TOSHIBA
Carrier

Owner's Manual

TOUCH SCREEN CONTROLLER for Air Conditioning Control System

Model

BMS-CT5120UL

English

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1 Precautions for safety

The following instructions must be observed.

- The product and this manual are provided with important safety notices to ensure safe use and protect the user and other people from hazards and preclude damage to property.
  Be sure that you fully understand the following contents (expressions and graphic symbols) and read this manual carefully. Always observe the precautions.
- Keep this Manual at accessible place for future reference.

Expressions

⚠ **Warning**	Text set off in this manner indicates that failure to adhere to the directions in the warning could result in serious bodily harm (*1) or loss of life if the product is handled improperly.
⚠ **Caution**	Text set off in this manner indicates that failure to adhere to the directions in the caution could result in serious bodily injury (*2) or damage (*3) to property if the product is handled improperly.

*1: Serious bodily harm indicates loss of eyesight, injury, burns, electric shock, bone fracture, poisoning, and other injuries which leave aftereffect and require hospitalization or long-term treatment as an outpatient.
*2: Bodily injury indicates injury, burns, electric shock, and other injuries which do not require hospitalization or long-term treatment as an outpatient.
*3: Damage to property indicates damage extending to buildings, household effects, domestic livestock, and pets.

Graphic symbols

 Prohibited	"⃠" indicates prohibited items. The actual contents of the prohibition are indicated by a picture or text placed inside or next to the graphic symbol.
 Compulsory	"●" indicates compulsory (mandatory) items. The actual contents of the obligation are indicated by a picture or text placed inside or next to the graphic symbol.
 Caution	"△" indicates caution items. The actual contents of the caution are indicated by a picture or text placed inside or next to the graphic symbol.

⚠ Warning

 Ask professional	**Ask your dealer or a professional for installation of your system.** Installation requires specialized knowledge. If you install your system yourself, fire, electric shock or injury may be caused.
 Disassembly prohibited	**Do not disassemble, alter, repair or relocate the system alone.** This may cause fire, electric shock or injury. Ask your dealer for repair or relocation.
 Compulsory	**Power OFF in the event of an alarm (odor, etc.).** Failure to do so may cause fire or electric shock. Ask your dealer for repair.

⚠ Caution

 Compulsory	**Before cleaning the unit, be sure to stop operation and turn OFF the power.** Failure to do so may cause electric shock or injury.
 Prohibited	**Do not touch any button with wet fingers.** This may cause electric shock.

2 Main functions

■ Monitoring and controlling air conditioners

The TOUCH SCREEN CONTROLLER for Air Conditioning Control System (hereafter TOUCH SCREEN CONTROLLER) can turn on and off operations, change settings, monitor the operating status, settings, and the occurrence of errors of all the air conditioners.
The air conditioners can be classified by naming their level, unit, area, tenant, and floor. The air conditioners can be set individually or in batches according to area, tenant, or floor.
In addition, an optional digital I/O interface makes it possible to gang control the air conditioners' demand alarm signals, fire alarm signals, and locking signals.

■ Scheduling operation of air conditioners

The TOUCH SCREEN CONTROLLER can schedule operations of all the air conditioners. A maximum of 20 settings can be done each day, and the air conditioners can be set to turn off in case people forget. The TOUCH SCREEN CONTROLLER can schedule operations by turning on, off, operation mode, temperature, enable or disable the local remote control, return back, save, and ventilation modes.
With the master schedule, it is possible to set weekly schedules, five special days, and monthly schedules for the upcoming year.

■ Power distribution system

The TOUCH SCREEN CONTROLLER can distribute power to each of the air conditioners. However, this is not according to calculation methods. The billing schedule can be set to total operating time and power distribution separately for in working hours and out of working hours.
However, the optional power meter interface is required for power distribution.

■ Alarm list display

The TOUCH SCREEN CONTROLLER can display a list of current alarms. It can also show a history of past alarms.

3 Names and functions of main screens

3-1. Control screen

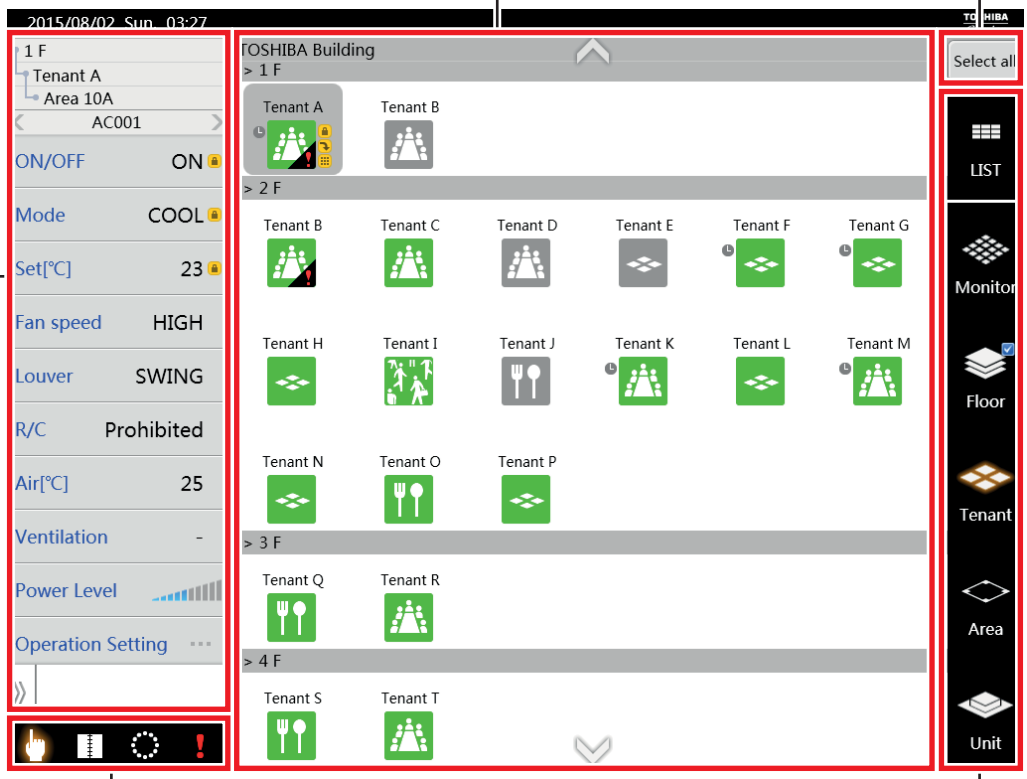
This screen allows you to set and check the operating status of the air conditioners.

