168.1.12]. (Replace the period "." with underbar "_".)

(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. **The period "." in the IP address within the folder name must be changed to underbar "_".**

Note: If the data is not read, check if the USB memory device is inserted correctly.

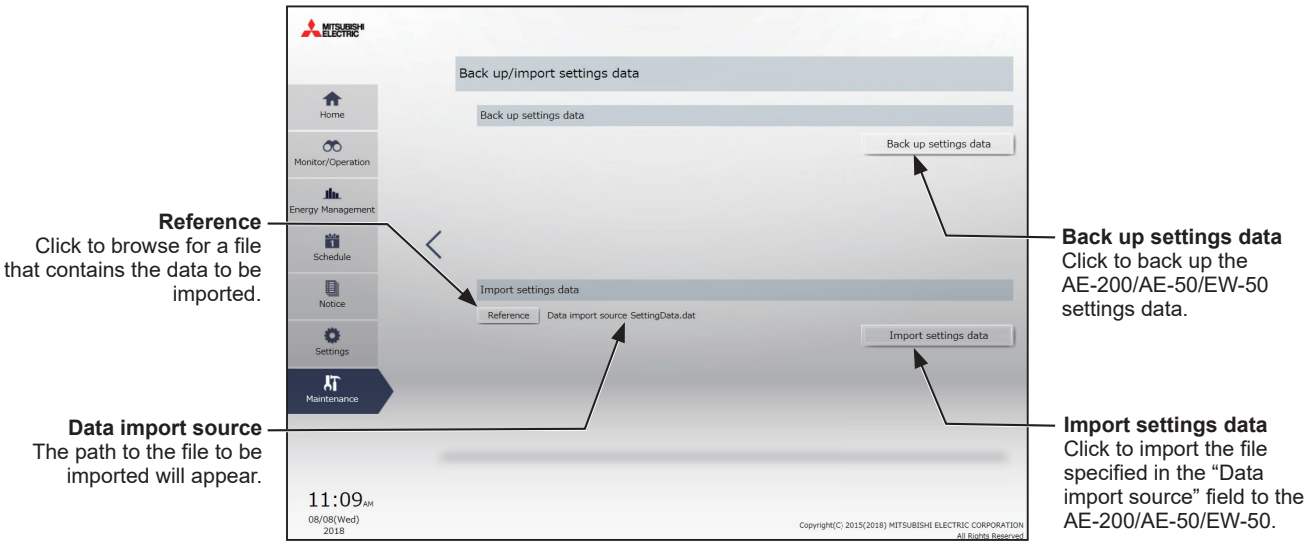
Note: Files backed up from the Integrated Centralized Control Web can be loaded. When loading the files, ensure that the root folder of the USB memory device is set in the format shown in step (1) above.

8-2. Settings Data Backup from Integrated Centralized Control Web

The settings data that have been made from the Initial Setting Tool or Integrated Centralized Control Web can be exported to an HDD as a backup.
The exported data can be imported back to the AE-200/AE-50/EW-50 to restore the previous settings after AE-200/AE-50/EW-50 replacement. The settings data can be backed up or imported from the Integrated Centralized Control Web.

(1) Click [Maintenance] > [Utility] > [Back up/import settings data] to access the Back up/import settings data screen.

Note: This function is accessible only if logged in as a building manager. Tenant managers and general users cannot use this function.



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 [Reference] button on the Back up/import settings data screen.

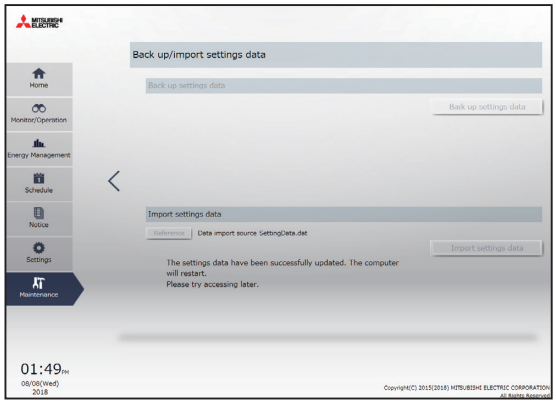
(2) Select the file to be imported, and click [Open].

(3) Click [Import settings data] to import the settings data to the AE-200/AE-50/EW-50.

Note: It will take a few minutes to import the settings data.



(4) When the settings data has been successfully imported, the AE-200/AE-50/EW-50 will restart.



Note: Files backed up from the LCD screen can be loaded.

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 on the AE-200's LCD. Or, Error log is displayed on the [Unit Error] screen under the [Log] menu on the AE-200's LCD.	"Version combination error (0092)"	The versions of the AE-200/AE-50/EW-50 do not match.	• Check the versions of the AE-200 and AE-50/EW-50. Refer to the Instruction Book (Apportioned Electricity Billing Function) for details.
(2)		"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 to 7 days. * Whether to warn (3 to 7 days before the warning is issued) or not to warn can be set. When "Not warn" is set, errors cannot be detected.	• Check if the measurement value is properly counted up on the [Measurement] screen under the [Monitor/Operation] menu. When an electricity meter with large pulse value is used, the error message may appear even if the wiring connection is correct. • Check for proper connection between the electricity meter and the PI controller (when a PI controller is used). • Check for proper connection between the electricity meter and the built-in Pulse Input (PI) on the AE-50/EW-50 (when a built-in Pulse Input (PI) on the AE-50/EW-50 is used). • Check if no communication error between the PI controller and the AE-50/EW-50 is occurring.
(3)		"Communication error - No response error (6920)"	The communication between AE-200 and AE-50/EW-50 is not properly established.	• Check if the destination IP address is properly entered. • Check for proper connection between the AE-200 and AE-50/EW-50.
(4)		"System abnormality - Attribute setting error (7106)"	1) In the group of units such as PI controllers, chiller units, or HWHP (QAHV) units, an address with attribute for different type of units (such as air conditioning units) exists. 2) The address of the unit to be interlocked set in the [Interlocked LOSSNAY] screen is not an address of LOSSNAY unit. 3) The attribute setting (IC/FU) for OA processing unit is not correct.	Cause 1) Configure the groups so that all addresses in each group have the same attribute (such as PI controllers, chiller units, or HWHP (QAHV) units). Cause 2) Correct or delete the address of the unit to be interlocked set in the [Interlocked LOSSNAY] screen. Cause 3) Switch the attribute using a dipswitch. Refer to the installation manual of the OA processing unit for details.

No.	Problem		Possible cause	Solution
(5)	Errors are displayed on the [Malfunction] screen under the [Status List] menu on the AE-200's LCD. Or, Error log is displayed on the [Unit Error] screen under the [Log] menu on the AE-200's LCD.	"System abnormality - Connection setting error (7109)"	1) The group setting contents set on the AE-200 do not match with the chiller unit configuration and the setting contents. 2) The HW Supply setting contents set on the AE-200 do not match with the HWHP (QAHV) unit configuration and the setting contents.	Cause 1) Check the addresses in the group settings and the unit configuration for chiller units. If they do not match, reconfigure them. Cause 2) Check the addresses in the HW Supply settings and the unit configuration for HWHP (QAHV) units. If they do not match, reconfigure the address settings.
(6)		"System abnormality - Different unit model error (7130)"	1) The digital setting on the HWHP (QAHV) unit is wrong.	Cause 1) Set the digital setting item code "107" on the circuit board on the HWHP (QAHV) unit to "2".
(7)	Errors are displayed on the [Malfunction] screen under the [Status List] menu on the AE-50's LCD.	"Communication error - No response error (6920)"	1) The communication between AE-50 and AE-200 is not properly established. 2) An error for the communication with the AE-200 that was connected in the past is being detected. 3) The IP address of the AE-200 has been changed. 4) The AE-50/EW-50 that experienced 2) or 3) above has been updated to Ver. 7.3 or later.	• Check for proper connection between the AE-200 and AE-50. • Make the AE-50/EW-50 communication error detection settings on the [Network] screen under the [Initial Settings] menu. Refer to section 5-1-5 "Network" [5] "Communication error detection" for details.
(8)	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 were transmitted from a new Initial Setting Tool to an old AE-200/AE-50/EW-50.	Settings for functions added in new version have not been carried out. Update the AE-200/AE-50/EW-50. Refer to section 3-1 "Separately sold parts" for compatible version combination of Initial Setting Tool and AE-200/AE-50/EW-50. Refer to section 4-4 "Software Update" for details of updates.
(9)	A message is displayed when data is acquired or Initial Setting Tool settings are transmitted.	Message: "The unit configuration settings for the following centralized controller does not match with the actual unit configuration."	1) The centralized controller type set on the system configuration settings screen differs from the actual type. 2) The configuration setting for the expansion controller set on the system configuration settings screen differs from the actual configuration.	Cause 1)-1 Check the "AE-200 M-NET" and "AE-200 Apportion" settings on the [Unit Info.] screen on the LCD. Cause 1)-2 Change the system configuration settings so that the settings match with the actual unit configuration. Cause 2) Make the expansion controller settings on the [Network] screen on the LCD.

