

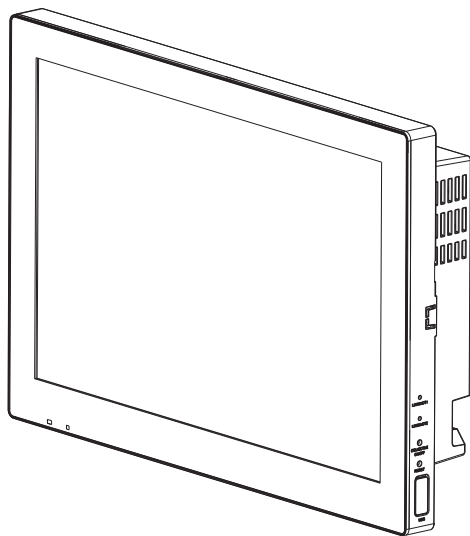
Air Conditioning Control System Centralized Controller



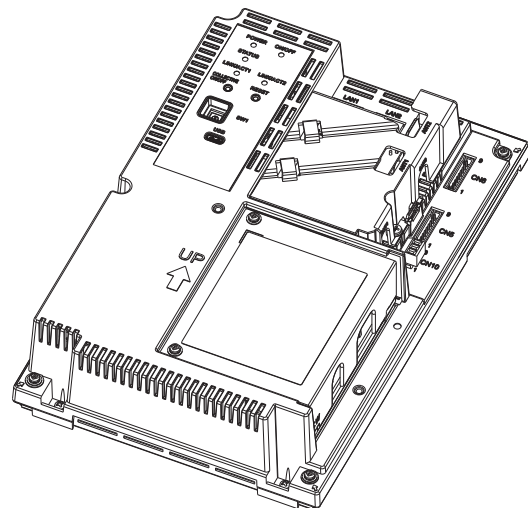
MODEL

AE-C400
EW-C50

Instruction Book



AE-C400



EW-C50

The serial number and DP of the product can be found on the back cover of this manual. They are required to use the product, so please keep this manual safe.

Proper installation is important for your safety and proper functioning of the units. Thoroughly read the following safety precautions prior to installation.

Safety notes are marked with **⚠WARNING** or **⚠CAUTION**, depending on the severity of possible consequences that may result when the instructions are not followed exactly as stated.

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



Manual Download



<http://www.mitsubishielectric.com/ldg/ibim/>

en Go to the above website to download manuals, select model name, then choose language.

de Besuchen Sie die oben stehende Website, um Anleitungen herunterzuladen, wählen Sie den Modellnamen und dann die Sprache aus.

fr Rendez-vous sur le site Web ci-dessus pour télécharger les manuels, sélectionnez le nom de modèle puis choisissez la langue.

es Visite el sitio web anterior para descargar manuales, seleccione el nombre del modelo y luego elija el idioma.

it Andare sul sito web indicato sopra per scaricare i manuali, selezionare il nome del modello e scegliere la lingua.

pt Aceda ao site Web acima indicado para descarregar manuais, seleccione o nome do modelo e, em seguida, escolha o idioma.

tr Kılavuzları indirmek için yukarıdaki web sitesine gidin, model adını ve ardından dili seçin.

ru Чтобы загрузить руководства, перейдите на указанный выше веб-сайт; выберите название модели, а затем язык.

中<简> 前往上述网站下载手册，选择产品型号，然后选择语言。

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Safety precautions

- ♦ Thoroughly read the following safety precautions prior to installation.
- ♦ Observe these precautions carefully to ensure safety.

 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.

- ♦ 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. The manual should be made available to those who repair or relocate the product. Make sure that the manual is passed on to any future air conditioning system user.

■ General precautions

WARNING

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

To reduce the risk of injury, electric shock, or fire, do not alter or modify the product.

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

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

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

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

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

If you notice any abnormality (e.g. a burning smell), stop the operation, turn off the product, and contact your dealer. Continuing the use of the product without correcting the abnormality may result in electric shock, malfunction, or fire.

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

** CAUTION**

To reduce the risk of injury from broken glass, do not apply excessive force to the glass parts.

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

To reduce the risk of injury, electric shock, or malfunction, do not touch sharp edges of parts.

Consult an authorized agency for proper disposal of the product. Inappropriate disposal can lead to environmental pollution.

■ Precautions for relocating or repairing the product** WARNING**

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

1. Introduction

The AE-C/EW-C controller is a Web-based system used to monitor and control air-conditioning and refrigeration units via a Web browser. The AE-C allows you to monitor and control the units from its LCD screen.

1-1. About this manual

- ♦ This manual explains basic controller operations and initial settings.
 - ♦ To make initial settings, you need to log in to the controller from the Initial Setting Tool.
The default settings are as follows:
User ID: initial
Password: Init + DP
For DP, refer to the back cover of the Instruction Book (supplied with the controller).
ex.) When DP is 123456, the password will be Init123456.
 - ♦ For monitoring or operation from a Web browser on a computer, you need to log in to the controller from the Web browser.
The default settings are as follows:
URL: https://192.168.1.1/control
User ID: administrator
Password: Admin + DP
For DP, refer to the back cover of the Instruction Book (supplied with the controller).
ex.) When DP is 123456, the password will be Admin123456.
 - ♦ Controller models are abbreviated as "AE-C" or "EW-C" in this manual.
 - ♦ In this manual, unless otherwise specified, "unit" means general air-conditioning and refrigerant equipment.
 - ♦ In this manual, an action of selecting an item by tapping it with your finger or a pen or by clicking it with a computer mouse is referred to as "tapping."
 - ♦ For matters not explained in this manual, refer to the Instruction Book (Detailed Version) for AE-C/EW-C.
 - ♦ Displayed items and screen transfer patterns may differ, depending on the equipment connected to the units and the licenses purchased by users.
-

1-2. Related manuals

- ♦ Installation Manual (supplied with the controller)
- ♦ Instruction Book (supplied with the controller): this manual

Note

- ♦ In addition to the Instruction Book (supplied with the controller), the Instruction Book (Detailed Version) and other manuals are available.
For the latest version of the manuals, refer to the specified page. "Manual Download (page 2)"

1-3. Trademarks and registered trademarks



MicroSDHC logo is a trademark of SD-3C, LLC.

Android and Google Chrome are trademarks of Google LLC.

BACnet is a registered trademark of ASHRAE.

IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

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Microsoft, Windows, Excel, Microsoft Edge, and Windows Server are registered trademarks of Microsoft Corporation in the U.S. and other countries.

MODBUS is a registered trademark of Schneider Electric USA Inc.

Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates in the U.S. and other countries.

Other company names and product names shown in this manual may be trademarks or registered trademarks of their respective companies.

1-4. Compliance with applicable laws and regulations

- ♦ For information about the compliance of the controller with applicable laws and regulations, refer to the web site of Mitsubishi Electric Corporation.
- ♦ The apportioned electricity billing function uses our unique analysis method of energy apportionment, which is based on the analysis of the operation status data exchanged between the controller and the air conditioning units, not based on the actual measurement of the energy consumption of each air conditioning unit. The entire energy consumption obtained by the apportioned electricity billing function is for internal use, and is not intended for disclosure to tenant owners.

1-5. Software details

Details of the open source integrated in the controller are available at the following URL:

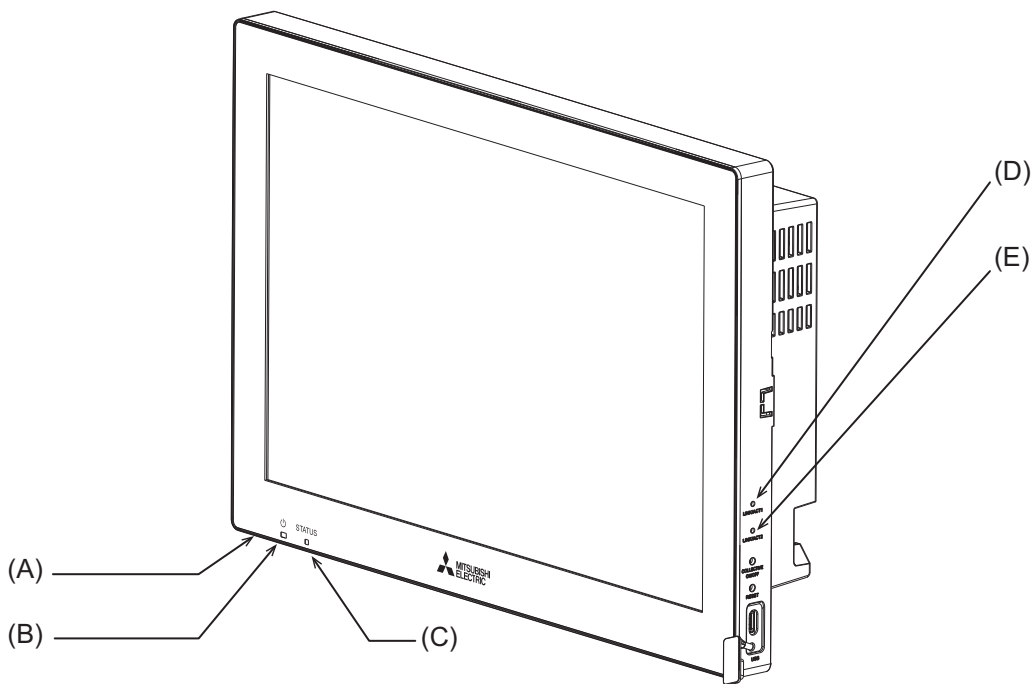
[https://\(IP address of the controller\)/license/](https://(IP address of the controller)/license/)

(The access to the above URL is allowed only to commissioning users. For details of the access, refer to the Instruction Book (Detailed Version).)

2. Parts names

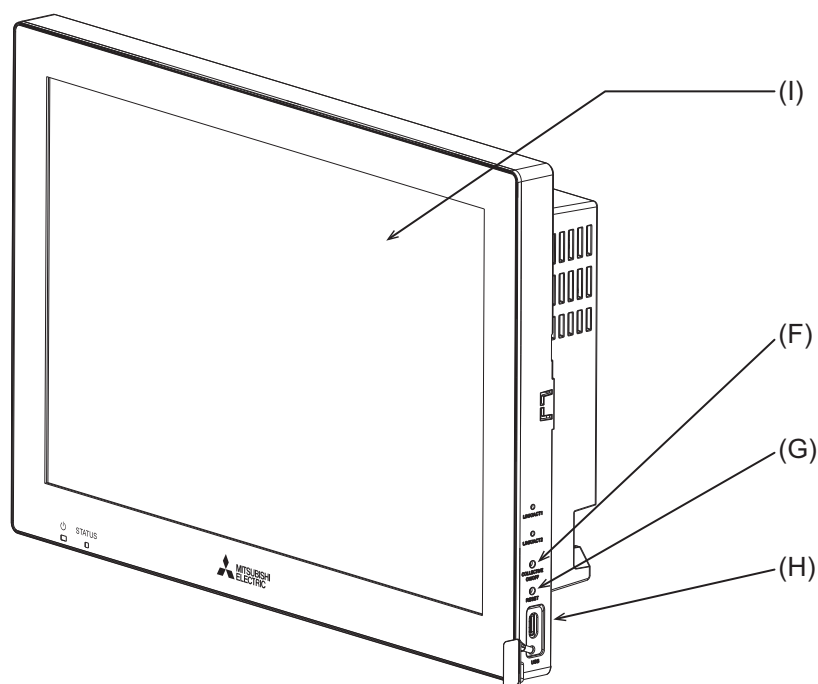
2-1. AE-C

■ AE-C (Front)



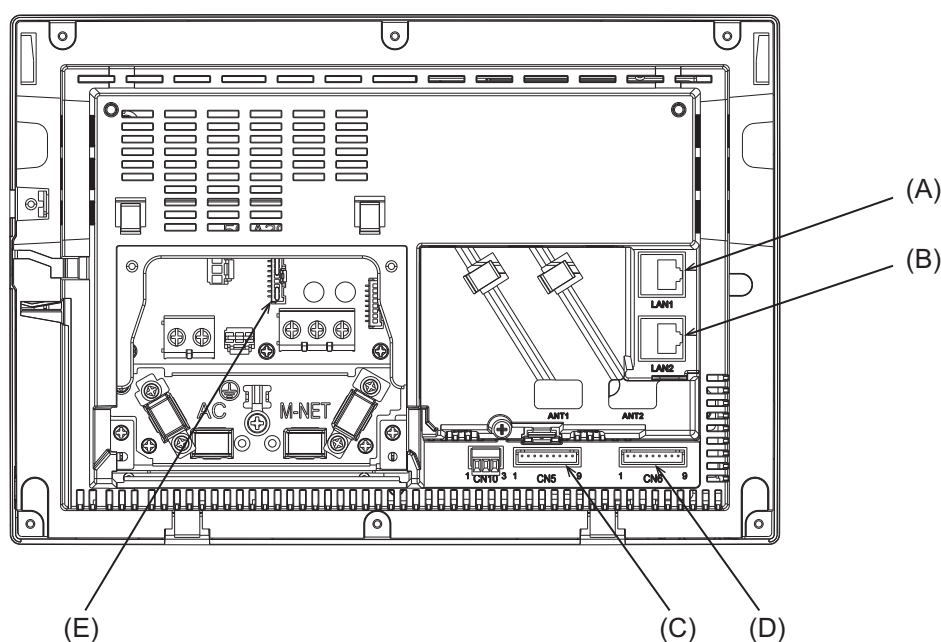
Item	
Function and description	
(A)	LED
	① (Bottom)
(B)	⏻*1
(C)	STATUS
(D)	LINK/ACT1
(E)	LINK/ACT2

*1 This LED shows the operation status of the devices controlled directly by the controller or the devices controlled by the entire system.