Air conditioner status list
Shows the name of the level of air conditioners to display and change status of settings.

Group icon area
Shows the group icons of air conditioners for controlling the air conditioning. They are displayed in categories from the top level. It is possible to check the status of air conditioners by the colour and pattern of the icons. ->For details, see "3-3.Icon display".

Select all button
Selects all the icons shown in a group icon area.

[Control screen]



Menu icon area
Moves the screen to various functions.

Display switching icon area
Changes the classification of the displayed group icons.

NOTE

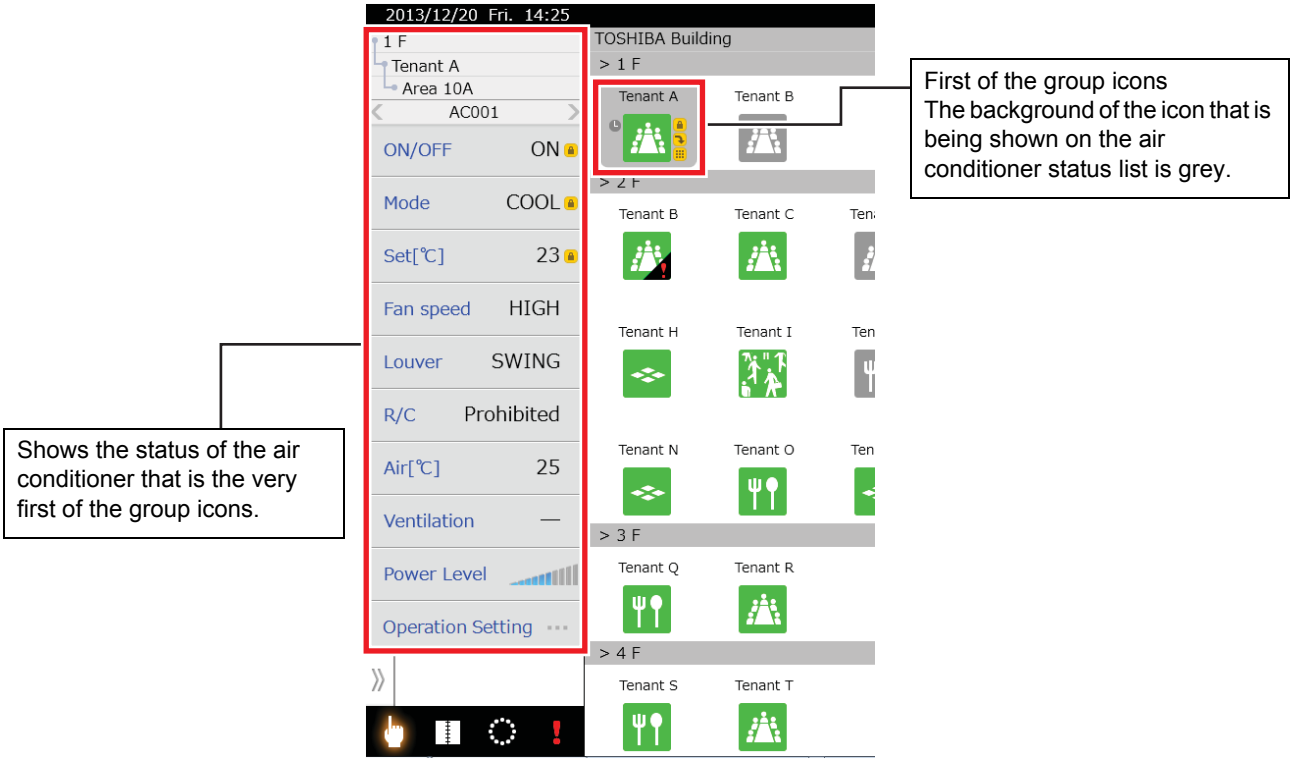
Screensaver

If the screen is not touched for a long time (about 10 minutes), the LCD's backlight turns off.
If the screen is touched, the LCD's backlight turns on again.

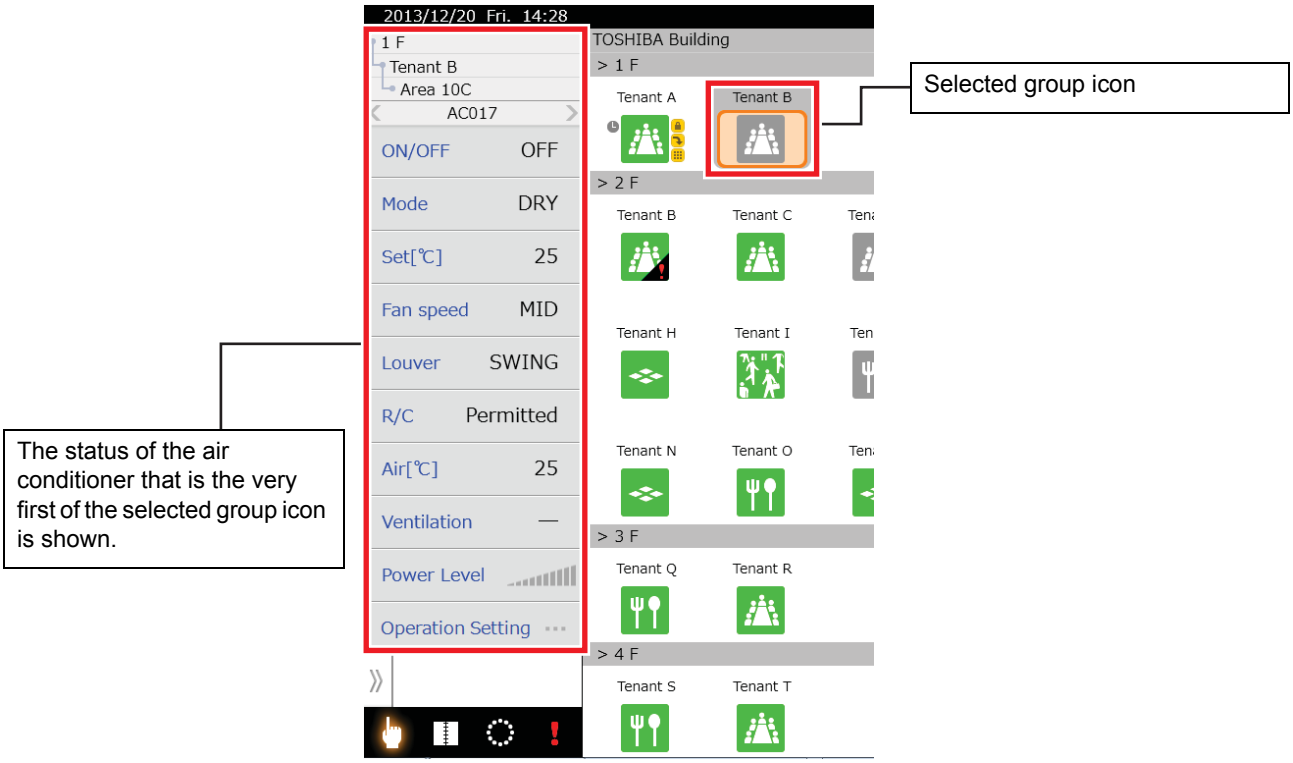
3-2. Air conditioner status list display

