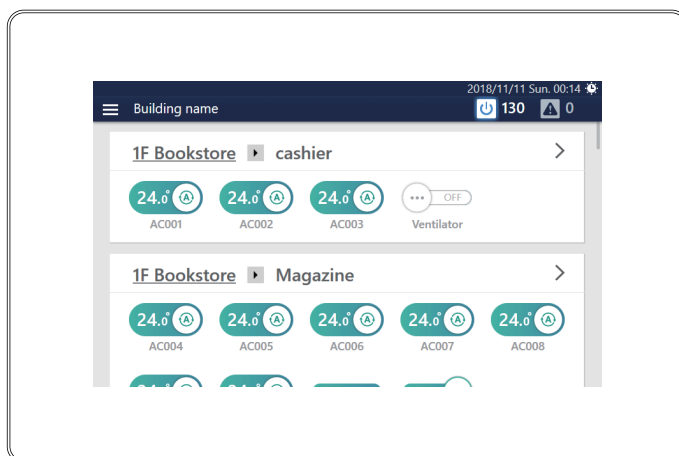


Touch Screen Controller

Model Name

BMS-CT1280UL



- Thank you for purchasing this air conditioning control system.
- In order to use this product safely and correctly, please read this operation manual carefully before use and make sure that you fully understand the contents.
In particular, please be sure to read the "Safety Precautions".
- After reading this manual, be sure to keep it in a place where the operator of the Unit can always view it.

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1 Quick Start Guide

Basic Usage

To start/stop the air conditioner(s)		→ "Start/Stop Operation" (P.25)
To change the set temperature		→ "Change the Air Conditioning Settings (ON/OFF/Mode/Wind direction/Fan Speed/Set temp.)" (P.28)
To change the Mode (Cool/Heat/Auto/Dry/Fan)		→ "Change the Air Conditioning Settings (ON/OFF/Mode/Wind direction/Fan Speed/Set temp.)" (P.28)
To check whether you have forgotten to turn off the air conditioner(s)	Batch ON/OFF screen	→ "Monitor the Overall Air Conditioning System" (P.39)
To check for current alarms	Alarm history screen	→ "Monitor the Overall Air Conditioning System" (P.39)





Advanced Usage Please use the following functions as necessary.

To set start/stop timer		→ "Set the Operation Schedule" (P.33)
To configure and confirm the energy saving settings	Return Back	→ "Configure and confirm the Return Back settings (Return Back)" (P.46)
	Eco Temperature Shift	→ "Change to energy saving temperature (Eco Temperature Shift)" (P.47)
	Change Temperature Range	→ "Set the temperature change range (Set temp. range limit)" (P.47)
	Save Mode	→ "Control air conditioner power (Energy saving ratio [%])" (P.46)
	Schedule settings	→ "Set the Operation Schedule" (P.33)
	Power peak cut schedule	→ "Set demand control schedule of outdoor unit (Power peak cut schedule)" (P.60)
To operate the Total Heat Exchange Unit		→ "Turn ON/OFF the ventilation function (Ventilation → ON/OFF)" (P.44)
To cancel the FILTER Sign after filter cleaning		→ "Erase FILTER Sign (Filter sign reset)" (P.45)
To connect with a PC that has the PC software Data Analyzer installed and display the usage of energy	Connect with the PC that has the PC software Data Analyzer installed and display the energy usage	→ "Settings when Using the PC Software Data Analyzer" (P.24)
	IP Address Setting	→ "Set the IP address of the Touch Screen Controller (IP Address)" (P.69)
	Output to USB memory	→ "Output data to a USB memory stick (Output to USB memory)" (P.63)
To connect with a PC that has Report Creation Software installed and display the power usage report	Connect with a PC that has Report Creation Software installed and display the power usage report	→ "Electric Power Allocation System that can be Used with this Unit" (P.76)
	Automatic Meter-Reading	→ "Set the summation date of the power allocation data (Automatic Meter-Reading)" (P.77)
	Manual Meter-Reading	→ "Sum data for power allocation as necessary (Manual Meter-Reading)" (P.78)
	IP Address Setting	→ "Set the IP address of the Touch Screen Controller (IP Address)" (P.69)
To output the daily and monthly report files, the alarm files, and the setup files by USB		→ "Output data to a USB memory stick (Output to USB memory)" (P.63)

2 Safety Precautions

This section explains safety precautions you must follow in order to prevent harm to the user and other persons and damage to property.

"Display Description" explains the classification of the degree of harm or damage that may occur if the unit is handled incorrectly, while "Symbol Description" indicates the meanings of symbols.

Display Description	Symbol Description
 WARNING Indicates "Content that is expected to result in death or serious injury (*1) to the user in the case of incorrect handling".	 indicates prohibited actions. Specifically prohibited contents are indicated with a picture and/or text in or near the symbol.
 CAUTION Indicates "Content that is expected to result in minor injury (*2) to the user or damage to property (*3) in the case of incorrect handling".	 indicates instructions which must be followed. The actual contents of the instructions are indicated with a picture and/or text in or near the symbol.



* 1: Serious injury refers to lasting after effects such as blindness, injury, burns (high temperature / low temperature), electric shock, bone fracture, or poisoning, etc. and injuries that require hospitalization/long-term outpatient treatment.

* 2: Minor injury refers to injuries, burns, or electric shocks, etc. that do not require hospitalization or long-term outpatient treatment.





* 3: Damage to property refers to extended damage related to houses, household goods, livestock, or pets, etc.

WARNING




Installation Precautions

 Request installation	Ask the dealer from whom you purchased the unit or a professional for installation work. Installation requires specialised technical expertise. If you attempt to perform installation work yourself and perform the work incorrectly, it may cause fire, electric shock, or injury.	 Use specified products	Use a designated TOSHIBA air conditioner. Please use a designated TOSHIBA air conditioner. Using products other than specified may cause fire, electric shock, or water leakage. Also, please ask a professional for installation work.
---	---	---	---

Usage Precautions





 Prohibited	Do not operate the switches with wet hands. Doing so may cause electric shock or failure.	 Prohibited	Do not wet the Air Conditioning Control System. Please be careful not to get the Air Conditioning Control System wet. Doing so may cause fire, electric shock, or failure.
 Compulsory	Turn off the power if anything is abnormal (burnt odour etc.). Continued use may cause fire or electric shock. Please ask the dealer from whom you purchased the product.	 Compulsory	Do not use a power source other than the specified model. Using a power source other than the specified model may cause fire or failure. Please use 120 V AC.

Relocation/Repair Precautions




 Prohibited	Do not remodel. Doing so may cause fire or electric shock.	 Request	Please ask the dealer from whom you purchased the unit for repair. Faulty repair may cause fire or electric shock.
 Request relocation	Contact a specialist or the dealer from whom you purchased the unit to relocate and re-install the air conditioner. Faulty installation may cause fire, electric shock or injury.		

⚠ CAUTION

Installation Precautions

 Check the installation location	Do not install in areas with high humidity or vibration. Doing so may cause a failure.	 Check the installation location	Do not install in direct sunlight or near heat sources. Doing so may cause a failure.
 Check the installation location	Do not install in areas where noise is generated. Doing so may cause malfunction.	 Check the installation location	Do not install the air conditioner in a place where combustible gas may leak. Gas leaking and accumulating around the product may cause a fire.

Usage Precautions

 Prohibited	Do not drop the product or apply strong shock. Doing so may cause a failure.	 If anything is abnormal turn off the power	If anything is abnormal, stop operation and turn off the original power supply, then contact the dealer from whom you purchased the unit. Continued operation with an abnormality may cause fire or electric shock.
 Instructions	When cleaning and checking, turn off the earth leakage breaker. Failing to do so may cause injury.		

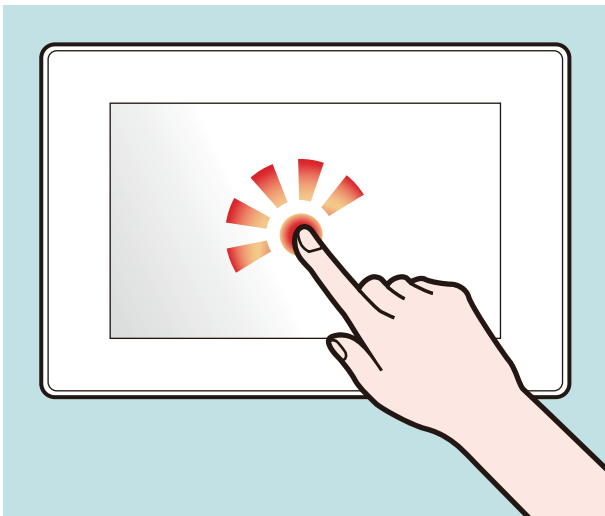
3 Operating method and screen structure

Touch Panel Operation Method

Explains the basic touch panel operation method.

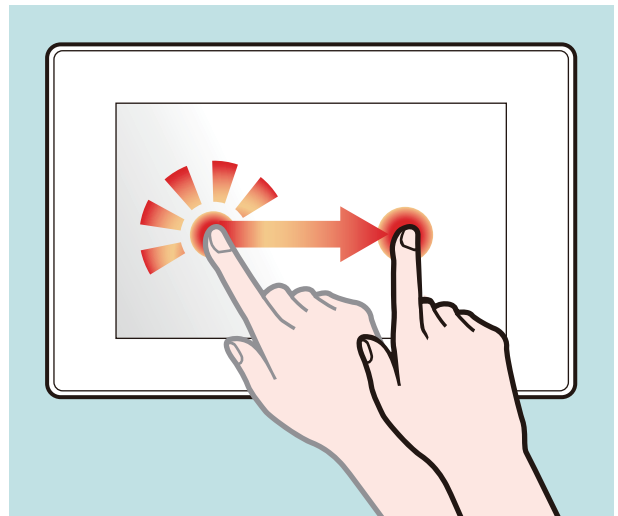
Tap

Touch your finger lightly on the screen and release it immediately.



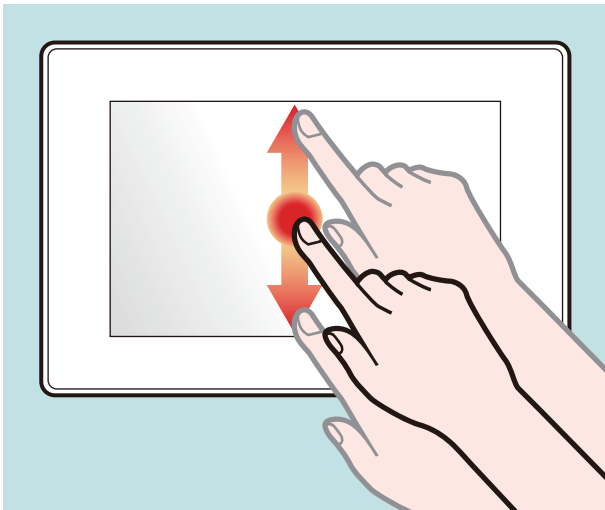
Drag

Tap an object on the screen, hold your finger down, and move.



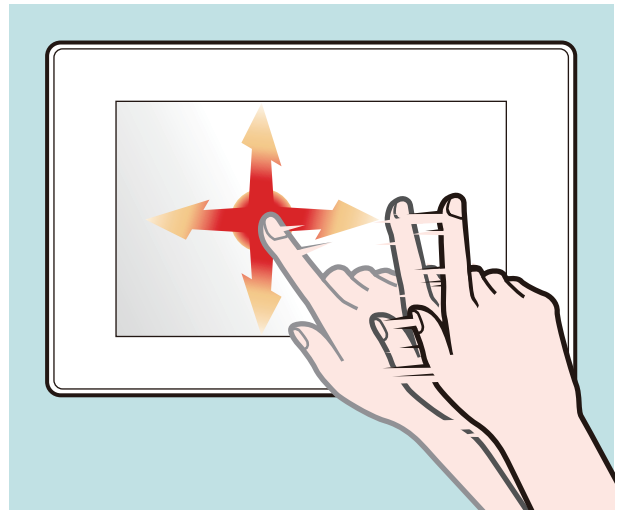
Swipe

Touch your finger lightly on the screen and move it in the desired direction.



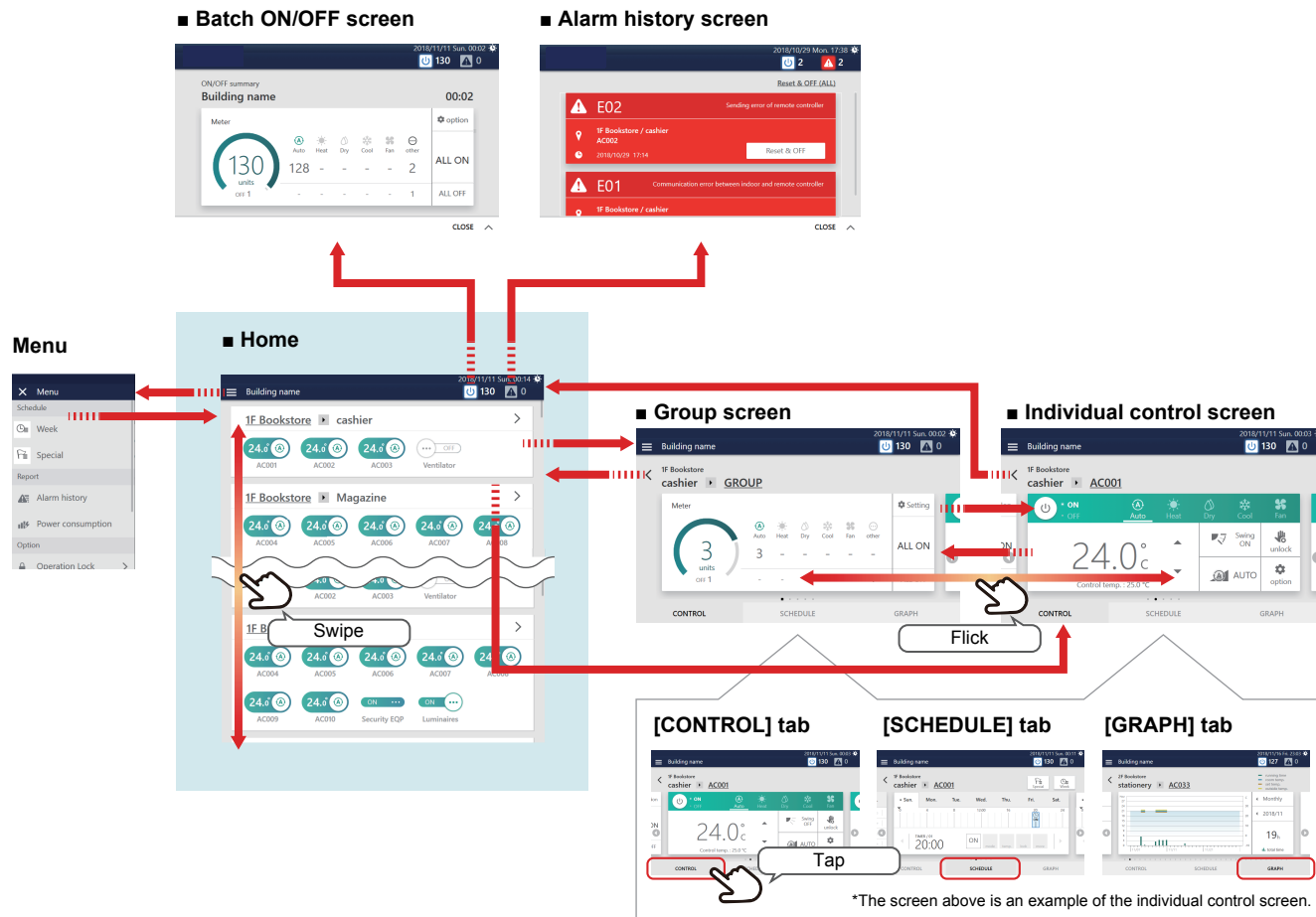
Flick

Touch the screen with your finger and move your finger quickly up, down, to left or the right.



Screen Structure

The main screen structures used by this Unit are as follows. The screen can be switched by tapping (or flicking in some cases).



Each display is an example screen. The display content varies with the usage environment settings.

Home screen	You can check the operation status of the air conditioner(s) and ON/OFF unit in a list. You can also start/stop individual operation. (P.13)	
Group screen	You can check/change the settings in group units. The group screen consists of three tabs: "CONTROL", "SCHEDULE" and "GRAPH". (P.16)	
Individual control screen	You can check/change the settings of the air conditioner(s) and ON/OFF unit individually. The individual control screen consists of three tabs: "CONTROL", "SCHEDULE" and "GRAPH". (P.18)	
Batch ON/OFF screen	You can check the operation status of the whole air conditioning system numerically. You can also start/stop the operation of the whole air conditioning system and configure the detailed settings. (P.39)	
Alarm history screen	You can confirm alarms that are occurring in the whole air conditioning system in a list. (P.39)	
[CONTROL] tab	You can check the detailed operation status. You can change the settings such as ON/OFF. (P.25)	
[SCHEDULE] tab	You can control the Week Schedule and the Particular Timer setting. (P.35)	
[GRAPH] tab	Group screen	You can check the operation time in group units. (P.55)
	Individual control screen	You can check the operation time in air conditioner or ON/OFF unit in units. (P.55)
Menu	You can configure settings for administrators such as screen display change and demand control. (P.56)	

* Although temperature is indicated in [°C] in the figures used in this manual, the initial temperature is displayed in [°F] on this software.

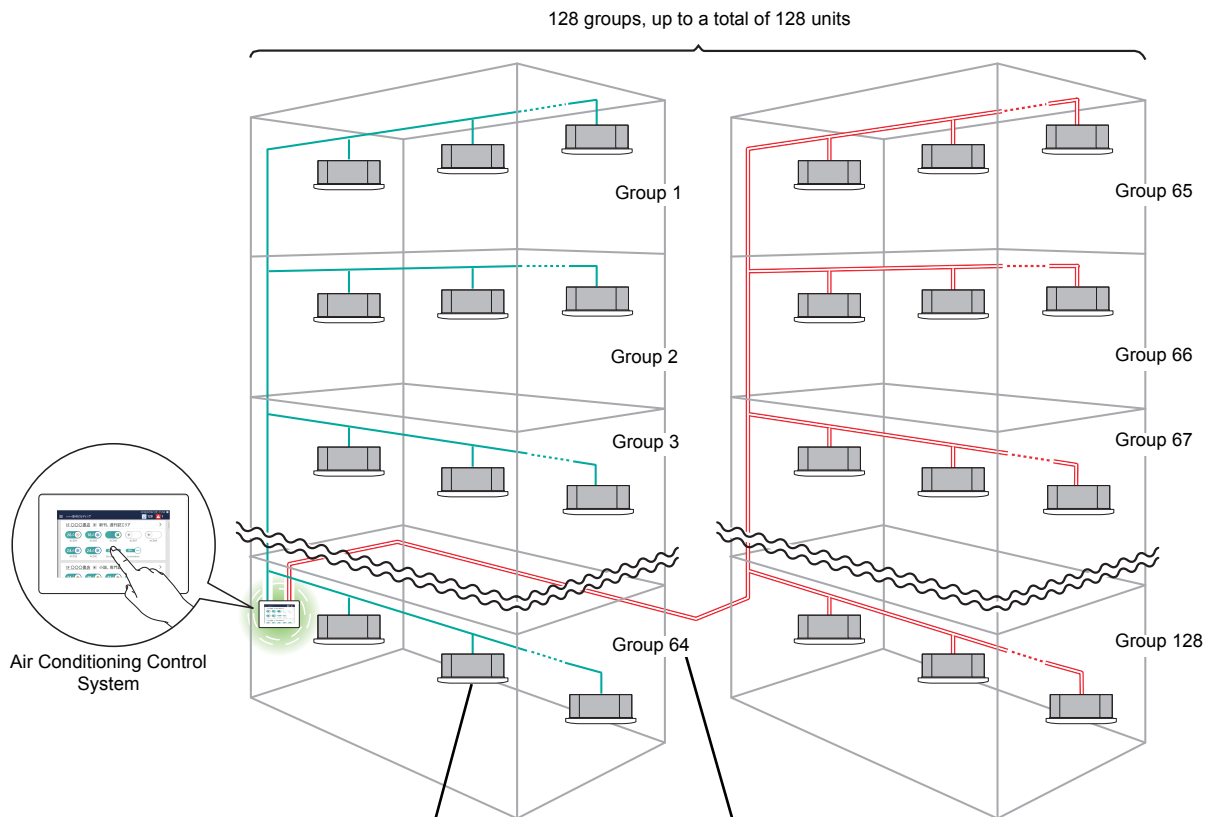
4 Before Usage

Air Conditioning System Configurations

The system configurations that this Unit can control are as follows:

All

Set all air conditioners at once.



Unit

Set the air conditioners individually.


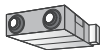
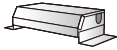
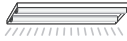

Group

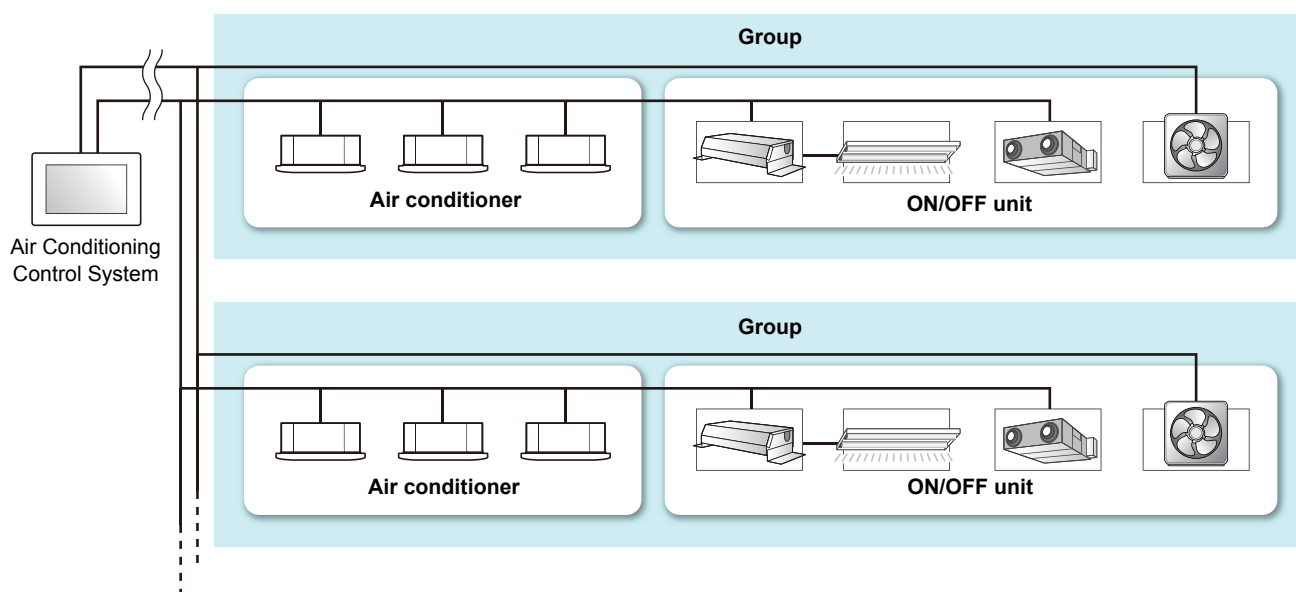
All air conditioners and ON/OFF unit are divided into 1 to 128 groups, and settings are configured for each group at once. It is convenient to register the air conditioners by dividing them into groups for each room.

- There are three units that can be controlled: All, Group, and Unit.
- The maximum number of groups (Floor/Tenant/Area combinations) that can be controlled is 128.
- The maximum number of units that can be controlled (air conditioner(s) and ON/OFF unit) is 128 for air conditioners and 60 for ON/OFF unit.

Control Target Devices

In this Unit, the following devices can be controlled and monitored.