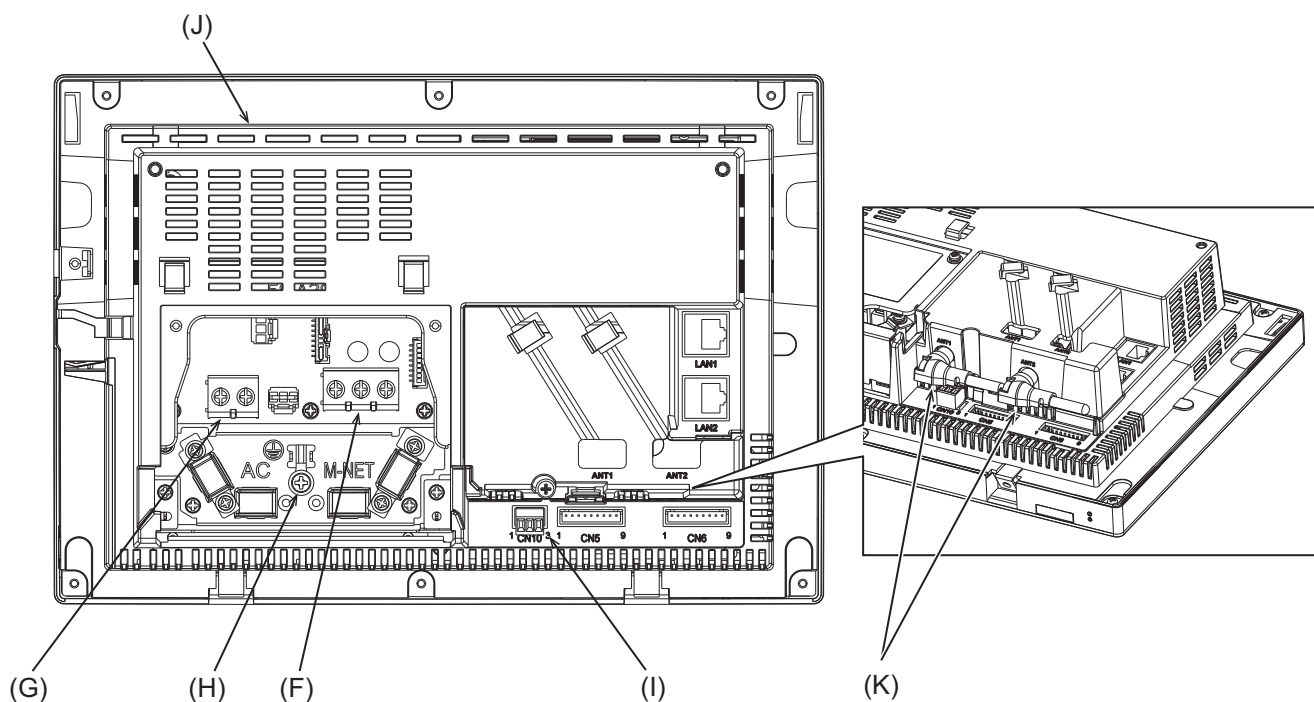


Item	
	Function and description
(F)	Push switch
	ON/OFF
	Pressing the switch turns the backlight on or off.
(G)	RESET
	Restarts the controller.
(H)	USB port (Type-C) (USB 3.1 Gen1)
	Remove the cover when connecting a device to the USB port. Leave the cover attached while not using the USB port.
(I)	LCD screen
	Touch panel

■ AE-C (Rear (without the service cover))

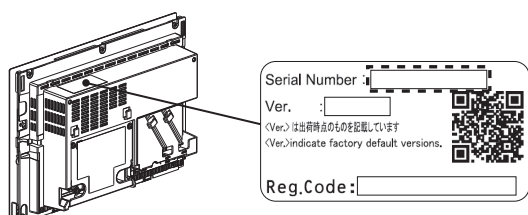


	Item	
	Function and description	
(A)	LAN1	LAN port for controlling air-conditioning and refrigeration units. Connects to other AE-C or EW-C with a LAN cable via a switching HUB.
(B)	LAN2	LAN port for BACnet connection. Connects to a building management system with a LAN cable via a switching HUB.
(C) (D)	CN5 CN6	Connector for connecting the external input/output adapter (PAC-YG10HA-E).
(E)	CN21	Connector for M-NET power supply. Attaching this connector to the controller supplies power to M-NET from the controller. (The controller is shipped with the connector attached.) To supply power to M-NET from other devices, remove this connector.



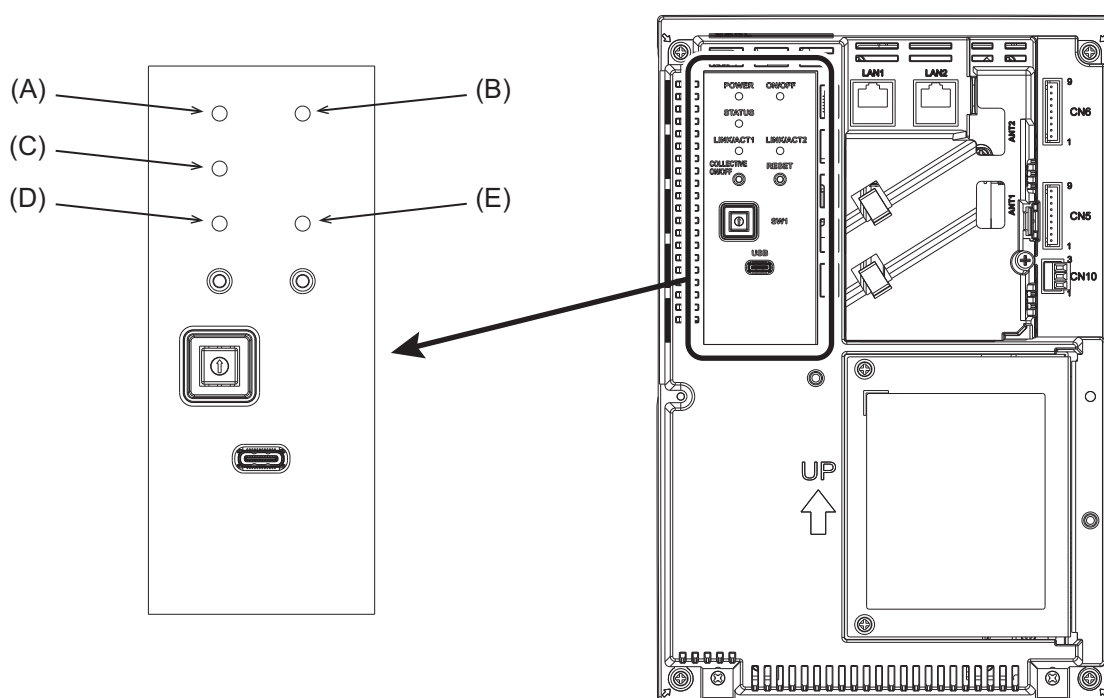
	Item	
	Function and description	
(F)	TB3 (M3.5)	Terminal block for connecting the M-NET transmission cable.
(G)	TB1 (M3.5)	Terminal block for connecting the AC power wires (L/L1, N/L2).
(H)	Ground (M4)	Terminal for connecting the protective ground wire.
(I)	CN10	RS-485 connector for connecting a watt-hour meter.
(J)	Serial number label	The serial label is on the rear of the controller. See the figure below.
(K)	Antenna for cellular communication	Do not remove the antennas from the controller if they are already installed on the controller. After installing the controller, place the antennas to the default position as shown in the figure.

Serial number label



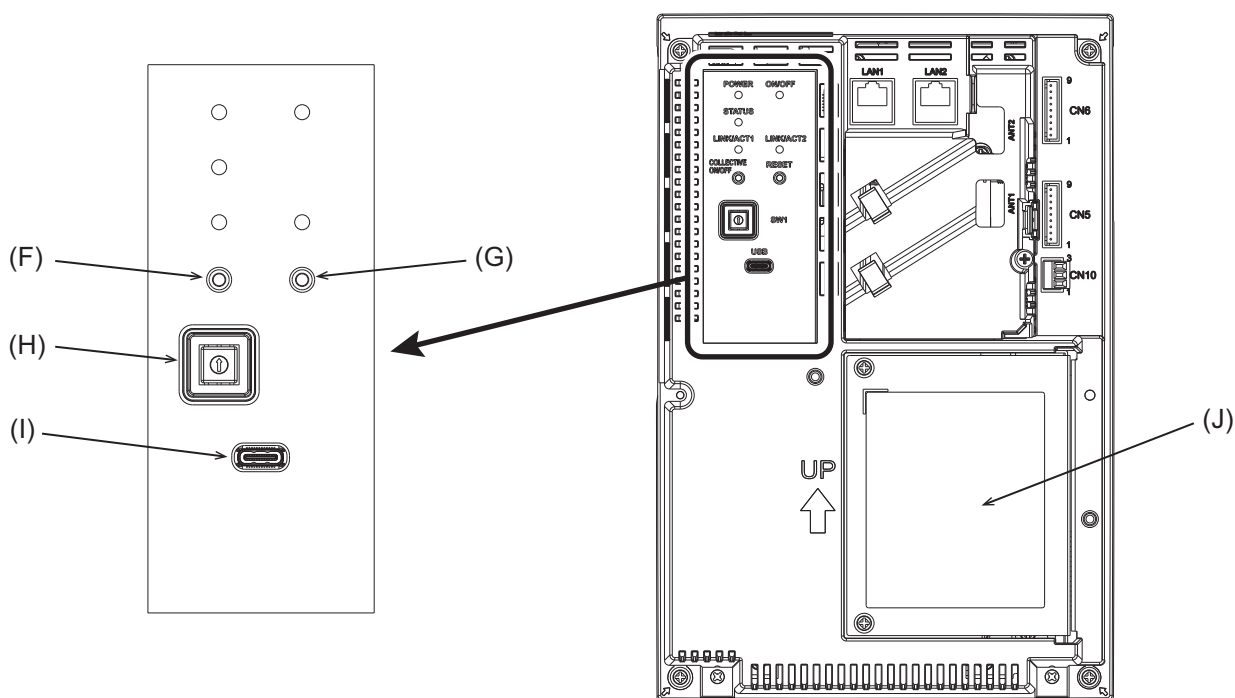
2-2. EW-C

■ EW-C (with the service cover)



Item		Function and description
LED		
(A)	POWER	Lit in green: The controller is receiving power. Unlit: The controller is not receiving power.
(B)	ON/OFF ^{*1}	Lit in green: On Blinking in green: Error Unlit: Off
(C)	STATUS	Indicates the status of the controller. The lamp is lit off, or lit or blinks in green during normal operation of the controller. If the lamp is blinking in orange, yellow, or pink, consult your dealer.
(D)	LINK/ACT1	Blinking in orange: Data transmission in progress (LAN1) Unlit: No data transmission
(E)	LINK/ACT2	Blinking in orange: Data transmission in progress (LAN2) Unlit: No data transmission

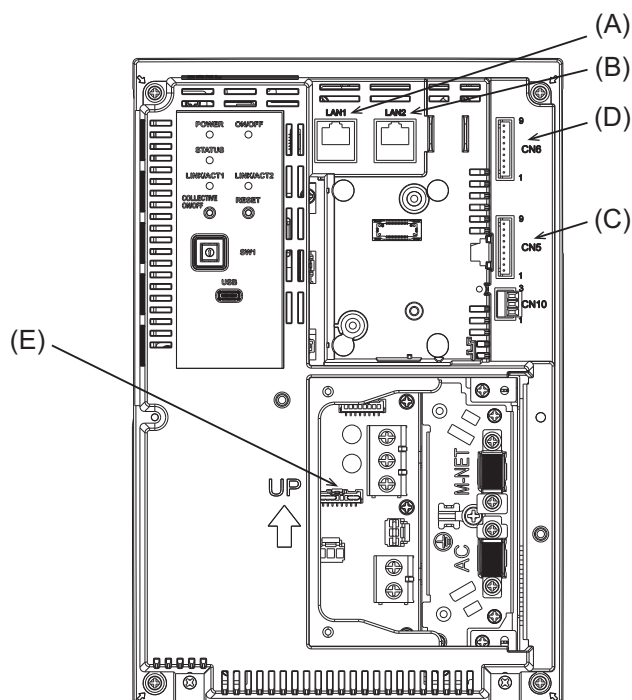
^{*1} This LED shows the operation status of the devices controlled directly by the controller or the devices controlled by the entire system.