Shows the status of the air conditioner that is the first of the selected group icon. If no group icon is selected, the status of the air conditioner that is the very first of the displayed group icon is shown.

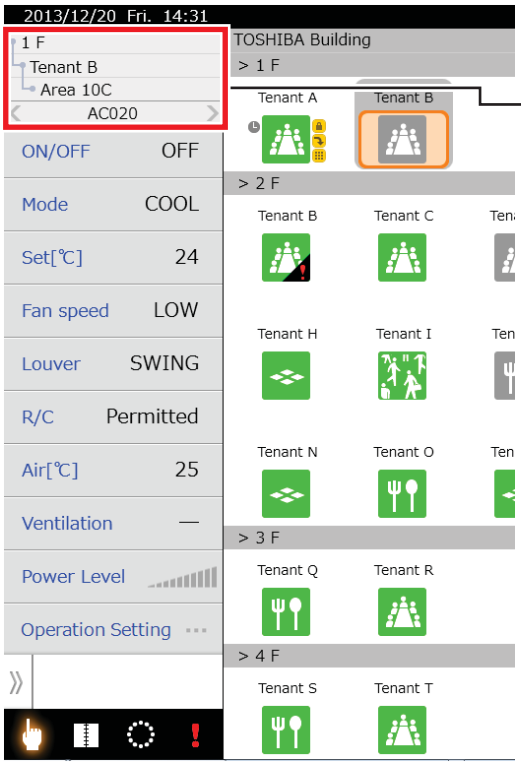
▼When a group icon is not selected



▼When a group icon is selected

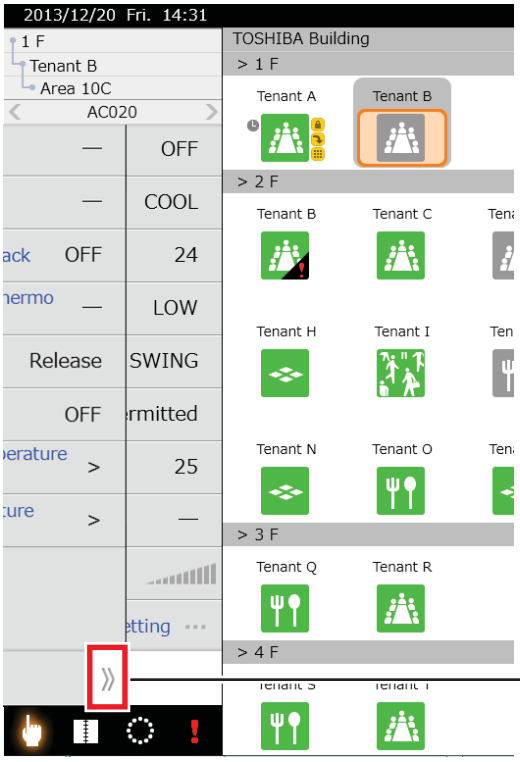


▼Changing the air conditioner that is shown on the air conditioner status list



Flicking the name of the level on the air conditioner status list moves the air conditioner into the selected group icon.
Right to left flick: Moves to the next air conditioner
Left to right flick: Moves to the previous air conditioner

▼Showing advanced items on the air conditioner status list



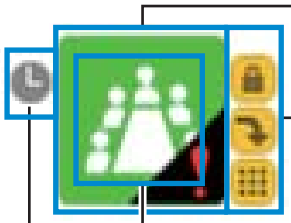
Dragging the Advanced tag on the air conditioner list shows advanced functions.

3-3. Icon display

This section describes the icon displays.

[1] Group icons

▼Icons show floors, tenants, and areas individually



Icon status

: Indicates it is operating (red or green).

: Indicates it is not operating (grey).

: Indicates an alarm has occurred.

Indicator icons

: Indicates remote control operation is prohibited.

: Indicates forced thermo OFF.

: Indicates there is a filter sign.

Schedule icon

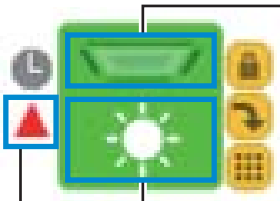
Indicates that a running schedule has been registered.

Group icon images

You can change the image to one you like on the icon settings screen.

...

▼Icons that show individual units



Air conditioner type icon

: Indicates a cassette type.

: Indicates a duct type.

: Indicates a ceiling type.

: Indicates a high wall type.

: Indicates a floor standing type.

: Indicates Air to Air Heat Exchanger and fresh air type.

Operation mode icons

: Indicates cooling.

: Indicates heating.

: Indicates fan.

: Indicates Drying.

: Indicates automatic operation.

Air temperature level icons

: Indicates the air temperature is higher than the set temperature.

: Indicates the air temperature is lower than the set temperature.

▼Icons when selected



Selected



Not selected

[2] Menu icons

▼Appearance and functions of menu icons

These icons display the various screens. Icons are orange when they appear on screen. The alarm icon flashes red when an alarm occurs.