Device names shown in this manual	Target devices	
Air conditioner <div> You can set air conditioning and heating operation (128 units) </div>	<ul style="list-style-type: none"> Multi air conditioners for buildings (Ceiling cassette, ceiling embedded, ceiling hanging, air to air heat exchanger with coil, etc.) Custom air conditioners for stores and offices Package air conditioners for facilities Hot Water Module (* For use outside Japan only) DX-Coil Interface TA type (* For use outside Japan only) 	
ON/OFF unit <div> You cannot set air conditioning or heating operation (Operation can be turned ON/OFF.) (60 units) </div>	<ul style="list-style-type: none"> Air to Air Heat Exchanger 	
		
	<ul style="list-style-type: none"> General purpose device control interface External device (DI/DO) (Air to Air Heat Exchanger, Lighting, Ventilation fan, etc.) 	
		



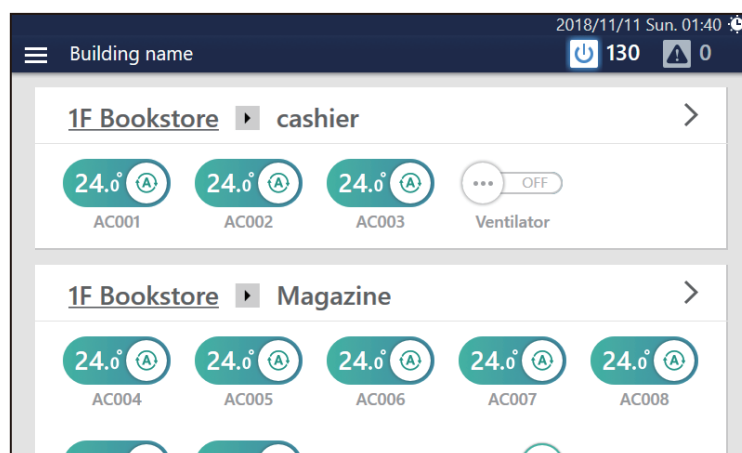
About the Main Screens

This section explains the home screen and the [CONTROL] tab of the group screen/individual control screen.

NOTE

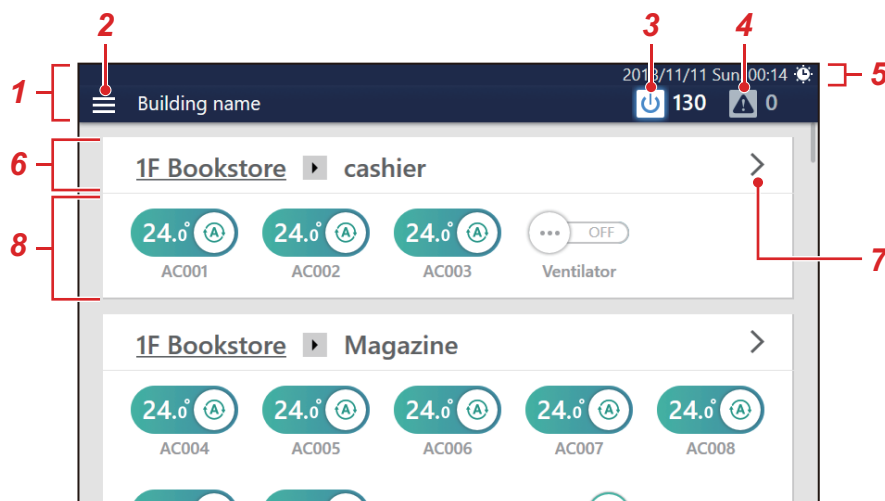
The language and display colors of the screen differ depending on the language and theme settings. The screens shown in the manual use the [English] language setting and the [Type A] theme setting. For details of the theme settings, refer to "Set the screen theme (Theme)" (P.65).


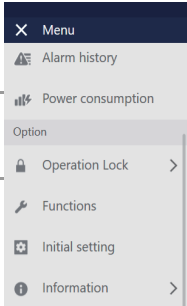



















Home


















Screen description

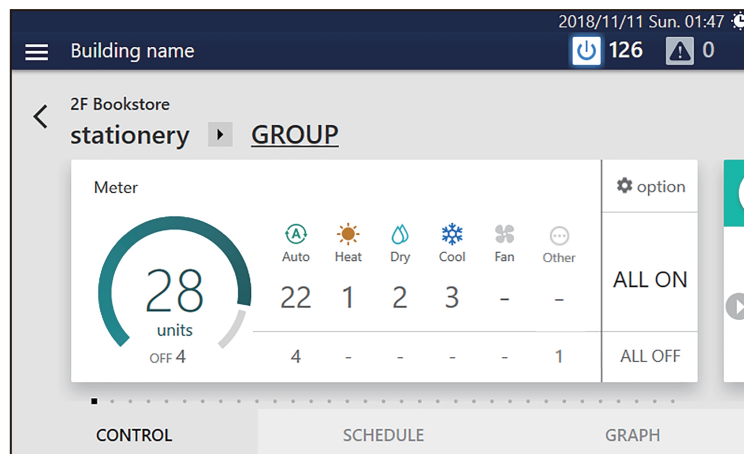
Switches for all air conditioners and ON/OFF unit are displayed for each group. You can change the group displayed by scrolling the screen.



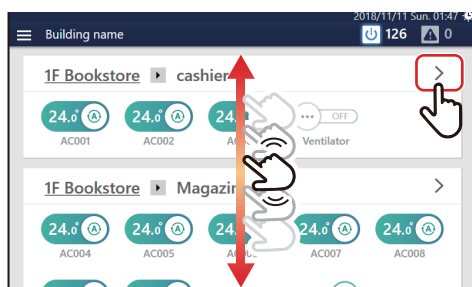
No.	Name (Icon)	Functions										
1	Header area	It is displayed even on screens other than the home screen. The operation content is common to each screen.										
2	Menu button ()	<p>Tap to display the menu. You can display various reports and detailed settings for the Unit.</p> <div><div>• NOTE</div><p>The display content of the menu may partially differ depending on the conditions.</p></div> <div></div>										
3	ON/OFF meter button ()	Tap to display the batch ON/OFF screen. (P.39) Lights up when there is an air conditioner or ON/OFF unit in operation.										
4	Alarm button ( / )	Tap to display the alarm history screen. (P.39) Lights up red when an alarm has occurred.										
5	Status display section	<p>Displays the current date and time. Also, the following will be displayed depending on the status and settings of the air conditioning system.</p> <table><tr><td></td><td>Displays when a demand signal is detected.</td></tr><tr><td></td><td>Displays during demand control of an outdoor unit. (P.60)</td></tr><tr><td></td><td>Displays when you operate remotely from a computer. (P.74)</td></tr><tr><td></td><td>Displays while outputting data to a USB memory stick. (P.63)</td></tr><tr><td></td><td>Displays when the daylight saving time (summer time) setting is ON. (P.64)</td></tr></table>		Displays when a demand signal is detected.		Displays during demand control of an outdoor unit. (P.60)		Displays when you operate remotely from a computer. (P.74)		Displays while outputting data to a USB memory stick. (P.63)		Displays when the daylight saving time (summer time) setting is ON. (P.64)
	Displays when a demand signal is detected.											
	Displays during demand control of an outdoor unit. (P.60)											
	Displays when you operate remotely from a computer. (P.74)											
	Displays while outputting data to a USB memory stick. (P.63)											
	Displays when the daylight saving time (summer time) setting is ON. (P.64)											
6	Group name display section	<p>Displays the name of the group that displays the switch (the name of the group to which the displayed switch belongs). Tap the underlined name in the group name to display the drop-down menu. You can jump to other groups.</p>										
7	"FORWARD" button ()	Tap to display the group screen. (P.16)										

No.	Name (Icon)	Functions
8	Switch	The air conditioner or ON/OFF unit switch registered in each group is displayed, and the name is displayed below the switch.
		 <p>Displays the operation status of the air conditioner(s).  means operating state. The set temperature is displayed on the left and the operation mode is displayed on the right. Drag or flick  to the left to stop the operation.  is the stopped state. Only the set operation mode is displayed. Drag or flick  to the right to start the operation. Tap the overall switch to switch to the [CONTROL] tab on the individual control screen. (P.18)</p>
		 <p>Displays the operating condition of the air conditioner. Operation of the air conditioner(s) is locked. (P.56)</p>
		 <p>Alarm in progress. Tap to switch to the [CONTROL] tab on the individual control screen and check the details of the alarm. (P.20)</p>
		 <p>Operation is impossible due to power outage (hibernation state).</p>
		 <p>Displays the operation status of the ON/OFF unit. Drag  left or right to change the operation status.</p>
		 <p>Displays the operation status of the ON/OFF unit. The operation status cannot be changed. The Unit is locked or output control cannot be performed.</p>
		 <p>Displayed when the FILTER Sign appears.</p>
		 <p>Displayed during operation preparation.</p>
		 <p>Displayed during heating preparation.</p>
		 <p>Displayed when the output of the air conditioner is limited.</p>

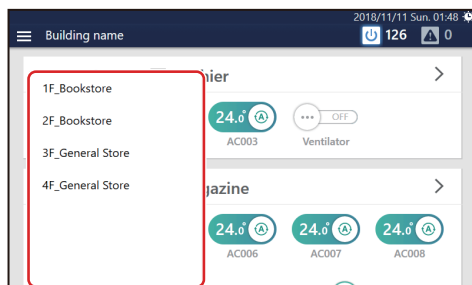
Group control screen ([CONTROL] tab)



How to display the screen



- 1 Scroll the home screen to display the group you want to change the settings for, then tap >

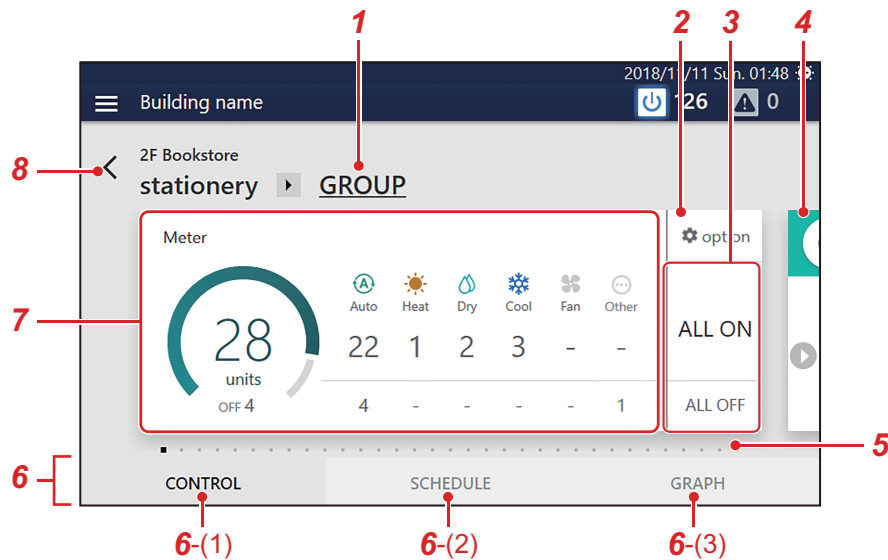


NOTE

You can jump to another group in the drop-down menu displayed by tapping the group name.

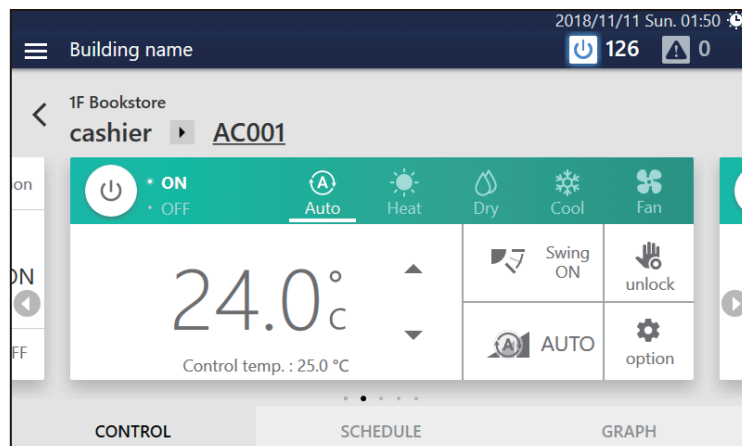
The [CONTROL] tab of the group screen is displayed.

Screen description

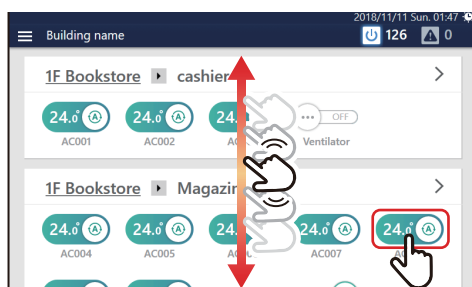


No.	Name (Icon)	Functions
1	Group name	Displays the name of the currently displayed group. Tap to display the drop-down menu. You can switch the display to the individual control screen for another air conditioner or ON/OFF unit registered in the group. <div data-bbox="1273 1021 1453 1263" data-label="Image"> </div>
2	Setting	You can change overall settings of the group such as Mode, set temperature, air direction, and fan speed simultaneously. (P.28)
3	ALL ON/ALL OFF	You can turn the whole group ON/OFF simultaneously. (P.26)
4	Next screen	Tap to display the individual control screen of the air conditioner or ON/OFF unit registered in the group. You can flick the group screen to display it.
5	Display position	Only the number of air conditioners or ON/OFF unit registered in the group is displayed. For the currently displayed screen, is displayed.
6	[SWITCH] tab	Tap to switch to the "6-(1)", "6-(2)" or "6-(3)" tab of the group screen.
7	Run	The ON/OFF meter on the left side can be used to check the total number of units operated in the group. On the right side you can check the number of units in each operation mode. The upper row shows the number of units in operation and the lower row shows the number of units stopped. If there are devices that do not have an operation mode, they will be displayed in [Other].
8	"BACK" button(<)	Returns to the Home.

Individual control screen ([CONTROL] tab)



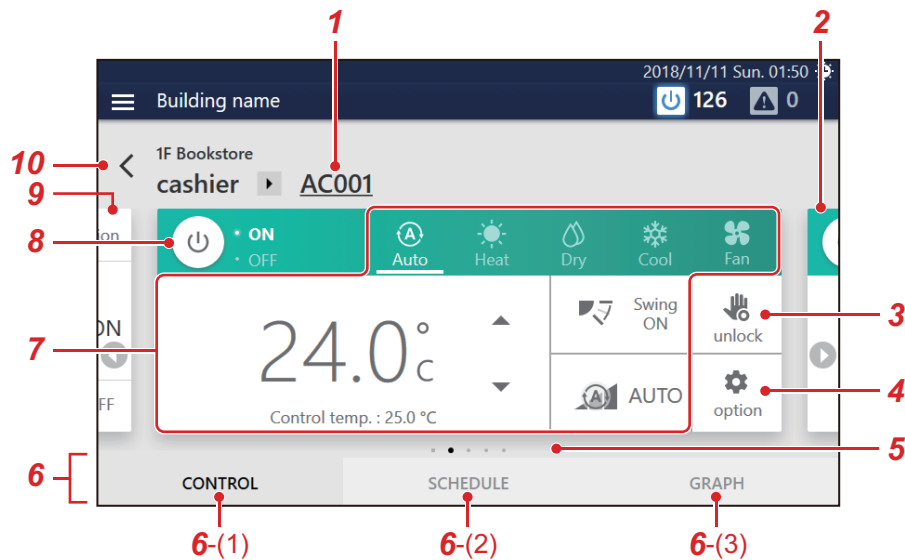
How to display the screen



- 1 Scroll the home screen, display the air conditioner or ON/OFF unit that you want to change the settings for, then tap the switch

The [CONTROL] tab of the individual control screen is displayed.

Screen description



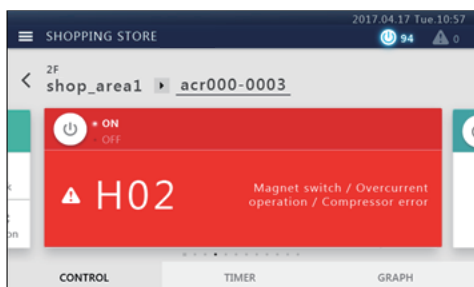
Each display is an example of the screen in the case of an air conditioner.
The display contents varies with use environment settings.

No.	Name (Icon)	Functions
1	Group name	The name of the air conditioner or ON/OFF unit currently displayed is shown. Tap to display the drop-down menu. You can switch the display to the group screen or another air conditioner or ON/OFF unit registered in the group. <div data-bbox="1273 1025 1455 1265"> </div>
2	Next screen	Tap to display the individual control screen for other air conditioners or ON/OFF unit registered in the group. You can also flick and display the individual control screen being displayed.
3	Lock setting of remote control	You can restrict the operating range of the local remote controller of the air conditioner(s) or ON/OFF unit. (P.40) If it is not restricted, [] is displayed. If there are restricted items, [] is displayed.
4	option	You can set or confirm the details of the operation method. (P.42)
5	Display position	Only the number of devices registered in the group [] is displayed. For the currently displayed screen, [] is displayed.
6	[SWITCH] tab	Tap to switch to the "6-(1)", "6-(2)" or "6-(3)" tab of the individual control screen.
7	Setting area	You can change basic settings such as operation mode, set temperature, air direction, and fan speed. (P.31)
8	ON/OFF	Tap to switch between ON/OFF.
9	Previous screen	Tap to display the individual control screen for other air conditioners or ON/OFF unit registered in the group. You can also flick and display the individual control screen being displayed. The group screen appears at the beginning.
10	"BACK" button(<)	Returns to the home screen.

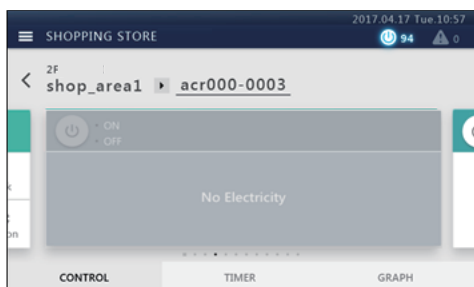
NOTE

- For ON/OFF unit, only configurable items are displayed.

Icons are displayed only when they are registered. (P.65)



- If an error occurs, an alarm code is displayed. Operation other than operation ON/OFF is not possible.



- Operation is impossible due to power outage (hibernation state).

5 Perform initial settings

Unit Settings

Have service personnel perform the following work.

1 Check the installation and wiring of the main unit

Follow the installation instructions to complete the installation and wiring work.

2 Check the wiring between the remote controller, indoor unit, and outdoor unit

Check that the address from the remote controller to the Unit is correct, and switch ON/OFF, Cool/Heat and confirm that operation is normal.

3 Create a local setting file with the setting file creation software

Input necessary information based on local air conditioner information and display language settings, etc. into a PC on which the setting file creation software is installed to create a local settings file.

4 Upload the local settings file

Connect the Unit to the PC via LAN and upload the local settings file.
While uploading, the Unit restarts.

5 Confirm the setting contents

Check that the screen display of the Unit is set according to the local settings file, perform ON/OFF, and confirm that the Unit operated on the screen matches the Unit that actually starts to operate.

Settings for Remote Monitoring with a PC

You can monitor and control the Unit by accessing it from a PC. This section explains the settings for the Unit and the PC. Please see "9. Remote monitoring using a PC" (P.74) for the system diagram and the PC operating environment.

• NOTE

Some functions cannot be used from a PC. For details, please see "List by Lock Level/Level" (P.84)

System diagram



Unit settings

- 1** Set the user account for remote operation (P.66)
- 2** Set the IP address (P.69)
- 3** Set a destination to send email to when an alarm occurs (P.70)

PC settings

Settings

IP address/ Subnet mask	Set it to be the same network as the Unit. (For details, see the "Network Configuration Guide".) (Example: the Unit 192.168.2.80/PC 192.168.2.90/subnet 255.255.255.0)
Port	Release port number 8801.
Drive C	Ensure that you have 500 MB or more free space and start up as a user with read/write authority.

Operating Environment

The following environment is necessary to use this function.

OS	Windows 8.1, Windows 10
.NET Framework	4.6.2
Web browser	Microsoft Edge, Internet Explorer 11, Google Chrome latest version

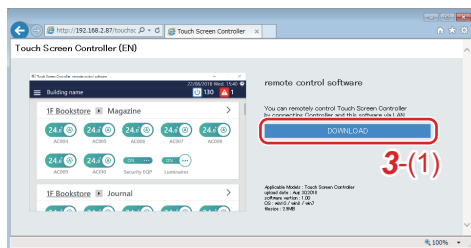
Install the software

- 1** Open the web browser of your PC
- 2** Access "http://[server name or IP address]/touchscreencontroller/[language code]/download.html"

Server name or IP address : For the IP address, enter the value set in step **2** of "Unit settings" (P.22).

Language code : Enter the following value according to the language.

Language	Language Code
Japanese	JA
English	EN
French	FR
German	DE
Italian	IT
Spanish	ES
Portuguese	PT
Turkish	TR
Polish	PL
Chinese	ZH



- 3** Click [3-(1)]
- 4** Save the file according to the browser message
- 5** Double-click on the saved "installer_touchscreencontroller.exe" to unzip/install (setup.exe)

When the installation is completed, a shortcut icon is created on the desktop.



NOTE

If .NET Framework 4.6.2 is not installed on the PC, this software will not work properly.
Be sure to download and install .NET Framework 4.6.2 from the above website.

Settings when Using Report Creation Software

By using the Report Creation Software, you can easily check/output reports (monthly report/daily report) for electric power allocation summed by the Unit with a PC. When using the Report Creation Software, apply the following settings.

• NOTE

For details on how to use the Report Creation Software, refer to the operation manual of the Report Creation Software.

Unit settings

- 1 Set the IP address of the Unit (P.69)**
- 2 Set the summation date for the power allocation data using the Unit (P.77)**

PC settings

- 1 Install the Report Creation Software on the PC**
For details, refer to the "Installation Instructions" included in the attached DVD.
- 2 Register the target system (this Unit) in the Report Creation Software**
For details, refer to the operation manual of the Report Creation Software.

Settings when Using the PC Software Data Analyzer

When using the PC software Data Analyzer, you can display the operation status and operation history of the air conditioners aggregated by this Unit on a PC screen.

• NOTE

For details on how to use the PC software Data Analyzer, refer to its operation manual.

Unit settings

- 1 Set the IP address of the Unit (P.69)**

PC settings

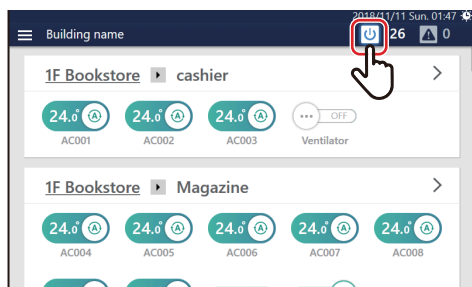
- 1 Install the PC software Data Analyzer on the PC**
For details, refer to the "Installation Instructions" included in the attached DVD.
- 2 Register the target system (this Unit) in the PC software Data Analyzer**
For details, refer to the operation manual of the PC software Data Analyzer.

6 Basic Usage

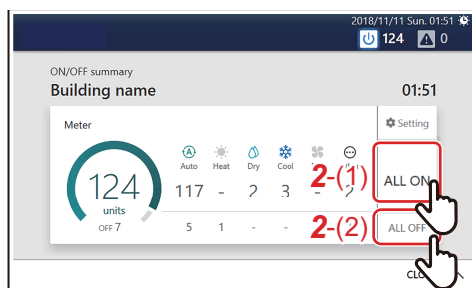
This section explains the basic setting method for operation Start/Stop and air conditioning, the setting method for the operation schedule, and the confirmation method for the overall air conditioning system.