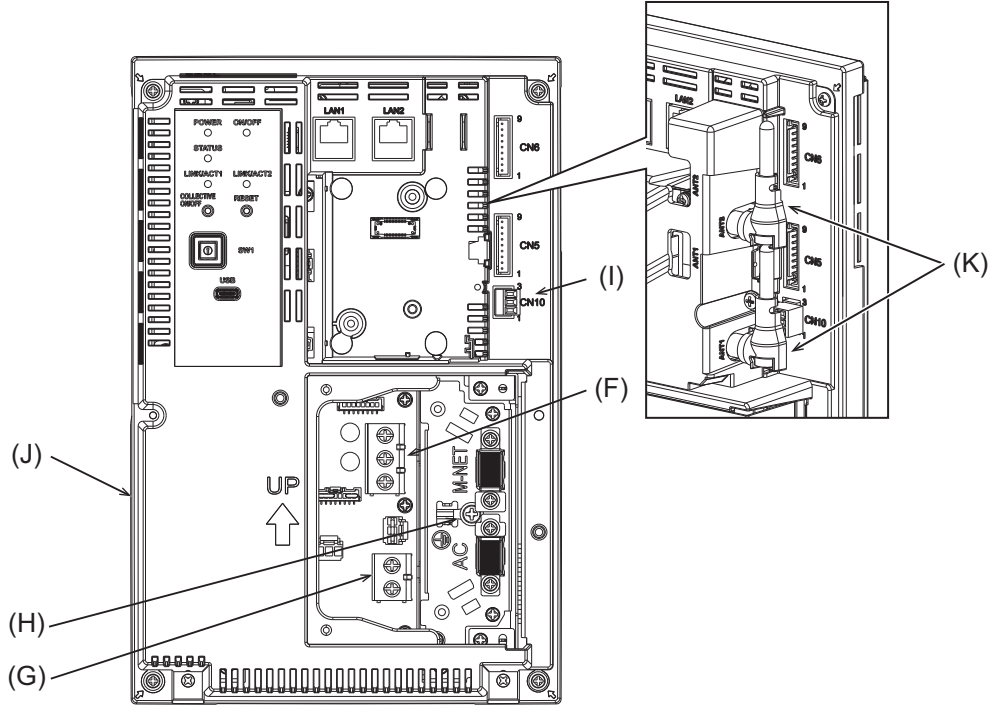
	Item	
	Function and description	
(F) (G)	Push switch	
	-	
	RESET	Restarts the controller.
(H)	Rotary switch	
	SW1 0 to F	
		Sets the IP address of LAN1 ^{*2} .
(I)	USB port (Type-C) (USB 3.1 Gen1)	
	-	
(J)	Service cover	
		To be removed when the AC power cable or M-NET transmission cable is connected to the controller.

^{*2} For details, refer to the Instruction Book (Detailed Version) for AE-C/EW-C.

■ EW-C (without the service cover)

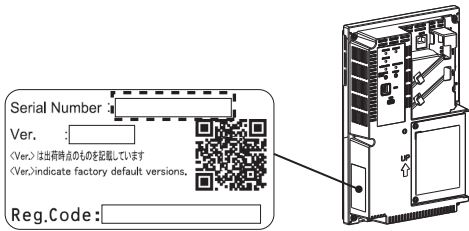


	Item	
	Function and description	
(A)	LAN1	LAN port for controlling air-conditioning and refrigeration units. Connects to other AE-C or EW-C with a LAN cable via a switching HUB.
(B)	LAN2	LAN port for BACnet connection. Connects to a building management system with a LAN cable via a switching HUB.
(C) (D)	CN5 CN6	Connector for connecting the external input/output adapter (PAC-YG10HA-E).
(E)	CN21	Connector for M-NET power supply. Attaching this connector to the controller supplies power to M-NET from the controller. (The controller is shipped with the connector attached.) To supply power to M-NET from other devices, remove this connector.



Item	
Function and description	
(F)	TB3 (M3.5) Terminal block for connecting the M-NET transmission cable.
(G)	TB1 (M3.5) Terminal block for connecting the AC power wires (L/L1, N/L2).
(H)	Ground (M4) Terminal for connecting the protective ground wire.
(I)	CN10 RS-485 connector for connecting a watt-hour meter.
(J)	Serial number label The serial label is on the rear of the controller. See the figure below.
(K)	Antenna for cellular communication Do not remove the antennas from the controller if they are already installed on the controller. After installing the controller, place the antennas to the default position as shown in the figure.

Serial number label



3. Before using the controller

- ♦ The controller must not be installed by the user. (Proper safety level and functionality may not be ensured.)
- ♦ The installation of the controller must be performed by the dealer (or the contractor) in accordance with the applicable laws, regulations, and certifications.
- ♦ When the installation work is completed, check that the initial settings are made properly. Refer to the specified page for details of the initial settings. "Initial settings (page 39)"
- ♦ After the installation work is completed by a professional contractor, attend the commissioning performed by the dealer (or the contractor) to obtain instructions on correct use to ensure safety.
- ♦ Make sure that all the items on the checklist of the Installation Manual are ticked off by the dealer (or the contractor). Receive the checklist from the dealer (or the contractor).

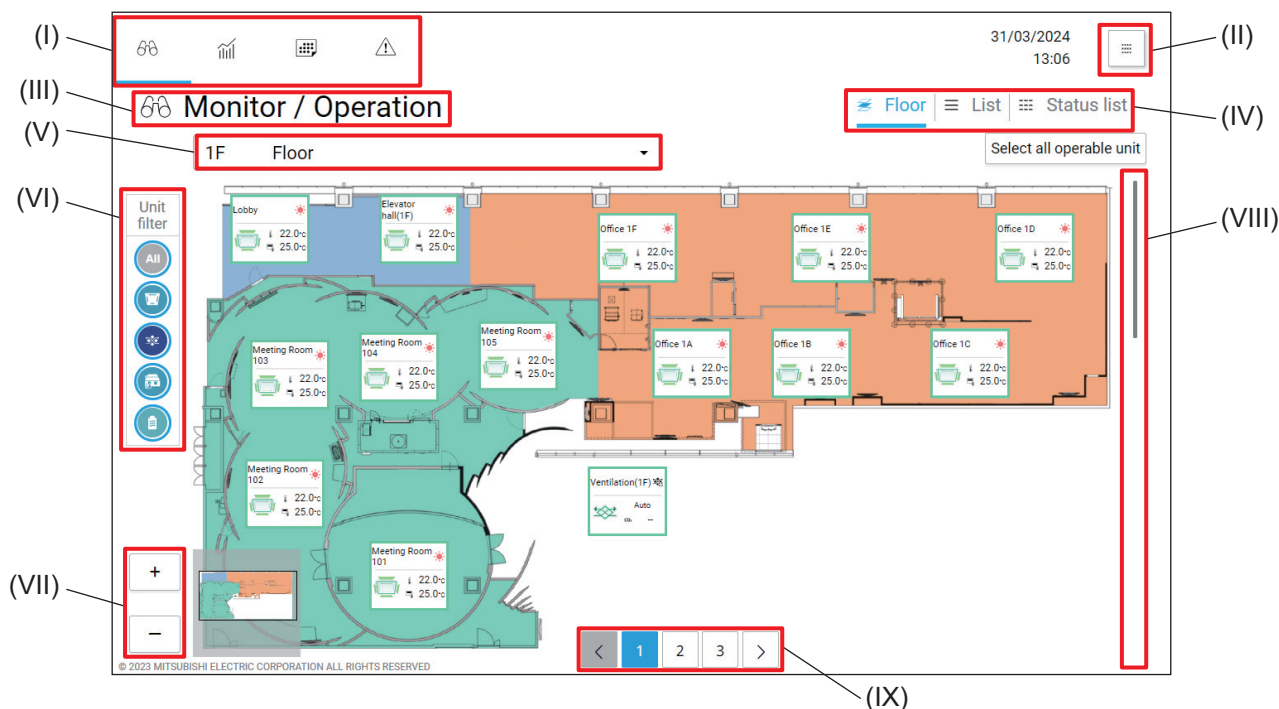
MEMO

4. Screen transition

This chapter explains the items and buttons that are displayed on all screens and the screen transition patterns.

4-1. Common items and buttons

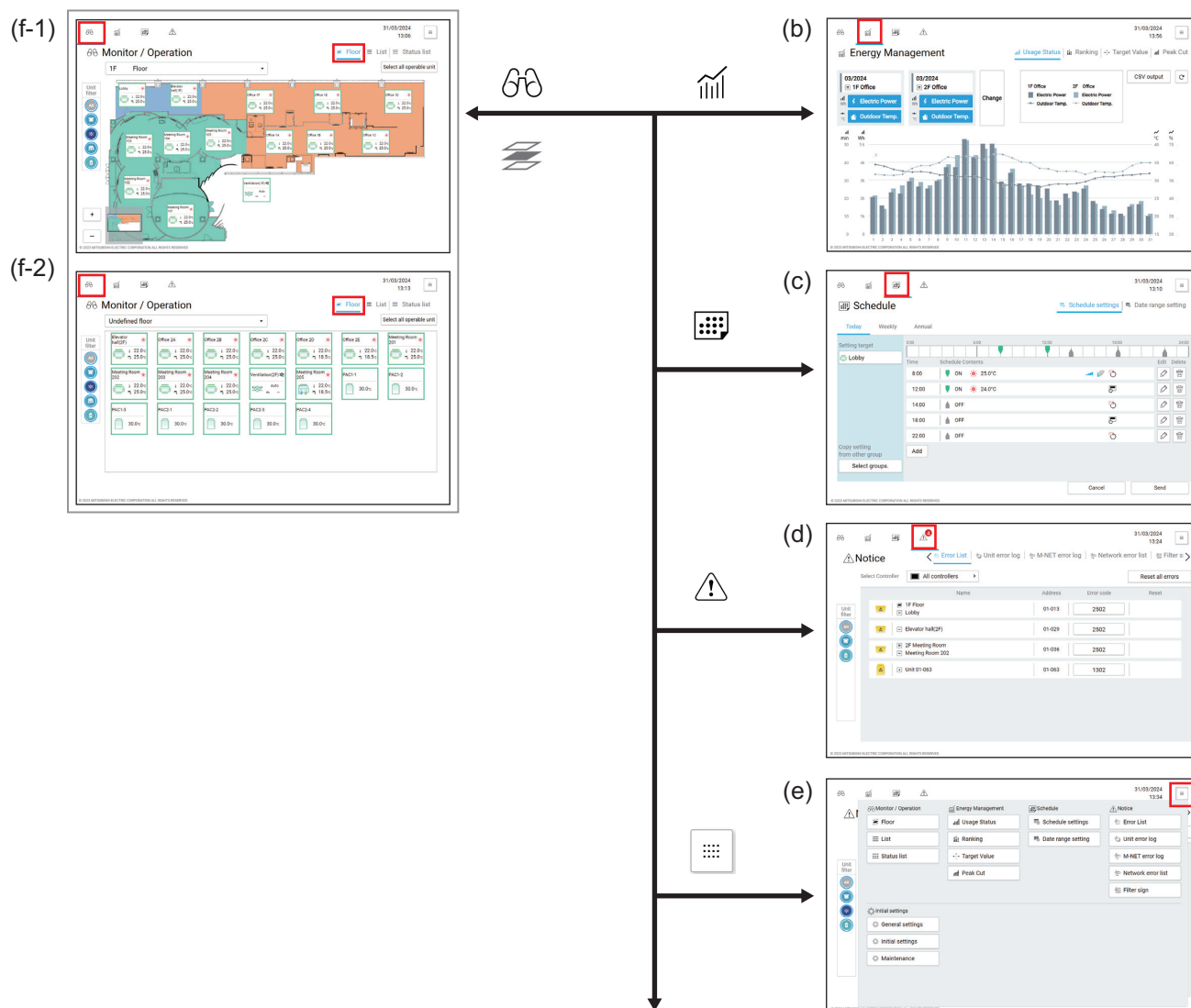
Items and buttons that appear on all screens are explained below.



	Item	Function and description
(I)	Main menu	Tapping the buttons on the main menu will display the following screens. [House] Monitor/Operation screen, which shows floor layouts. [Bar chart] Energy Management screen, which shows the energy consumption status. [Calendar] Schedule screen, which shows the schedule settings. [Warning triangle] Notice: Shows the occurrence of filter signs and errors.
(II)	[List icon] (Panorama view)	Tapping this button will display the list of setting items.
(III)	Screen name	The name of the screen selected by the main menu buttons is displayed. Monitor/Operation, Energy Management, Schedule, Notice
(IV)	Sub menu	Tapping the buttons on the sub menu will display the control or setting items. Different items appear on different screens. To view items not visible on the screen, tap [<] or [>] to scroll the screen to the left or the right.

	Item	Function and description
(V)	Floor name/selection button Controller name/selection button	The functions of the item and the button to be displayed vary, depending on the screens selected by the main menu buttons. ♦ Floor name/floor selection button The name of the floor being monitored is displayed. Monitoring target floors are selectable from the pull-down menu. When no floors are registered, "Undefined floor" will be displayed. ♦ Controller name/controller selection button Tapping [All controller] and selecting the AE-C/EW-C number will display the units that are controlled by the selected AE-C/EW-C.
(VI)	Unit filter	Tap the buttons below to select the types of units to display. ex.) []: All units, []: Indoor units, []: LOSSNAY units
(VII)	[+]/[-]	These buttons appear on the floor layout screen, and are used to zoom in or out the screen.
(VIII)	Scroll bar	The scroll bar appears when the content of the screen is not entirely visible. Moving the scroll bar up or down will scroll the screen up or down.
(IX)	Page number buttons	These buttons appear on the Notice screen when the content of the screen is not entirely visible on the scrollable area. Tapping the page number buttons or [<] or [>] will move the screen pages forward or backward.