No.	Problem	Possible cause	Solution
(10)	Initial settings data cannot be output from the LCD to the USB memory device.	1) The USB memory device is not set correctly. 2) There is insufficient free space on the USB memory device. 3) The USB memory device does not support the AE-200/AE-50. 4) The USB memory device was removed or inserted too quickly. 5) The USB memory device is write-protected.	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 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.
(11)	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_[IP address]” (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 (10).
(12)	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.
(13)	The license cannot be registered on the License Registration screen of the Initial Setting Tool even though the license number has been entered.	1) The license information of the centralized controller has not been acquired.	• Perform [Collective data acquisition] or [Data acquisition] before registering the license.
(14)	The CSV file that contains license information cannot be imported and collective license registration fails on the License Registration screen of the Initial Setting Tool.	1) The CSV file has been edited using programs such as Microsoft® Excel.	• Reissue the CSV file that contains license information. • Individually register the licenses by entering the license numbers on the License Registration screen of the Initial Setting Tool.

No.	Problem	Possible cause	Solution
(15)	AE-200/AE-50/EW-50 does not startup after the update. The log appears and disappears repeatedly on the AE-200/AE-50 LCD. The status LED of EW-50 blinks in blue, blinks in pink, and turns off repeatedly.	The update has failed.	• Turn off the AC power of AE-200/AE-50/EW-50, and turn it back on. Cause 1) If the problem persists, AE-200/AE-50/EW-50 is at fault. Replace the AE-200/AE-50/EW-50.
(16)	Anti-virus software detects a virus or malware while the Initial Setting Tool is being used.	1) The anti-virus software mistakenly identifies the Initial Setting Tool as a virus or malware.	Cause 1) Add the Initial Setting Tool folder (C:\Program Files\MITSUBISHI ELECTRIC CORPORATION\ AE-200 Initial Setting Tool) as an exception in the anti-virus software so that the folder is excluded from virus scanning by the software. For how to add exceptions in anti-virus software, refer to the manual of the anti-virus software.
(17)	“Centralized controller network error” appears under “Notice” on the Integrated Centralized Control Web.	1) The IP address of the AE-50/EW-50 that has been set on the AE-200 is incorrect. 2) The certificate of the AE-50/EW-50 that is connected to the AE-200 has not been registered to the browser.	Cause 1) Set the correct IP address using the network setting that can be accessed from the LCD screen of the AE-200 or using the Initial Setting Tool. For how to set the IP address, refer to section 4-2-2. Cause 2) Register the certificate to the PC, tablet computer, or smartphone to be used. For how to register the certificate, refer to “1. HTTPS (SSL) connection” in chapter 5 of Instruction Book (Integrated Centralized Control Web) for AE-200/AE-50/EW-50.
(18)	Loading floor plan files fails.	1) Loading from a USB memory device using the LCD screen ① Format or size of the floor plan files ② Factors attributable to the USB memory device 2) Loading from the Initial Setting Tool ① Format or size of the floor plan files	Cause 1) ① Check that the floor plan files meet the restrictions given in section 5-1-11 “Floor Layout” in this manual. ② Check that the USB memory device meets the following requirements. • Supports USB 2.0 (Must be USB 2.0-compatible when using a USB 3.0) • Formatted with FAT32 or FAT (FAT16) • Without a security function (locked by a password or encrypted) that prevents the data files from being written to or the function is unused. When using a USB memory device with a security function, its function must be disabled. (USB memory device with a fingerprint authentication function may be used.) Cause 2) ① Check that the floor plan files meet the restrictions given in section 6-5-1 “Floor settings for LCD” in this manual.

No.	Problem	Possible cause	Solution
(19)	The colors of the floor layout shown on the LCD screen differ from the colors of the floor plan files.	The floor plan files contain colors that cannot be displayed on the LCD screen.	Select colors for the floor plan files according to the color table shown in section 5-1-11 “Floor Layout” in this manual.
(20)	Not accessible to AE-200/AE-50/EW-50 from the Integrated Centralized Control Web, monitoring system, or Initial Setting Tool.	1) The IP address (network address) of the remote side and the IP address (network address) of LAN2 (for exclusive use for BACnet®) of AE-200/AE-50/EW-50 are the same. 2) The IP address of the target PC or monitoring system is not included in the accessible IP address list.	Cause 1) Change the IP address of LAN2 of AE-200/AE-50/EW-50 with the Initial Setting Tool. Alternatively, change the IP address (network address) of the remote-side. See the notes under 4-2. [1]. Cause 2) Enter the IP address of the target PC in the accessible IP address list using the Initial Setting Tool. If you forget the settings of the list, reset the list of accessible IP addresses on the LCD screen. See section 5-1-5. [6].

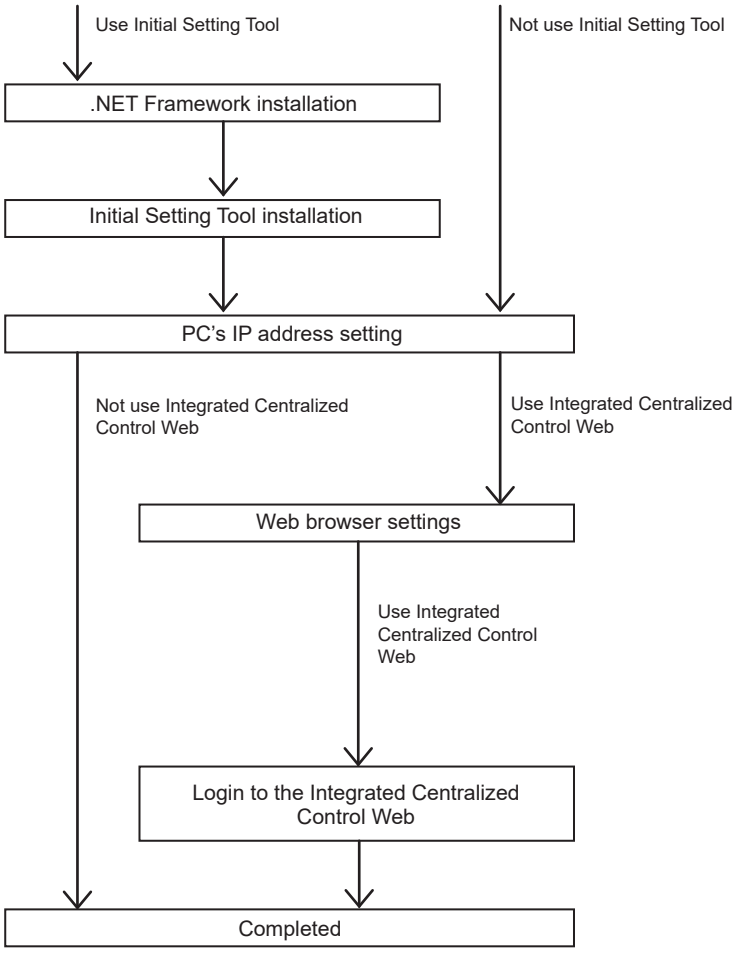
10.Advance preparation

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 Integrated Centralized Control Web.
These preparations are not required when configuring all settings using only the LCD.

Carry out preparations using the following procedure.



In order to use the Initial Setting Tool, connect to the Internet, and install the .NET Framework.
(See section 10-1-1 “Installation procedures of .NET Framework”.)

Install Initial Setting Tool.
(See section 10-1-2 “Installation procedures of the Initial Setting Tool”.)

Set the IP address of the PC.
(See section 10-1-3 “Setting the PC's IP address”.)

Configure Web browser settings to use the Integrated Centralized Control Web.
(See section 10-1-4 “Setting the Web Browser”.)

Check that you can log into the Integrated Centralized Control Web.
(See section 4-1 “Logging in to the Integrated Centralized Control Web”.)

10-1-1. Installation procedures of .NET Framework

If .NET Framework 4.8 or later is not already installed, download the .NET Framework 4.8 installer from the URL shown below, and then install it.
If the .NET Framework version is earlier than the required version, the installation process of the Initial Setting Tool will be canceled and a message will appear indicating that the installation of the .NET Framework is necessary.

https://dotnet.microsoft.com/en-us/download/dotnet-framework/net48

* Other language can also be selected from this website.