Control screen


Running schedule screen


Option screen


Alarm List screen

[3] Display switching icons

▼Appearance and functions of display switching icons

These icons change the display of group icons. Icons that are on the screen that is currently displayed are orange.

- Screen switching


List screen


Monitor screen

- Level switching


Floor display


Tenant display

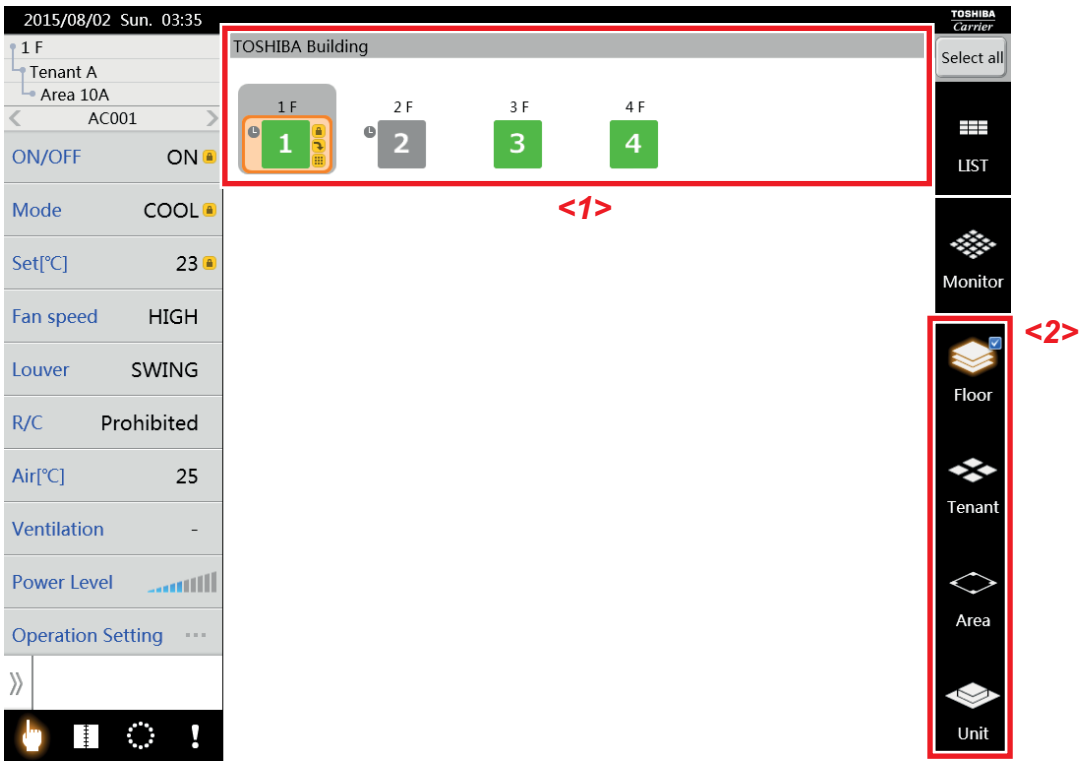

Area display


Unit display

4 How to operate

4-1. Moving levels

[Control screen]



[1] Moving to a lower level on the control screen

(1) Using the display switching icon to move
Tap the group icon **<1>** (more than one can be selected) you want to move to a lower level, then tap the display switching icon **<2>** of the level to which you want to move.

(2) Long tapping to move (TOUCH SCREEN CONTROLLER only)
Long tap a group icon, to move it under the group icon you long tapped.

[2] Moving to an upper level on the control screen

Tap the display switching icon of the upper level to move to the upper level.

CAUTION

If a level is skipped, such as from a floor to an area, then you cannot move to the skipped level. Return to the highest level and then move to it.

4-2. Changing air conditioner settings

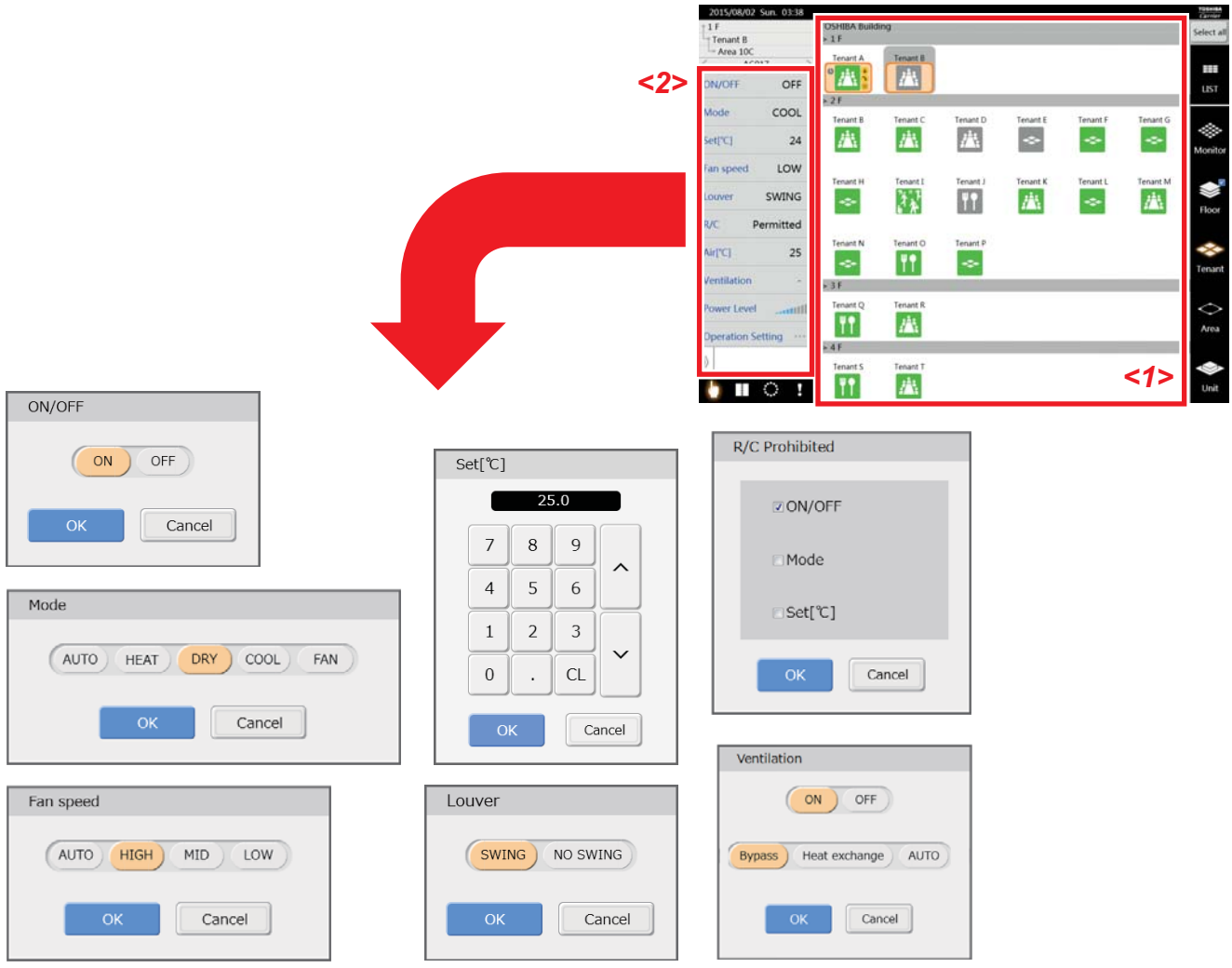
You can change the settings and turn on or off the air conditioner. You can change the air conditioner's settings from the control screen.
If "-" appears on the air conditioner status list, that function cannot be used, so you cannot set it even if you tap it.