4-2. Screen transition



To the next page

	Screen name	Function and description
(f-1) (f-2)	Monitor/Operation (Floor layout display)	This screen shows the units to be monitored or operated on a floor layout. When no floor layouts are registered, "Undefined floor" will be displayed.
(b)	Energy Management	This screen shows the energy consumption status.
(c)	Schedule	This screen shows the schedule settings.
(d)	Notice	This screen shows the occurrence of filter signs and errors.
(e)	Panorama view	This screen shows the list of menu buttons. Initial settings (general settings, initial settings, and maintenance) are set from this screen.

To the previous page



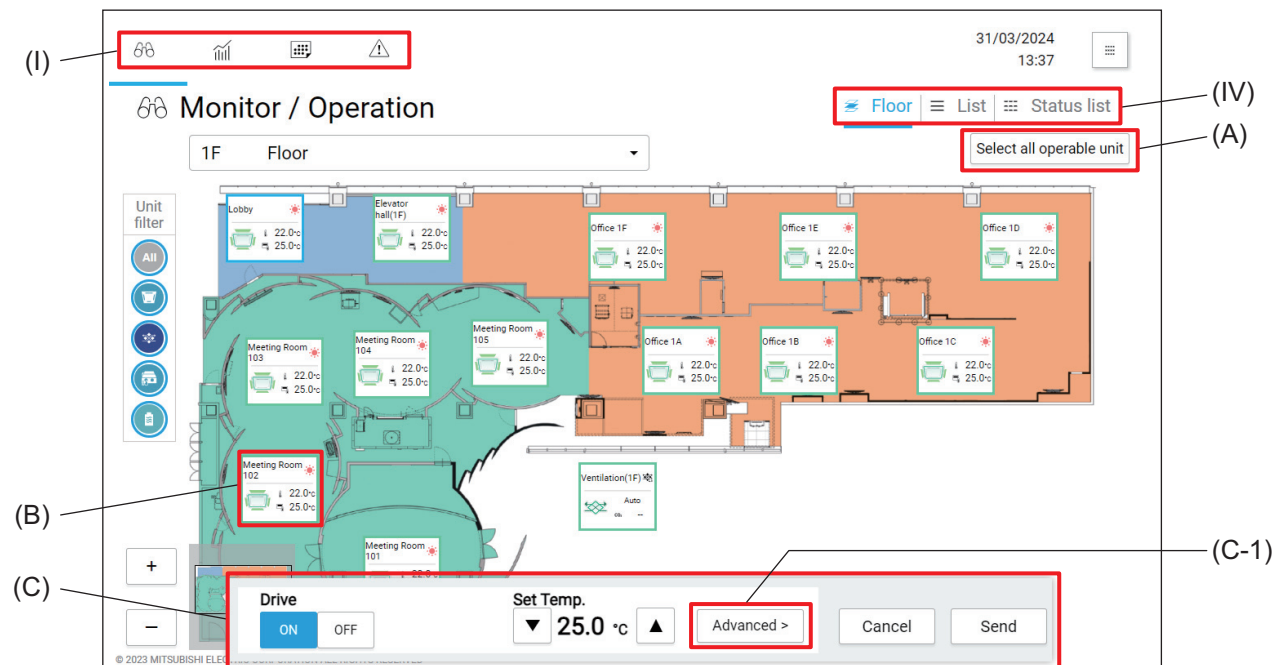
	Screen name	Function and description
(g)	Monitor/Operation (List)	This screen shows the list of the units to be monitored or operated. On this screen, floors or blocks that contain target units can be selected.
(h)	Monitor/Operation (Status list)	This screen shows the information about the units to be monitored or operated on each floor.

MEMO

5. Usage (Operation)

5-1. Monitor/Operation (floor layout)

Tapping **[Floor]** on the main menu (I) and then **[Floor]** on the sub menu (IV) will display the Monitor/Operation (floor layout) screen.



	Item	Function and description
(A)	[Select all operable unit]	Tapping this button will select all the displayed units to be controlled.
(B)	Unit icon	Tapping this icon will show the unit information. (B-1) Lobby 22.0°C 25.0°C (B-1) Group name The registered group name is displayed. (B-2) Unit operation status The operation status of the unit is displayed.
(C)	Simple operation panel	When a unit icon (B) is selected, the icon frame will turn blue and the Simple operation panel (C) will appear. Basic control, such as turning on/off the unit, is possible on the Simple operation panel. Tapping [Advanced] will display the Advanced setting screen.

5-2. Advanced setting screen

Tapping **[Advanced]** on the Simple operation panel will display the Advanced setting screen for the selected group.

On the Advanced setting screen, you can view the operation status of the selected group or change the settings of the selected group.

(For details of the Simple operation panel, refer to the specified page. "Monitor/Operation (floor layout) (page 23)")

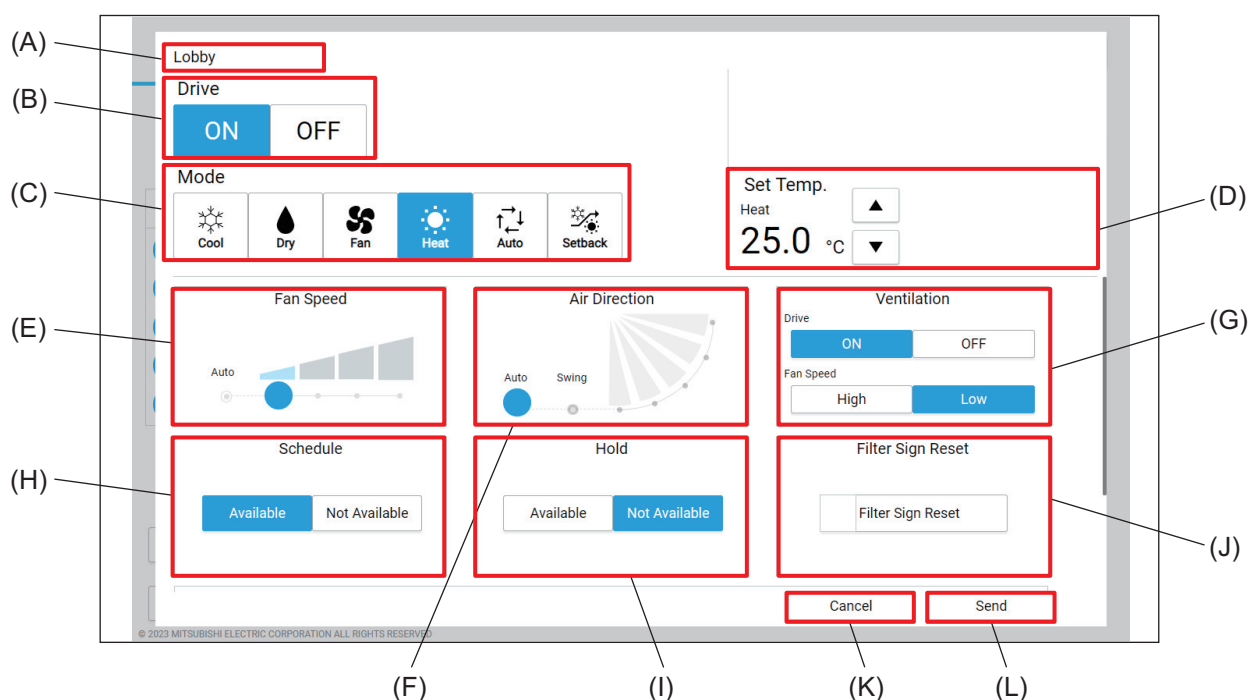
After changing the settings, tap **[Send]** (L) to save the changes.

To go back to the previous screen without saving the changes, tap **[Cancel]** (K).

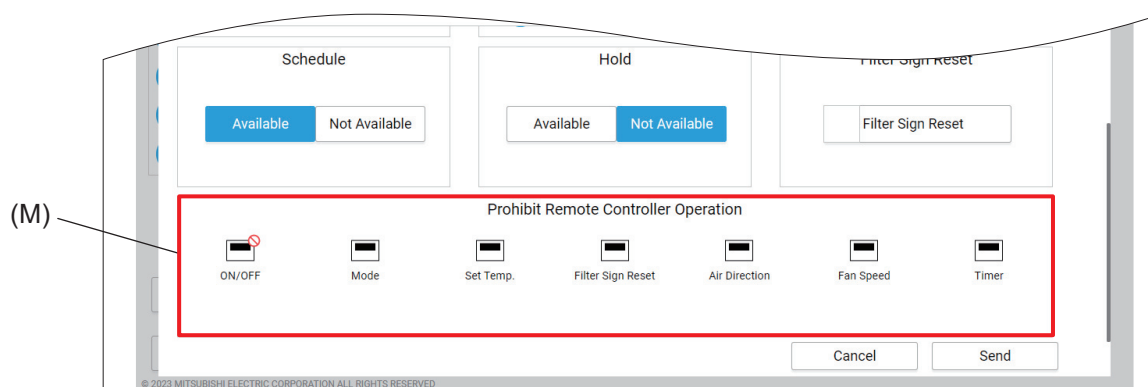
- While the Advanced setting screen is being displayed, any changes in the operation status will not be reflected on the information shown on the screen.
- Buttons being selected are displayed in blue.

[1] Air conditioning unit (indoor unit) group

(1) Advanced setting screen (Top half of the screen)



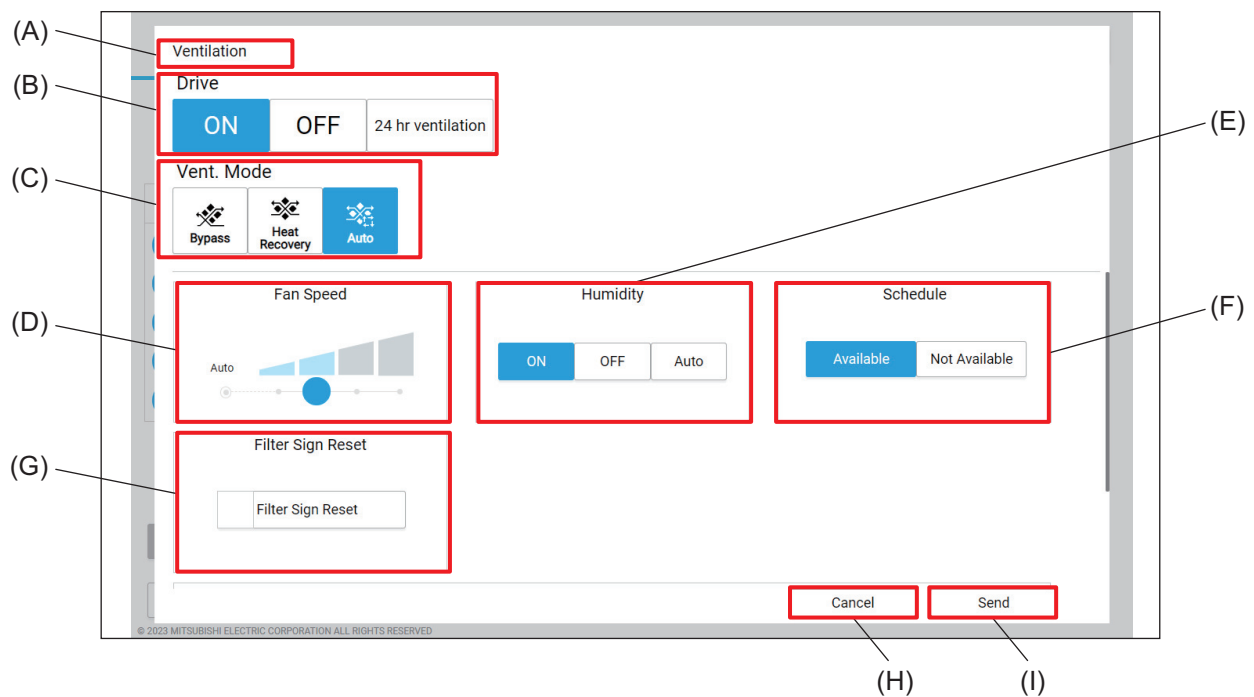
(2) Advanced setting screen (Bottom half of the screen)



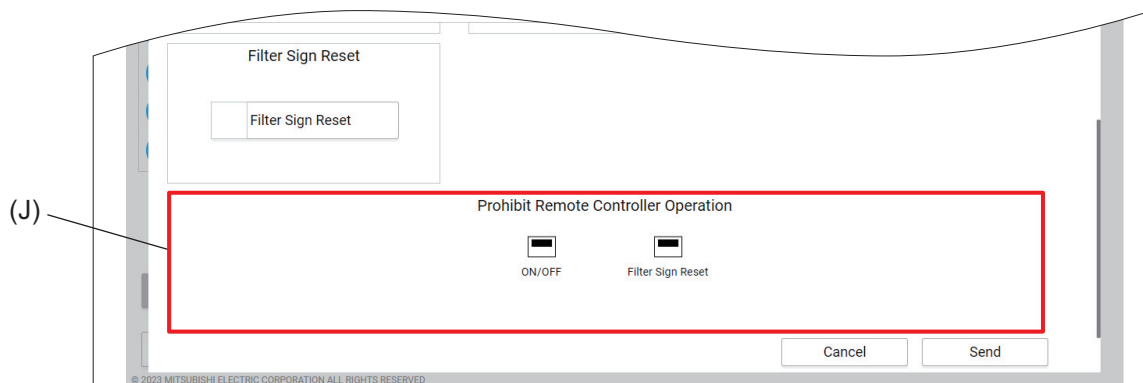
	Item	Function and description
(A)	Group Name	The name and icon of the selected group are displayed.
(B)	Drive	Tap [ON] or [OFF] to turn on or off the indoor unit.
(C)	Mode	Select the operation mode.
(D)	Set Temp.	Tap [▲] or [▼] to change the set temperature. ♦ The temperature setting range vary with models.
(E)	Fan Speed	Set the fan speed.
(F)	Air Direction	Set the air direction.
(G)	Ventilation	Tap [ON] or [OFF] to turn on or off the interlocked LOSSNAY unit. Tap [High] or [Low] to change the fan speed of the interlocked LOSSNAY unit.
(H)	Schedule	Tap [Available] or [Not Available] to enable or disable the schedule. ♦ When [Not Available] is selected, the controller will not operate according to the set schedule.
(I)	Hold	Tap [Available] or [Not Available] to reflect or ignore the schedule settings made from other system controllers or remote controllers.
(J)	Filter Sign Reset	Tap this button to turn off the reminder to clean the filter. (The total operation time will be reset.)
(K)	Cancel	Tap this button to go back to the previous screen without saving the setting changes.
(L)	Send	Tap this button to save the setting changes.
(M)	Prohibit Remote Controller Operation	Tap the buttons to allow or prohibit access from the remote controller to each item. Up to seven settings can be allowed or prohibited: ON/OFF, Mode, Set Temp., Filter Sign Reset, Air Direction, Fan Speed, and Timer. Prohibited settings are marked with [🚫] .