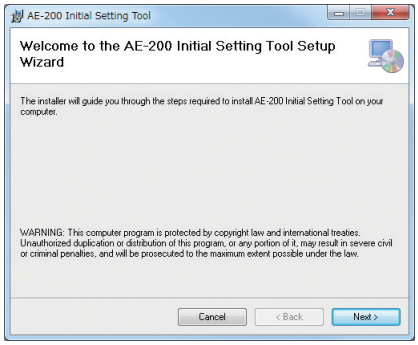
10-1-2. Installation procedures of the Initial Setting Tool

(1) Execute the install file for the Initial Setting Tool.

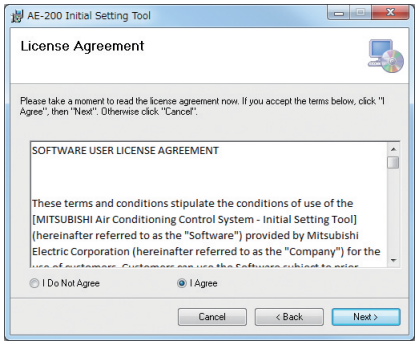
* The install file name is “SetupISToolA_V***” for AE-200A/AE-50A/EW-50A.
The install file name is “SetupISToolE_V***” for AE-200E/AE-50E/EW-50E.
(“V***” indicates version number. “V120” indicates Ver. 1.20.)

(2) If the “Security Warning” message appears, click [Run].

(3) When the “Setup Wizard” screen appears, click [Next].

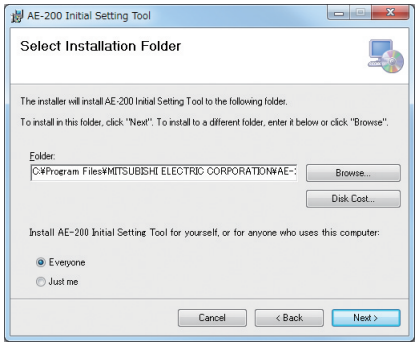


(4) The “License Agreement” screen will appear. Select [I Agree] and click [Next].

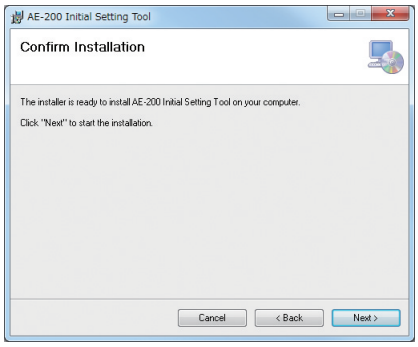


(5) The “Select Installation Folder” screen will appear. Select the save destination folder and click [Next].

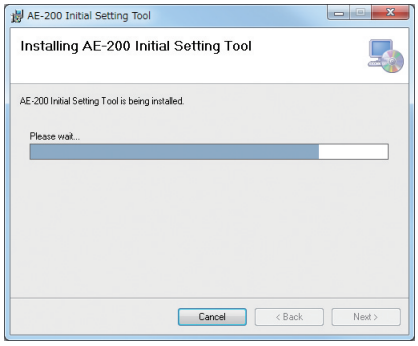
Note: To allow all users who can login the PC to have access to the Initial Setting Tool, check that the [Everyone] checkbox is selected and then click [Next].



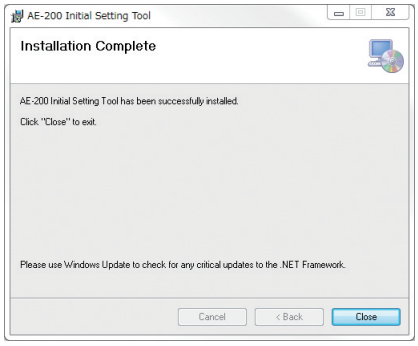
(6) When the “Confirm Installation” screen appears, click [Next].



(7) The Initial Setting Tool will be installed.



(8) Once installation is completed, click [Close].



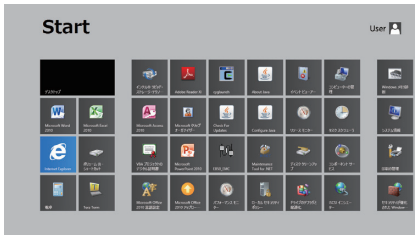
Note: An Initial Setting Tool shortcut icon will be created on the desktop.
To launch the software, double-click the icon.

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 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.

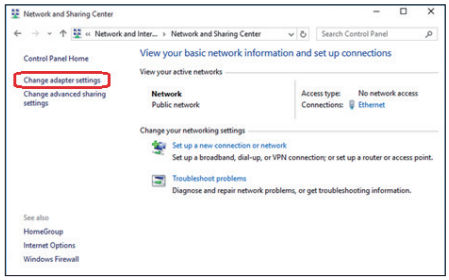
(13) Keep clicking [OK] or [Close] to close all windows.

[2] For Windows 10 or Windows 11

(1) Search for the control panel using the search box. The Control Panel will open.

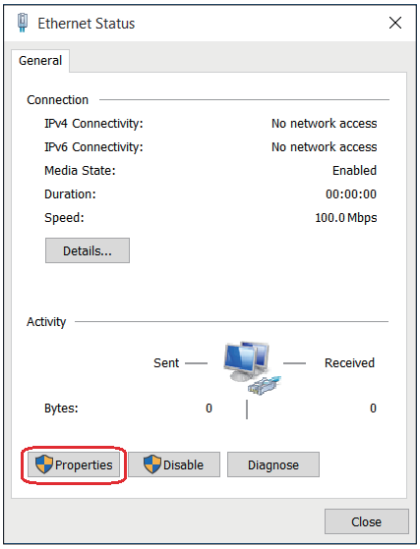
(2) Click the [Network and Sharing Center] icon.

(3) Click [Charge adapter settings].

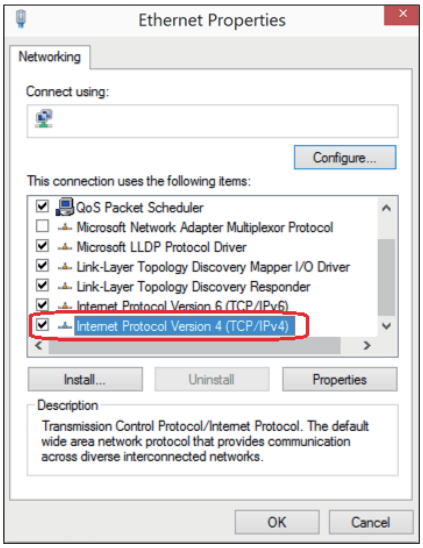


(4) Double-click the [Ethernet] icon.

(5) In the [Ethernet status] window, click [Properties].



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

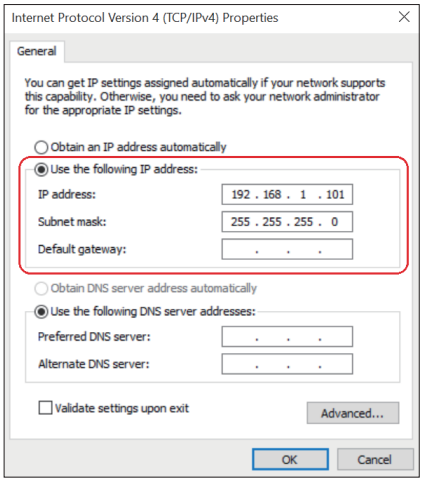


(7) In the [Internet Protocol Version 4 (TCP/IPv4) Properties] window, check the radio button next to [Use the following IP address].

(8) Enter the PC's IP address (e.g., [192.168.1.101]) in the "IP address" field.

(9) Enter the subnet mask [255.255.255.0] in the "Subnet mask" field.

(10) 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.

(11) 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.

Note: Vulnerability in a network system creates a risk of denial-of-service attack, data breach, or data falsification by malicious users. The following measures are recommended to protect your network system against cyber-attacks.

- Install anti-virus software on all computers that are accessible to AE-200/AE-50/EW-50.
- Only allow the access from reliable networks and hosts to AE-200/AE-50/EW-50.

[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) Open the Internet Options as follows.