Start/Stop Operation

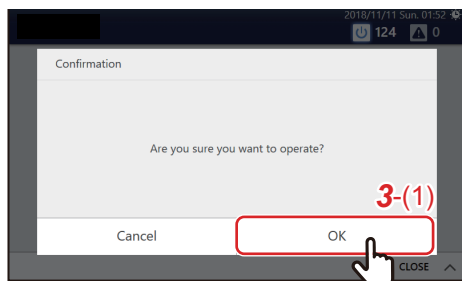
Overall air conditioning system operation method



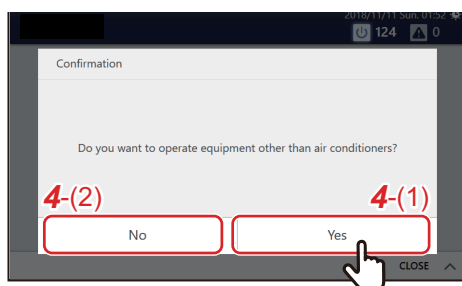
1 Tap 



2 Tap [2-(1)] or [2-(2)]



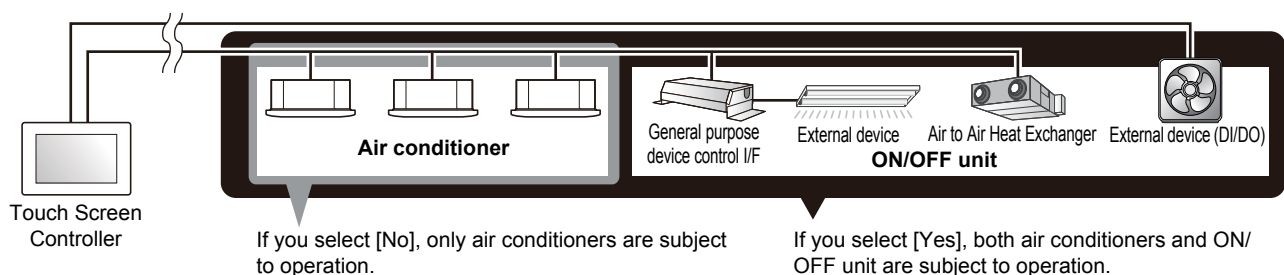
3 Check the contents of the message and tap [3-(1)]



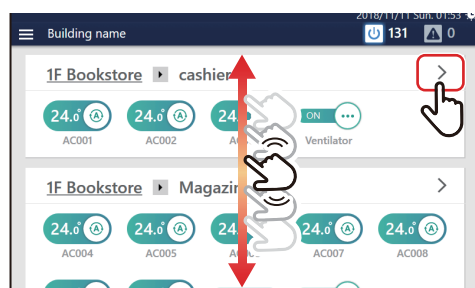
4 When the screen on the left appears, check the contents of the message and tap [4-(1)] or [4-(2)] *

All air conditioners and ON/OFF unit start/stop operation.

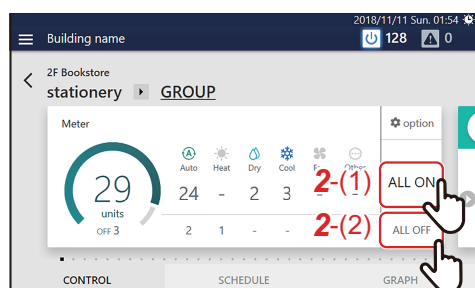
* About confirmation pop-up selection



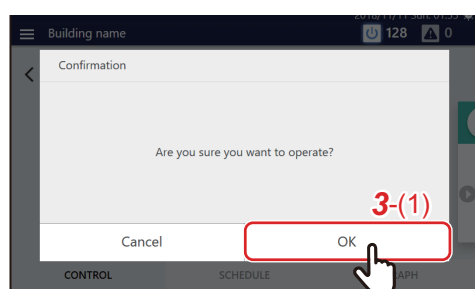
Group unit operation method



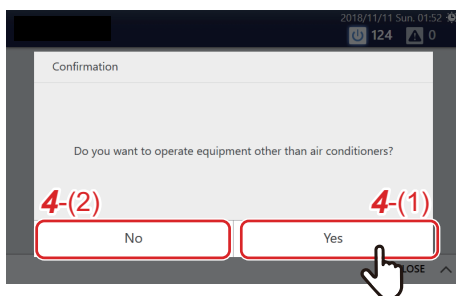
1 Scroll the home screen to display the group you want to change the settings for, then tap >



2 Tap [2-(1)] or [2-(2)]



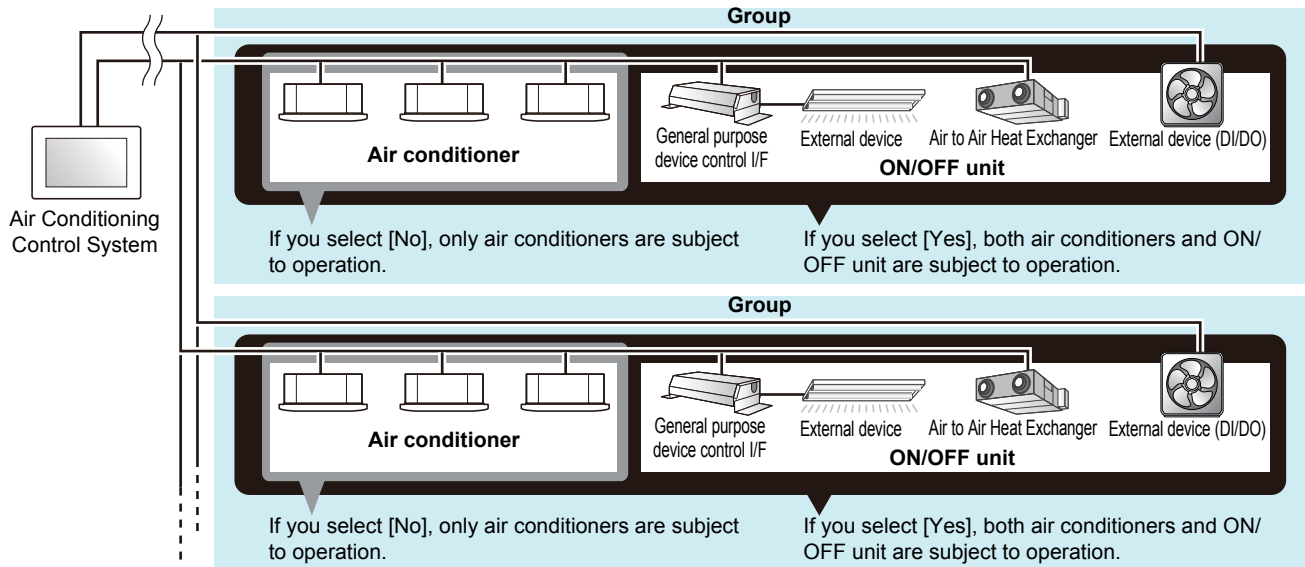
3 Check the contents of the message and tap [3-(1)]



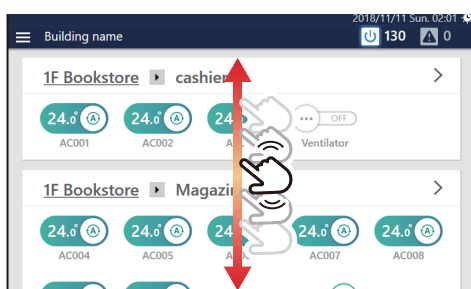
4 When the screen on the left appears, check the contents of the message and tap [4-(1)] or [4-(2)] *

All group air conditioners and ON/OFF equipment turn ON or OFF.

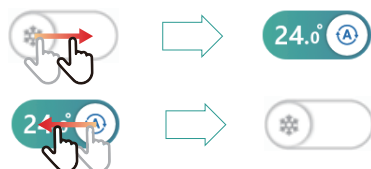
* About confirmation pop-up selection



Operation method in units of air conditioner or ON/OFF unit

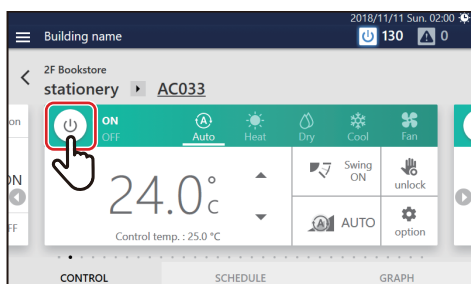


1 Scroll the home screen and display the air conditioner or ON/OFF unit that you want to change the settings for



2 Drag or flick the [ON/OFF] of the corresponding switch

Drag or flick to the right to start operation.
Drag or flick to the left to stop operation.



NOTE

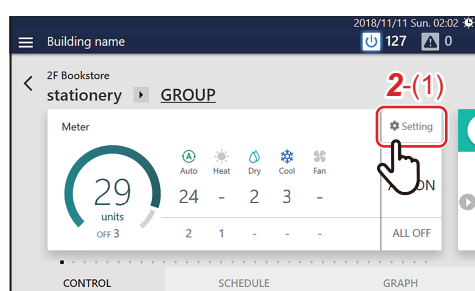
You can also start/stop operation by tapping the power icon on the [CONTROL] tab on the individual control screen displayed by tapping the switch.

Change the Air Conditioning Settings (ON/OFF/Mode/Wind direction/Fan Speed/Set temp.)

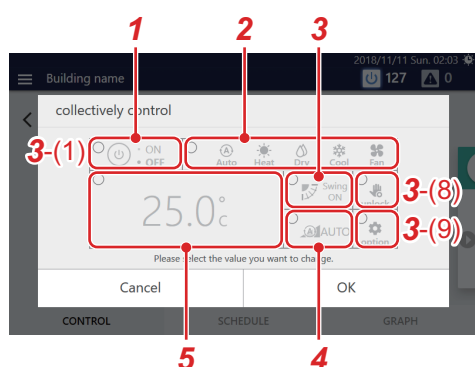
Group unit operation method



- 1** Scroll the home screen to display the group you want to change the settings for, then tap >



- 2** Tap [2-(1)]
The batch settings screen is displayed.



- 3** Change settings




Example: When changing the operation status settings

- 3-1** Tap [3-(1)]
The operation status settings screen is displayed.



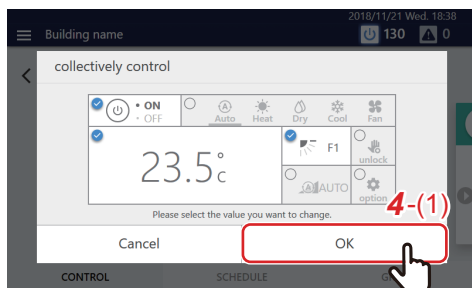
- 3-2** Set the check box of [3-(2)] to ☒
You can now change the settings.
- 3-3** Select [3-(3)] or [3-(4)] and tap [3-(5)]
Return to the batch settings screen.
- 3-4** Change the other items with reference to steps **3-1** to **3-3**
For the setting details, see the following table.

No.	Name	Functions
1	ON/OFF	Can be set to [ON/OFF].
2	Mode	Can be set to [Auto/Heat/Dry/Cool/Fan]. <div> NOTE <ul style="list-style-type: none"> A bar is displayed at the bottom of the icon for the currently selected mode. Operation modes that cannot be set are not displayed. </div>

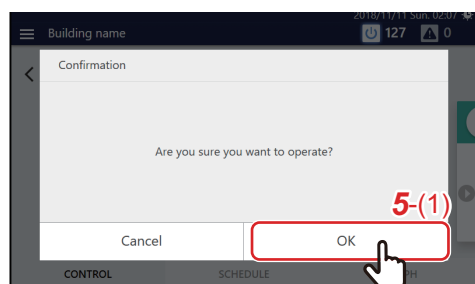
No.	Name	Functions
3	Wind direction	<p>Tap ◀ ▶ to switch to the following.</p>  <p>• NOTE</p> <p>Depending on the connected model, items that cannot be set are not displayed.</p>
4	Fan Speed	<p>Tap ◀ ▶ to switch to the following.</p>  <p>• NOTE</p> <ul style="list-style-type: none"> For models with limited fan speed setting range, this is changed to the values that can be set for each model. Fan speeds that cannot be set are not displayed.
5	Set temp.	<p>Tap ▲ ▼ to change the set temperature.</p> <p>• NOTE</p> <ul style="list-style-type: none"> When set to a temperature outside the setting range limit of each operation mode, the temperature is changed to the upper or lower limit of the setting range. If there are Dual Set Point compatible models in the group, two tabs will be displayed. When you tap [3-(6)], one set temperature is displayed, and when you tap [3-(7)], two set temperatures are displayed. Tap ▲ ▼ to change the set temperature. An icon and a message are displayed here during frost protection preparation, heat preparation or other operations. 

• **NOTE**

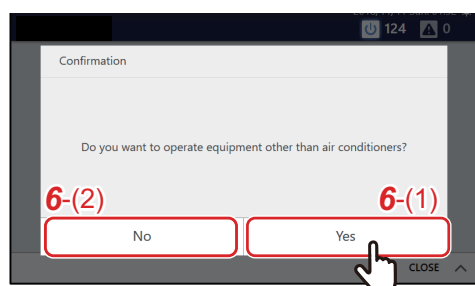
- For models that do not have the function set, the setting change is ignored.
- For the setting of [Lock] [Unlock] of [3-(8)], see "Local Remote Controller Lock" (P.40).
- For the [Option] settings of [3-(9)], see "Set Operation Details" (P.42).



4 Confirm that the changed item is checked, and tap [4-(1)]

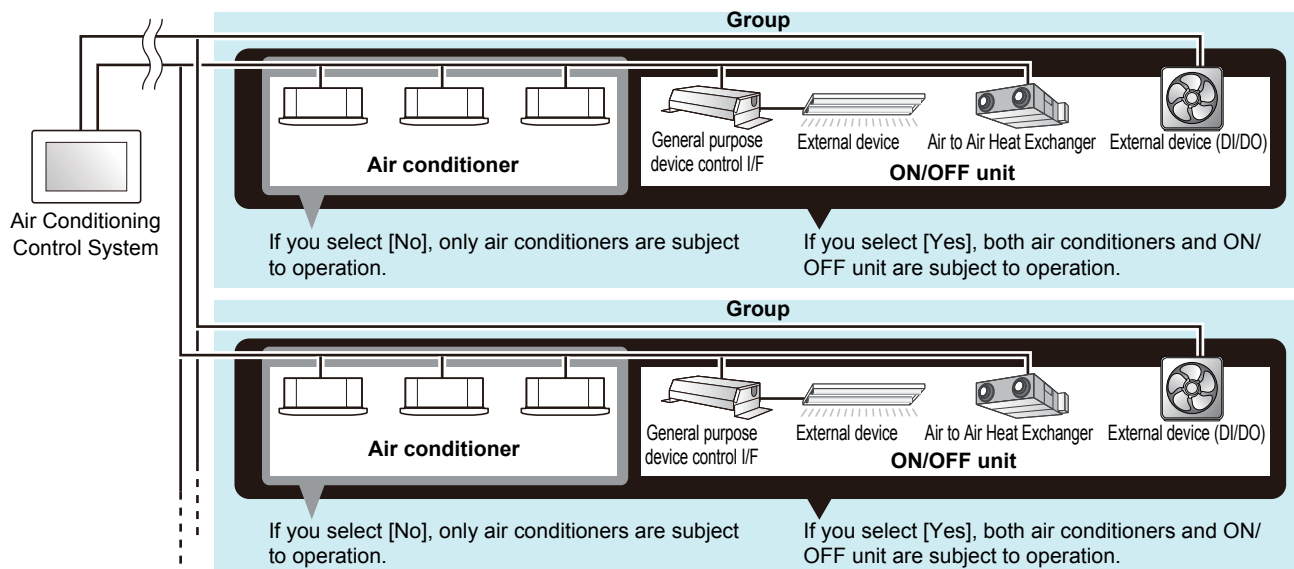



5 Check the contents of the message and tap [5-(1)]



6 When the screen on the left appears, check the contents of the message and tap [6-(1)] or [6-(2)] *
The settings of the entire group are changed.

*** About confirmation pop-up selection**

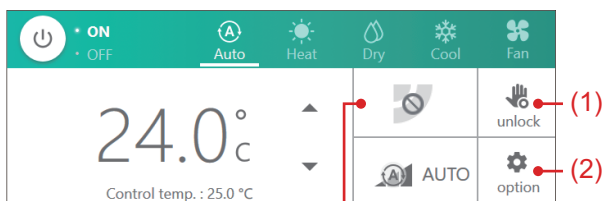


No.	Name	Functions
3	Fan Speed	<p>Tap to switch to the following.</p>  <p>• NOTE</p> <p>Fan speeds that cannot be set are not displayed.</p>
4	Set temp.	<p>Tap ▲ ▼ to change the set temperature.</p> <p>• NOTE</p> <ul style="list-style-type: none"> If the operation mode is FAN, the temperature cannot be set. "Control temp." shows the indoor temperature detected by the outdoor unit. *Depending on conditions such as the installation site of the indoor unit, it may differ from actual room temperature.

• **NOTE**

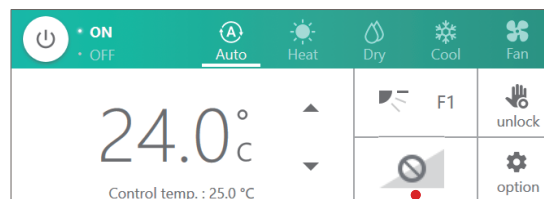
- For the setting of [(1)], see "Local Remote Controller Lock" (P.40).
- For the setting of [(2)], see "Set Operation Details" (P.42).
- If there is no corresponding function, that item is not displayed.

Example of a model without a flap



Since you cannot set the air direction, it does not change even if you tap it.

Example of a model where only a certain fan speed can be set



Since you cannot change the fan speed, it does not change even if you tap it.

Set the Operation Schedule

You can configure the air conditioners or the ON/OFF unit with a “Week Schedule”, through which settings such as operation start/stop are changed depending on the specified time for any day from Sunday to Saturday, or a “Particular Timer setting”, through which settings are changed for special days such as national holidays or special holidays. The operation schedule is set on the [SCHEDULE] tab of the group screen or individual control screen.

• NOTE

If a day is set in both the Week Schedule and the Particular Timer setting, the Particular Timer setting applies and the Week Schedule is disabled for that day.

Screen description

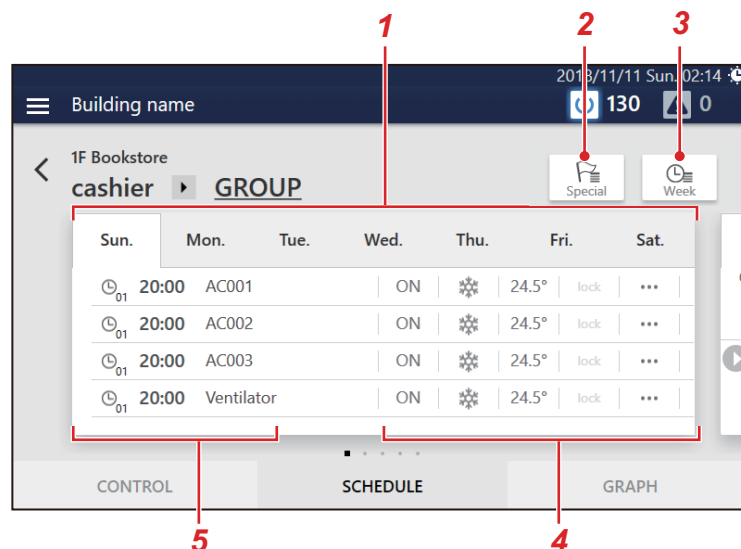
This section explains how to view the [SCHEDULE] tab when setting the operation schedule.

• NOTE

Refer to the description of the [CONTROL] tab for the display items that are not explained. (P.16, 18)

Group screen

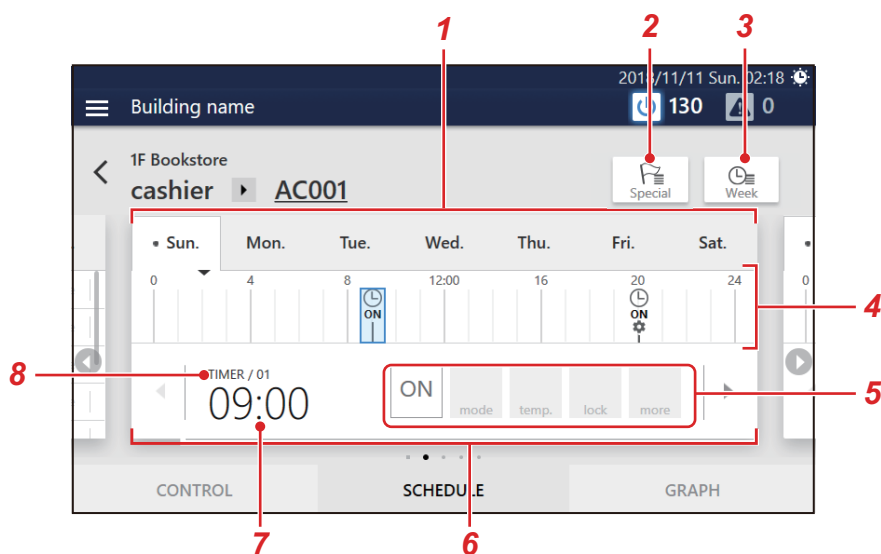
The schedule set for the air conditioners or ON/OFF unit in the group is displayed in list format in time units.



No.	Functions
1	You can switch the display in day-of-week units.
2	Displays the setting screen of Particular Timer setting.
3	Displays the setting screen of Week Schedule.
4	The schedule settings content (ON/OFF, Mode, Temp., Lock, more) is displayed.
5	The times when the schedule is executed and the air conditioners and ON/OFF unit for which the schedule is executed are displayed.

Individual control screen

The schedule set for the air conditioner or ON/OFF unit being displayed is displayed on a 24-hour time scale.



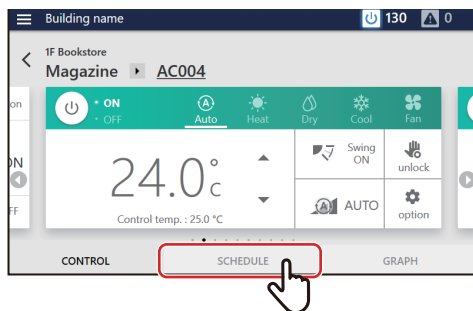
No.	Functions
1	You can switch the display in day-of-week units.
2	Displays the setting screen of Particular Timer setting.
3	Displays the setting screen of Week Schedule.
4	⌚ is displayed at the times when the schedule is set. When operation start/stop is set, [ON] or [OFF] is displayed below ⌚. When setting change is set, ⚙ is displayed below ⌚. Also, the currently displayed schedule is displayed in blue.
5	The schedule settings content (ON/OFF, Mode, Temp., Lock, more) is displayed.
6	You can switch the display to the previous or next schedule.
7	The times when the schedule will be executed are displayed.
8	The schedule setting number is displayed.

Create a new Week Schedule

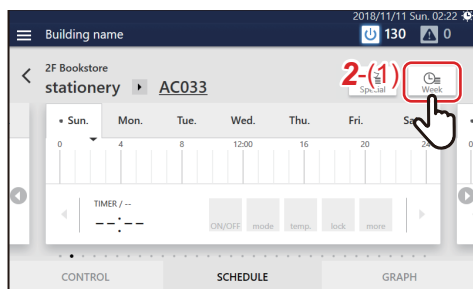
In a Week Schedule, you can set:

- Start time
- Day(s) of the week
- Air conditioner(s) or ON/OFF unit
- ON/OFF

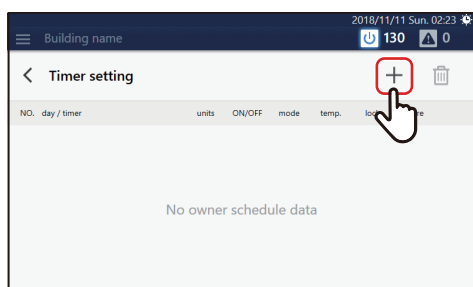
Schedule settings can be applied from either the group screen or the individual control screen. In the following procedure, the individual control screen is used to explain.