[2] LOSSNAY group

(1) Advanced setting screen (Top half of the screen)



(2) Advanced setting screen (Bottom half of the screen)



	Item	Function and description
(A)	Group Name	The name and icon of the selected group are displayed.
(B)	Drive	Tap [ON] , [OFF] , or [24 hr ventilation] to change the operation of the LOSSNAY unit.
(C)	Vent. Mode	Tap [Bypass] , [Heat Recovery] , or [Auto] to change the ventilation mode of the LOSSNAY unit.
(D)	Fan Speed	Set the fan speed.
(E)	Humidity	Tap [ON] , [OFF] , or [Auto] to change the humidifier operation.
(F)	Schedule	Tap [Available] or [Not Available] to enable or disable the schedule. ♦ When [Not Available] is selected, the controller will not operate according to the set schedule.
(G)	Filter Sign Reset	Tap this button to turn off the reminder to clean the filter. (The total operation time will be reset.)
(H)	Cancel	Tap this button to go back to the previous screen without saving the setting changes.
(I)	Send	Tap this button to save the setting changes.
(J)	Prohibit Remote Controller Operation	Tap the buttons to allow or prohibit access from the remote controller to each item. Two settings can be allowed or prohibited: ON/OFF and Filter Sign Reset. Prohibited settings are marked with [.

6. Usage (Status monitoring)

6-1. Filter sign screen

Tapping [⚠] (I) on the main menu will display the ⚠ Notice screen.

Tapping [📄 Filter sign] (IV) on the sub menu will display the list of the indoor units and the ventilating units that bear a filter sign.

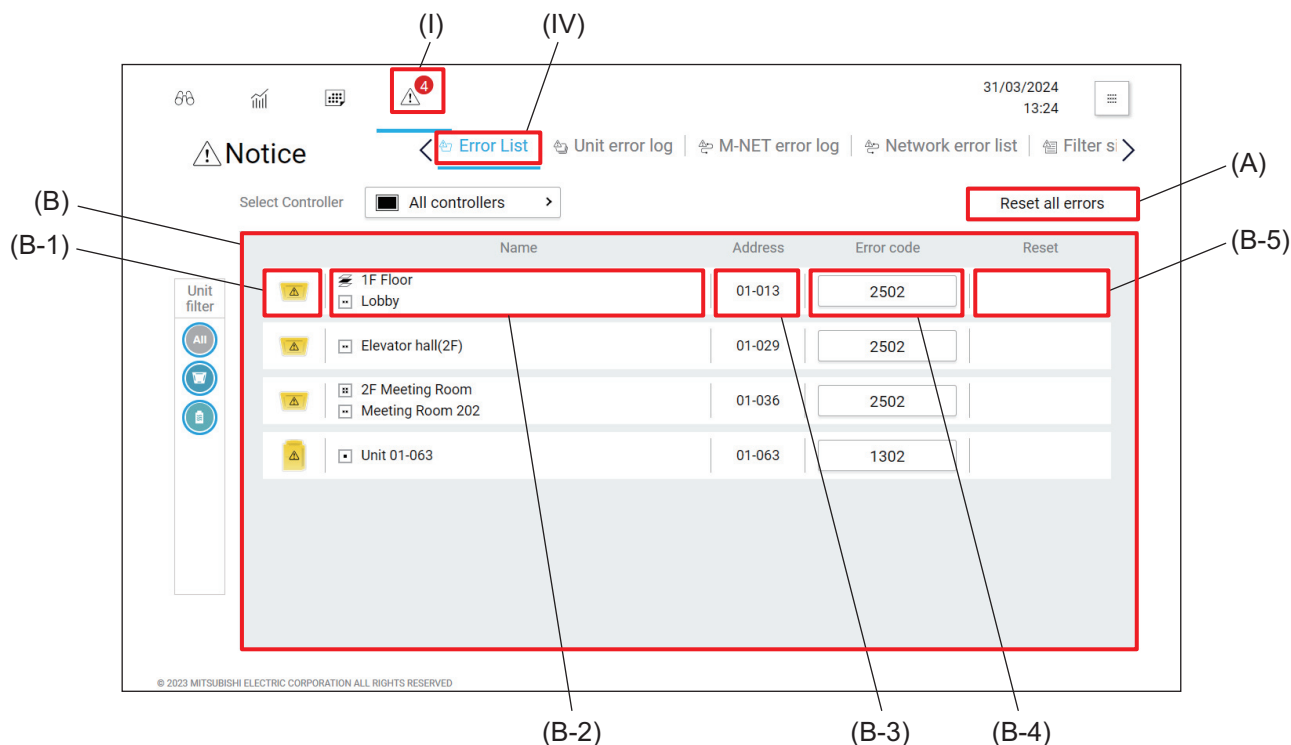


	Item	Function and description
(A)	[Reset all signs]	Tapping this button will clear all filter signs.
(B)	Filter sign list	The indoor units and the ventilating units that bear a filter sign will be listed.
(B-1)	Unit icon	Each icon shows an indoor unit or a ventilating unit.
(B-2)	Name	The name and the number of the group containing the indoor units or the ventilating units that bear a filter sign are displayed.
(B-3)	Address	The number of the AE-C/EW-C that controls the indoor unit or the ventilating unit that bear a filter sign and the address of the indoor unit or the ventilating unit are displayed. ex.) 01-012: 01 is the number of the AE-C/EW-C, and 012 is the address of the indoor unit or the ventilation unit.
(B-4)	[Reset sign]	Tapping this button will clear the filter sign.

6-2. Error list screen

Tapping [] (I) on the main menu will display the  Notice screen.

Tapping [ **Error list**] (IV) on the sub menu will display the list of the units that have an error and the units that have failed to communicate with the AE-C/EW-C.



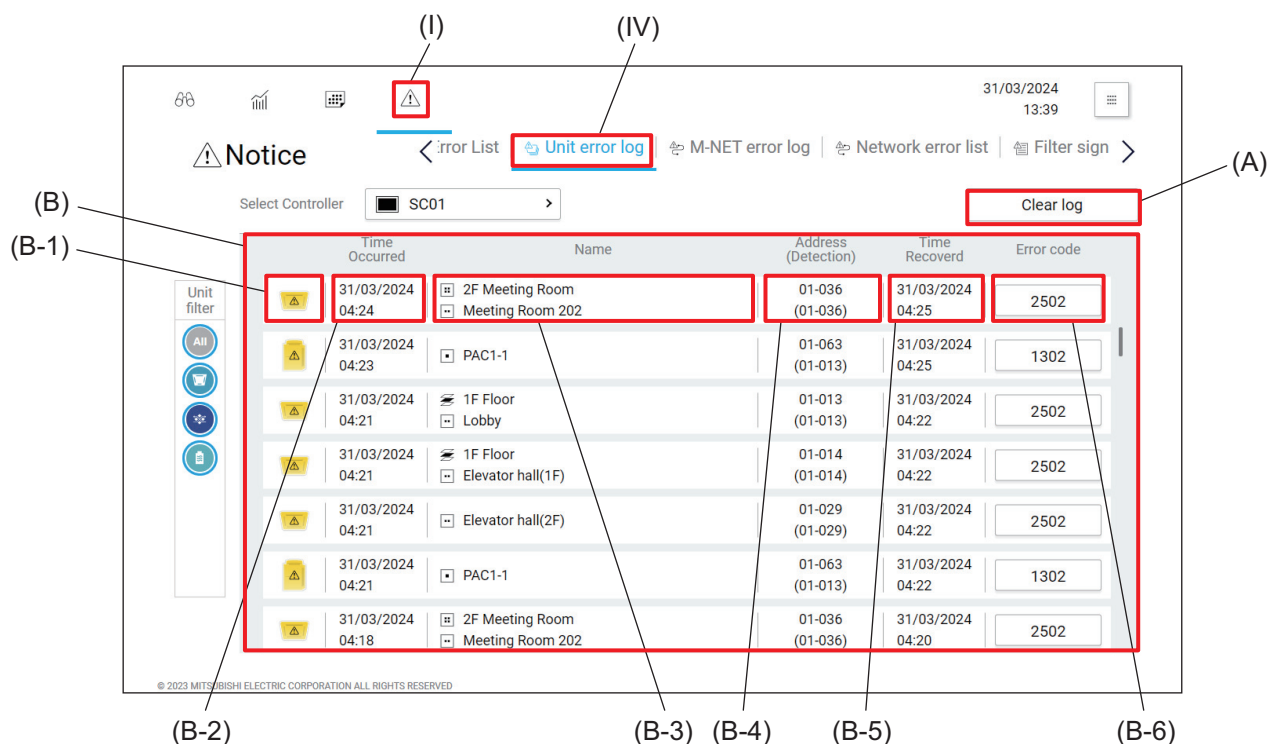
	Item	Function and description
(A)	[Reset all errors]	Tapping this button will clear all errors.
(B)	Error list	Units that have an error are listed.
(B-1)	Unit icon	Each icon shows a unit.
(B-2)	Name	The name and the number of the group containing the units that have an error are displayed.
(B-3)	Address	The number of the AE-C/EW-C that controls the unit that has an error and the address of the unit are displayed. ex.) 01-012: 01 is the number of the AE-C/EW-C, and 012 is the address of the unit.
(B-4)	Error Code	Tapping the error code will display the details of the error.
(B-5)	[Reset error]	Tapping the button displayed here will clear the error.

6-3. Error log screen

6-3-1. Unit error log screen

Tapping [!] (I) on the main menu will display the [!] Notice screen.

Tapping [Unit error log] (IV) on the sub menu will display the error logs of the units.

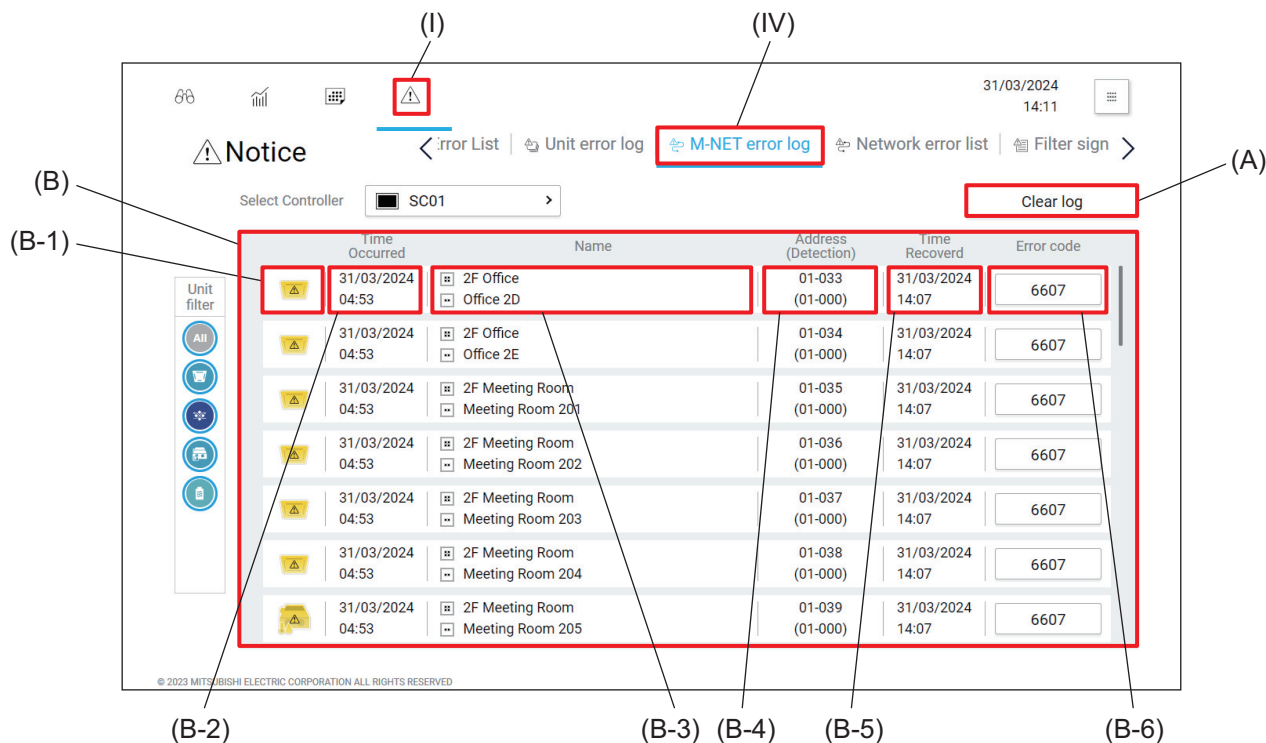


	Item	Function and description
(A)	[Clear log]	Tapping this button will clear all error logs.
(B)	Error log	Error logs are displayed.
(B-1)	Unit icon	Each icon shows a unit.
(B-2)	Time Occurred	The date and time when the error occurred is displayed.
(B-3)	Name	The name and the number of the group containing the units that had an error are displayed.
(B-4)	Address	The number of the AE-C/EW-C that controlled the unit that had an error and the address of the unit are displayed. The number shown in the parentheses indicates the address of the unit or the AE-C/EW-C that detected the error and the number of another AE-C/EW-C that controls the unit or the AE-C/EW-C that detected the error. ex.) 01-012: 01 is the number of the AE-C/EW-C, and 012 is the address of the unit.
(B-5)	Time Recoverd	The date and time when the unit recovered from the error is displayed.
(B-6)	Error code	Tapping the error code will display the details of the error.