Windows® 8.1

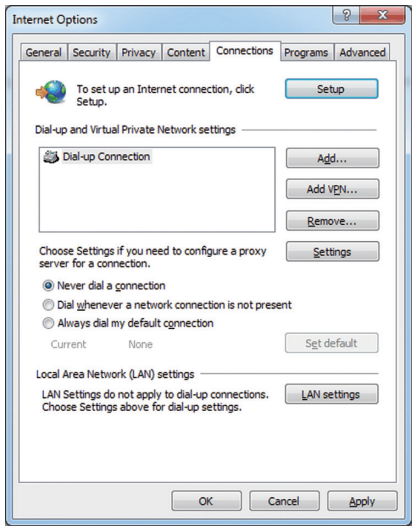
Start screen>[Desktop]>[My computer]>[Control panel]>[Network and Sharing center]>[Internet Options]

Windows® 10 or 11

Search for the control panel using the search box, and click [Network and Sharing center]>[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) Open the Internet Options as follows.

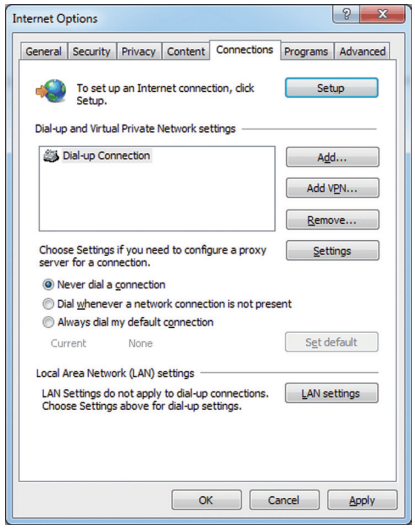
Windows® 8.1

Start screen>[Desktop]>[My computer]>[Control panel]>[Network and Sharing center]>[Internet Options]

Windows® 10 or 11

Search for the control panel using the search box, and click [Network and Sharing center]>[Internet Options].

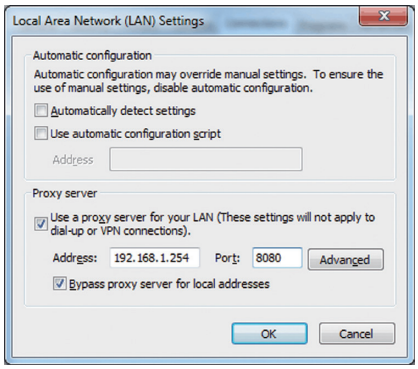
(2) In the [Internet Options] window, click the [Connections] tab.



(3) Check the radio button next to [Never dial a connection] in the middle of the window.

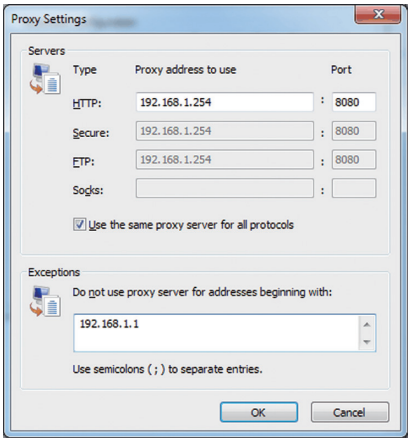
(4) Click [LAN settings] under [Local Area Network (LAN) settings].

(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.*]).



11. Explanation of terms

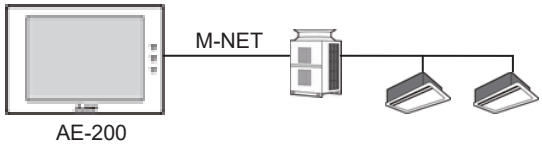
This explains terms used in this manual.

• AE-200 system

This indicates one AE-200 connected to 0 to 4 AE-50/EW-50 expansion controllers.
System configurations are as follows.

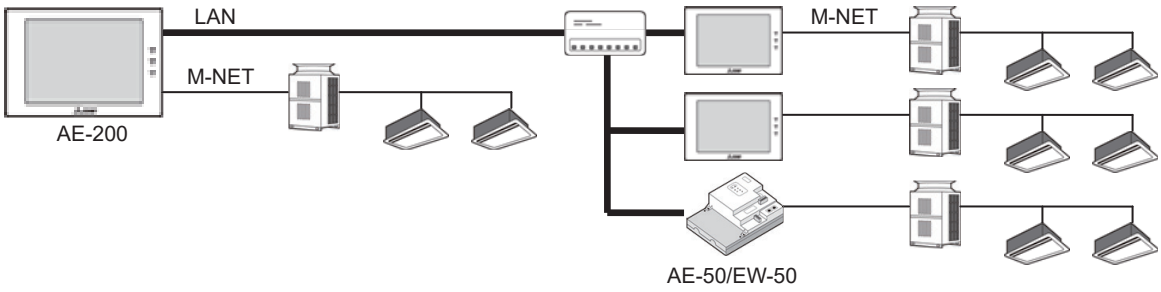
■ AE-200 (independent)

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.



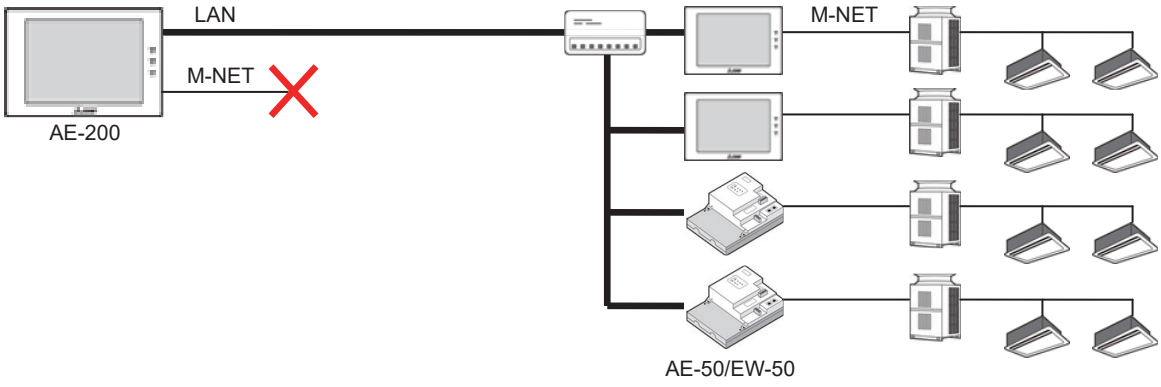
■ AE-200

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.



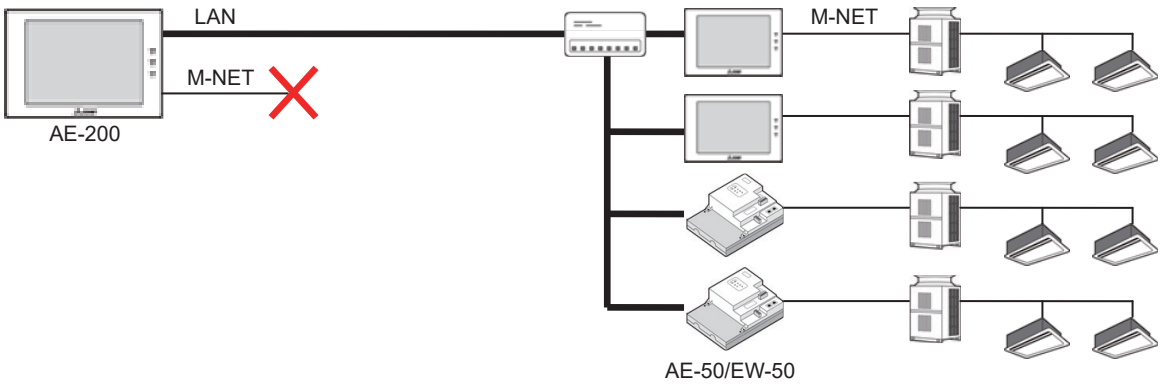
■ AE-200 (No M-NET)

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.



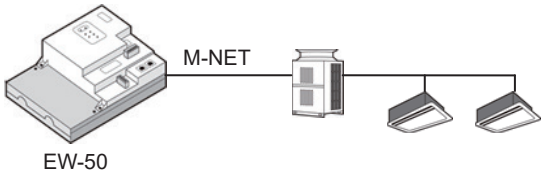
■ AE-200 (Billing)

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.