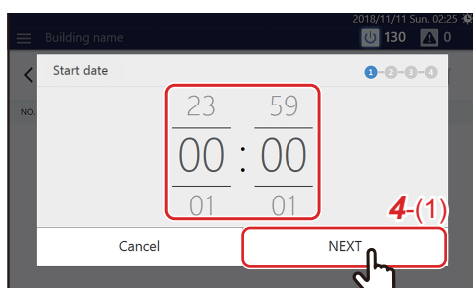
1 Tap [SCHEDULE] on the group screen or individual control screen



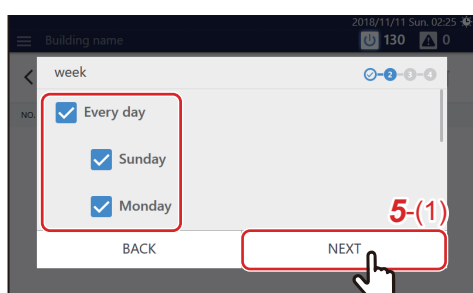
2 Tap [2-(1)]



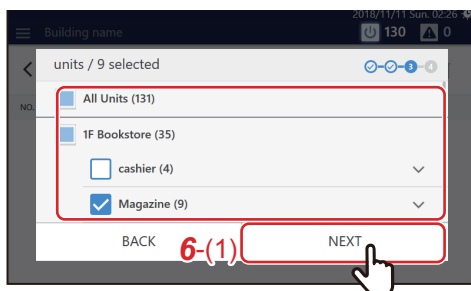
3 Tap +



4 Tap or flick to set the start time and tap [4-(1)]



5 Select the day of the week to execute and tap [5-(1)]



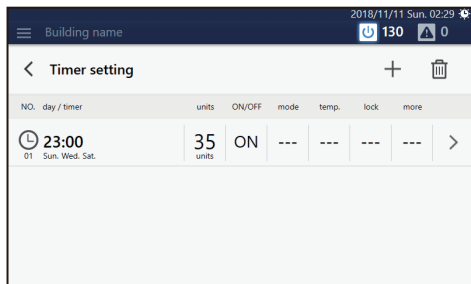
6 Select the air conditioner(s) or ON/OFF unit for setting the schedule and tap [6-(1)]

You cannot select a model that has already been scheduled at the same time.



7 Tap the check box of [7-(1)] and set it to ☒, then select [7-(2)] or [7-(3)] and tap [7-(4)]

You can only set [ON/OFF] here.



A schedule has been registered.

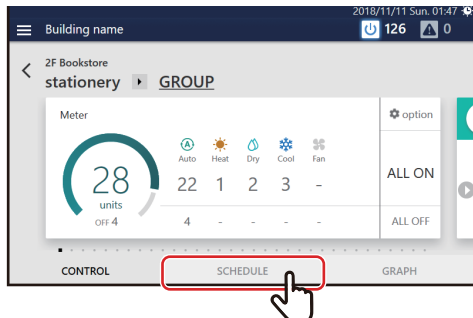
NOTE

- When setting details such as operation mode or set temperature, etc. as a schedule, refer to "Change the Operating Schedule" (P.48).
- When deleting a registered schedule, refer to "Delete the operation schedule" (P.54).

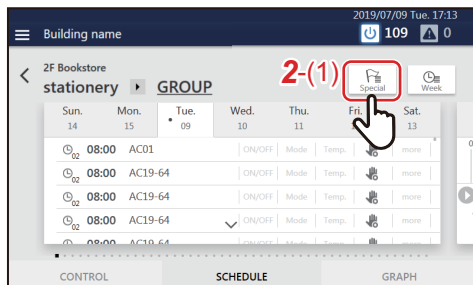
Create a new Particular Timer setting

In a Particular Timer setting, you can register special days, such as national holidays and special holidays, to configure a special schedule that differs from the Week Schedule.

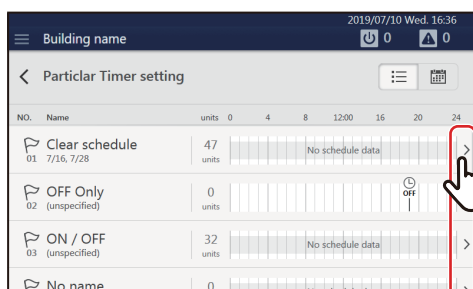
Schedules can be configured from the group screen or the individual control screen. The following procedure is explained using the individual control screen.



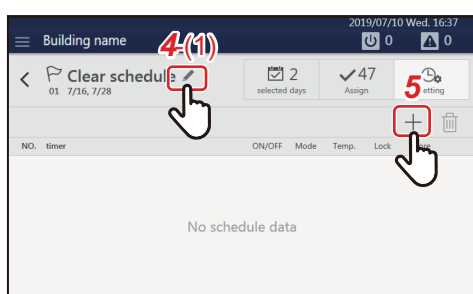
1 Tap [SCHEDULE] on the group screen or the individual control screen



2 Tap [2-(1)]

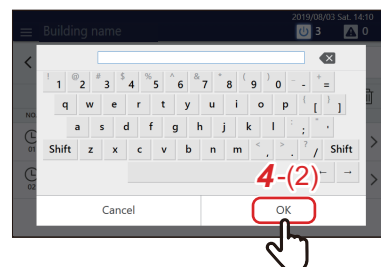


3 Tap >




4 Tap [4-(1)] and set the schedule name

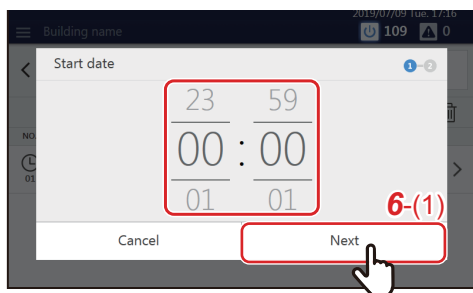
A keyboard is displayed. Enter the name and then tap [4-(2)].



5 Tap + to go to step 6

NOTE

- Tap [Shift] to toggle between upper case letters and lower case letters, and numbers and symbols.
- Tap  to delete one character.



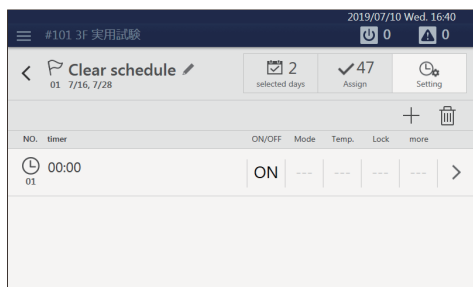
6 Tap or flick to set the start date, and then tap [6-(1)]



7 Tap the check box of [7-(1)] and set it to ☒, then select [7-(2)] or [7-(3)] and tap [7-(4)]

You can only set [ON/OFF] here.



The schedule is registered.



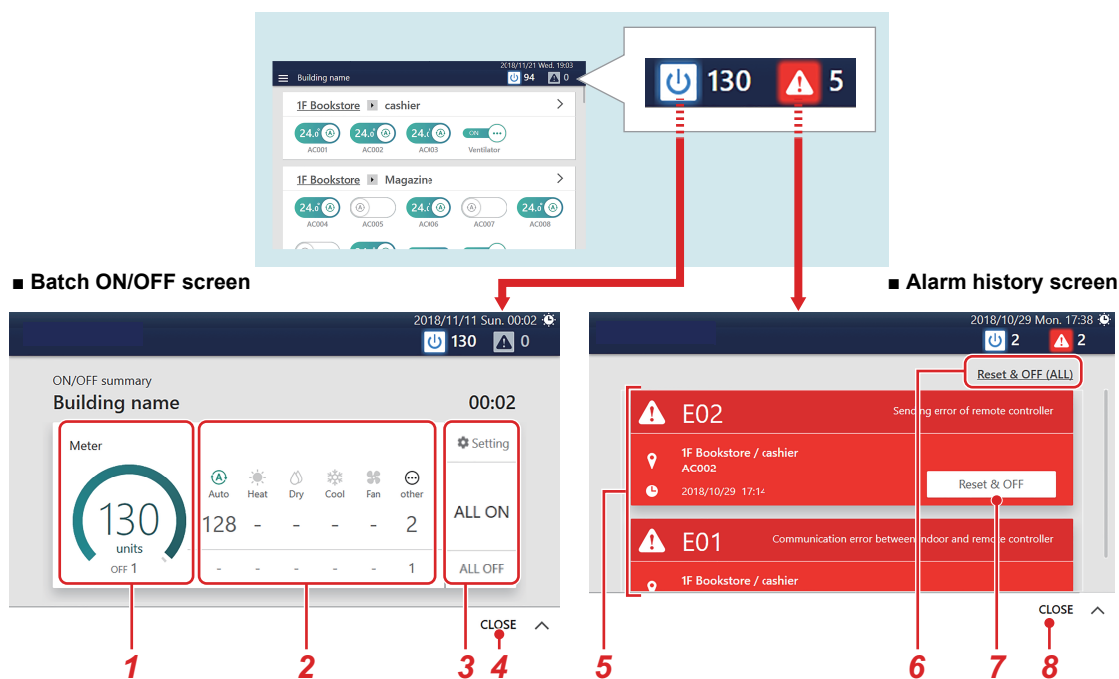
NOTE





- When setting details such as the mode or the set temperature to a schedule, refer to "Change the details of the Particular Timer setting" (P.50).
- When deleting a registered schedule, refer to "Delete the operation schedule" (P.54).

Monitor the Overall Air Conditioning System

To check the operation status of the overall air conditioning system, tap   to display the batch ON/OFF screen.

To check the alarm occurrence status, tap   to display the alarm history screen.



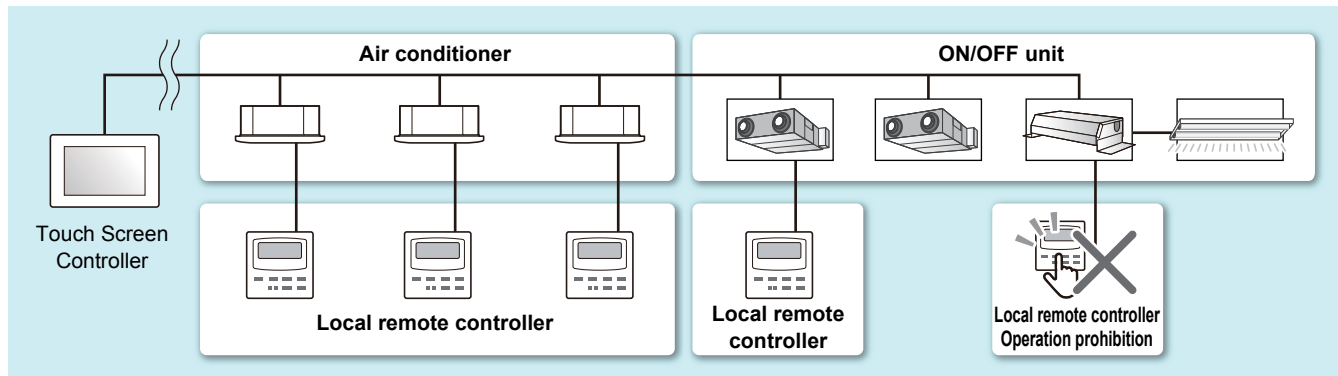
No.	Functions
1	Displays the overall number of operating units as ON/OFF meters and numerical values.
2	Displays the number of units for each operation mode. The upper row shows the number of units in operation and the lower row shows the number of units stopped. If there is ON/OFF unit, it is displayed in [Other].
3	You can change the operation status of the overall air conditioning system. (P.25) For the Option settings, see step 3 on (P.28).
4	Tap to close the batch ON/OFF screen. <div> <div>NOTE</div> You can also tap   to close. </div>
5	The alarm code, alarm content, occurrence location, and occurrence time are displayed.
6	Stop operation of all air conditioners and ON/OFF unit where alarms have occurred and erase the alarm(s). <div> <div>NOTE</div> For some ON/OFF unit, only the operation stops, and the alarm(s) are not erased. </div>
7	Stop the applicable air conditioner(s) or ON/OFF unit and erase the alarm(s). <div> <div>NOTE</div> For some ON/OFF unit, only the operation stops, and the alarm(s) are not erased. </div>
8	Tap to close the alarm history screen. <div> <div>NOTE</div> You can also tap   to close. </div>

7 Various Functions

This section explains detailed settings on the [CONTROL] tab, how to change the schedule on the [SCHEDULE] tab, and how to check the power usage on the [GRAPH] tab.

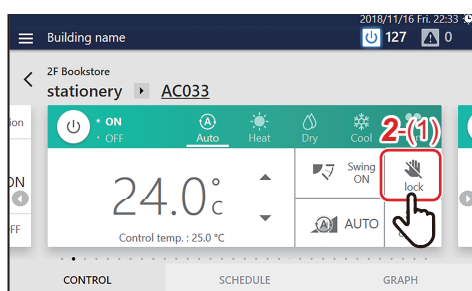
Local Remote Controller Lock

You can restrict operation of the local remote controllers that belong to each air conditioner.



- 1 Display the [CONTROL] tab of the air conditioner(s) whose setting you want to change (P.16,18)
When changing in group units, display the batch settings screen (P.28)

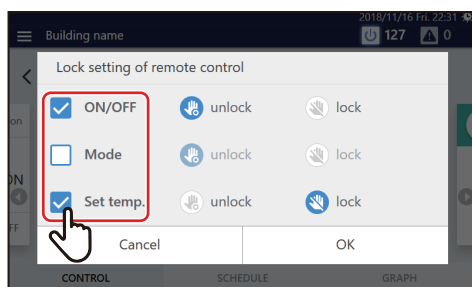
In the following procedure, the [CONTROL] tab of the individual control screen is used to explain.



- 2 Tap [2-(1)]

NOTE

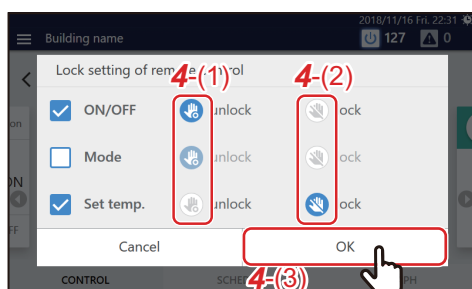
👤 appears if it is not locked. 🚫 appears if there is a locked item.



- 3 Tap the check box of the function whose setting you want to change to set it to ☒

NOTE

The display items vary depending on the model.



- 4 Select [4-(1)] or [4-(2)], then tap [4-(3)]

REQUIREMENT

If you set the check box to ☐ before tapping [4-(3)], the setting will not be applied.

• NOTE

When local remote control operation is prohibited, if there is a power failure, the local remote control prohibited status will be cancelled when the power returns.

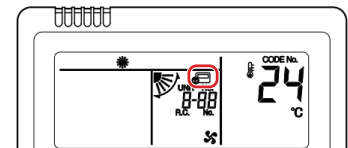
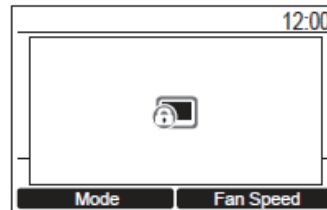
Ask service personnel if you want to continue the local remote control prohibited status after returning from a power failure.

• NOTE

If you perform an operation that is locked with the local remote controller, the lock screen or a message will be displayed.

Lock screen example
(Energy saving neo remote controller)

(Wired remote controller)



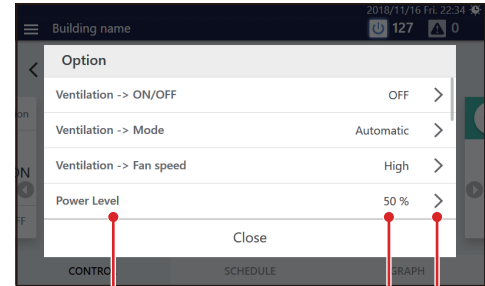
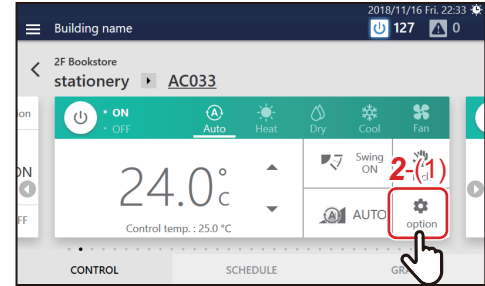
Set Operation Details

You can check the current settings of the air conditioner(s) or ON/OFF unit, and set the details of the operation method.

- 1
- Display the [CONTROL] tab of the air conditioner(s) or ON/OFF unit whose setting you want to change (P.18)
When changing in group units, display the batch settings screen (P.28)

In the following procedure, the individual control screen is used to explain.

2 Tap [2-(1)]



The option screen appears.

No.	Functions
1	The function name appears.
2	The currently set contents are displayed. If the settings are invalid, "-" is displayed.
3	When the settings can be changed, > is displayed. Tap to display the settings screen.

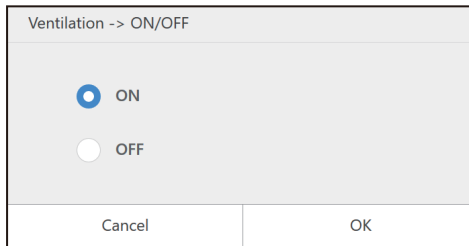
- 3
- Scroll up and down to display the items you want to set/check

4 To change, tap > to display the settings screen, then tap [OK] after changing the settings

For details on the confirmation/setting contents of each item, refer to the following. The items displayed depend on the model and state.

Function Name	Overview	Setting Items	Reference Page
Ventilation → ON/OFF	Controls the operation of the ventilator connected to the air to air heat exchanger(s) or the air conditioner(s).	ON/OFF	P.44
Ventilation → Mode	Controls the ventilation mode of the ventilator connected to the air to air heat exchanger(s) or the air conditioner(s).	Bypass/Heat exchange/Automatic	P.44
Ventilation → Fan speed	Controls the operation of the ventilator connected to the air to air heat exchanger(s) or the air conditioner(s).	High/Middle/Supply air > Exhaust air/ Exhaust air > Supply air	P.44
Ventilation → Control	24-hour ventilation/Nighttime heat purge	–	–
Power Level	You can monitor the output status of the air conditioner(s).	–	P.45
Outdoor temp.	You can monitor the temperature inside the room detected by the outdoor unit.	–	P.45
Filter sign reset	You can clear the FILTER Sign. You can clear the Hour.	OK/Cancel	P.45
Soft Cooling	You can set to Middle COOL.	ON/OFF	P.45
Energy saving ratio [%]	You can control the cooling/heating output of the air conditioner(s).	Release/Max./50/0	P.46
Forced Thermo OFF	You can release Thermo OFF.	Invalid	P.46
Return Back	You can monitor Return Back. Return Back is set by the operation schedule.	–	P.46
Power peak cut	You can monitor whether the outdoor unit is controlling demand.	–	P.46
Eco Temperature Shift	You can set whether to change (shift) the set temperature.	Shift the set temperature to the energy saving temperature	P.47
Set temp. range limit	You can change the set temperature range for each operation mode.	64°F to 84°F * It may differ depending on the region and model.	P.47

Turn ON/OFF the ventilation function (Ventilation → ON/OFF)



You can turn ON/OFF the operation of the ventilator connected to the air to air heat exchanger(s) or air conditioner(s).

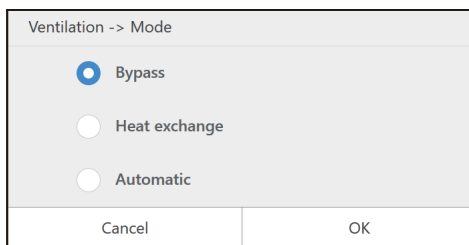
• NOTE

Displayed when a configurable model is connected.

Set Ventilation Mode (Ventilation → Mode)

You can set the ventilation mode of the ventilator connected to the air to air heat exchanger(s) or the air conditioner(s). The settings screen displayed differs depending on the setting state of [Ventilation → ON/OFF].

◆When [ON] is selected under [Ventilation → ON/OFF]



Bypass:

Outdoor air is taken into a room as it is. We recommend using this mode in the middle of spring and autumn.

Heat exchange:

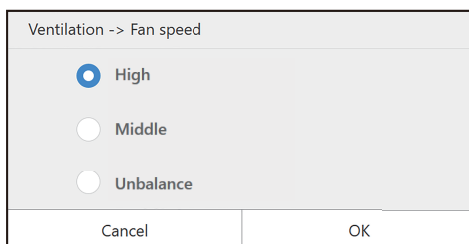
Exchanging heat between the outdoor air and return air and making the temperature and humidity of the outdoor air closer to those of the return air before supplying it. We recommend you use this mode for cooling and heating in summer and winter. Total Heat Ventilation and Bypass Ventilation are switched automatically.

Automatic:

• NOTE

- Depending on the connected model, items that cannot be set are not displayed.
- Some items may not be configurable.

Setting the ventilation fan speed (Ventilation → Fan speed)



You can set the ventilation fan speed of the ventilator connected to the air to air heat exchange unit or the air conditioner. The choices displayed depend on the model.

• NOTE

- Displayed when a configurable model is connected.
- It is displayed when [Ventilation → ON/OFF] is [ON] and setting change is possible.

* Imbalance between ventilation and exhaust varies depending on the settings of the connected model.

Check the output status of the air conditioner(s) (Power Level)

Option		
Ventilation -> Mode	Bypass	>
Ventilation -> Fan speed	High	>
Power Level	50 %	>
Outdoor temperature	26.0 °C	>
Close		

You can check how much power the air conditioner is using for operation.

• NOTE

Displayed in the case of a compatible air conditioner.

Check the indoor temperature detected by the outdoor unit (Outdoor temp.)

Option		
Ventilation -> Mode	Bypass	>
Ventilation -> Fan speed	High	>
Power Level	50 %	>
Outdoor temperature	26.0 °C	>
Close		

You can check the temperature inside the room detected by the outdoor unit.

• NOTE

- Displayed in the case of a compatible air conditioner.
- Depending on conditions such as the location of the indoor unit installation, it may differ from the actual indoor temperature.

Erase FILTER Sign (Filter sign reset)

Filter sign reset

Remaining time to cleanfilter.
Are you sure you want to reset the time?

(1)

Cancel

OK

When a device has operated for a certain period of time, a warning (FILTER Sign) is displayed to indicate that the filter should be cleaned. After filter cleaning, tap [(1)].

• NOTE

- Displayed in the case of a compatible air conditioner.
- If you set the air conditioners where a sign is displayed to [OK], the cumulative time for the sign display is set to 0.

Set Middle COOL (Soft Cooling)

Soft Cooling

☒ ON

☐ OFF

Cancel

OK

Middle COOL can be turned ON/OFF. When turned ON, the air direction is set to up, and the maximum power is restricted.

• NOTE

- Displayed when a configurable model is connected.
- The settings screen is displayed when the air conditioner is in operation and the operation mode is COOL.

Control air conditioner power (Energy saving ratio [%])

An energy saving function whereby you can operate the air conditioner with suppressed cooling/heating power.

Release: Save Mode is not performed.

Max.: Operate with the highest save rate.

50: Operate at 50% save rate.

0: Operate at 0% cooling/heating power (Thermo OFF).

• NOTE

The settings screen is displayed when a compatible air conditioner is in operation.

Release Thermo OFF (Forced Thermo OFF)

"Thermo OFF" refers to an energy saving function that controls demand to restrict the cooling/heating power of the air conditioner such that the outdoor unit compressor is stopped. When this state is reached, the air conditioner becomes a fan and cold/hot air is no longer output.

To release Thermo OFF, display the settings screen and press [OK].

• NOTE

Displayed in the case of a compatible air conditioner.

Configure and confirm the Return Back settings (Return Back)

You can configure and check the Return Back setting temperature and setting time of each operation mode that are set in the operating schedule.