6-3-2. M-NET error log screen

Tapping [⚠] (I) on the main menu will display the ⚠ Notice screen.

Tapping [🔍 M-NET error log] (IV) on the sub menu will display the M-NET communication error logs of the units.



	Item	Function and description
(A)	[Clear log]	Tapping this button will clear all M-NET communication error logs.
(B)	M-NET communication error log	M-NET communication error logs of the units are displayed.
(B-1)	Unit icon	Each icon shows a unit.
(B-2)	Time Occurred	The date and time when the error occurred is displayed.
(B-3)	Name	The name and the number of the group containing the units that had an error are displayed.
(B-4)	Address	The number of the AE-C/EW-C that controlled the unit that had an error and the address of the unit are displayed. The number shown in the parentheses indicates the address of the unit or the AE-C/EW-C that detected the error and the number of another AE-C/EW-C that controls the unit or the AE-C/EW-C that detected the error. ex.) 01-012: 01 is the number of the AE-C/EW-C, and 012 is the address of the unit.
(B-5)	Time Recoverd	The date and time when the unit recovered from the error is displayed.
(B-6)	Error code	Tapping the error code will display the details of the error.

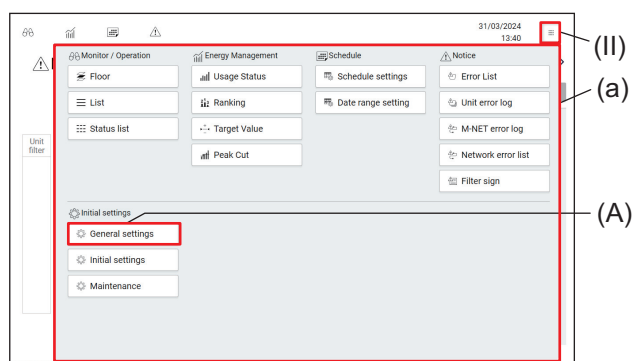
7. Adjustment and maintenance


WARNING

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

7-1. Adjusting the sound volume

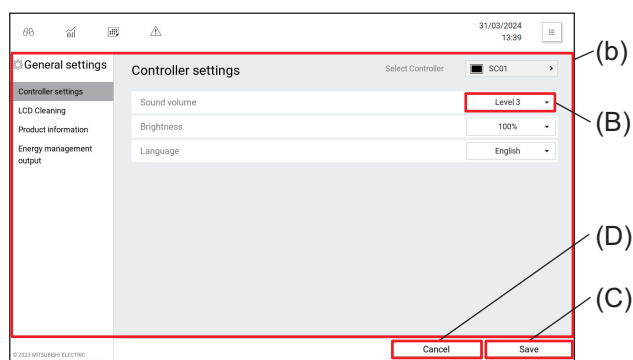
The screen sound volume of the AE-C is adjustable.



Step

1. Tap (II) to display screen (a).

2. Tap (A) to display screen (b).



3. Select the sound volume from the pull-down list (B). (Factory default: Level 1)

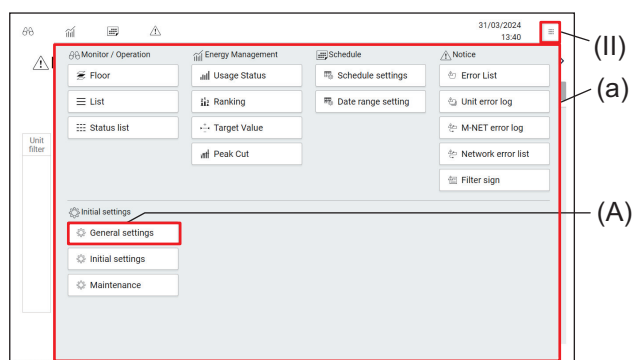
4. Tap (C) to save the setting.

♦ To cancel the setting, tap (D).

5. Tap any button on the main menu to go back to the regular operation screen.

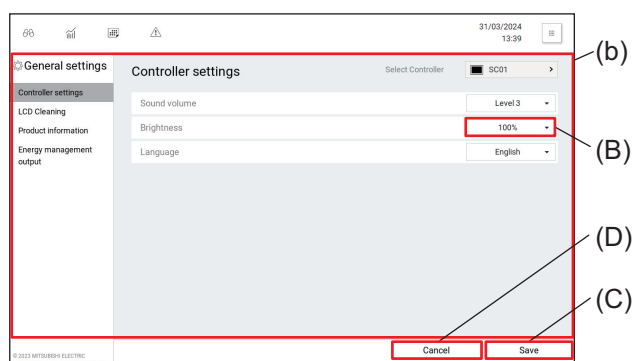
7-2. Adjusting the screen brightness

The LCD screen brightness of the AE-C is adjustable.



Step

1. Tap (II) to display screen (a).
2. Tap (A) to display screen (b).

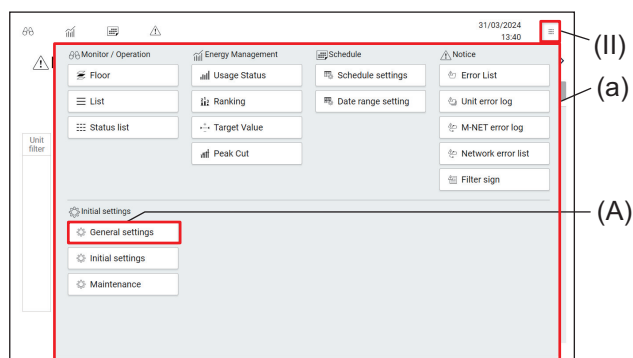


3. Select the brightness value from the pull-down list (B). (Factory default: 100%)
4. Tap (C) to save the setting.
 - ♦ To cancel the setting, tap (D).
5. Tap any button on the main menu to go back to the regular operation screen.

7-3. Cleaning the LCD screen and the casing

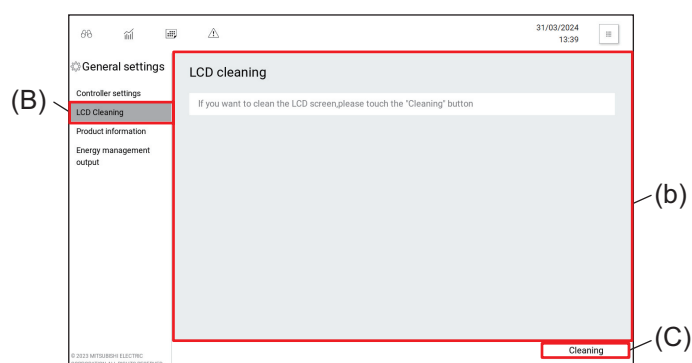
- ♦ Wipe off dirt with a soft cloth soaked in diluted neutral detergent, and then wipe off the detergent with a dry cloth. (Dilute neutral detergent with water according to its usage instructions. Do not use undiluted detergent.)
- ♦ Do not use benzene or thinner. Do not touch the controller with a chemical cloth. Doing so may cause discoloration.

Clean the LCD screen using the following steps.

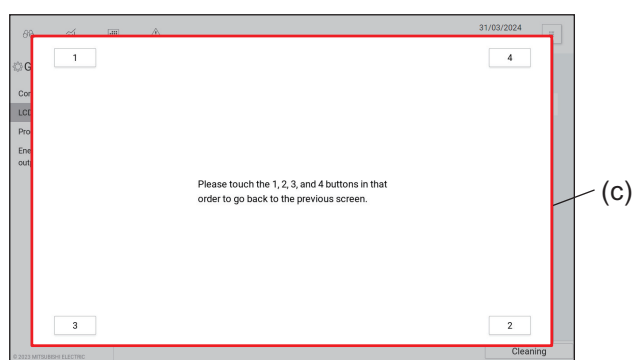


Step

1. Tap (II) to display screen (a).
2. Tap (A).



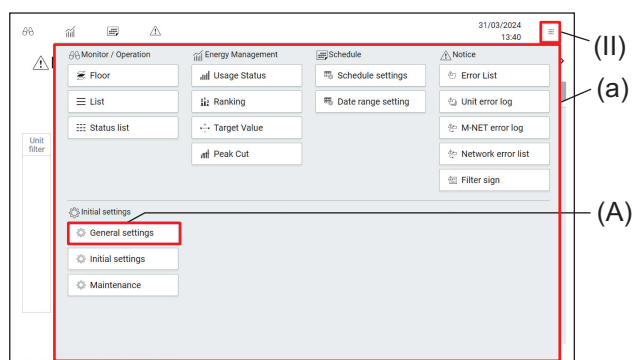
3. Tap (B) to display screen (b).
4. Tap (C) to display screen (c).
 - ♦ The LCD cleaning screen will be displayed.
5. Clean the LCD screen.



6. After completing the cleaning, tap the numbers [1] through [4] at the corners of screen (c) to return to screen (b).
 - ♦ The numbers tapped will turn dark gray.
 - ♦ Unless the numbers are tapped in the correct order, all the numbers tapped will be canceled. If this happens, start with [1] again.
7. Tap any button on the main menu to go back to the regular operation screen.

7-4. Viewing the product information

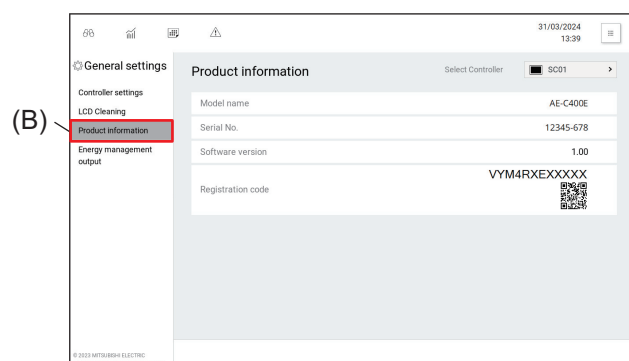
Follow the steps below to view the model name, serial number, and software version of the AE-C.



Step

1. Tap (II) to display screen (a).

2. Tap (A).



3. Tap (B) to view the product information (model name, serial number, and software version).

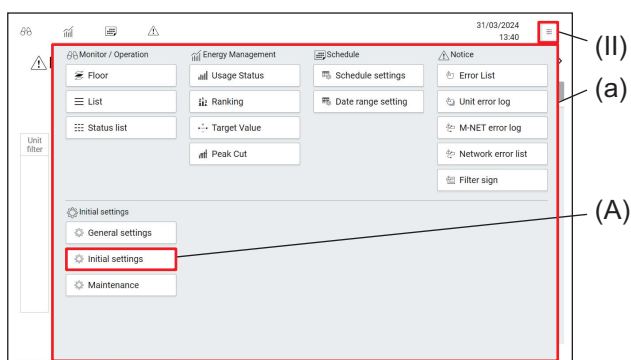
4. Tap any button on the main menu to go back to the regular operation screen.

Note

- For how to view the product information of the EW-C or other devices, refer to the Instruction Book (Detailed Version).

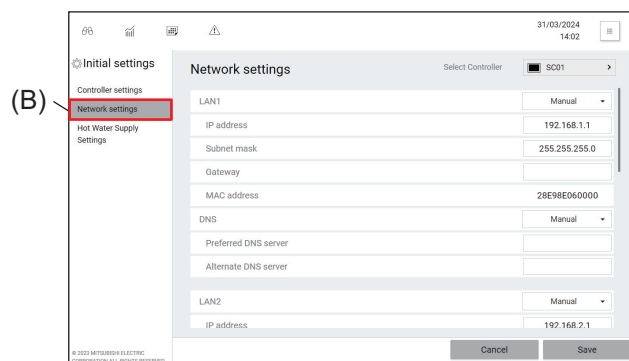
7-5. Viewing the IP address

Follow the steps below to view the IP address of the AE-C.



Step

1. Tap (II) to display screen (a).
2. Tap (A), and enter the user ID and the password according to the screen instructions.
 - ♦ For the user ID and the password, refer to the specified page. "About this manual (page 6)"



3. Tap (B) to display the network settings.
4. Check the IP address, and then tap any button on the main menu to go back to the regular operation screen.