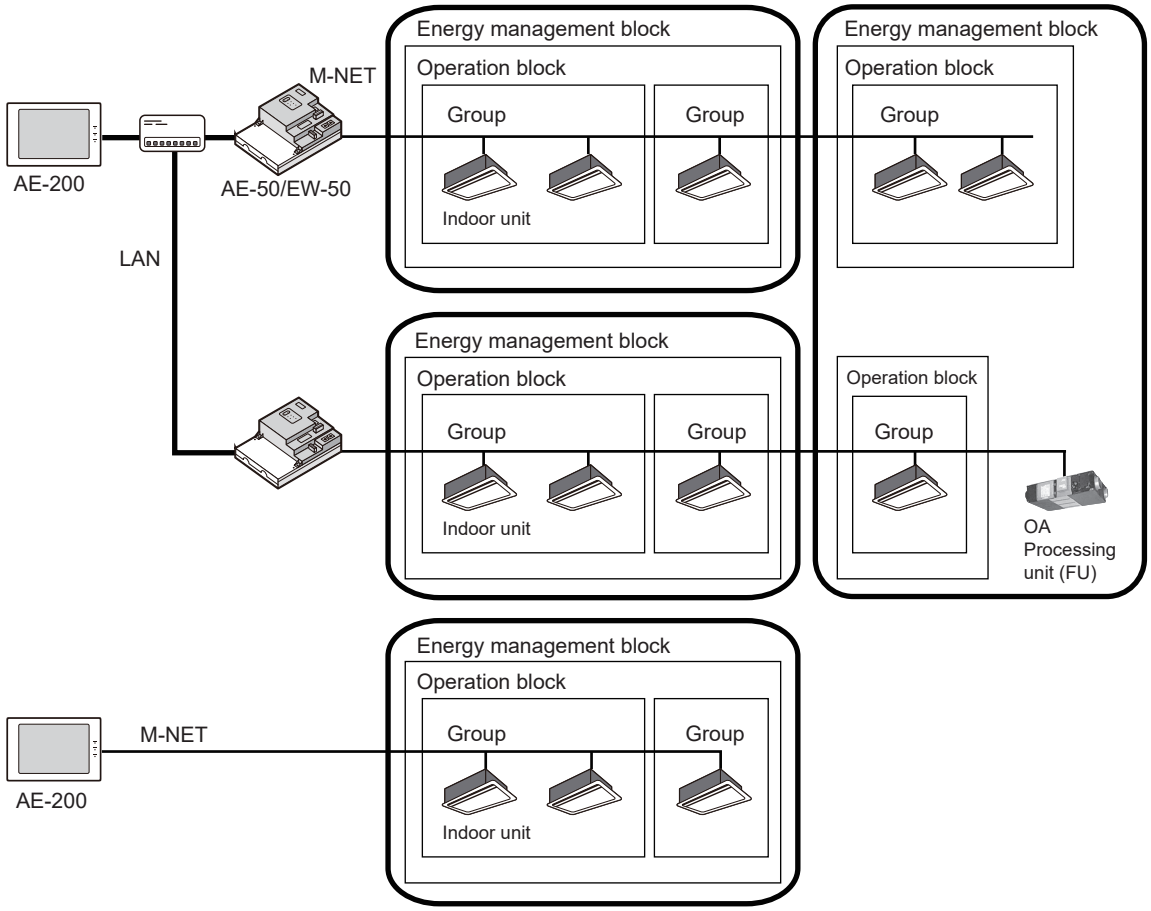
• BACnet® Setting Tool
The BACnet® Setting Tool is used for configuring BACnet® functions from a PC.
This allows separate configuration of single AE-200/AE-50/EW-50 units.
For how to use the BACnet® Setting Tool, refer to the Instruction Book (BACnet® Setting Tool).

* 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 OA Processing units (FU).
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.


Energy management block
Operation block
Group
Group
Indoor unit
Energy management block
Operation block
Group
M-NET
AE-200
AE-50/EW-50
LAN
Energy management block
Operation block
Group
Group
Indoor unit
Operation block
Group
OA
Processing
unit (FU)
Energy management block
Operation block
Group
Group
Indoor unit
M-NET
AE-200

• Main and Sub system controllers

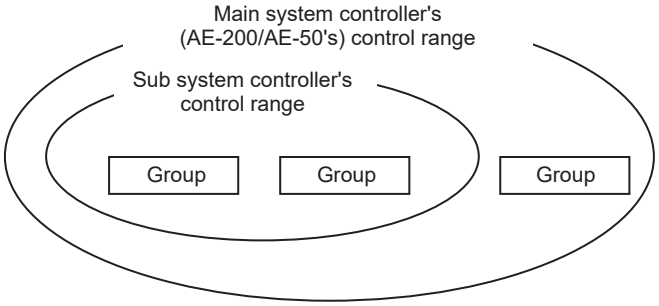
Each group can be controlled by a Main system controller or a Sub system controller.
AE-200/AE-50 is exclusively for use as a Main system controller and cannot be used as a Sub system controller.

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.

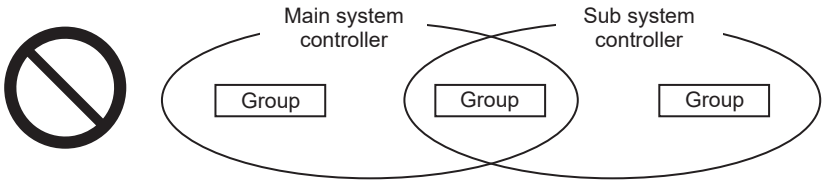
Sub system controller

Sub system controller refers to a system controller that is controlled by a Main system controller.

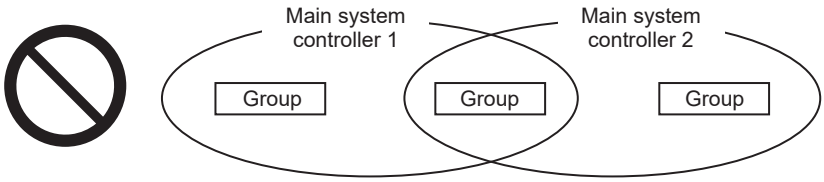


The system cannot be configured as shown in the examples below.

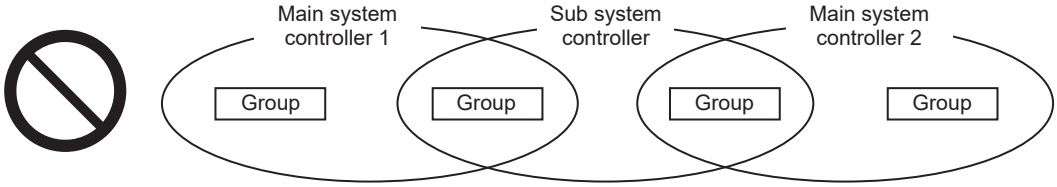
● Groups that are not under the control of a Main system controller cannot be controlled from a Sub system controller.



● 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 that can be detected with AE-200/AE-50 (EW-50) and their definitions are shown below.
Refer to [3] “Errors on other related equipment” for errors on DIDO controller or AHC.
For other error codes, refer to the manual of the equipment of the error source address.
If an error occurs, note the error code and consult your dealer.

[1] M-NET errors

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

[2] AE-200 and AE-50 (EW-50) 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
6920	Communication error - No response error
6922	Communication error - Receiving frame ID error
7106	System abnormality - Attribute setting error
7109	System abnormality - Connection setting error
7130	System abnormality - Different unit model 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

[3] Errors on other related equipment

0100	Equipment abnormality
01*0	Equipment abnormality (PAC-YG66DCA) in system *
01**	Equipment abnormality in system **

(When these errors occur on the DIDO controller (PAC-YG66DCA), the error code will not appear, but the error status display LED on the DIDO controller of the system in error will light up.)