• NOTE

- Displayed in the case of a compatible air conditioner.
- For information on Return Back, see "Return Back settings" (P.53).

Monitor demand control of outdoor unit (Power peak cut)

You can monitor the demand rate [%], outdoor line No., and schedule No. of the outdoor unit connected to the selected air conditioner.

Display the settings screen to check the demand status of the outdoor unit.

• NOTE

Displayed in the case of a compatible air conditioner.

Change to energy saving temperature (Eco Temperature Shift)

An energy saving function that changes (shifts) the set temperature according to the current operation mode as follows.

Operation Mode	Set Temperature Shift Width
Cool/Dry	Current set temperature +2°C shift (About +4°F)
Heat	Current set temperature -2°C shift (About -4°F)
Auto/Fan	Remain at current set temperature

• NOTE

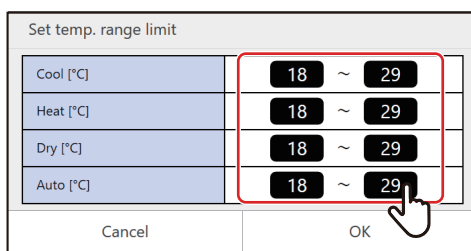
- Displayed in the case of a compatible air conditioner.
- When the Mode is set to [Heat], [Cool], or [Dry], the settings screen is displayed.

Set the temperature change range (Set temp. range limit)

You can set the set temperature range for each operation mode.

• NOTE

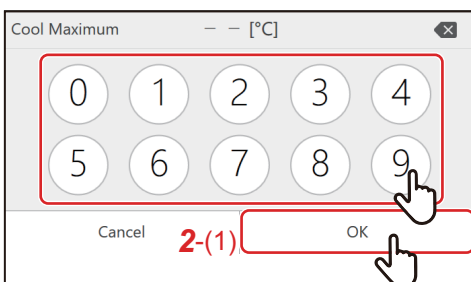
- Displayed in the case of an air conditioner. It is not displayed in the case of ON/OFF unit.
- If the current set temperature of the air conditioner is outside of the set temperature range after the change, it will be changed to the temperature within the range after the change.



1 Tap the upper/lower limit temperature you want to change

• NOTE

- Displayed in the case of a compatible air conditioner.
- Some operation modes are not displayed depending on the model.



2 Tap the number, enter the temperature, and tap [2-(1)]

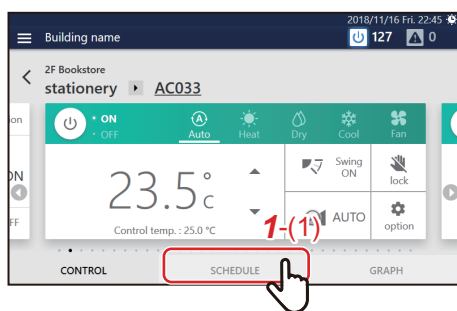
Change the Operating Schedule

The operating schedule settings can be changed from the [Menu] button, the group screen, or the individual control screen. There are two types of operating schedules: Week Schedule and Particular Timer setting. The following procedure is explained using the individual control screen.

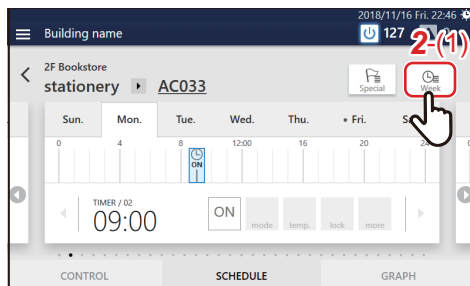
NOTE

If a day is set in both the Week Schedule and the Particular Timer setting, the Particular Timer setting applies and the Week Schedule is disabled for that day.

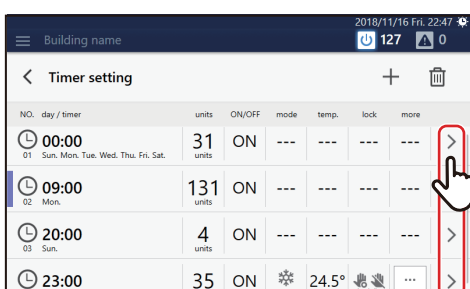
Change the details of the Week Schedule



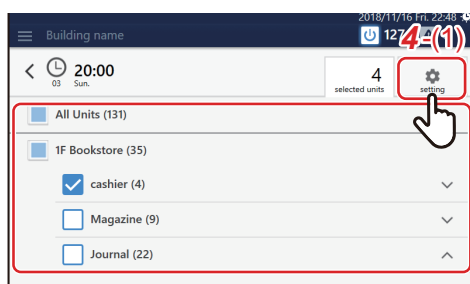
1 Tap [1-(1)] on the group screen or the individual control screen



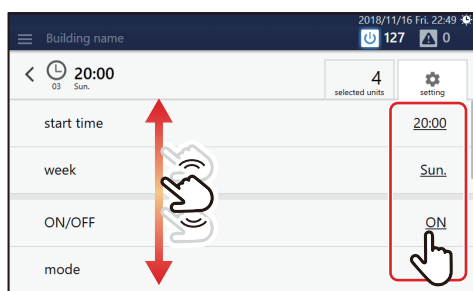
2 Tap [2-(1)]



3 Tap > of the schedule you want to modify



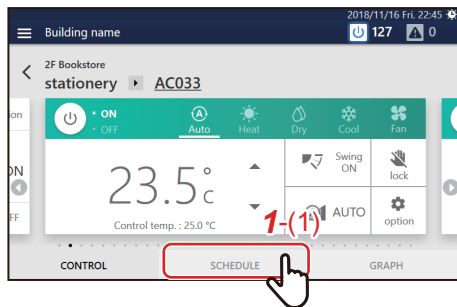
4 Modify the target air conditioner(s) or ON/OFF unit, then tap [4-(1)]



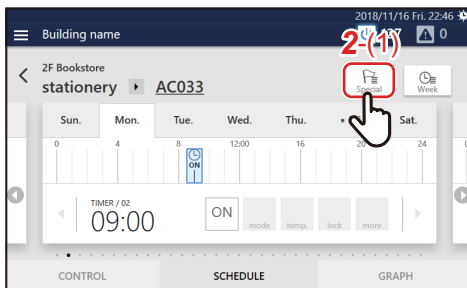
5 Scroll the screen and tap the value of the item you want to set. After changing the setting, tap [OK]

See "Setting items list" (P.52) for the items that can be configured.

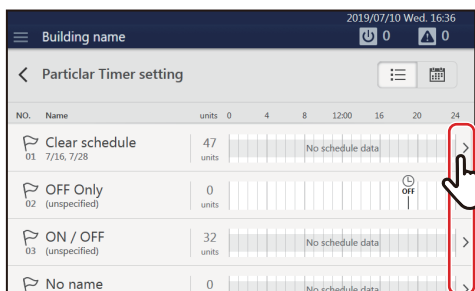
Change the details of the Particular Timer setting



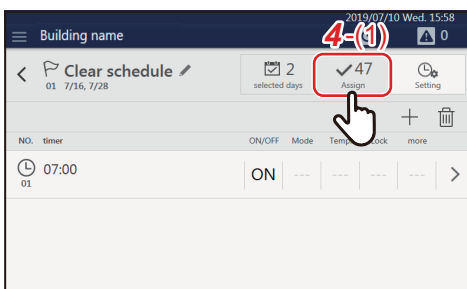
1 Tap [1-(1)] on the group screen or the individual control screen



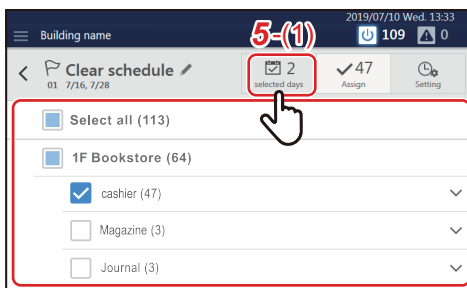
2 Tap [2-(1)]



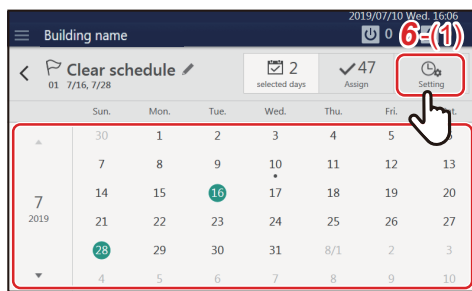
3 Tap > of the schedule you want to modify



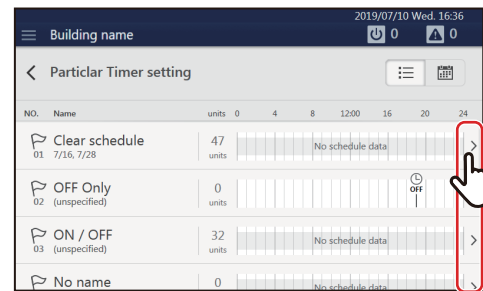
4 Tap [4-(1)] to switch to the Assign screen



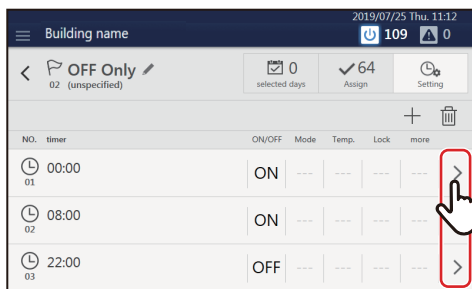
5 Modify the target air conditioner(s) or ON/OFF unit, then tap [5-(1)]



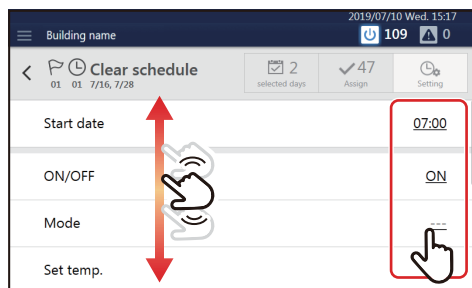
- 6** Tap the date you want to configure, modify the settings, and then tap [6-(1)]



- 7** Tap > of the schedule you want to modify

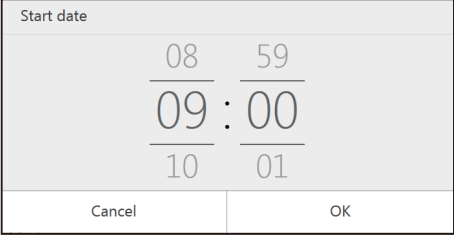
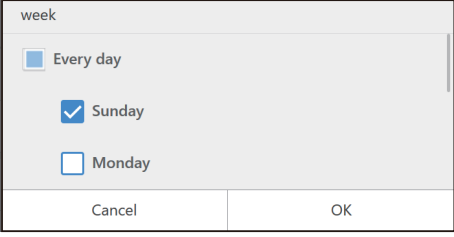
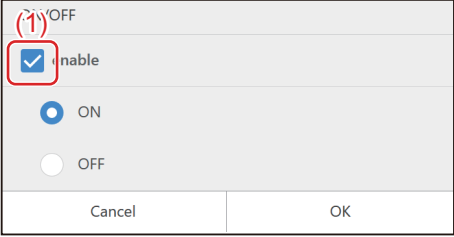
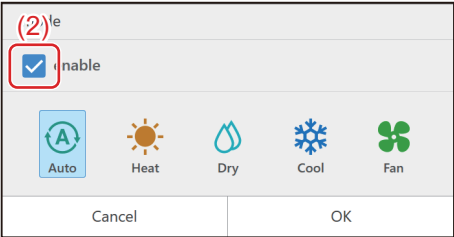
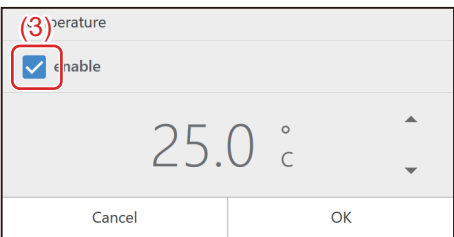


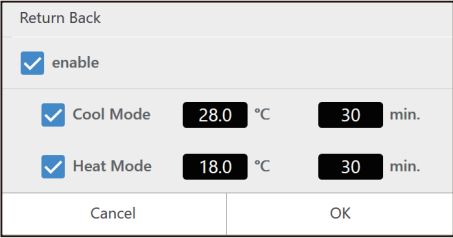
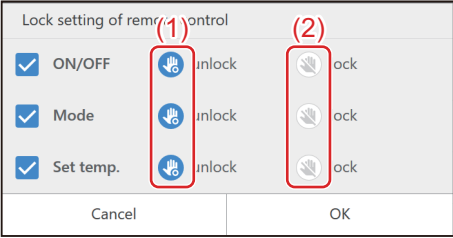
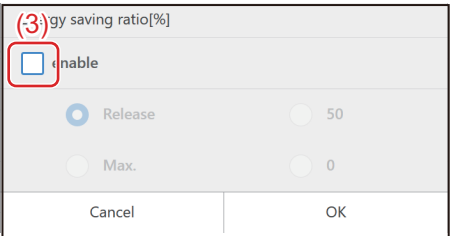
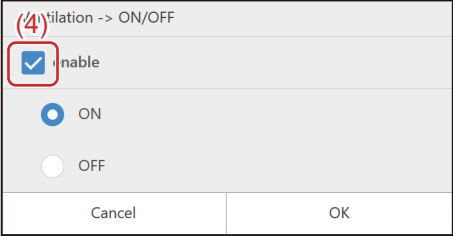
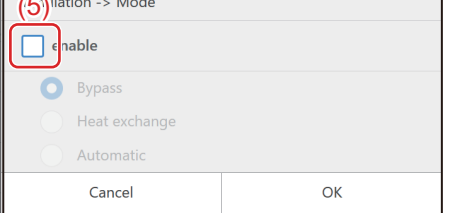
- 8** Tap > of the time you want to modify



- 9** Scroll the screen and tap the value of the item you want to set. After changing the setting, tap [OK]
See "Setting items list" (P.52) for the items that can be configured.

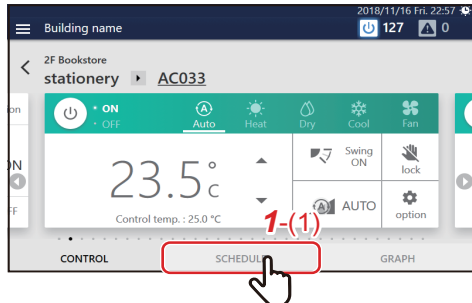
Setting items list

Setting Items	Setting Procedure
Time setting [Start date] 	Tap or flick to change the time.
Day of the week setting [week] 	Set the check box(es) of the day(s) of the week on which you want to execute the schedule to <input checked="" type="checkbox"/> . NOTE The day of the [week] setting is not displayed in Particular Timer setting.
Operation setting [ON/OFF] 	To enable the setting, set the check box of [(1)] to <input checked="" type="checkbox"/> and select a value.
Operation mode setting [Mode] 	To enable the setting, set the check box of [(2)] to <input checked="" type="checkbox"/> and select a value.
Set temperature setting [Set temp.] 	To enable the setting, set the check box of [(3)] to <input checked="" type="checkbox"/> , tap ▲ ▼, then change the set temperature.

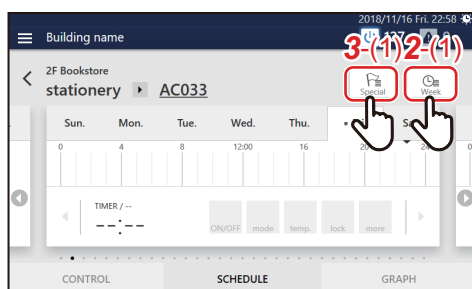
Setting Items	Setting Procedure
Return Back settings [Return Back]  <p>The screen shows 'Return Back' with an 'enable' checkbox checked. Below are two rows: 'Cool Mode' with a temperature of 28.0 °C and a time of 30 min., and 'Heat Mode' with a temperature of 18.0 °C and a time of 30 min. At the bottom are 'Cancel' and 'OK' buttons.</p>	<p>An energy saving function whereby if you temporarily change the set temperature to one which increases the load, you can automatically return to the energy saving set temperature after a certain time has elapsed. For example, if you set COOL to 82°F/30 minutes, then if the set temperature is set to below 82°F, the Unit will return to 82°F 30 minutes after the change.</p> <p>• NOTE</p> <p>Displayed in the case of a compatible air conditioner.</p>
Local operation prohibition setting [Lock setting of remote control]  <p>The screen is titled 'Lock setting of remote control'. It has three rows: 'ON/OFF', 'Mode', and 'Set temp.'. Each row has a checked 'enable' checkbox, a hand icon with a lock symbol, and the word 'unlock'. To the right of each row is a 'lock' button with a hand icon and a lock symbol. Red circles with numbers (1) and (2) are around the 'unlock' and 'lock' buttons respectively. At the bottom are 'Cancel' and 'OK' buttons.</p>	<p>Tap the check box of the function whose setting you want to change to set it to <input checked="" type="checkbox"/>, then select [(1)] or [(2)].</p>
Save operation setting [Energy saving ratio[%]]  <p>The screen is titled 'Energy saving ratio[%]'. It has an 'enable' checkbox with a red circle (3) around it. Below are two rows: 'Release' with a radio button selected and a value of 50, and 'Max.' with a radio button unselected and a value of 0. At the bottom are 'Cancel' and 'OK' buttons.</p>	<p>To enable the setting, set the check box of [(3)] to <input checked="" type="checkbox"/>. For details, see "Control air conditioner power (Energy saving ratio [%])" (P.46) .</p>
Ventilation operation setting [Ventilation -> ON/OFF]  <p>The screen is titled 'Ventilation -> ON/OFF'. It has an 'enable' checkbox with a red circle (4) around it and a checked checkbox. Below are two rows: 'ON' with a radio button selected, and 'OFF' with a radio button unselected. At the bottom are 'Cancel' and 'OK' buttons.</p>	<p>You can turn ON/OFF the operation of the ventilator connected to the air to air heat exchanger(s) or air conditioner(s). To enable the setting, set the check box of [(4)] to <input checked="" type="checkbox"/> and apply the setting.</p>
Vent. Mode [Ventilation -> Mode]  <p>The screen is titled 'Ventilation -> Mode'. It has an 'enable' checkbox with a red circle (5) around it. Below are three rows: 'Bypass' with a radio button selected, 'Heat exchange' with a radio button unselected, and 'Automatic' with a radio button unselected. At the bottom are 'Cancel' and 'OK' buttons.</p>	<p>You can set the ventilation mode of the ventilator connected to the air to air heat exchanger(s) or the air conditioner(s). To enable the setting, set the check box of [(5)] to <input checked="" type="checkbox"/> and apply the setting. For details, see "Set Ventilation Mode (Ventilation → Mode)" (P.44).</p>

Delete the operation schedule

You can delete the schedule from either the group screen or the individual control screen. In the following procedure, the individual control screen is used.

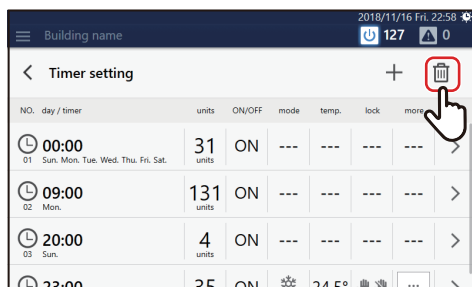
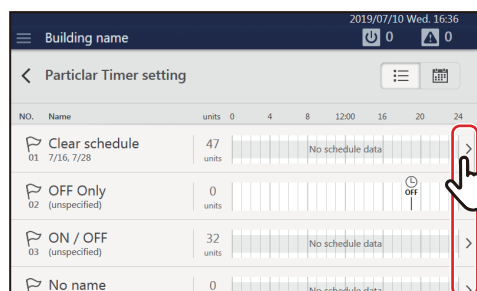


1 Tap [1-(1)] on the group screen or individual control screen

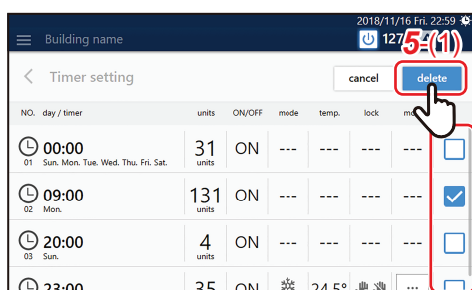


2 Tap [2-(1)] to go to step 4

3 (In case of Particular Timer setting) tap [3-(1)]
Tap > of the schedule you want to modify to go to step 4.



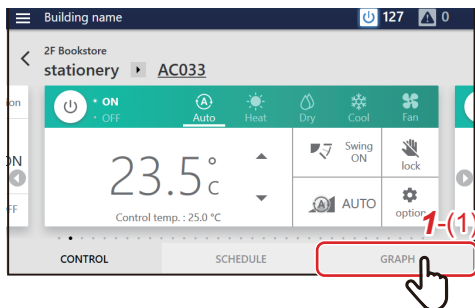
4 Tap (Some displayed items differ between the Week Schedule screen and the Particular Timer setting screen, but the procedure shown below is the same.)



5 Set the check box of the schedule you want to delete to ☒ then tap [5-(1)]

Confirm the Operation Time

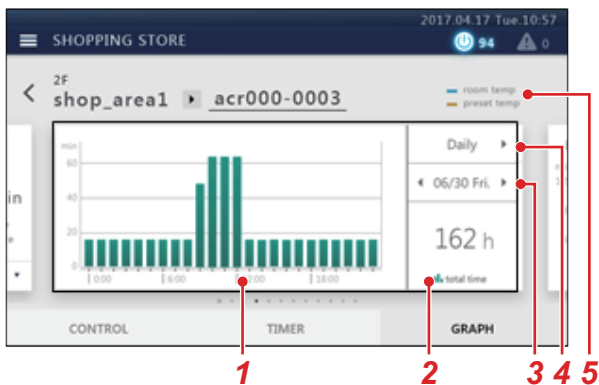
In the [GRAPH] tab of the group screen or individual control screen, you can check the operation time for each group, air conditioner or ON/OFF unit. You can find the peak period of operation and waste operation.



1 Tap [1-(1)] on the group screen or individual control screen

The operation graph appears.

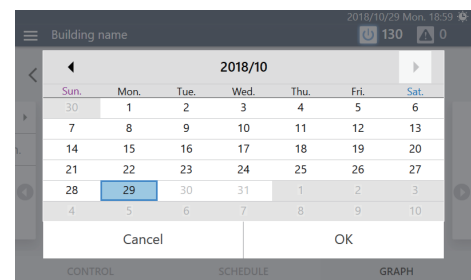
Group screen



Individual control screen



No.	Functions
1	The hourly or daily operation hours are shown as a bar graph. For the individual control screen, the outdoor temperature, room temperature, and set temperature are displayed as a line graph.
2	The operation hours for the displayed summary period is displayed.
3	Displays the currently displayed date. Tap ◀ ▶ to switch the date. Tap the centre to select the display period from the calendar screen.
4	You can change the summary unit to day or month.
5	The legend for the graph appears.



NOTE

Refer to the description of the [CONTROL] tab for other displays. (P.16, 18)

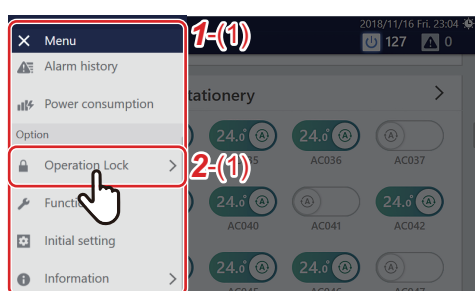
8 Administrator menu

Restrict Operation of the Touch Screen Controller (Operation Lock)

You can restrict the operation range of the Unit by locking it.

This section explains how to set and release the lock.