Note

- ♦ For how to view the IP address and other details of the EW-C and other devices, refer to the Instruction Book (Detailed Version).
- ♦ The default IP address of the LAN1 port of the controller is 192.168.1.1.

8. Regular inspection

Product components deteriorate over time and can pose safety hazards.

Regularly conduct safety inspections to use the product safely and in good condition.

MEMO

9. Initial settings

This chapter explains initial settings made after the installation work.

For details of the initial settings and commissioning, refer to the specified page. "Commissioning (page 47)"

Initial settings require a computer.

9-1. Preparation for initial settings

[1] Installing .NET Framework

[2] Installing the Initial Setting Tool

[3] Importing the root CA certificate

[4] Setting the IP address of the computer

[5] Updating the software of the AE-C/EW-C

[6] Registering licenses

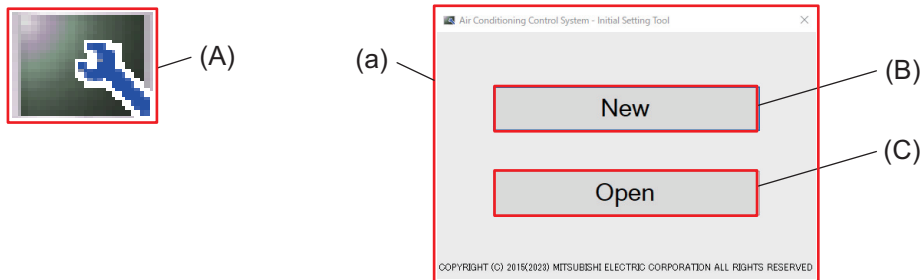
[7] Clock setting of the AE-C/EW-C

Note

- ♦ This manual explains how to set the initial settings for a system consisting of the following. For the initial settings for systems with other configurations, refer to the Instruction Book (Detailed Version).
 - ♦ One AE-C/EW-C controller (one M-NET network)
 - ♦ Air conditioning units (CITY MULTI) and LOSSNAY units (interlocked)
 - ♦ No optional licenses
- ♦ For how to view the product information (model name, serial number, and software version) of the controller, refer to the specified page. "Viewing the product information (page 35)"
- ♦ For how to view the IP address of the controller, refer to the specified page. "Viewing the IP address (page 36)"
- ♦ For details, refer to the Instruction Book (Detailed Version) for AE-C/EW-C.

9-2. Setting the Initial Setting Tool

9-2-1. Starting the Initial Setting Tool and loading a setting file



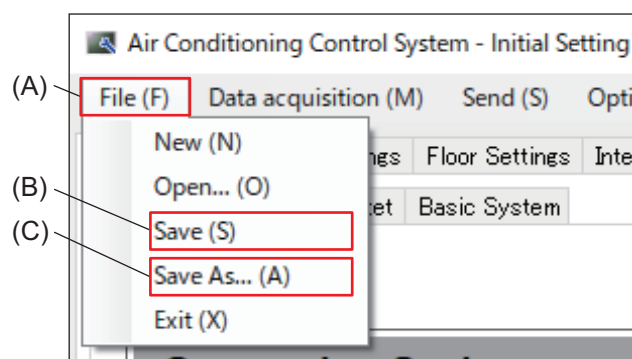
	Item
(A)	Initial Setting Tool icon
(B)	[New]
(C)	[Open]

Step

1. Tap (A) to display screen (a).
2. To create a new setting file, tap (B).
 - ♦ To use an existing setting file, tap (C) to load the existing setting file (with the dat file extension).

9-2-2. Saving and sending the setting data and exiting the Initial Setting Tool

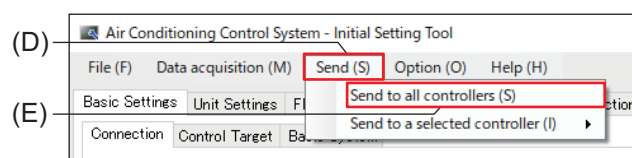
[1] Saving the setting data to the computer



Step

1. Tap (A) of the tool bar, and tap (B) or (C).

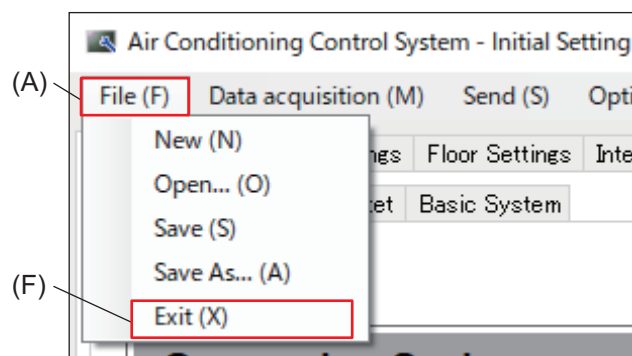
[2] Sending the setting data to the AE-C/EW-C



Step

1. Tap (D) of the tool bar, and tap (E).
2. Enter the user ID and the password.

[3] Exiting the Initial Setting Tool



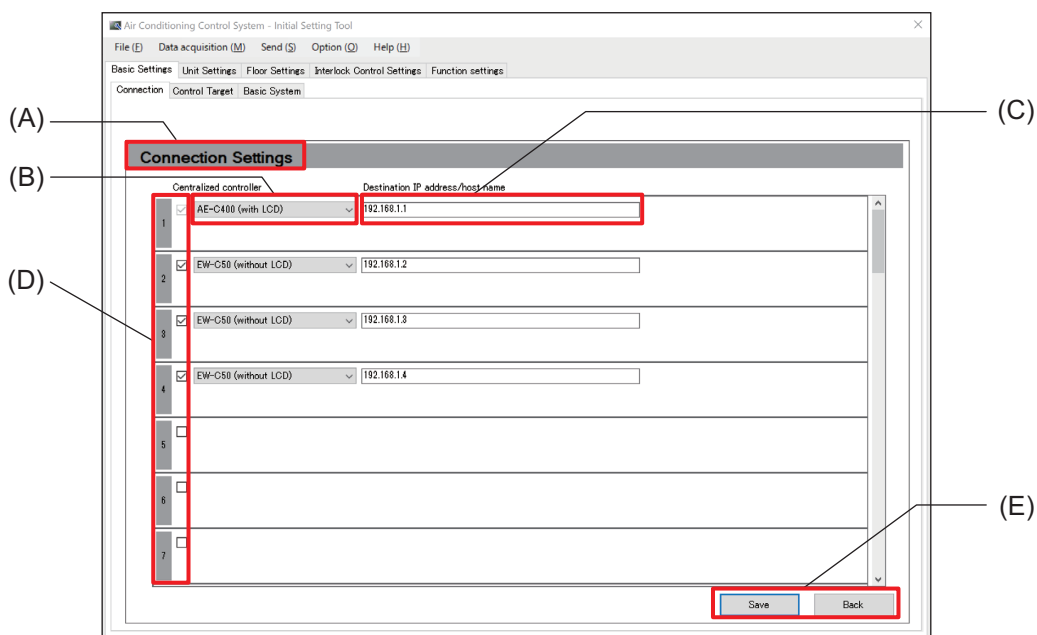
Step

1. Tap (A) of the tool bar, and tap (F).

9-3. Menus of the Initial Setting Tool

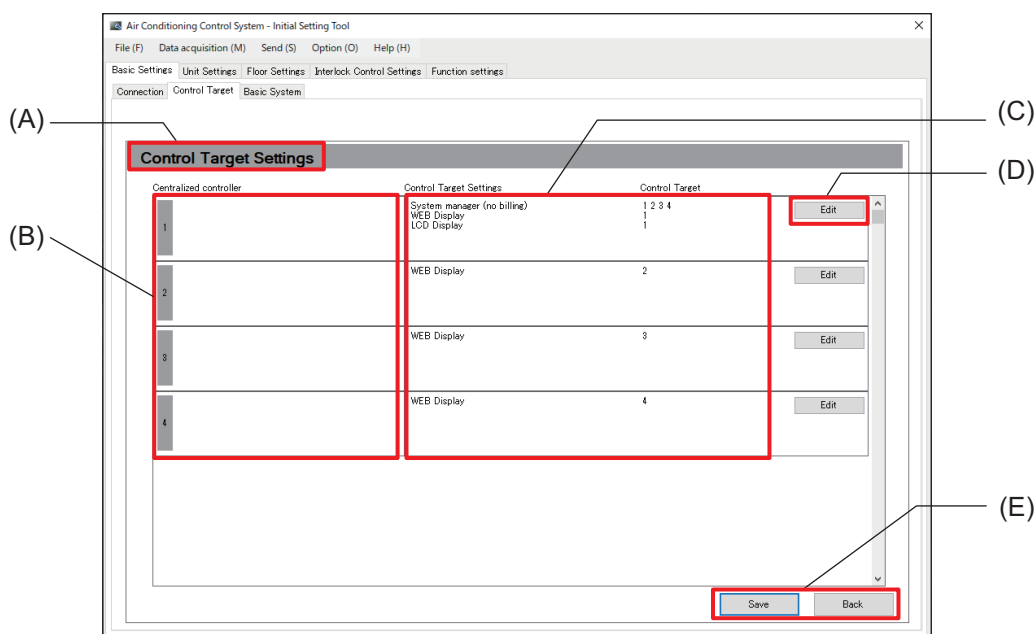
9-3-1. Menu tab: Basic Settings

[1] Sub menu tab: Connection



	Item	Function and description
(A)	Connection Settings	This screen is for registering the AE-C/EW-C controllers that are connected to the same system.
(B)	Centralized controller	Select AE-C or EW-C from the pull-down list.
(C)	Destination IP address/ host name	Enter the IP address or host name of the connection destination. ex.) 192.168.1.1...
(D)	Controller number and check box	When multiple AE-C/EW-C controllers are connected to the same system, select the AE-C/EW-C controllers you want to register by tapping their check box, and set (B) and (C). When only one AE-C/EW-C controller exists in the system, only controller number 1 is displayed.
(E)	[Save]/[Back]	After completing the setting, tap [Save] . To cancel the setting, tap [Back] .

[2] Sub menu tab: Control Target

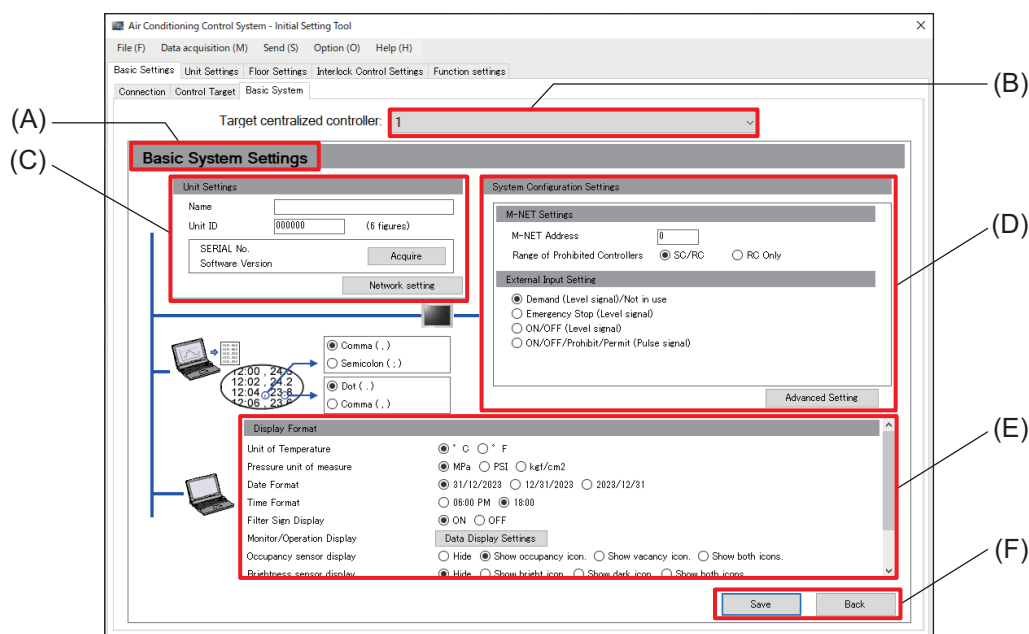


	Item	Function and description
(A)	Control Target Settings	This screen is for making settings to monitor and operate the units that are connected to different AE-C/EW-C controllers.
(B)	Centralized controller	The number and the name of the AE-C/EW-C controller that has been registered on the Connection tab are displayed.
(C)	Control Target Settings and Control Target	Set the following items to monitor and operate the units that are connected to different AE-C/EW-C controllers. - System manager (billing), System manager (no billing) This item shows the AE-C/EW-C controller that manages the entire system. Only one AE-C/EW-C controller can be the system manager. - WEB Display The numbers of the controllers (B) that are monitored and operated via the Web are displayed. - LCD Display The numbers of the controllers (B) that are monitored and operated on the LCD screen are displayed. Note that a limited number of controllers can be added to this item.
(D)	Edit	Tap this button to display the screen for setting the centralized controller, and set the following items. - System manager Tap the check box to select or deselect the controller as the System Manager. - WEB Display Select the numbers of the centralized controllers you want to add to this item. - LCD Display Select the numbers of the centralized controllers you want to add to this item.
(E)	[Save]/[Back]	After completing the setting, tap [Save]. To cancel the setting, tap [Back].