Appendix 1: Air-conditioner ON/OFF trial run

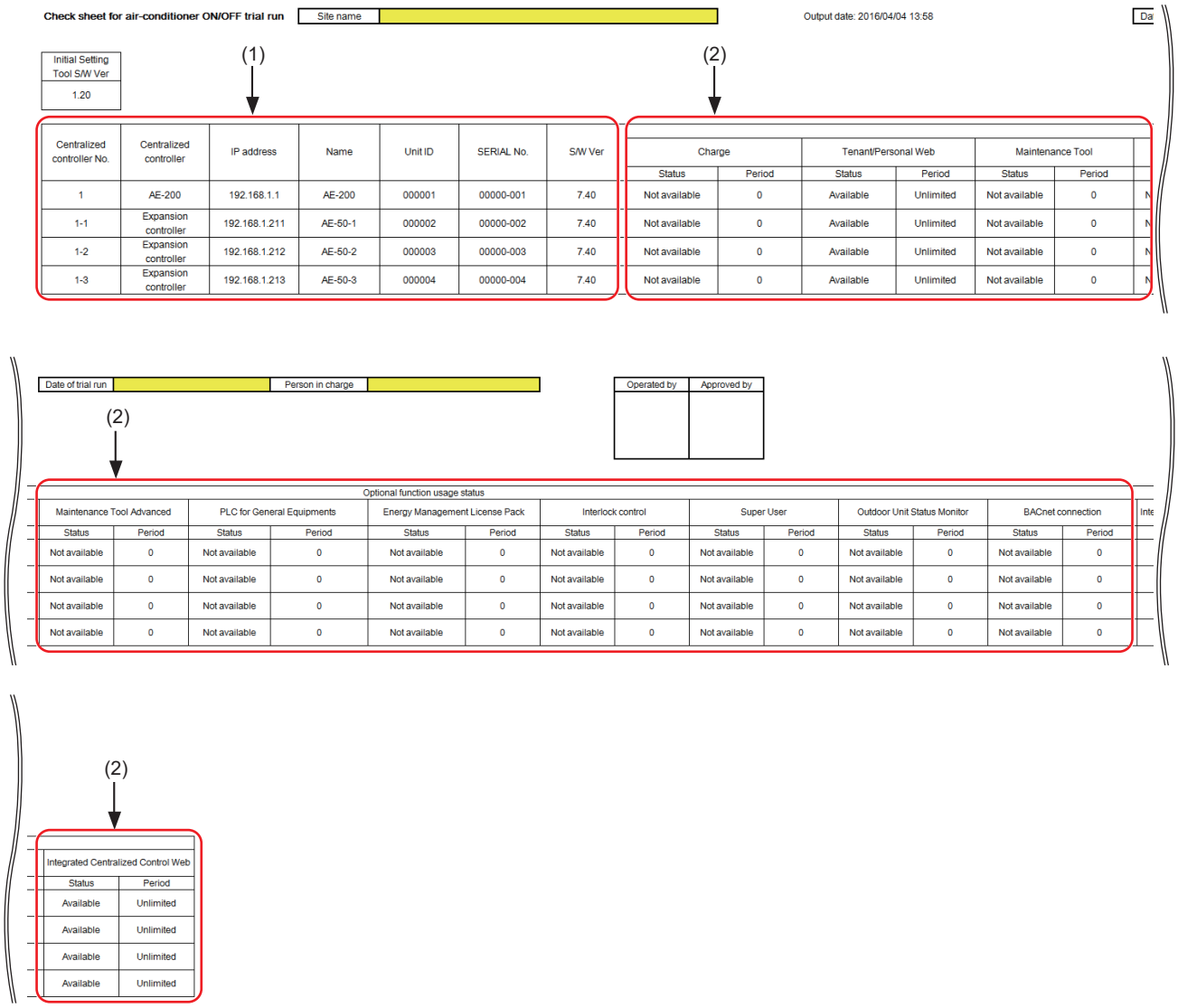
After the centralized controllers are installed, a check sheet can be output to be used for air-conditioner ON/OFF trial runs.

Click [Option] > [Output - Check sheet for air-conditioner ON/OFF trial run] in the tool bar of the Initial Setting Tool to output the check sheet for each AE-200 system.

Note: When the PC with Initial Setting Tool installed and the centralized controller are connected via a LAN, the license registration status can be output in the check sheet.

[1] Centralized controller

Output this check sheet for each AE-200 system.



Check sheet for air-conditioner ON/OFF trial run | Site name | Output date: 2016/04/04 13:58

Initial Setting Tool S/W Ver: 1.20

(1) (2)

Centralized controller No.	Centralized controller	IP address	Name	Unit ID	SERIAL No.	S/W Ver	Charge		Tenant/Personal Web		Maintenance Tool	
							Status	Period	Status	Period	Status	Period
1	AE-200	192.168.1.1	AE-200	000001	00000-001	7.40	Not available	0	Available	Unlimited	Not available	0
1-1	Expansion controller	192.168.1.211	AE-50-1	000002	00000-002	7.40	Not available	0	Available	Unlimited	Not available	0
1-2	Expansion controller	192.168.1.212	AE-50-2	000003	00000-003	7.40	Not available	0	Available	Unlimited	Not available	0
1-3	Expansion controller	192.168.1.213	AE-50-3	000004	00000-004	7.40	Not available	0	Available	Unlimited	Not available	0

Date of trial run | Person in charge | Operated by | Approved by

(2)

Optional function usage status

Maintenance Tool Advanced		PLC for General Equipments		Energy Management License Pack		Interlock control		Super User		Outdoor Unit Status Monitor		BACnet connection	
Status	Period	Status	Period	Status	Period	Status	Period	Status	Period	Status	Period	Status	Period
Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0
Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0
Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0
Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0	Not available	0

(2)

Integrated Centralized Control Web	
Status	Period
Available	Unlimited
Available	Unlimited
Available	Unlimited
Available	Unlimited

(1) Checking the connection configuration

Check for proper IP addresses and software versions.

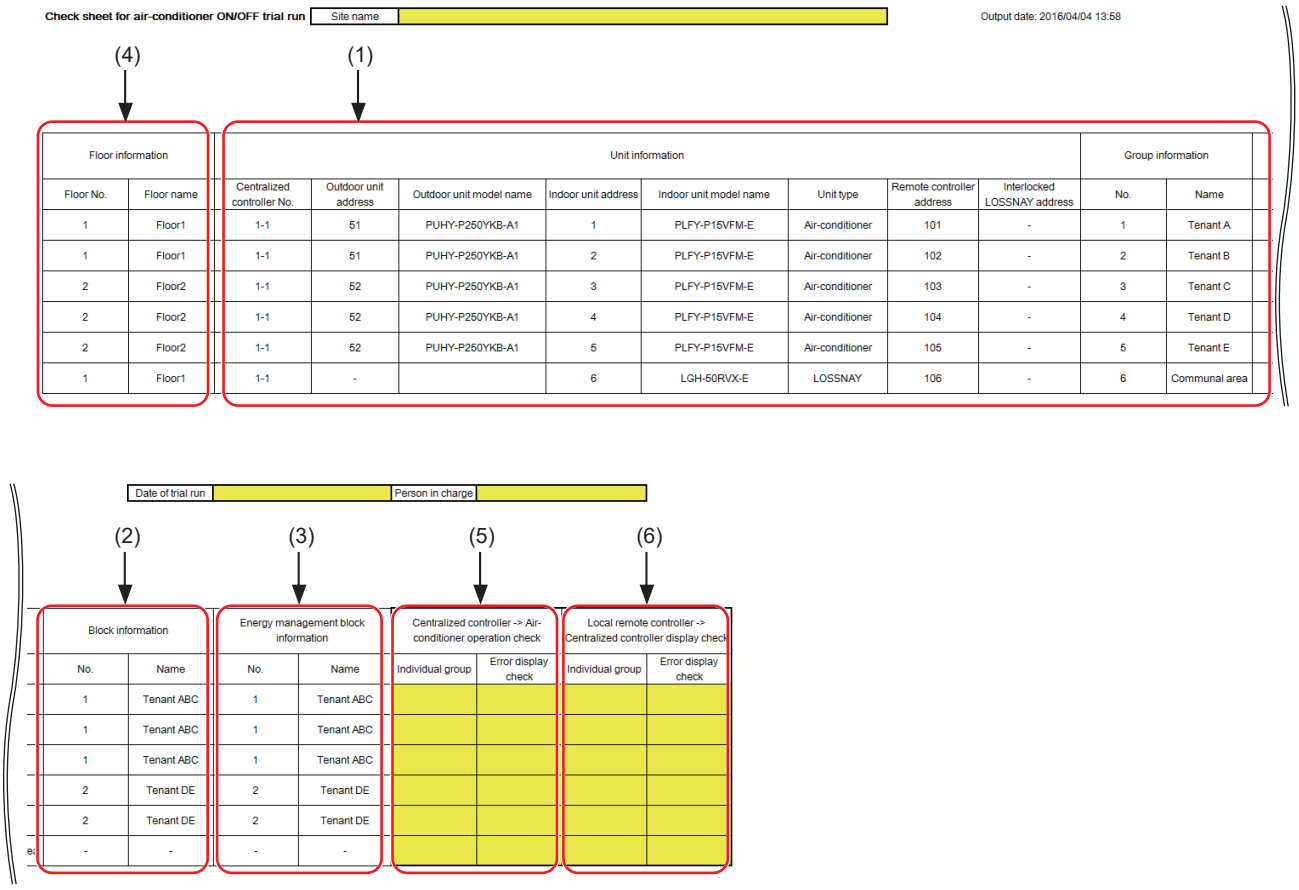
(2) Checking the license

Check that all required licenses are registered.

Note: To check the license registration status, output the check sheet when the PC with Initial Setting Tool installed and the centralized controller are connected via a LAN.