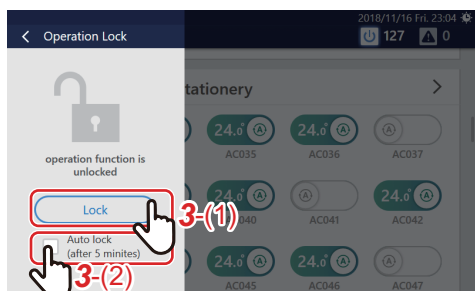
For the restriction range, see "Set the operation lock level (Operation lock)" (P.68).



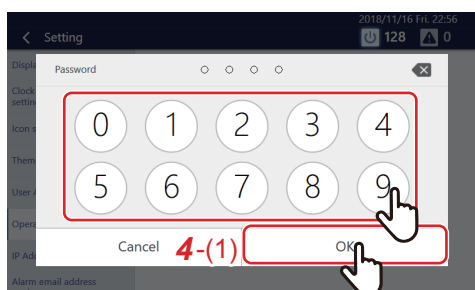
1 Tap [1-(1)] appears.

2 Tap [2-(1)]

Below, the screen for release is explained.



3 Tap [3-(1)]
To change the auto lock settings, tap [3-(2)]



4 Tap the number, enter the 4-digit password, then tap [4-(1)]

The lock is set or released.

NOTE

- The initial set password is "1048".
- There are two levels of protection when locking. (P.68)
- Tap to delete one character.

NOTE

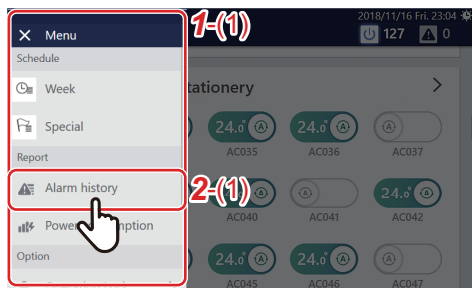
- You can change the password. (P.68) If you do not know the password, please contact your administrator.
- If you enter the wrong password three times when unlocking, password input is restricted for 30 minutes.
- When automatic lock is set, the Unit will be locked automatically after 5 minutes have passed after an operation has completed.
- When the lock is set, if you tap a function that cannot be operated, the message "operation function is locked" is displayed. Also, appears in the menu.

Confirm Alarm History (Alarm history)

You can display alarms that have occurred in a list, including currently occurring alarms. This can be used for grasping the status of the site such as investigating the cause of an alarm and the recovery status.

NOTE

The past 1000 alarms are displayed.

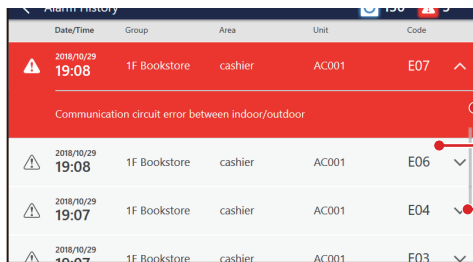


1 Tap [1-(1)] appears.

2 Tap [2-(1)]

3 The alarm history screen appears

The detected alarms are listed in chronological order.



Currently occurring alarms are displayed with a red background.

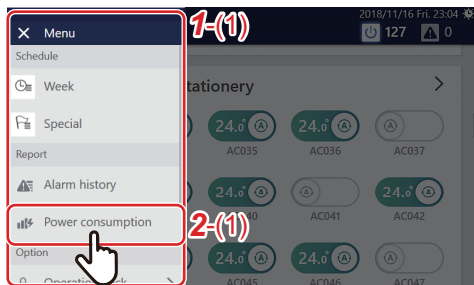
Past alarms are displayed with a white background.

Tap to display the details of the alarm contents.

Confirm the Power consumption on a Graph (Power consumption)

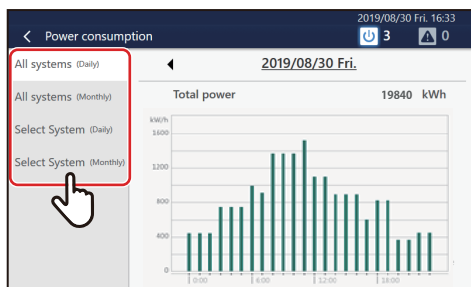
Pulse values are graphed and the electric power can be visually confirmed.

* This function can be displayed when the electric power is measured by connecting this Unit to a pulse oscillation type watt hour meter.



1 Tap [1-(1)] appears.

2 Tap [2-(1)]



3 Tap the data type to be displayed

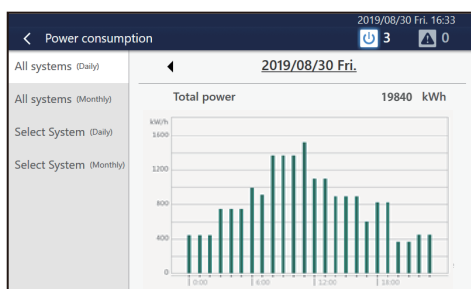
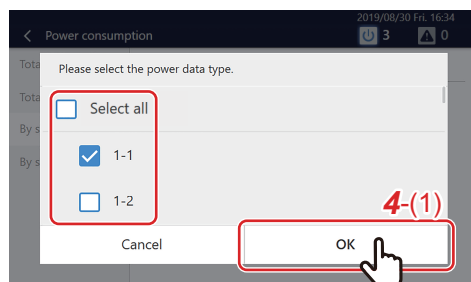
All systems (Daily): You can display the total electric power on a daily basis on a graph.

All systems (Monthly): You can display the total electric power on a monthly basis on a graph.

Select System (Daily): You can select the watt hour meter to sum and display the daily electric power on a graph.

Select System (Monthly): You can select the watt hour meter to sum and display the monthly electric power on a graph.

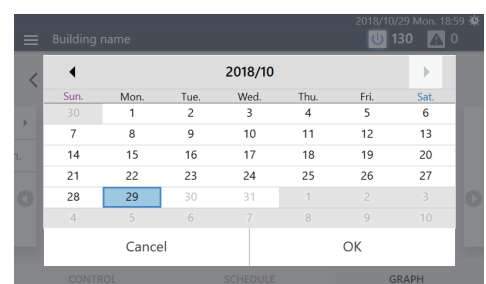
4 To select [Select System(Daily)] or [Select System(Monthly)], set the check box of the watt hour meter to sum to and tap [4-(1)]



An electric power graph is displayed.

NOTE

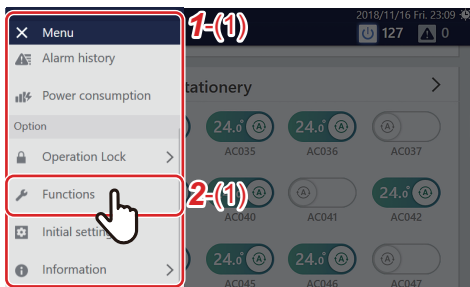
Tap to change the summary period to display. You can also tap the displayed date to display the calendar and change the summary period.



[Functions] Menu Settings

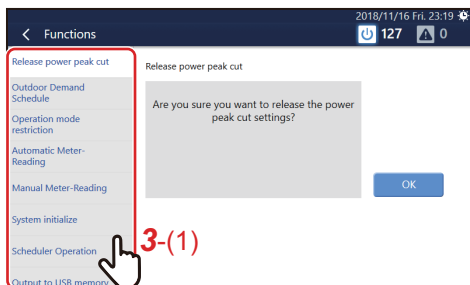
On the [Functions] menu, demand control of outdoor units and summation of data for power allocation can be performed.

How to display the [Functions] menu



1 Tap [1-(1)] appears.

2 Tap [2-(1)] [3-(1)] appears.



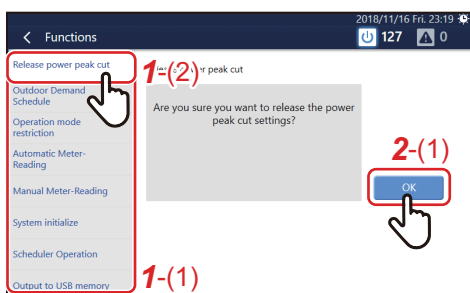
3 Tap the item you want to set with [3-(1)]

The settings screen of the selected item appears on the right.

For details on the setting contents of each item, refer to the following.

- Release power peak cut (P.59)
- Power peak cut schedule (P.60)
- Operation mode restriction (P.62)
- Automatic Meter-Reading (P.77)
- Manual Meter-Reading (P.78)
- System reboot (P.62)
- Scheduler Operation (P.63)
- Output to USB memory (P.63)

Release demand control of outdoor unit (Release power peak cut)



1 Tap [1-(2)] with [1-(1)]

2 Tap [2-(1)]

Outdoor demand set for all outdoor units is released.

NOTE

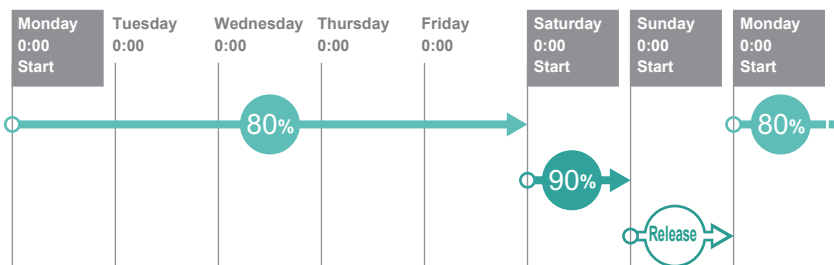
- Outdoor demand can be set by the "Power peak cut schedule". (P.60)
Outdoor demand may function with digital input set locally. In this case it can also be released.
- When you release the Power peak cut, the setting value of [Power peak cut] on the option screen changes to the release state. (P.46)

Set demand control schedule of outdoor unit (Power peak cut schedule)

The demand function of the outdoor unit can be managed with the schedule to 90 to 0% according to the peak time zone.

Setting example:

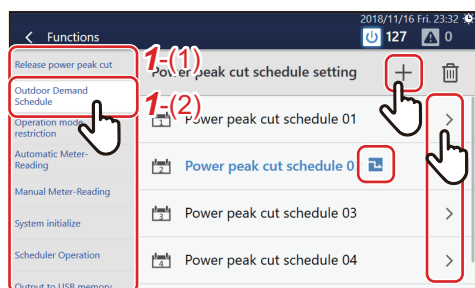
When "80%" at midnight on Monday,
"90%" at midnight on Saturday,
and "Release" at midnight on Sunday is set:



NOTE

- Cannot be set when the Outdoor Demand Schedule is disabled. Please enable the Outdoor Demand Schedule. (P.63)
- Demand levels that can be set are "Release", "90%", "80%", "70%", "60%" and "0%".
- Up to 10 schedules can be created.

Add/change Power peak cut schedule

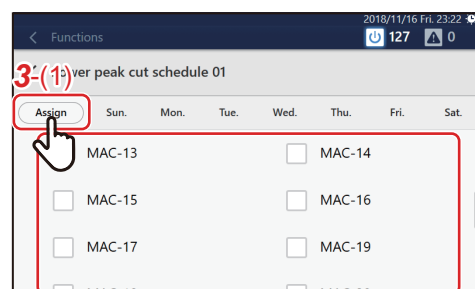


1 Tap [1-(2)] with [1-(1)] (P.59)

2 Tap **+** to register new
To change, tap **>** of the schedule you want to change

NOTE

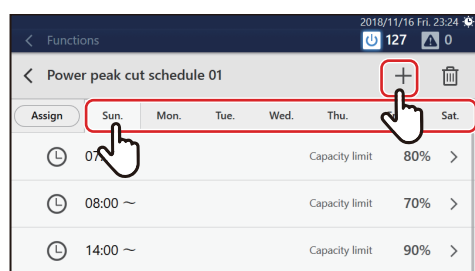
When the demand function is functioning at the current time, appears.



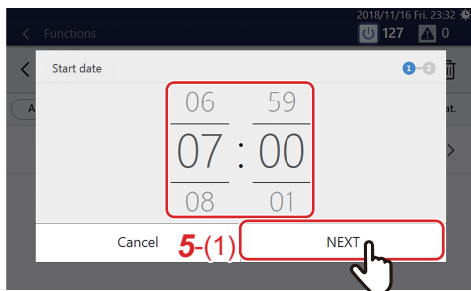
3 Tap [3-(1)] and set the check box of the outdoor unit for setting the Power peak cut schedule to ☒

NOTE

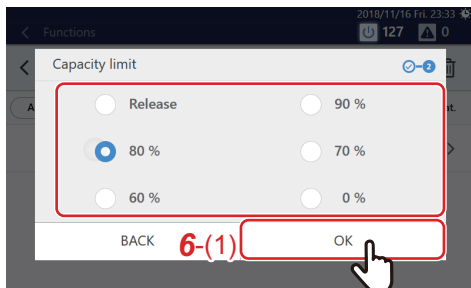
The schedule number () will be displayed on outdoor units that have already been scheduled. Cannot be selected.



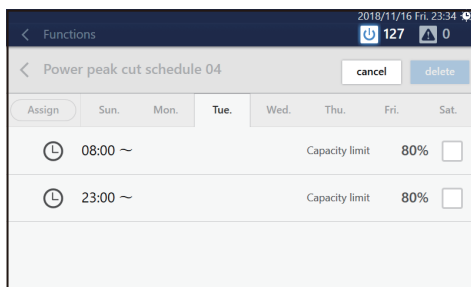
4 Tap the day of the week tab to start the schedule, then tap **+**
To change an already registered schedule, tap **>** on the corresponding schedule



5 Tap or flick to set the start time and tap [5-(1)]



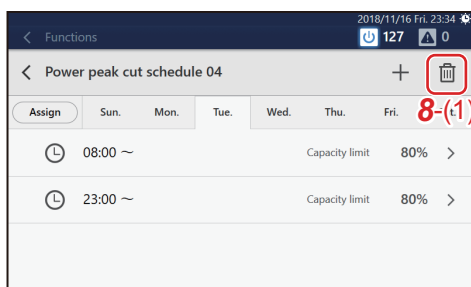
6 Select the outdoor demand level and tap [6-(1)] to add a demand schedule



7 To add a schedule such as change/release of demand level, repeat steps 4 to 6

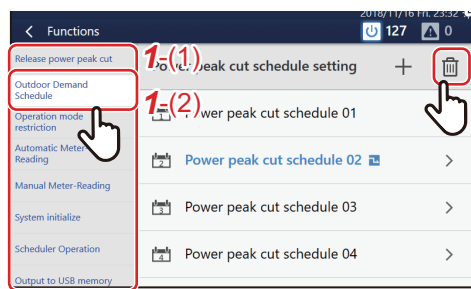
NOTE

- The outdoor demand initiated by the schedule is released in the following cases.
 - When demand release is set in the schedule
 - When demand control of the outdoor unit has been released (P.59)
- Demand control continues even across days.
 Example: When the demand rate is set to 0% on Monday at 13:00 and release is set at 6:00 on Tuesday
 → The demand rate is set to 0% from Monday at 13:00 to Tuesday at 6:00 and demand release occurs at 6:00 on Tuesday



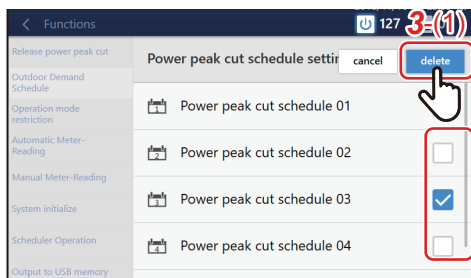
8 Tap [8-(1)] and set the check box of the demand setting you want to delete to ☒, then tap "delete"

Delete an Power peak cut schedule



1 Tap [1-(2)] with [1-(1)] (P.59)

2 Tap

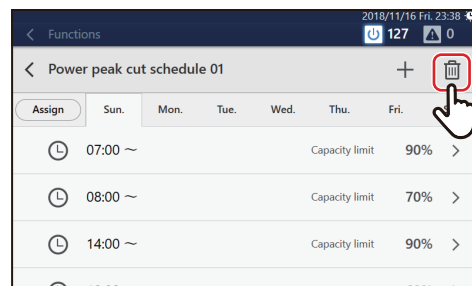


3 Set the check box of the schedule you want to delete to ☒, then tap [3-(1)]

The selected schedule will be deleted.

NOTE

Also, when deleting a registered time, tap and operate similarly.



Restrict operation mode (Operation mode restriction)

When using an outdoor unit that cannot operate cooling and heating at the same time, you can restrict its operation mode so that it can only be set for either cooling or heating.

1 Tap [Operation mode restriction] in the [Functions] menu (P.59)

2 Select the operation mode and tap [OK]

NOTE

- Settings are reflected in all outdoor units.
- Even with restriction, the operation mode of the [CONTROL] tab can be selected. When a restricted operation mode is selected, the Thermo OFF state is set.

Restart the Unit (System reboot)

You can restart the Unit if its operation becomes unstable.
The schedule is not executed during restart.

1 Tap [System reboot] in the [Functions] menu (P.59)

2 Tap [OK]

Set the operating schedule or the power peak cut schedule (Scheduler Operation)

You can disable registered Operation Schedules and Power peak cut schedules so that they do not operate.

- 1 Tap [Scheduler Operation] in the [Functions] menu (P.59)
- 2 Set the check box to ☒ if you do not want to operate each schedule, or set the check box to ☐ to operate them, then tap [OK]

Output data to a USB memory stick (Output to USB memory)

You can output monthly report/daily report files for power allocation, alarm files, or setting files to a USB memory stick.

- 1 Connect the USB memory stick to the slot in the Unit
- 2 Tap [Output to USB memory] in the [Functions] menu (P.59)
- 3 Tap [OK]

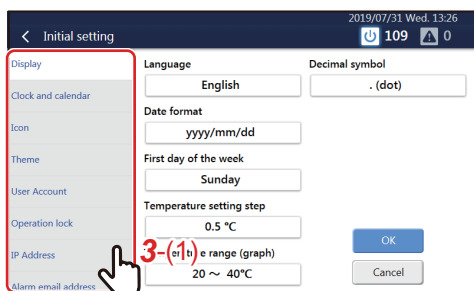
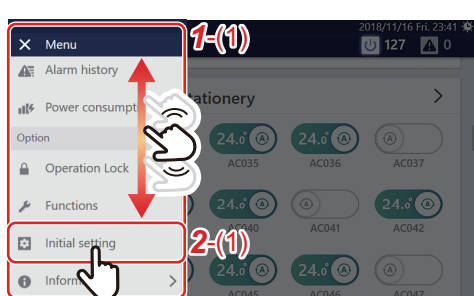
NOTE

If the USB memory stick is not connected, [OK] will not be enabled.

[Initial setting] Menu Settings

On the [Initial setting] menu, you can change the Unit screen display and the settings for remote operation, etc.

How to display the [Initial setting] menu



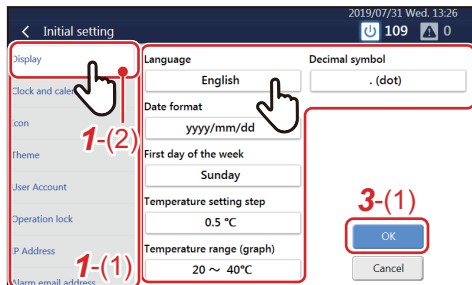
- 1 Tap [1-(1)] appears.
- 2 Scroll through the menu list and tap [2-(1)] [3-(1)] appears.
- 3 Tap the item you want to set with [3-(1)]
The settings screen of the selected item appears on the right.

For details on the setting contents of each item, refer to the following.

- Display Settings (P.64)
- Clock and calendar setting (P.64)
- Icon settings (P.65)
- Theme Settings (P.65)
- User Account Setting (P.66)
- Operation lock Setting (P.68)
- IP Address Setting (P.69)
- Alarm email address setting (P.70)
- Indoor unit area setting (P.71)
- Indoor unit name setting (P.72)
- Area name setting (P.72)
- Backlight setting (P.73)

Set the screen display (Display)

You can change the display settings of the screen, such as language and date display format.



1 Tap [1-(2)] with [1-(1)] (P.63)

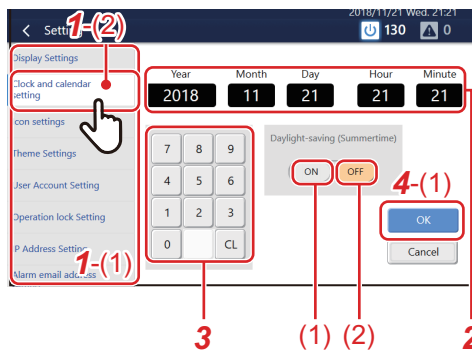
2 Tap the item you want to change

- Language: You can change the display language of the screen.
- Date format: You can change the format of the date displayed in the upper right of the screen.
- First day of the week: You can change the first day of the week displayed on the calendar or schedule to Sunday or Monday.
- Temperature setting step: You can change the temperature setting step to 0.5°C or 1°C. However, it cannot be changed if the display unit is Fahrenheit.
- Temperature range (graph): You can change the temperature range displayed on the [GRAPH] tab.
- Decimal symbol: You can change the decimal symbol displayed on the screen between [. (dot)] and [, (comma)].

3 Select the value you want to change, then tap [3-(1)]

Set the current date and time (Clock and calendar)

You can change the date and time displayed in the upper right of the screen.



1 Tap [1-(2)] with [1-(1)] (P.63)


2 Tap the item you want to change

The background of the selected item changes to white.

3 Tap the numeric keypad to enter a number

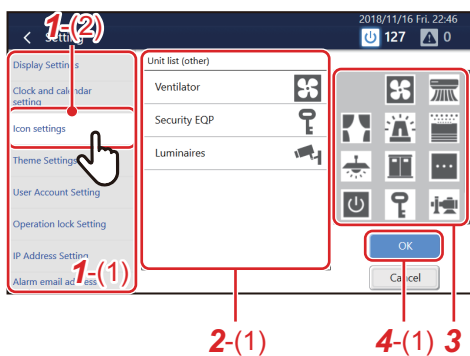
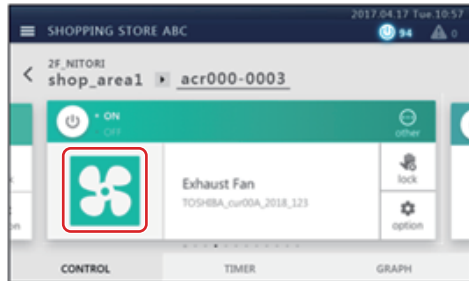
4 Tap [4-(1)]

NOTE

You can set daylight saving time with [Daylight-saving (Summertime)]. When set to [(1)], the time moves one hour forward, and when set to [(2)], it moves one hour back. While daylight saving time is set,  appears in the upper right corner of the screen.

Set icons of devices other than air conditioners (Icon)

You can display icons of each device on the [CONTROL] tab of devices other than air conditioners such as ventilation fan or lighting.



- 1** Tap [1-(2)] with [1-(1)] (P.63)
- 2** Tap the device you want to set with [2-(1)]
- 3** Tap the icon you want to set in the icon list
The selected icon is displayed in [2-(1)].
- 4** Tap [4-(1)]

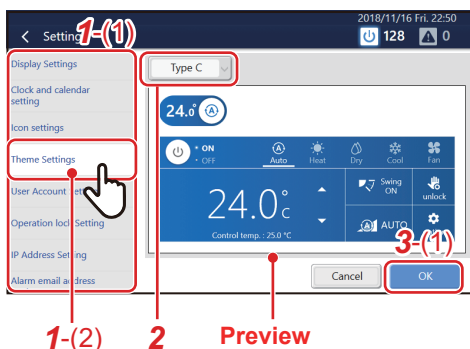
NOTE

- To delete a set icon, select the device with [2-(1)] and then tap the space at the top left of the icon list.
- The following icons can be set:

	Ventilation fan/Circulator		Room air conditioner		Curtain		Alarm		Humidifier/Dehumidifier		Lighting
	Cubicle		Water storage tank		General switch		Security		Pump		Camera

Set the screen theme (Theme)

You can set the theme of the home screen and the details/control screen.