▼You can set air conditioners in the following groupings.

- Set all air conditioners in a batch
- Set air conditioners by floor in a batch
- Set air conditioners by tenant in a batch
- Set air conditioners by area in a batch
- Set air conditioners individually

[1] Changing individual settings of air conditioners on the control screen

You can turn air conditioners on or off, change the operation mode, set temperatures, fan speeds, louvers, and ventilation, and remote control prohibited.



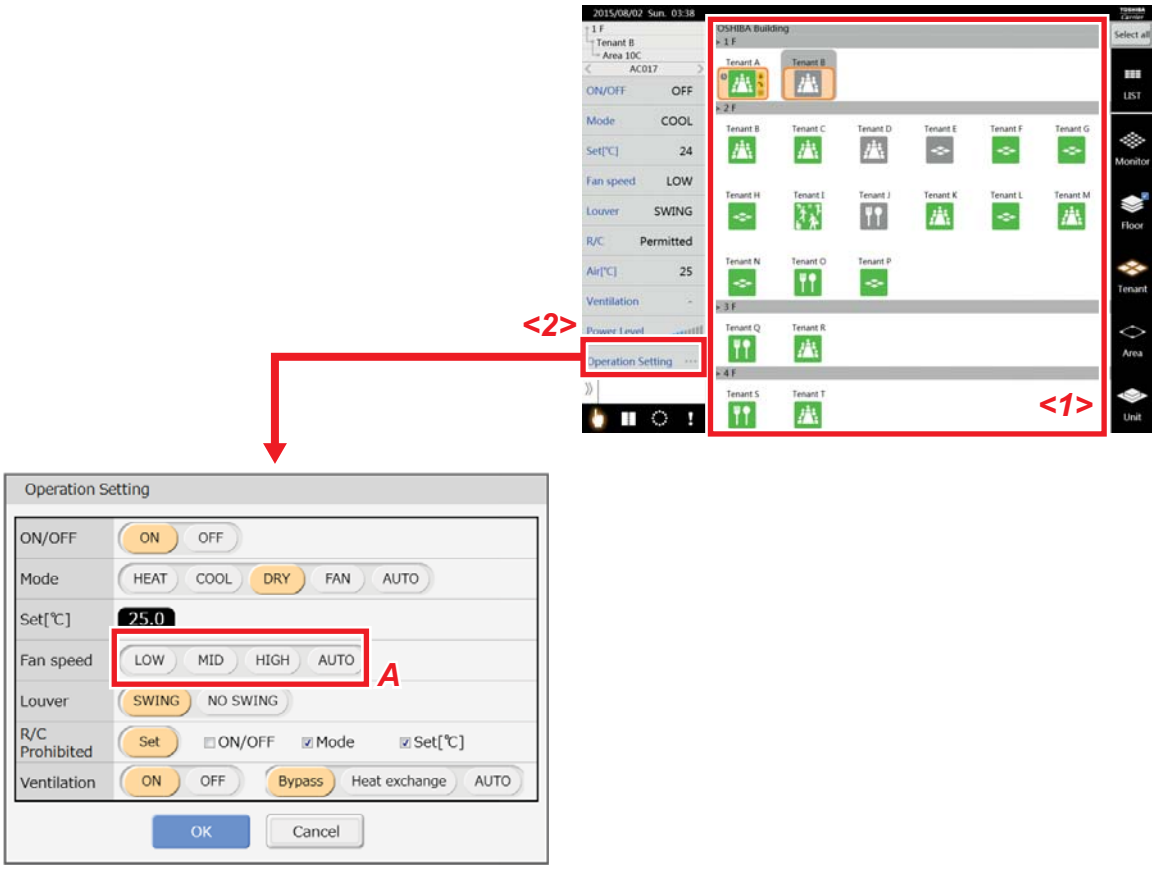
(1) Move to another level and tap the group icon **<1>** that you want to set. (More than one can be selected)
(2) Tap the item that you want to change on the "Air conditioner status list" **<2>**.
The screen for changing settings appears.
(3) Set the changes and tap the [OK] button.
The settings are applied to the air conditioners in the group icon that was selected in (1).

CAUTION

Power level shows the performance status of the air conditioner that is operating in 10 steps. The more bars are lit, the stronger the operation.
Air temperature and power level are indicators only, they cannot be set.
Some functions cannot be used, depending on the model of the air conditioner. Refer to the Owner's Manual for each air conditioner.

[2] Changing multiple settings of air conditioners on the control screen

You can turn air conditioners on or off, change the operation mode, set temperatures, fan speeds, louvers, and ventilation, and remote control prohibited in batches.