[2] Unit - Controller

Output this check sheet for each AE-200/AE-50/EW-50.



Check sheet for air-conditioner ON/OFF trial run | Site name | Output date: 2016/04/04 13:58

(4) (1)

Floor information		Unit information								Group information	
Floor No.	Floor name	Centralized controller No.	Outdoor unit address	Outdoor unit model name	Indoor unit address	Indoor unit model name	Unit type	Remote controller address	Interlocked LOSSNAY address	No.	Name
1	Floor1	1-1	51	PUHY-P250YKB-A1	1	PLFY-P15VFM-E	Air-conditioner	101	-	1	Tenant A
1	Floor1	1-1	51	PUHY-P250YKB-A1	2	PLFY-P15VFM-E	Air-conditioner	102	-	2	Tenant B
2	Floor2	1-1	52	PUHY-P250YKB-A1	3	PLFY-P15VFM-E	Air-conditioner	103	-	3	Tenant C
2	Floor2	1-1	52	PUHY-P250YKB-A1	4	PLFY-P15VFM-E	Air-conditioner	104	-	4	Tenant D
2	Floor2	1-1	52	PUHY-P250YKB-A1	5	PLFY-P15VFM-E	Air-conditioner	105	-	5	Tenant E
1	Floor1	1-1	-		6	LGH-50RVX-E	LOSSNAY	106	-	6	Communal area

Date of trial run | Person in charge

(2) (3) (5) (6)

Block information		Energy management block information		Centralized controller -> Air-conditioner operation check		Local remote controller -> Centralized controller display check	
No.	Name	No.	Name	Individual group	Error display check	Individual group	Error display check
1	Tenant ABC	1	Tenant ABC				
1	Tenant ABC	1	Tenant ABC				
1	Tenant ABC	1	Tenant ABC				
2	Tenant DE	2	Tenant DE				
2	Tenant DE	2	Tenant DE				
-	-	-	-				

(1) Checking the group configuration

Check for proper group registration and unit information of the unit.

(2) Checking the block configuration

Check for proper block configuration of the unit.

(3) Checking the energy management block (EM block) configuration

Check for proper energy management block (EM block) configuration of the unit.

(4) Checking the floor configuration

Check for proper floor configuration of the unit.

(5) Checking the operation between centralized controllers and air conditioning units

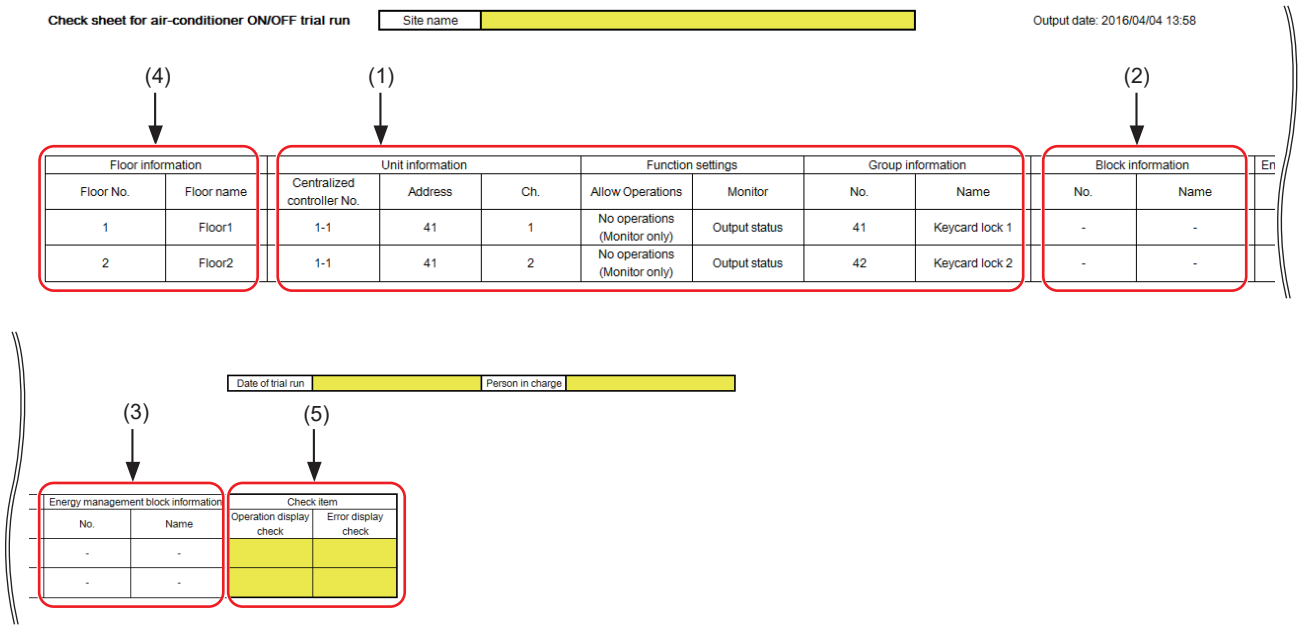
Check the operation status of centralized controllers and air conditioning units by turning on/off the units or generating an error, and check for proper settings and connections.

(6) Checking the operation between centralized controllers and local remote controllers

Check the display of centralized controllers and local remote controllers by turning on/off the units or generating an error, and check for proper settings and connections.

[3] General Equipment

Output this check sheet for each AE-200 system.



Check sheet for air-conditioner ON/OFF trial run | Site name | Output date: 2016/04/04 13:58

(4) (1) (2)

Floor information		Unit information			Function settings		Group information		Block information		En
Floor No.	Floor name	Centralized controller No.	Address	Ch.	Allow Operations	Monitor	No.	Name	No.	Name	
1	Floor1	1-1	41	1	No operations (Monitor only)	Output status	41	Keycard lock 1	-	-	
2	Floor2	1-1	41	2	No operations (Monitor only)	Output status	42	Keycard lock 2	-	-	

Date of trial run | Person in charge

(3) (5)

Energy management block information		Check item	
No.	Name	Operation display check	Error display check
-	-		
-	-		

(1) Checking the group configuration

Check for proper group registration and unit information for the general equipment contact.

(2) Checking the block configuration

Check for proper block configuration for the general equipment contact.

(3) Checking the energy management block (EM block) configuration

Check for proper energy management block (EM block) configuration for the general equipment contact.

(4) Checking the floor configuration

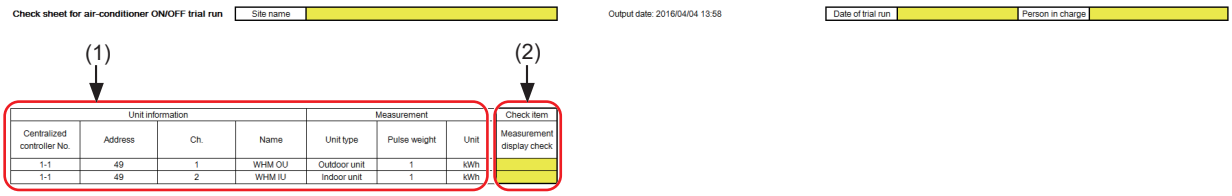
Check for proper floor configuration for the general equipment contact.

(5) Checking the operation between centralized controllers and air conditioning units

Check the operation status of centralized controllers and general equipment by turning on/off the general equipment contact or generating an error, and check for proper settings and connections.

[4] PI Controller

Output this check sheet for each AE-200 system.



Check sheet for air-conditioner ON/OFF trial run | Site name | Output date: 2016/04/04 13:58 | Date of trial run | Person in charge

(1) (2)

Unit information				Measurement			Check item
Centralized controller No.	Address	Ch.	Name	Unit type	Pulse weight	Unit	Measurement display check
1-1	49	1	WHM OU	Outdoor unit	1	kWh	
1-1	49	2	WHM IU	Indoor unit	1	kWh	

(1) Checking the metering device

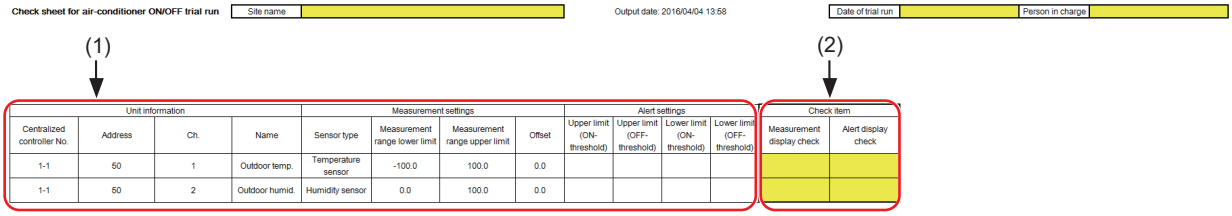
Check for proper type and settings for the metering device.