- 1** Tap [1-(2)] with [1-(1)] (P.63)
- 2** Tap the drop-down menu and select a theme
The selected theme appears in the preview. Operate the switch or tap the power supply or operation mode button to check the display after the change.
- 3** Tap [3-(1)]

Set an account for remote operation (User Account)

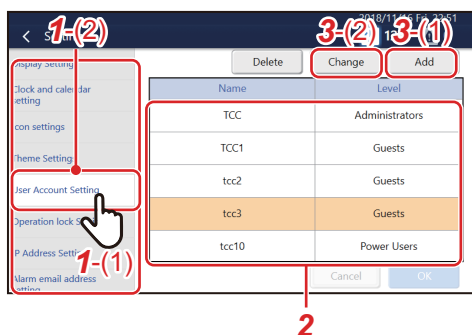
You can set a user account to operate the Unit remotely.

* Remote operation can be used when the Unit is connected via LAN to a PC on which the Remote Control Software is installed.

NOTE

- 128 users can be registered.
- Up to 16 users can log in at the same time.
- At least one user must be registered.

Add/change user account



1 Tap [1-(2)] with [1-(1)] (P.63)

2 To change, tap the row you want to change in the list

NOTE

The following users are registered in advance.

You can also change/delete users.

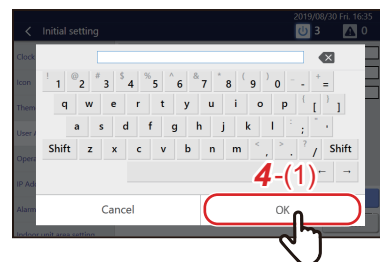
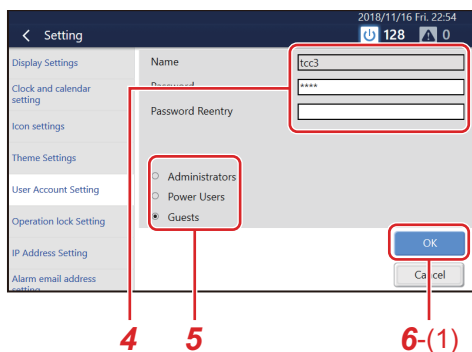
Name: TCC
Password: TCC
Level: Administrators

3 Tap [3-(1)] or [3-(2)]


In the following procedure, the screen in the case of addition is used to explain.

4 Set Name (only when adding) and password

Tap the entry field to display the keyboard. After entering the characters, tap [4-(1)].



NOTE

- Tap [Shift] to toggle between upper case letters and lower case letters, and numbers and symbols.
- Tap  to delete one character.

5 Set level

Administrators : All functions can be used.

Power Users : The following functions cannot be used.

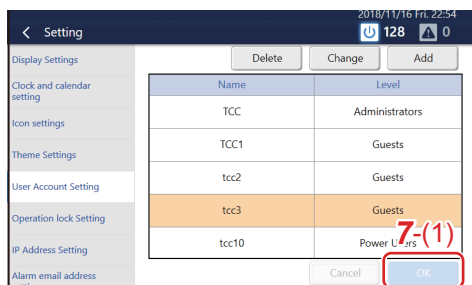
- Confirm/change the operation schedule
- [Menu] > Functions
- [Menu] > Initial setting

Guests : Only the operation status can be confirmed. The settings cannot be changed.

NOTE

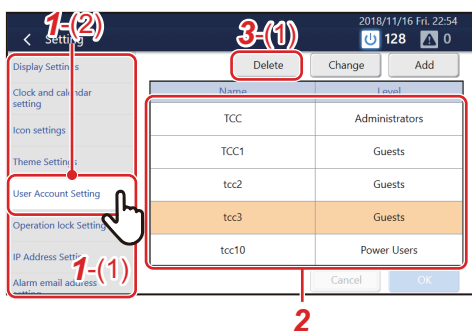
For details on the functions that can be used for each level, see "List by Lock Level/Level" (P.84).

6 Tap [6-(1)]



7 Tap [7-(1)]

Delete a user account

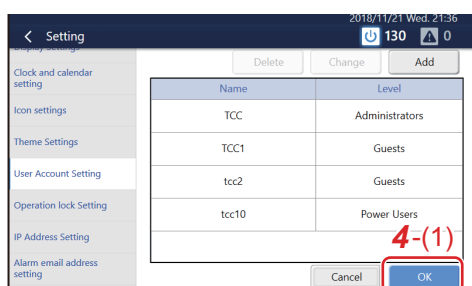


1 Tap [1-(2)] with [1-(1)] (P.63)

2 Tap the row you want to delete

3 Tap [3-(1)]

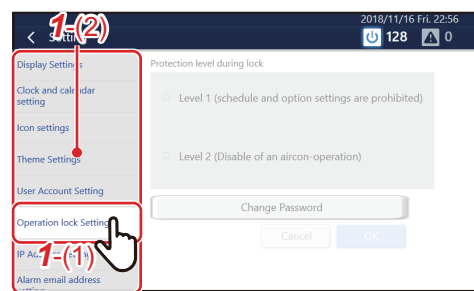
It will be deleted from the list.



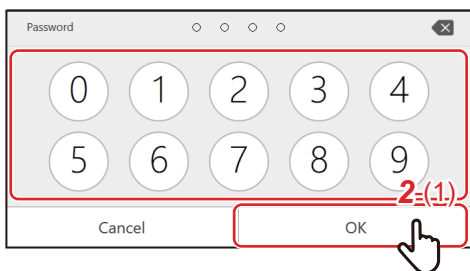
4 Tap [4-(1)]

Deletion is confirmed.

Set the operation lock level (Operation lock)



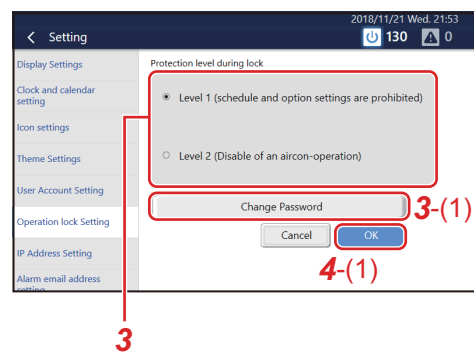
1 Tap [1-(2)] with [1-(1)] (P.63)



2 Enter the password and tap [2-(1)]

NOTE

The factory default setting password is "1048".



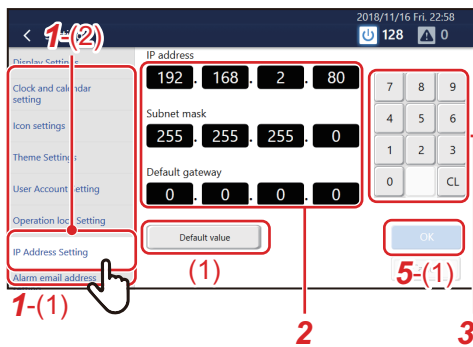
3 Select the protection level during lock

NOTE

You can change the password that sets the operation lock. Tap [3-(1)] to display the change password input screen. Enter the changed password, tap [OK], re-enter it on the re-entry screen, then tap [OK]. 4-digit passwords can be set.

4 Tap [4-(1)]

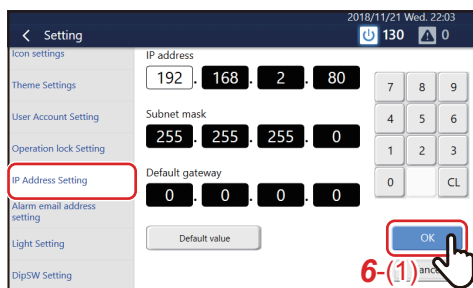
Set the IP address of the Touch Screen Controller (IP Address)



- 1** Tap [1-(2)] with [1-(1)] (P.63)
- 2** Tap the value you want to change
The background of the selected item changes to white.
- 3** Tap the numeric keypad to enter a number
- 4** If there are other values you want to change, repeat steps 2 and 3
- 5** Tap [5-(1)]
The IP address is reset.

NOTE

- The initial setting is as follows:
IP address: 192.168.2.80
Subnet mask: 255.255.255.0
Default gateway: 0.0.0.0
- To return a changed value to the specified value, tap [(1)]. Tap [OK] on the confirmation screen to reset the IP address.



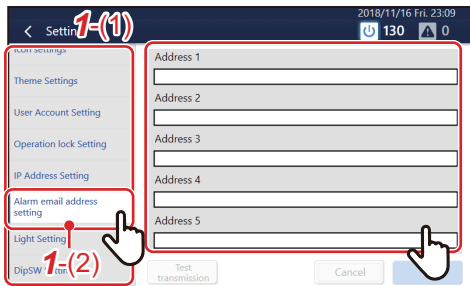
- 6** Tap [6-(1)]
The Unit restarts.

Set alarm email destination (Alarm email address)

You can set the email address to send email to when an alarm occurs.

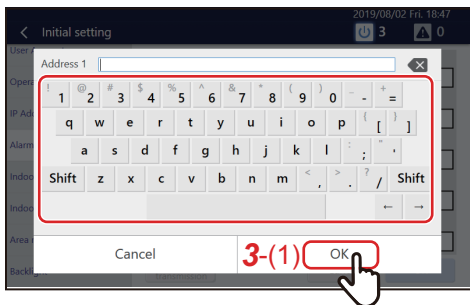
NOTE

Up to five email addresses can be set.




1 Tap [1-(2)] with [1-(1)] (P.63)

2 Tap the address field to register



3 Enter the email address on the keyboard, then tap [3-(1)]

NOTE

- Tap [Shift] to toggle between upper case letters and lower case letters, and numbers and symbols.
- Tap  to delete one character.

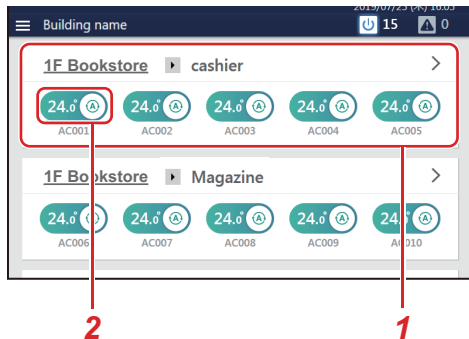
4 Tap [OK]

NOTE

To test-send to the registered email address, tap [Test transmission], which displays after you tap [OK].

Change the area set for an indoor unit (Indoor unit area setting)

In [Indoor unit area setting], you can move the indoor unit A in area X to area Y.



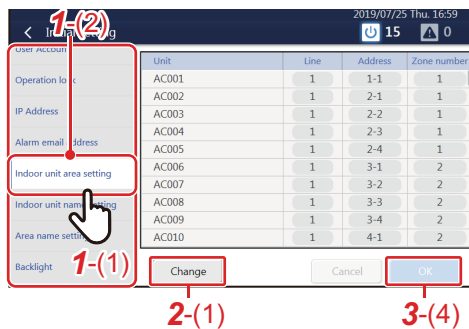
NOTE

- [1] All areas. The area numbers, such as area 1 and area 2, are allocated automatically in the upper section of the home screen.
- [2] Each indoor unit in the area.

The procedure below is used as an example to explain how to move the indoor unit (AC001) set in area 1 to area 2.

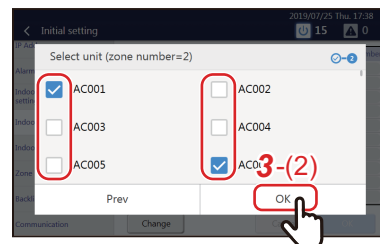
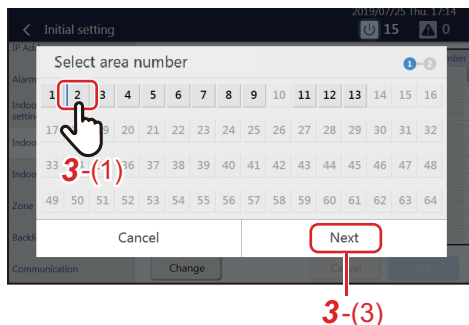
1 Tap [1-(2)] in [1-(1)] (P.63)

2 Tap [2-(1)]

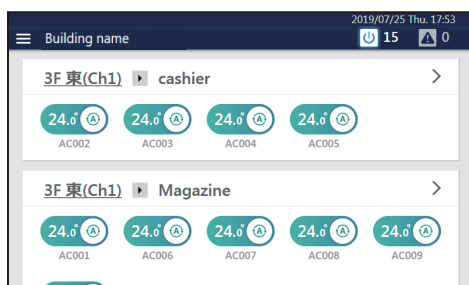


3 Tap [3-(1)]

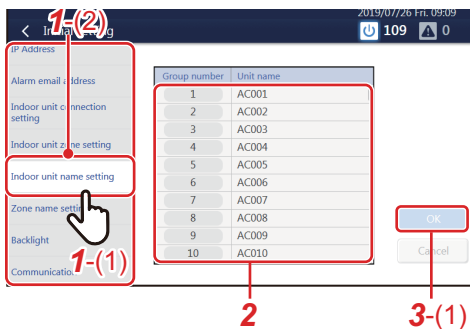
Set the check box of the indoor unit (AC001) you want to move to area 2 to ☒, and then tap [3-(2)], [3-(3)], and [3-(4)].



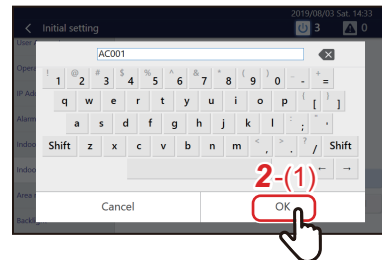
The indoor unit (AC001) is moved to area 2.




Set the name of an indoor unit (Indoor unit name setting)



- 1 Tap [1-(2)] in [1-(1)] (P.63)
- 2 Tap the name you want to change in the list
A keyboard is displayed. Enter the name and then tap [2-(1)].

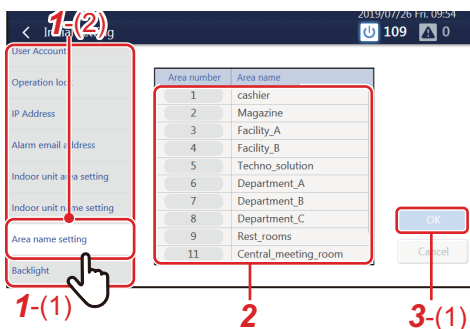


NOTE

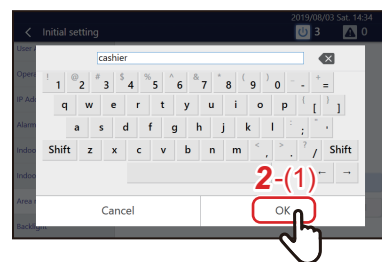
- Tap [Shift] to toggle between upper case letters and lower case letters, and numbers and symbols.
- Tap  to delete one character.

3 Tap [3-(1)]


Set the area name (Area name setting)



- 1 Tap [1-(2)] in [1-(1)] (P.63)
- 2 Tap the name you want to change in the list
A keyboard is displayed. Enter the name and then tap [2-(1)].



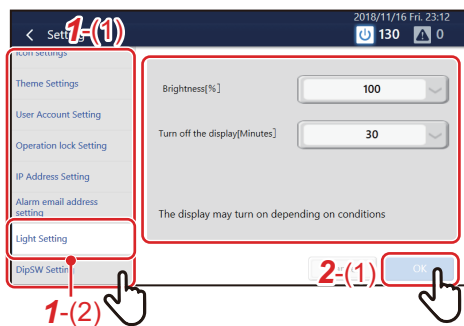
NOTE

- Tap [Shift] to toggle between upper case letters and lower case letters, and numbers and symbols.
- Tap  to delete one character.

3 Tap [3-(1)]

Set the screen brightness (Backlight)

You can set the brightness of the screen and the duration after the end of the operation. (30, 60, 360, or 720 minutes later)



1 Tap [1-(2)] with [1-(1)] (P.63)

2 Select the brightness and tap [2-(1)]

9 Remote monitoring using a PC

You can monitor and control the Unit by accessing it from a PC. This section explains the system diagram and the operating environment. For settings, etc., see "Settings for Remote Monitoring with a PC" (P.21).

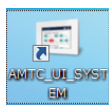
● NOTE

Some functions cannot be used from a PC. For details, please see "List by Lock Level/Level" (P.84).

Log in to Remote Control Software

● NOTE

Up to 16 users can log in at the same time.

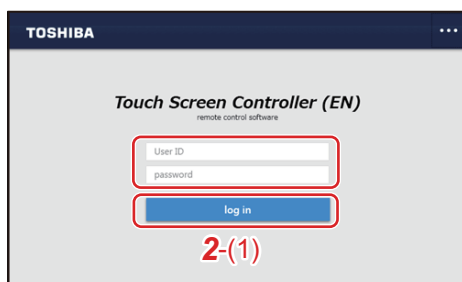


1 Double-click "AMTC_UI_****" on the desktop

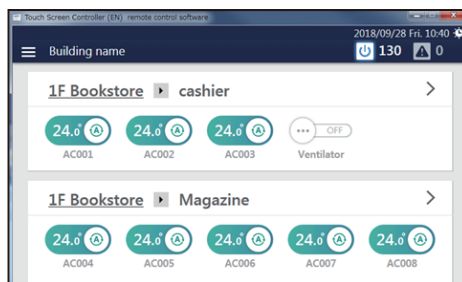
2 Enter [User ID] [password], then click [2-(1)]

User ID/password:

Use the user account set up in step **1** of "Unit settings" (P.22).

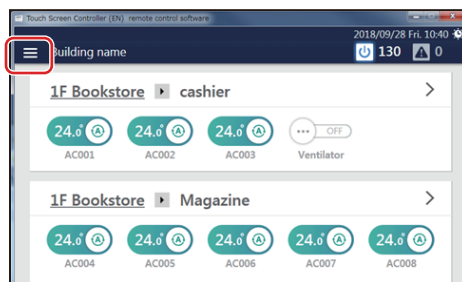


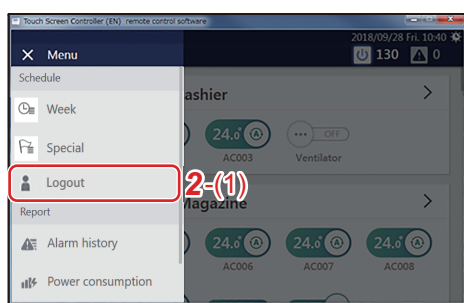
The Remote Control Software home screen is displayed.



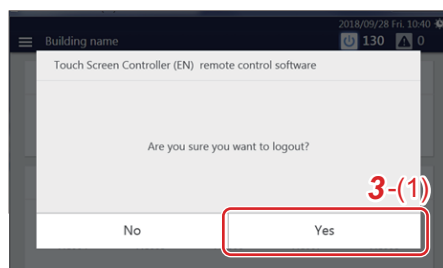
Log out from Remote Control Software

1 Click





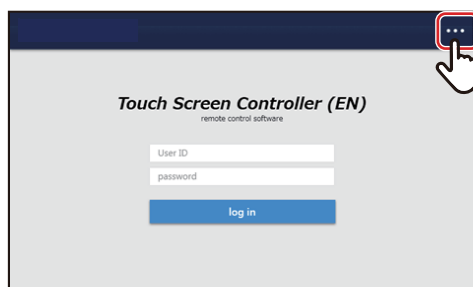
2 Click [2-(1)]



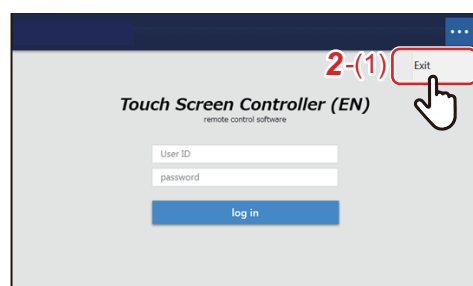
3 Click [3-(1)]

You are logged out from the Remote Control Software.

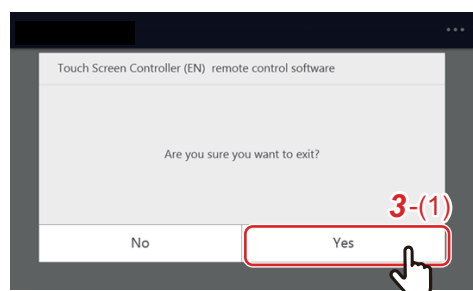
Exit Remote Control Software



1 Tap [1]



2 Tap [2-(1)]



3 Tap [3-(1)]

Exit the Remote Control Software.

10 Power allocation

Electric Power Allocation System that can be Used with this Unit

In normal houses, a contract is made with the electric power company for each house, but in buildings such as offices and shops, a contract is made between the building owner and the electric power company, and the building owner pays the total electricity bill. Therefore, in some cases the building owner allocates the electricity fee that they paid in bulk to each tenant and invoices for a fee.

With this Unit, you can record the operating time of the air conditioner(s) and the ON/OFF unit, and distribute the electric power of each device based on that data.

In addition, by using the Report Creation Software, you can easily summarize the operation results in a report format and calculate the billing amount.

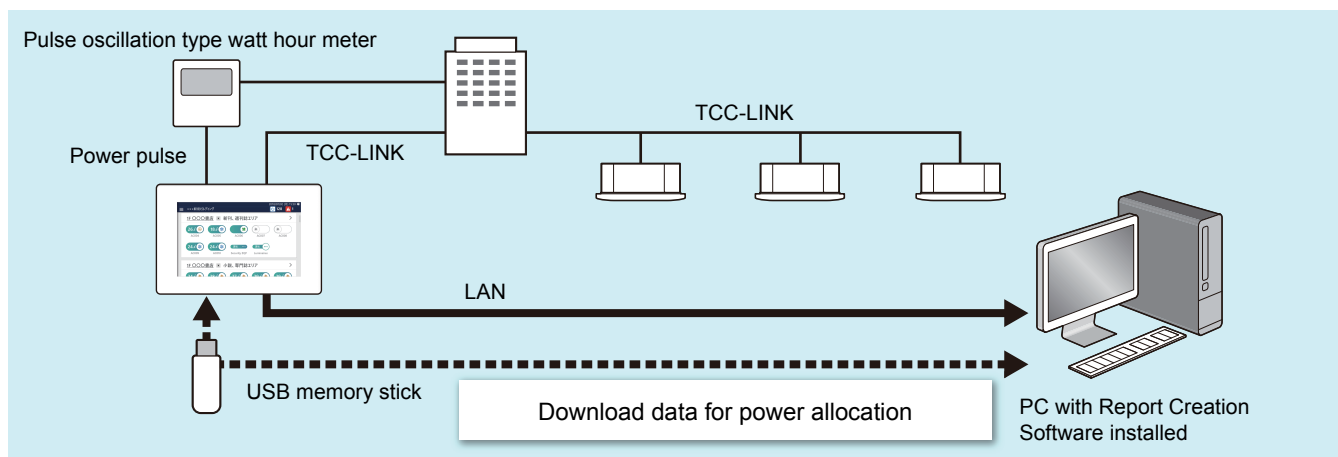
Example report

A	B	C	D	E	F	G	H	I	J
1	東芝ビル								
2		空調機器 電力振分結果 月報 [A] 一覧表							
3	検針期間								
4	開始日	2013/09/11							
5	終了日	2013/09/20							
6									
7									
8									
9									
10	番号	フロア	テナント	エリア	ユニット	運転時間[h]	電力量[kWh]	課金金額[円]	税込金額[円]
11	1 FLOOR-1	TENANT-A	** 名称なし **	unit1-1-1		200.0	774.72	14395	15115
12	2 FLOOR-1	TENANT-A	** 名称なし **	unit1-1-2		133.3	1622.70	28648	30079
13	3 FLOOR-1	TENANT-A	area2	unit1-1-3		200.0	1279.45	23782	24971
14	4 ** 除外 **	TENANT-B	** 除外 **	** 除外 **		133.3	** 除外 **	** 除外 **	** 除外 **
15	5 FLOOR-1	TENANT-B	area3	unit1-2-2		133.3	1309.01	21806	22886
16	6 FLOOR-1	TENANT-B	area3	unit1-2-3		200.0	1545.07	32795	34372
17	7 FLOOR-1	TENANT-C	area1	unit1-1-1		133.3	858.37	14300	15015
18	8 FLOOR-1	TENANT-C	area1	unit1-1-2		200.0	1287.55	27278	28643
19				合計		1333.3	8675.9	162946.4	171093.3
20									
21									
22									
23									
24									
25									
26									
27									
28									

CAUTION

This system calculates the allocation of the power by load ratio estimated for each air conditioner. The result may differ from the actual power consumed. In addition, the result is not calculated based on the Measurement Act and cannot be used officially.