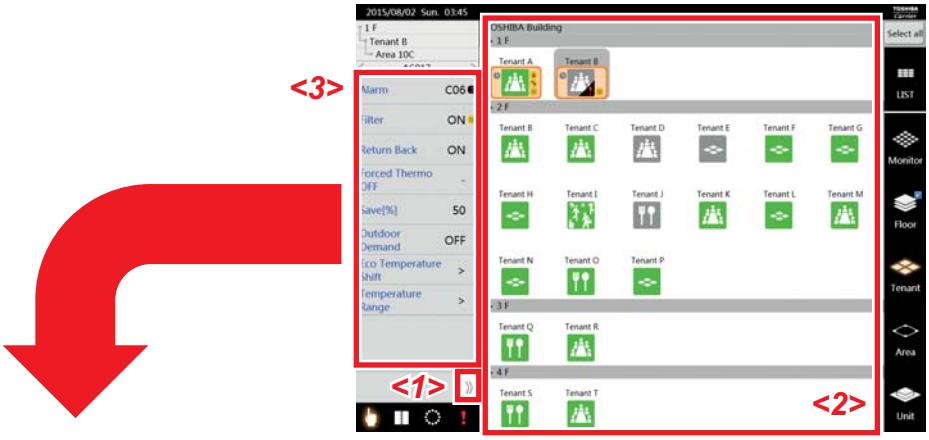
(1) Move to another level and tap the group icon **<1>** that you want to set. (More than one can be selected)
(2) Tap [Operation Setting] on the "Air conditioner status list" **<2>**.
The Operation Setting screen appears.
(3) Set the changes and tap the [OK] button.
The settings are applied to the air conditioners in the group icon that was selected in (1).

CAUTION

Unset items are not set to the air conditioners. (See ***A***)
To clear a setting that is selected, tap the selected item again.

[3] Changing the advanced functions of air conditioners on the control screen

You can open the advanced list by sliding the Advanced tag <1>. You can change the set temperature range, the eco temperature shift, save, filter sign reset, alarm reset, and forced thermo OFF reset. You can only check the settings of Return Back and Outdoor Demand. If advanced functions are not operating or registered, "-" appears.



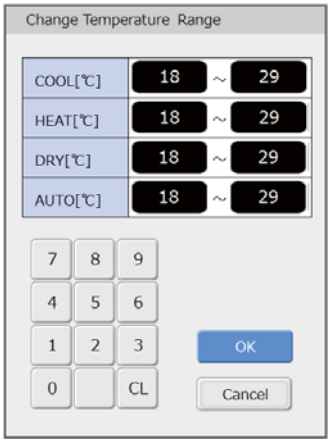


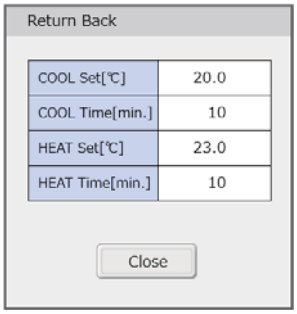


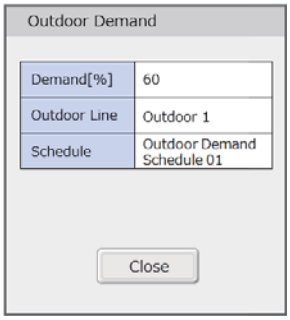












(1) Move to another level and tap the group icon <2> that you want to set. (More than one can be selected)
(2) Tap what you want to change on the "Advanced list" <3>.
The screen for settings appears.
(3) Set the changes and tap the [OK], [Reset] button.
The settings are applied to the air conditioners in the group icon that was selected in (1).

■ About advanced functions

▼ Alarm Reset

Transmits an error clear signal and eliminates error signals.

▼ Filter Sign Reset

Transmits a filter sign clear signal and clears the filter sign.

▼ Return Back

If a temperature is set that is lower (when cooling) or higher (when heating) than the Return Back temperature, which has been set in advance, then the setting is automatically returned to the temperature set for the Return Back temperature after a certain period of time. You can check the time and temperature of the Return Back setting.

▼ Reset Forced Thermo OFF

Clears the status of air conditioners that have had Forced Thermo OFF done to them by the demand signal from the digital I/O interface.

▼ Save

Operates the air conditioners with suppressed performance. Settings are shown below.

Release: No power saving
Max: 99 - 50 % power saving
50: 50 % power saving
0: Thermo off

▼ Outdoor Demand

You can check the outdoor demand schedule, outdoor line, outdoor demand ratio set for the outdoor units that are connected.

▼ Eco Temperature Shift

The set temperatures are shifted in a batch by ±2 °C.
Example: +2 °C during cooling, -2 °C during heating

▼ Change Temperature Range

Set the upper and lower limits of the temperature for each mode (COOL, HEAT, DRY, AUTO).

4-3. Schedule settings

The TOUCH SCREEN CONTROLLER can schedule operations of the air conditioners.

▼ The following settings can be set for scheduled operations.

ON / OFF, operation mode, set temperature, operation of remote control prohibited / permitted, return back, save, and ventilation mode.

▼ Glossary of schedule settings

- Master Schedule: Schedule assigned to air conditioners
- Operating Schedule: Schedule up to one week from the present that is assigned to each air conditioner
- Weekly pattern: Schedule for one week
- Special Day pattern: Schedule that is different from the weekly pattern
- Monthly settings: Sets the daily operations for special day patterns

▼ Procedure for setting scheduled operations

(1) Creation of a master schedule
Creates a weekly pattern.
Creates monthly settings and creates schedules for special days if special day patterns are required.