(2) Checking the operation of the metering device

Check for proper settings and connections between the centralized controllers and metering device by letting the metering device count up.

[5] AI Controller

Output this check sheet for each AE-200 system.



Check sheet for air-conditioner ON/OFF trial run | Site name | Output date: 2016/04/04 13:58 | Date of trial run | Person in charge

(1) (2)

Unit information				Measurement settings				Alert settings				Check item	
Centralized controller No.	Address	Ch.	Name	Sensor type	Measurement range lower limit	Measurement range upper limit	Offset	Upper limit (ON-threshold)	Upper limit (OFF-threshold)	Lower limit (ON-threshold)	Lower limit (OFF-threshold)	Measurement display check	Alert display check
1-1	50	1	Outdoor temp.	Temperature sensor	-100.0	100.0	0.0						
1-1	50	2	Outdoor humid.	Humidity sensor	0.0	100.0	0.0						

(1) Checking the sensors

Check for proper type and settings for the sensors.

(2) Checking the operation of the sensors

Check for proper settings and connections between the centralized controllers and sensors by operating the sensors.

Appendix 2: Added functions

Version	Menu item		Added function	Reference
Ver. 7.2	LCD	Peak Cut settings *1	Sets the Peak Cut settings. 50% is selectable for outdoor unit capacity save amount.	5-2-1 “Peak Cut (Energy-save control function)”
	Web Browser for Initial Settings	Peak Cut settings *1	50% is selectable for outdoor unit capacity save amount.	–
Ver. 7.3	LCD	Network settings	Displays the detection of communication error on expansion controllers AE-50/ EW-50.	5-1-5 “Network”
		Energy management block	Units under the control of AE-200, AE-50, and EW-50 can be placed in the same block.	5-1-10 “EM Blocks”
		Floor Layout	Sets the display or non-display of gridlines and the distance of icon movement.	5-1-11 “Floor Layout”
		Ventilation settings	Sets Night purge on OA processing units.	5-4 “Ventilation setting”
	Initial Setting Tool (Ver. 1.1)	Floor settings	Sets the floor layout for AE-200/AE-50 and Integrated Centralized Control Web.	6-5 “Floor Settings”
	Web Browser for Initial Settings	Ventilation settings	Sets Night purge on OA processing units.	–
Ver. 7.4	LCD	Air conditioning unit settings	Sets the display/non-display of room temperature and set temperature on the [Floor] window.	5-1-4 “Unit Information”
	Initial Setting Tool (Ver. 1.2)	Display settings	Sets the display/non-display of room temperature and set temperature on the [Floor] window.	6-3-2 “Basic System settings”
		Block settings	Copies the group settings to the block settings when setting them to the same settings.	6-4-4 “Block settings”
		Energy management block settings	Copies the block settings to the energy management block settings when setting them to the same settings.	6-4-5 “Energy management block settings”
	Web Browser for Initial Settings	Display settings	Sets the display/non-display of room temperature and set temperature on the [Floor] window.	–
Ver. 7.5	LCD	Group settings	Sets the chiller units to groups.	5-1-6 “Groups”
		HW Supply settings	Sets the HWHP (QAHV) units to groups.	5-1-7 “HW Supply”
		Air conditioning unit settings	Enables the display of both the room temperature and the set temperature on the [Floor] window.	5-1-4 “Unit Information”
	Initial Setting Tool (Ver. 1.3)	Display settings	Enables the display of both the room temperature and the set temperature on the [Floor] window.	6-3-2 “Basic System settings”
		Group settings	Sets the chiller units to groups.	6-4-1 “Group settings”
		Interlock Control settings *2	Sets the Interlocking Control settings for units under the control of different expansion controllers.	6-7 “Interlock Control”
	Web Browser for Initial Settings	Group settings	Sets the chiller units to groups.	–
		Display settings	Enables the display of both the room temperature and the set temperature on the [Floor] window.	–
		Interlock Control settings *2	The setting function was deleted.	–
Ver. 7.6	LCD	HW Supply settings	HWHP (QAHV) units can be registered to the AE-50 and EW-50.	5-1-7 “HW Supply”
	Initial Setting Tool (Ver. 1.4)	License registration	Licenses can be registered from the Initial Setting Tool.	4-5 “License registration for optional functions”

Version	Menu item		Added function	Reference
Ver. 7.68	LCD	Group settings	Sets the MEHT-CH&HP unit to groups.	5-1-6 “Groups”
Ver. 7.7	LCD	Group settings	Sets the outlet air temperature control unit to groups.	5-1-6 “Groups”
	Web Browser for Initial Settings	Group settings	Sets the outlet air temperature control unit to groups.	–
	Initial Setting Tool (Ver. 1.6)	IP Address settings	Sets the IP address of AE-200/AE-50/ EW-50.	6-3-2 “Basic System settings”
		Group settings	Sets the outlet air temperature control unit to groups.	6-4-1 “Group settings”
		Interlock Control	Sets the interlock control settings for the outlet air temperature control units.	6-7 “Interlock Control”
		Energy Management Settings	Sets the energy management settings.	6-8-1 “Energy Management Settings”
		System-changeover Settings	Sets the System-changeover settings.	6-8-2 “System-changeover”
	Integrated Centralized Control Web	E-Mail	Set to use the error notification e-mail function or the e-mail communication function.	7-1-1 “E-Mail”
		Peak Cut	Set the control contents for each Peak Cut method or demand level.	7-1-2 “Peak Cut (Energy-save control function)”
		Set Temperature Range Limit	Set to limit the settable temperature range for the local remote controllers or the Web Browser for User.	7-1-3 “Set Temperature Range Limit”
		Night Mode Schedule	Set to operate the outdoor units in a quiet mode for the specified time period.	7-1-5 “Night Mode (quiet operation) Schedule”
		External Temperature Interlock	Set to automatically adjust the set temperature based on the temperature difference between the set temperature and the outdoor temperature.	7-1-4 “External Temperature Interlock”
		Night Setback Control	Set to perform cooling or heating operation automatically when the room temperature goes outside of the specific range during the night.	7-1-6 “Night Setback Control”
		Night purge	Set to draw cooler outside air into the room to suppress temperature rises at night.	7-2-1 “Night purge”
Ver. 7.8	LCD Initial Setting Tool (Ver. 1.7)	Group settings	Chiller units (EAHV-P1500/1800YB(-H)(-N)(-BS) and EACV-P1500/1800YB(-N)(-BS)) can be connected.	5-1-6 “Groups” 6-4-1 “Group settings”
Ver. 7.85	Initial Setting Tool (Ver. 1.8)	Refrigerant System settings	Pump units can be registered.	6-4-2 “Refrigerant System settings”
Ver. 7.90	Initial Setting Tool (Ver. 1.9)	AI controller settings	Set the e-mail alarm function for upper and lower limit temperatures/humidities.	6-4-7 “AI controller settings”
Ver. 7.93	Integrated Centralized Control Web	E-Mail	[SSL/TLS] was added to the e-mail encryption method.	7-1-1 “E-Mail”
Ver. 7.96	Initial Setting Tool (Ver. 2.0)	[Send to a selected controller.] ([Send all settings], [Only send the changes])	It is possible to send only the changed settings to the centralized controller.	6-2-3 “List of tool bar operations”

Version	Menu item		Added function	Reference
Ver. 7.98	Integrated Centralized Control Web	Integrated Centralized Control Web login window	Displays the model name, serial number, and software version on the login window of the Integrated Centralized Control Web	4-1 “Logging in to the Integrated Centralized Control Web”
			The default building manager login password for AE-200A/EW-50A can be changed here.	
	LCD	Login window on the LCD	The default maintenance user / building manager login passwords for AE-200A/AE-50A can be changed here.	5-1-1 “Logging in to the Initial Settings menu”
	Windows® 11 compatible		A computer with Windows® 11 is compatible for use.	3-3 “PC requirements”
	.NET Framework 4.8 compatible		Supports the use of .NET Framework 4.8	3-3 “PC requirements”
Ver.8.03	Initial Setting Tool (Ver.2.05)	Access restriction settings	Supports access restriction settings to limit accessible IP addresses.	6-3-3 “Access restriction settings”

*1 “Saving Energy Control (Peak Cut)” license is required to use the function.

*2 “Interlock control” license is required to use the function.

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 2014/35/EU
- Electromagnetic Compatibility Directive 2014/30/EU

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

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