System diagram



Power Allocation System

In order to perform power allocation, it is necessary to sum the data for power allocation. Summing may be done by automatic meter-reading or manual meter-reading.

Set the summation date of the power allocation data (Automatic Meter-Reading)

You can set the date for automatic meter-reading of the power allocation data. Automatic meter-reading is carried out on the set date, and data from the previous meter-reading date to the set date is output as a monthly report file.

It can be set according to the convenience of the building owner or tenant. For example, it is possible to sum over a period as follows.

- Sum to the end of the month each month (Set the automatic meter-reading day to the end of the month and sum from the 1st to the end of the month)
- Sum to the 15th of every month (Set the 15th of the month as the automatic meter-reading day and sum from the 16th of the previous month to the 15th of the current month)
- Sum by dividing each month into two (Set the 15th of the month and the end of the month as the automatic meter-reading days and sum twice, from the 1st to the 15th and from the 16th to the end of the month)
- Sum two months (Set the end of every other month as the meter-reading day and sum from the 1st of the preceding month to the end of the current month)

By setting automatic meter-reading, you can use the system for monthly electricity billing.

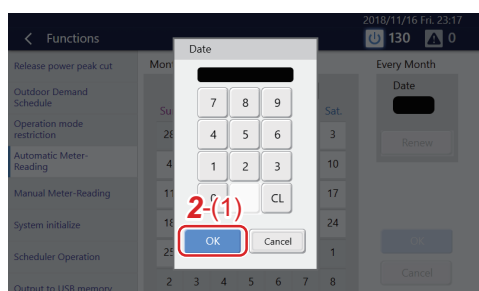


- 1 Tap [1-(2)] with [1-(1)] (P.59)
- 2 Select the day you want to meter-read on the calendar and tap [2-(1)]

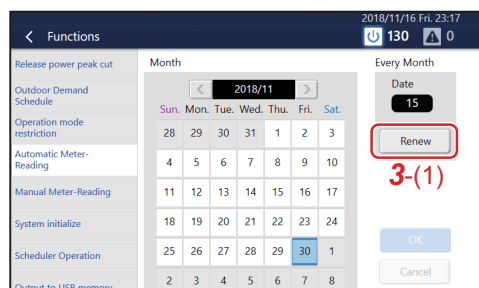
NOTE

- You can set the schedule for one year from the current month.
- You can set up to two days for every month. Months without meter-reading can also be set.
- Tap the selected day again to release the setting.
- The meter-reading result file (monthly report/daily report file) can be output to a USB memory stick. (P.63)

◆ To batch set meter-reading days



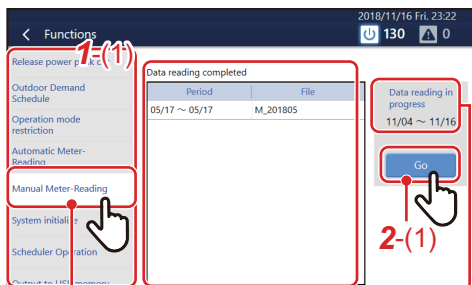
- 1 Tap []
- 2 Tap a number, enter the date, then tap [2-(1)]



- 3 Tap [3-(1)]

Sum data for power allocation as necessary (Manual Meter-Reading)

You can manually meter-read the data for power allocation from the previous meter-reading day until the current day. Manual meter-reading is convenient if you need to sum data for power allocation before the automatic meter-reading day, such as when a tenant leaves.



1-(2)

The file names of automatic or manual meter-readings and meter-reading periods are displayed in a list.

2-(2)

The period for which manual meter-reading is carried out (the previous meter-reading day to the current day) is displayed.

1 Tap [1-(2)] with [1-(1)] (P.59)

2 Tap [2-(1)]

The meter-reading result file is added to [2-(2)].

NOTE

The meter-reading result file (monthly report/daily report file) can be output to a USB memory stick. (P.63)

How to use the power allocation system

1 Download the data for power allocation

Save the data for power allocation to the PC using one of the following procedures.

1) Download by LAN connection

Download the data using the Report Creation Software.

2) Copy the data to a USB memory stick

Output the data to the USB memory stick using the Unit's [Output to USB memory] and import the data using the Report Creation Software.

2 Create monthly reports and daily reports

Create a monthly report or daily report from [Run] - [Download & create monthly/daily report] in the Report Creation Software.

3 Click the month or day you want to display

4 Click the [View report] button

NOTE

For details, refer to the instruction manual of the Report Creation Software.

11 Troubleshooting

Phenomenon	Question	Confirmation items
The LCD does not display.	Is the power turned on?	Check that the power is not turned off by the breaker or the like. There is a green LED at the lower rear of the main unit and a green LED on the AC adapter that indicate that power is being supplied.
		Check that the wiring of the power outlet and AC adapter is not disconnected. There is a green LED at the lower rear of the main unit and a green LED on the AC adapter that indicate that power is being supplied.
	Has the backlight gone out?	The LCD turns off when there is no operation for a certain period of time. Touch the touch panel to turn on. The brightness and display time can be changed using [Backlight].
	Is the backlight brightness dark?	Adjust the brightness using [Backlight].
The operated air conditioner does not run.	Does the operated air conditioner match the actual air conditioner?	Operate another air conditioner and check if the actual air conditioner operates.
	Is an alarm occurring?	The air conditioner will not operate when an alarm is occurring. Turn off the alarm.
	Are you operating with the local remote control?	Even if the air conditioner is run with this Unit, if it is stopped afterwards with the local remote control, it will stop. The latter operation of this Unit or the local remote control overrides the former.
	Is the air conditioner stopped due to the schedule setting of the local remote control or the like?	Even if the air conditioner is run with this Unit, if it is stopped afterwards with the local remote control schedule, it will stop. The latter operation of this Unit or the local remote control overrides the former.
	Are you operating with the PC app "Remote Control Software"?	Even if the air conditioner is run with this Unit, if it is stopped afterwards with the PC app "Remote Control Software", it will stop. The latter operation of this Unit or the "Remote Control Software" overrides the former.
I want to turn off the power.	There is no power switch.	Please remove the AC adapter or turn off the circuit breaker.
I want to reboot.	Reboot from the menu.	Select [Menu] - [Functions] - [System reboot].
The air conditioner settings change arbitrarily.	Are you operating with the local remote control?	Even if the air conditioner is run with this Unit, if it is stopped afterwards with the local remote control, it will stop. The latter operation of this Unit or the local remote control overrides the former.
	Is the air conditioner stopped due to the schedule setting of the local remote control or the like?	Even if the air conditioner is run with this Unit, if it is stopped afterwards with the local remote control schedule, it will stop. The latter operation of this Unit or the local remote control overrides the former.
	Have you applied settings such as stop using an external input signal?	When stop, etc. is set by an external input signal using the external interlocking function, the air conditioner stops automatically when a signal is input.
	Are you operating with the PC app "Remote Control Software"?	Even if the air conditioner is run with this Unit, if it is stopped afterwards with the PC app "Remote Control Software", it will stop. The latter operation of this Unit or the "Remote Control Software" overrides the former.
The schedule does not work.	Is the schedule disabled?	Please confirm the Scheduler Operation settings.
	Does the scheduled air conditioner match the actual air conditioner?	Operate another air conditioner and check if the actual air conditioner operates.
	Is a Particular Timer setting set?	If a day is set in both the Week Schedule and a Particular Timer setting, the Particular Timer setting will apply for that day.

Phenomenon	Question	Confirmation items
The air conditioner doesn't cool. The air conditioner doesn't heat.	Is demand control turned on?	Demand control suppresses the capability of the outdoor unit in order to reduce power consumption. Therefore, it may take time to reach the set temperature.
	Is the forced thermo OFF control turned on?	Forced thermo OFF is a control to stop the operation of the outdoor unit. Therefore, the indoor unit acts as a fan.
	Is the power saving control turned on?	Power saving suppresses the capability of the outdoor unit. Therefore, it may take time to reach the set temperature.
The LCD does not turn off.	Is an alarm occurring?	The LCD will still be on when an alarm is occurring. Turn off the alarm.
Sometimes the LCD becomes black for a moment.	The LCD's antistatic control is working.	Temporarily stop the LCD periodically to prevent LCD burn-in. Not a malfunction.
The setting displayed on the local remote control does not match the setting displayed on this Unit.	Does the operated air conditioner match the actual air conditioner?	Operate another air conditioner and check if the actual air conditioner operates.
I would like to frequently change detailed settings such as set temp. and setting mode for all air conditioners.	Only "ON" and "OFF" can operate all air conditioners at once.	You can set the set temp., setting mode, etc. for each air conditioner group by group. Please group the air conditioners.
When local remote control operation is prohibited, if there is a power failure, the local remote control prohibited status will be cancelled when the power returns.	-	Ask service personnel if you want to continue the local remote control prohibited status after returning from a power failure.
FILTER information can be reset even when the FILTER sign is not displayed.	The FILTER sign lights up depending on the accumulated operation time.	As the operation time accumulates, the FILTER sign lights up when the preset operation time is reached. The FILTER sign information can be reset to clear the accumulated time for cases such as when FILTER cleaning is carried out before the FILTER sign turns on.
I want to check the software version.	Reboot from the menu.	The version is displayed under [Menu] - [Information].
Reboot from time to time.	Please check for noise and the power supply status.	The main unit may restart if noise in the surroundings or an unstable power supply cause the operation of the software to be unstable. Please check the surrounding environment.
I cannot start the Remote Control Software.	Is "Error 1001" displayed?	Please download .Net Framework 4.6.2 from the download website of this software and install it.
	Is the LAN cable connected?	This software will not start unless the PC and the LAN of this Unit are connected. Check the LAN cable connection and network settings.
	Is the IP address of the access destination set to the IP address of the controller main unit?	The IP address (or server name) to be entered during installation is the IP address of the controller main unit. It is not the IP address of the PC. If it is incorrect, please do the following and then reinstall. 1. Uninstall the application 2. Delete the install destination directory 3. Delete the desktop and start menu shortcuts
	Is the PC on which the software was installed Windows 8.1 or 10?	Windows 8.1 and 10 are supported. The software may not operate correctly when installed on a PC with a different OS.
I cannot log in to the Remote Control Software.	Have you logged in as the same user from another PC?	Each user can log in from only one PC at the same time.
	Is the Windows display style set to classic style?	Please select a display style other than classic style. You can change the display style from [Start] - [Control Panel] - [Appearance and Personalization] - [Change the theme]. This software supports Windows 8.1 and 10.


Phenomenon	Question	Confirmation items
I cannot log in to Remote Control Software from another PC after the LAN is disconnected.	Have you logged in with the same user ID?	You must log in again from a PC with the LAN disconnected and log out normally.
	Have you accessed the software from more than 8 PCs?	Up to 8 PCs can be accessed at the same time. The software may not operate correctly if you connect to more than 9 PCs.
	Did you assign the PC's IP address using a DHCP server?	This Unit judges whether it is accessed from the same PC using the IP address. If the PC address is changed partway through by the DHCP server, you may not be able to log in again after LAN disconnection. Please set the PC that accesses this Unit to a fixed IP or reboot the Unit and erase the login information.
The language does not switch with the Remote Control Software.	Does the login user for the Windows being used have write permission for the Remote Control Software storage location?	Please allow write permission below the folder where Remote Control Software is saved (initial setting: C:\Program Files\TOSHIBA Carrier Corporation). Right-click on the TOSHIBA Carrier Corporation folder, select the [Properties] - [Security] Name, click the "Edit" button and check [Allow] for [Full control] under different settings.
The schedule setting changes have not been reflected.	Are you trying to change the schedule settings on both the Remote Control Software and the main unit?	To change the schedule settings, please set only one of either the main unit or the Remote Control Software.
I would like to use the software with other centralized controllers.	Centralized controllers that can be used together within the same TCC-LINK.	It is possible to use up to 8 units together with all centralized controllers including this Unit. Ask service personnel to use them in combination.
I want to use multiple units in combination.	Number of units that can be used in combination in the same TCC-LINK.	It is possible to use up to 8 units together with all centralized controllers including this Unit. Ask service personnel to use them in combination.
The LCD sometimes turns black for a moment.	The LCD's antistatic control is working.	This is not a malfunction. The LCD may turn black temporarily to remove static electricity.
The multi outdoor unit's option board control does not work.	Do you want to use the multi outdoor unit's option board?	When the centralized controller is connected, the functions of the outdoor unit's option board become ineffective. Only one of the centralized controller and the outdoor unit's option board can be used.
The Unit does turn ON/OFF even though the operation interlock signal/stop interlock signal is input.	Has the interlock signal been input from the time of activation?	Since the interlock signal confirms the state by detecting the rising edge and falling edge, if the interlock signal is input from the time of activation, interlock control will not be performed. Please set so that the interlock signal turns OFF at the time of activation.

12 Useful information

The following cases are not faults with the Unit.


Problem	Cause
When an air conditioner is stopped, its operation status is displayed on the LCD display part of the Touch Screen Controller.	This is because even when an air conditioner is stopped, you can set its operation from the Touch Screen Controller.
The display does not switch even if you operate the Touch Screen Controller.	<ul style="list-style-type: none"> The function is not provided by the air conditioner. There may be an error in the operation method. Please check the operation explanation of the function. This is because switching of HEAT and COOL in the operation mode is prohibited.
It is not set even when operating the Touch Screen Controller.	

Please check the following before requesting service.

Problem	Cause	Solution
The air conditioner does not operate even when I press the Run/Stop switch on the Touch Screen Controller.	Has a power outage occurred?	If the LCD of the Touch Screen Controller does not display, press the ON/OFF button of the Touch Screen Controller again after energizing the controller.
The check lamp of the Touch Screen Controller lights up.	Is the air conditioner protection device operating?	Please see the air conditioner operation manual and check the operation.
On the LCD display part of the Touch Screen Controller  (Abnormality) and the check code C06 is displayed.	Is a power outage affecting the air conditioner?	After restoring power to the air conditioner, the display will disappear after waiting a few minutes.

If you have investigated the above and there is still an abnormality, please contact the dealer from whom you purchased the Unit with the part number and problem.

Under no circumstances conduct repairs by yourself. Doing so is dangerous.

Moreover, if the LCD display part of the Touch Screen Controller displays  (Abnormality) and a check code, please also inform the dealer of these items.

13 Appendix

Specifications

Detailed specifications

Power supply	120 V AC 60 Hz
Operating temperature/humidity range	32°F to 104°F (0°C to 40°C), 10% to 90% RH (no dew condensation)
Dimensions: inch (mm)	H5.35"×W8.07"×D0.39" (H136 mm×W205 mm×D10 mm)(+3.15" (+80 mm)) (Embedded dimensions shown in parenthesis)
Mass	2.95 lb (1.34 kg) (Touch Screen Controller) 0.99 lb (0.45 kg) (power adapter)
LCD	Type 7 TFT liquid crystal, 800×480, 16,700,000 colours (Luminance 800 cd/m ² , contrast ratio 600:1)
Touch Screen	Projection-capacitive type
Communication ports	· RS-485 port ×1 (for connecting four digital I/O interfaces and four watt hour meter interfaces) · LAN port ×1 (for connecting PC)
USB port	USB memory stick connection port ×2
External contact input	8 inputs
External contact output	4 inputs
Included PC software (Requires a separate PC (*1))	· Remote Control Software · Report Creation Software · Section Changeover Software · Data Analyzer

*1 Conditions for PC connection (operating environment)

OS: Windows 8.1 or Windows 10

LAN port: 10BASE-T or 100BASE-TX wired LAN port

Other: mouse/keyboard, printer (if printing is required)

Function list

Key Features			
Control	ON/OFF		
	Setting mode		
	Set temp.		
	Fan speed settings		
	Swing ON		
	Local remote controller operation lock/unlock		
	Ventilation → ON/OFF		
	Ventilation → Mode		
	Ventilation → Fan speed		
	Soft Cooling		
	Energy saving ratio [%]		
	Eco Temperature Shift		
	Set temp. range limit		
	Filter Sign Reset		
	Monitoring	ON/OFF	
Setting mode			
Set temp.			
Fan speed settings			
Swing ON			
Local remote controller operation lock/unlock			
Ventilation → ON/OFF			
Ventilation → Mode			
Ventilation → Fan speed			
Soft Cooling			
Energy saving ratio [%]			
Eco Temperature Shift			
Set temp. range limit			
Outdoor temp.			
Power Level			
Return Back			
Power peak cut			
FILTER Sign			
Schedule	Setting unit (Per unit)		
	Setting unit: Week Schedule (per day of the week)		
	Setting unit: Particular Timer setting (per date)		
	Setting time (00:00 to 23:59)		
	Setting content	ON/OFF	
		Setting mode	
		Set temp.	
		Local remote controller operation lock/unlock	
		Return Back	
		Energy saving ratio [%]	
		Ventilation operation setting	
		Vent. Mode	
Maximum number of schedules per day 64			

Key Features			
External input	Inputs	Main unit	8 inputs
		DIO interface	8 inputs x 4 units
	Functions	Power pulse measurement	
		Demand Interlocking	
		Fire Alarm Interlocking	
		Security Interlocking	
		Stop Interlocking	
		Operation Interlocking	
		For ON/OFF indication	
		For alarm indication	
External output	Outputs	Main unit	4 outputs
		DIO interface	4 outputs x 4 units
	Functions	Alarm Output Interlocking	
		Operation Output Interlocking	
		Controller Error Output Interlocking	
		For ON/OFF control	

Glossary

◆Power peak cut

The maximum demand power, which is the power value used to calculate the electricity fee from the electric power company.

The monthly electricity fee is composed of the "basic fee" and the "power fee". The "power fee" is calculated according to the usage of electricity in the month, but the "basic fee" is determined according to the month when the Power peak cut was the highest in the past year. Since the time when Power peak cut increases, such as summer, is limited, keeping Power peak cut to the average is a key point to reduce the basic fee.

◆During power peak cut control

Control to cut the peak of electric power usage.

◆Flap

A part that changes the air direction at the outlet. It is also called a louver.

◆ON/OFF unit

Indicates devices that cannot control or monitor set temperature or setting mode among the managed devices. Main equipment includes lighting settings, air to air heat exchangers, ventilation fans, etc.

◆Thermo OFF

An energy saving function whereby when the temperature of a room reaches the set temperature, the outdoor unit compressor stops to switch from cooling/heating to fan operation.

Although the indoor unit (air conditioner) is in operation, the outdoor unit repeatedly turns ON/OFF depending on the room temperature.

List by Lock Level/Level

Refer to the following table for the functional differences depending on the operation of the main Unit and remote operation, the level of the operation lock of the main Unit and the level of the user account.

(○: Full functional operation △: Partially restricted –: Cannot be used)

Item		Unit Operation			Remote Operation		
		Operation Lock None	Operation Lock - Level 1	Operation Lock - Level 2	Administrators	Power Users	Guests
Home screen		○	○	△	○	○	△
Group screen	[CONTROL] tab	○	○	–	○	○	–
	[SCHEDULE] tab	○	–	–	○	–	–
	[GRAPH] tab	○	○	–	○	○	–
Individual control screen	[CONTROL] tab	○	○	–	○	○	–
	[SCHEDULE] tab	○	–	–	○	–	–
	[GRAPH] tab	○	○	–	○	○	–
SCHEDULE	Week Schedule	○	–	–	○	–	–
	Particular Timer setting	○	–	–	○	–	–
Batch ON/OFF screen		○	○	△	○	○	△
Alarm history screen		○	○	△	○	○	△

Item		Unit Operation			Remote Operation		
		Operation Lock None	Operation Lock - Level 1	Operation Lock - Level 2	Administrators	Power Users	Guests
Menu	Operation lock screen		○	○	○	○	○
	Alarm History		○	○	○	○	○
	Electric power		○	○	○	○	○
	Functions	Release power peak cut		○	—	—	—
		Power peak cut schedule		○	—	—	—
		Operation mode restriction		○	—	—	—
		Automatic Meter-Reading		○	—	—	—
		Manual Meter-Reading		○	—	—	—
		System initialize		○	—	—	—
		Scheduler Operation		○	—	—	—
		Output to USB Memory		○	—	—	—
	Settings	Display Settings		○	—	—	—
		Clock and calendar setting		○	—	—	—
		Icon settings		○	—	—	—
		Theme Settings		○	—	—	—
		User Account Setting		○	—	—	—
		Operation Lock Setting		○	—	—	—
		IP Address Setting		○	—	—	—
		Alarm email address setting		○	—	—	—
		Indoor unit area setting		○	—	—	—
		Indoor unit name setting		○	—	—	—
		Area name setting		○	—	—	—
		Backlight setting		○	—	—	—
	Support screen		○	○	○	○	○
	Logout		—	—	—	○	○

14 Warranty and after-sales service

About the Warranty

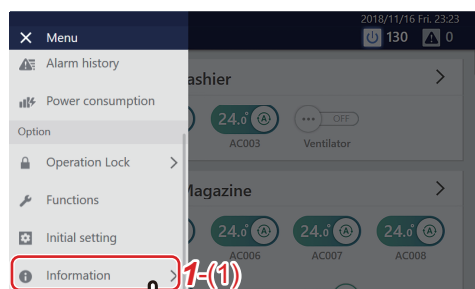
- The warranty period is one year from date of purchase.

About After-Sales Service

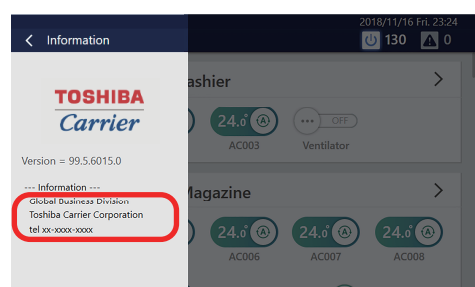
- Please check "11. Troubleshooting" (P.79) before requesting a repair. If this does not solve the problem, immediately shut off the power supply and contact us.
- Please inform us of the following when requesting a repair.
 - **Customer name**
 - **Address, phone number**
 - **Product model name and serial number**
 - **Installation date**
 - **Failure status (as much detail as possible)**

Contact for after-sales service (Information)

For after-sales service, please contact here.



- 1 Tap , then tap [1-(1)]
The contact information is displayed.



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[Tatu continues]

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- DES is now external, in the OpenSSL library
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- Zlib is now external, in a library
- The make-ssh-known-hosts script is no longer included
- TSS has been removed
- MD5 is now external, in the OpenSSL library
- RC4 support has been replaced with ARC4 support from OpenSSL
- Blowfish is now external, in the OpenSSL library

[The licence continues]

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* @version 3.0 (December 2000)

*

* Optimised ANSI C code for the Rijndael cipher (now AES)

*

* @author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>

* @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>

* @author Paulo Barreto <paulo.barreto@terra.com.br>

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MEMO

[illegible]

Customer Memo

Model Name	BMS-CT1280UL		
Installation Date	Year	Month	Day
Name of dealer from whom you purchased the unit	Phone number		

It is convenient to fill this in at the time of purchase in case you need to request repair, etc.

Toshiba Carrier Corporation

336 TADEHARA, FUJI-SHI, SHIZUOKA-KEN 416-8521 JAPAN