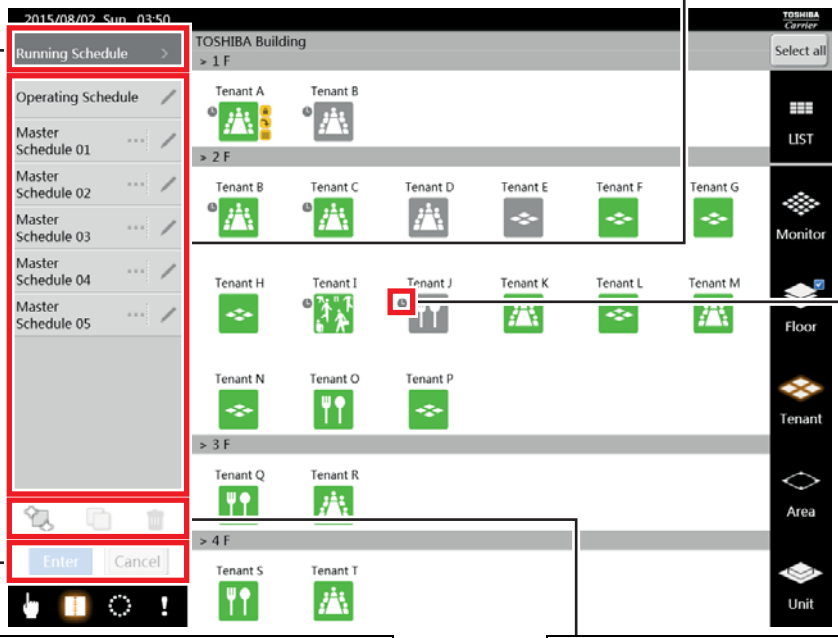
(2) Registration of a master schedule
Schedules are set by registering a master schedule used for each air conditioner.
You can check the content of a schedule that is set in the Operating Schedule settings screen.

(3) Changes to schedules
You can change a schedule from the operating schedule settings screen.

Schedule title
Switches between the running schedule and the billing schedule.

Schedule list
Shows the operating schedule and the master schedule.

[Running Schedule screen]



Schedule icon
Appears if a running schedule has been registered.

Master schedule registration operating area
Enabled when a master schedule is selected.
->For details, see "4-3.[6]Registering new master schedules in the Running Schedule screen".

Enter : Registers a master schedule for the selected air conditioner.

Cancel : Unselects a selected air conditioner.

Master schedule operating area

: Creates new master schedules.

: Copies master schedules.

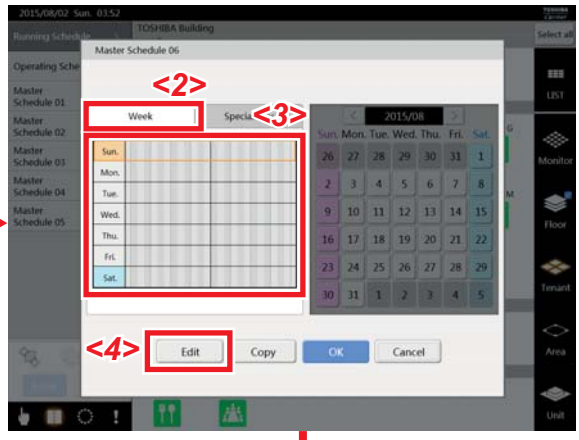
: Deletes master schedules.

[1] Creating new master schedules in the Running Schedule screen

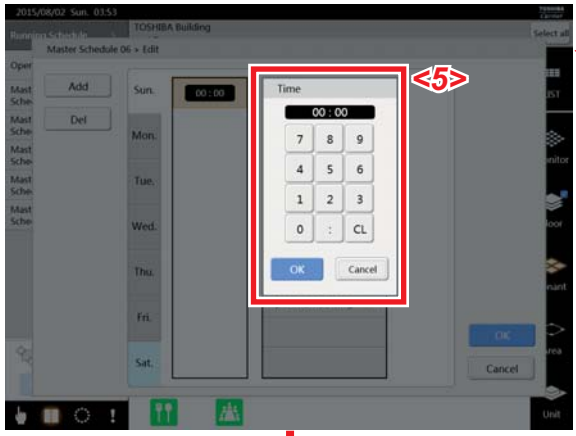
[Running Schedule screen]



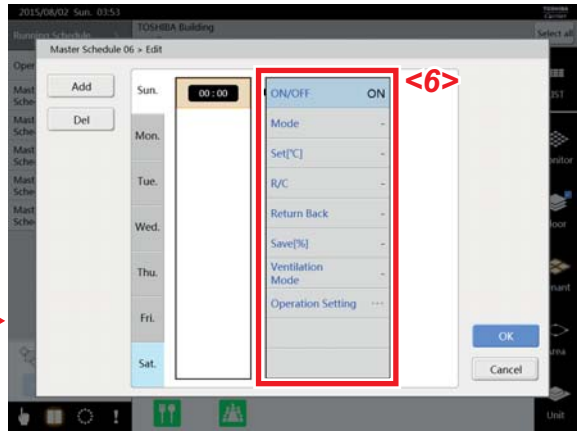
[Master Schedule Weekly Pattern Settings screen]



[Schedule Setup screen]