Note

- When there is only one AE-C/EW-C controller (or only one M-NET network) in the system, the items on this tab do not need to be set.

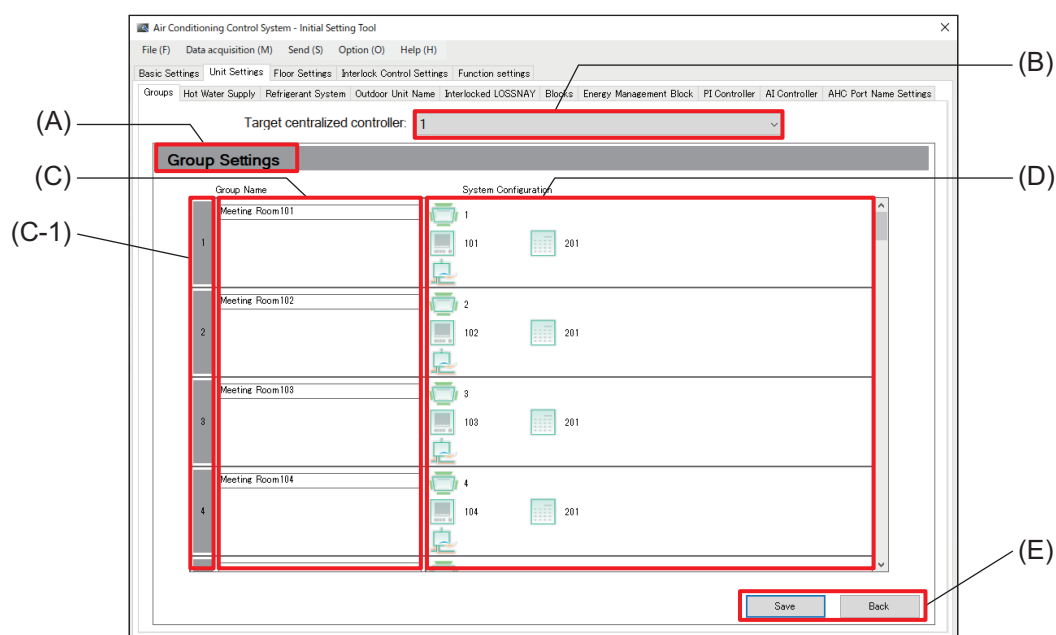
[3] Sub menu tab: Basic System



	Item	Function and description
(A)	Basic System Settings	This screen is for making settings related to the AE-C/EW-C controller.
(B)	Target centralized controller	The number and the name of the AE-C/EW-C controller that has been registered on the Connection tab are displayed.
(C)	Unit Settings	Set the name and the unit ID of the AE-C/EW-C controller. Name: Enter the site name, building name, floor number, etc. (Up to 20 characters) Unit ID: Enter any number. (Six digits)
(D)	System Configuration Settings	Set the M-NET address and the external input method for the AE-C/EW-C controller.
(E)	Display Format	Set the items related to the display format of the AE-C/EW-C controller.
(F)	[Save]/[Back]	After completing the setting, tap [Save]. To cancel the setting, tap [Back].

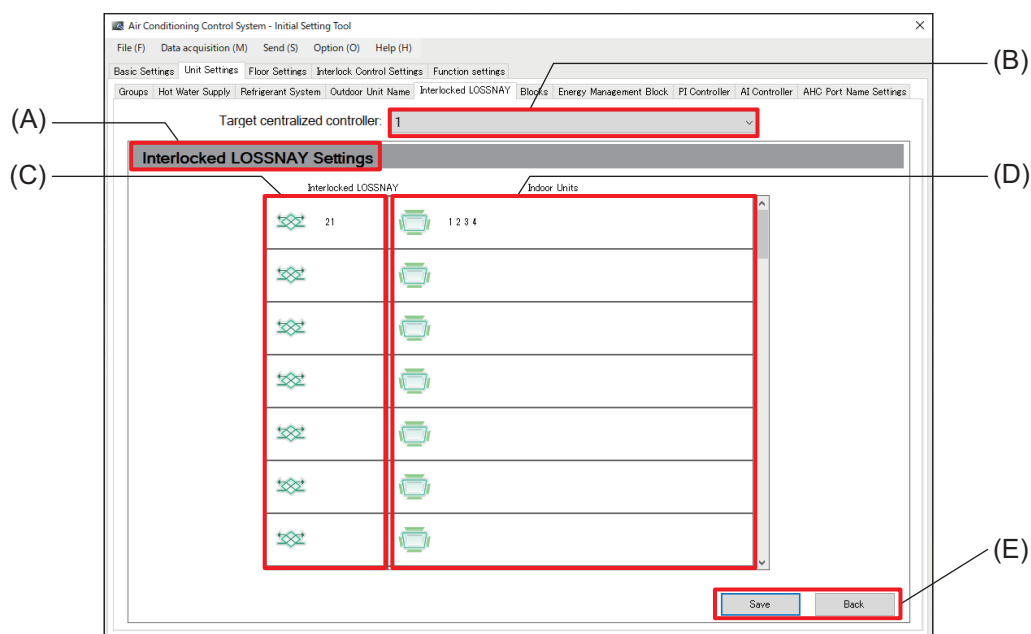
9-3-2. Menu tab: Unit Settings

[1] Sub menu tab: Groups



	Item	Function and description
(A)	Group Settings	This screen is for registering the equipment connected to each AE-C/EW-C controller.
(B)	Target centralized controller	Select the number of the AE-C/EW-C controller from the pull-down list.
(C)	Group Name	Set the group name for each group number (C-1). The group name set here will be displayed on the AE-C/EW-C screen.
(D)	System Configuration	Register the information of the connected unit. ♦ Select the unit type, and set the unit address. ♦ To add a local remote controller (ME remote controller) to the system, select its icon and set the address. ♦ When a sub system controller exists in the system, select its icon and set the address.
(E)	[Save]/[Back]	After completing the setting, tap [Save] . To cancel the setting, tap [Back] .

[2] Sub menu tab: Interlocked LOSSNAY



	Item	Function and description
(A)	Interlocked LOSSNAY Settings	This screen is for registering the interlock settings of the LOSSNAY units for each AE-C/EW-C controller.
(B)	Target centralized controller	Select the number of the AE-C/EW-C controller from the pull-down list.
(C)	Interlocked LOSSNAY	Tap the icon displayed here, and select the address (1 to 50) of the interlocked LOSSNAY unit.
(D)	Indoor Units	Tap the icon displayed here, and select the address (1 to 50) of the indoor unit to be interlocked. ♦ Multiple indoor units can be selected as interlock sources.
(E)	[Save]/[Back]	After completing the setting, tap [Save] . To cancel the setting, tap [Back] .

10. Checking for proper installation and conducting commissioning

10-1. Checking for proper installation

- ♦ The controller must be installed by the dealer (or the contractor) in accordance with the applicable laws, regulations, and certifications.
- ♦ Attend the commissioning to be conducted by the dealer (or the contractor).
- ♦ Receive instructions on the correct usage from the dealer (or the contractor) to ensure safety.
- ♦ When the installation work is completed, check the following items yourself.

Check item	Check-off column
Did you receive instructions on safety precautions?	
Did you receive instructions on operation procedures and correct usage to ensure safety?	
Did you make sure that the items listed on the installation work checklist of the Installation Manual are checked off?	
Did you receive instructions on the initial settings?	
Did you receive a report on the commissioning result? Did you attend the commissioning?	

10-2. Commissioning

- ♦ Before the commissioning for the controller is conducted, a test run for the indoor units must be completed. For details, refer to the installation manual for the indoor units. The following checks must be conducted to make sure that the initial settings of the controller are correct and that the air-conditioning system is configured properly.
 - (1) Start and stop the indoor units from the AE-C, and make sure the indoor units operate accordingly.
 - (2) Start and stop the indoor units from the local remote controller, and make sure the correct operation statuses appear on the AE-C.
 - (3) Perform items (1) and (2) for all indoor unit groups.

Important

- ♦ Conduct a test run for each group. Incorrect initial settings (e.g., incorrect group settings) for the controller can result in operation problems (e.g., target/non-target indoor units do not operate or stop as intended).

Note

- ♦ Item (2) can be skipped when testing a system without local remote controllers.
- ♦ EW-C needs to be operated from the Web browser. For details, refer to the Instruction Book (Detailed Version) for AE-C/EW-C.

11. Specifications

■ AE-C

Item		Specifications
Power supply	Rating	100-240 VAC $\pm 10\%$, 50/60 Hz, single phase
Power consumption		22 W
LAN1, LAN2		100BASE-TX
RS-485		For connecting a watt-hour meter (Modbus RTU)
External input/output	Input	Photocoupler input (4 inputs x 2)
	Output	Transistor output (2 outputs x 2) (sink type)
Ambient conditions	Operating temperature range	0°C to +40°C (+32°F to +104°F)
	Storage temperature range	-20°C to +60°C (-4°F to +140°F)
	Humidity	30% to 90% RH (non-condensing)
Exterior		PC + ABS - GF10 (Munsell 1.0Y 9.2/0.2)
External dimensions	W x H x D	306 × 211 × 71.8 mm (12-1/16 × 8-5/16 × 2-27/32 in) When embedded, the controller protrudes from the wall or the metal control box by 19.7 mm (25/32 in).
Weight		2.9 kg (7 lbs)
Installation conditions		Indoor only ♦ The controller is for use in an indoor or equivalent environment.

■ EW-C

Item		Specifications
Power supply	Rating	100-240 VAC $\pm 10\%$, 50/60 Hz, single phase
Power consumption		15 W
LAN1, LAN2		100BASE-TX
RS-485		For connecting a watt-hour meter (Modbus RTU)
External input/output	Input	Photocoupler input (4 inputs x 2)
	Output	Transistor output (2 outputs x 2) (sink type)
Ambient conditions	Operating temperature range	-10°C to +55°C (+14°F to +131°F)
	Storage temperature range	-20°C to +60°C (-4°F to +140°F)
	Humidity	30% to 90% RH (non-condensing)
Exterior		Body: Electrogalvanized steel sheet Cover: PC + ABS
External dimensions	W x H x D	185 × 278 × 60.3 mm (7-5/16 × 10-31/32 × 2-3/8 in) (185 × 278 × 81.5 mm (7-5/16 × 10-31/32 × 3-7/32 in) when installed on the installation frame)
Weight		1.9 kg (5 lbs)
Installation conditions		In the metal control box installed indoors

12. Before requesting repairs

If the problem cannot be solved by referring to the "Before requesting repairs" chapter of the Instruction Book (this manual) and the Instruction Book (Detailed Version), stop the operation, and turn off the molded-case circuit breaker. Contact the dealer (contractor, service provider) with the information on the nature of the problem and the alphanumeric code (error code) that appears on the display.

	Symptom	Possible cause	Countermeasure
1	The LCD screen is off. Tapping the screen displays nothing. (The backlight does not light up.)	- Is the ① (power) LED lit in green? - Foreign substances or dirt on the screen may cause a malfunction.	Press the push switch (ON/OFF) on the side of the controller once, wait for two seconds, press the push switch again, and then tap the screen. - The screen and the touch panel will be reset, and the screen display will recover. - The controller will not be reset. - After the screen display recovers, clean the LCD screen.
2	The LCD screen does not respond to tapping while it is lit. The screen operating sound is heard or the screen switches when the screen is not tapped.	- The screen sometimes takes time to switch. Does the screen switch after five seconds or so? - Foreign substances or dirt on the screen may cause a malfunction.	Press the push switch (ON/OFF) on the side of the controller once, and then tap the screen. - The screen and the touch panel will be reset, and the screen display will recover. - The controller will not be reset. - After the screen display recovers, clean the LCD screen.
3	The outdoor unit icon is marked with [△] (error).	- Is the error code of the outdoor unit "6607" on the Error list screen? - Unless the power of the outdoor unit is on, indoor units do not perform cooling or heating operation or emit cool or warm air.	- Check that the power of the outdoor unit is on. If it is not on, turn it on. - If an error code other than "6607" is displayed, the outdoor unit needs to be inspected.

	Symptom	Possible cause	Countermeasure
4	When the controller is not operated, an indoor unit or a LOSSNAY unit starts or stops.	Even when the controller is not operated, indoor units may be started or stopped by the following event: 1) Control from the local remote controller 2) Activation of the schedule function or the timer of the local remote controller 3) Activation of the schedule function of the controller 4) Activation of the interlocked control	When an indoor unit or a LOSSNAY unit is started or stopped by the events listed on the left, it is not a malfunction. Cause 1) Indoor units or LOSSNAY units may start or stop according to the operation of the local remote controller. Cause 2) Indoor units or LOSSNAY units may start or stop according to certain settings of the local remote controller, such as the schedule setting, ON/OFF timer setting, and Auto-OFF timer setting. Cause 3) Indoor units or LOSSNAY units may start or stop according to the schedule settings (day, weekly, and annual schedule settings) of the controller. Cause 4) LOSSNAY units may start or stop, interlocking with multiple indoor units.

The serial number and DP contained in this manual are required to use the product, so please keep this manual safe.

Serial Number

DP

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

2011/65/EU; (EU) 2015/863; (EU) 2017/2102:

The restriction of the use of certain hazardous substances in electrical and electronic equipment

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

MITSUBISHI ELECTRIC CORPORATION

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