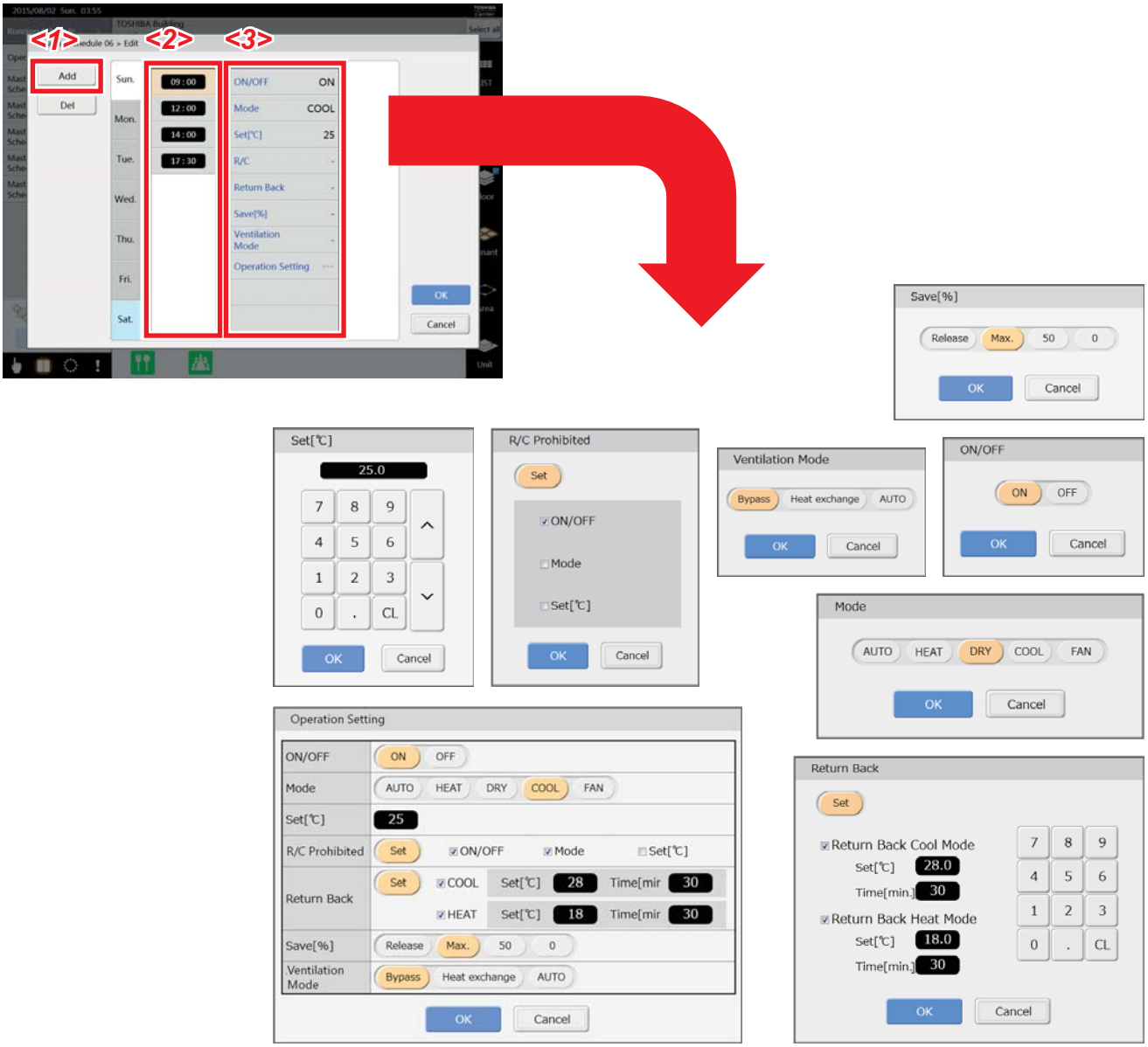


[Master Schedule Detailed Settings screen]



(1) Tap the [Create New] icon **<1>**.
The Master Schedule Weekly Pattern Settings screen appears.
(2) Tap the [Week] tab **<2>**.
(3) Tap the day **<3>** that you want to set.
(4) Tap the [Edit] button **<4>**.
The screen for setting the time appears.
(5) Set the "Schedule Time" **<5>**.
Tap the [OK] button to add the scheduled time to the Master Schedule Detailed Settings screen.
(6) Tap what you want to change on the "Operations list" **<6>**.
The screen for changing settings appears.
(7) Set the changes and tap the [OK] button.
The changes are reflected in the Master Schedule Detailed Settings screen.
(8) Tap the [OK] button in the Master Schedule Detailed Settings screen.
The changes are reflected in the Master Schedule Weekly Pattern Settings screen.
(9) Tap the [OK] button in the Master Schedule Weekly Pattern Settings screen to create a new master schedule.

[2] Creating schedules in the Master Schedule Detailed Settings screen



▼Add

(1) Tap the [Add] button **<1>**.
The screen for setting the time appears.

(2) Set the schedule time.
Tap the [OK] button to add a new time to the "Time list" **<2>**.

▼Change

(1) Tap the schedule that you want to change on the "Time list" **<2>**.
The schedule is highlighted and the "Operations list" **<3>** for the set times appears.

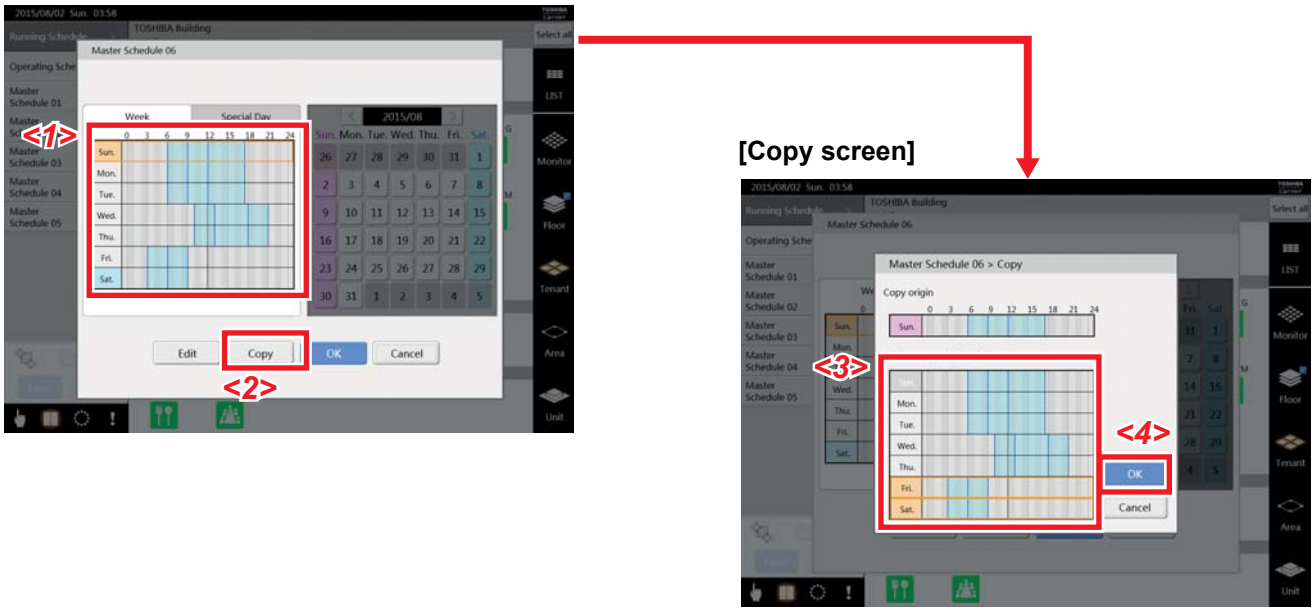
(2) Tap the item that you want to change on the schedule or "Operations list" **<3>**.

(3) Set the changes and tap the [OK] button.

[3] Copying daily schedule in the Master Schedule Weekly Pattern Settings screen

The setup details completed for the day can be copied to other days.

[Master Schedule Weekly Pattern Settings screen]

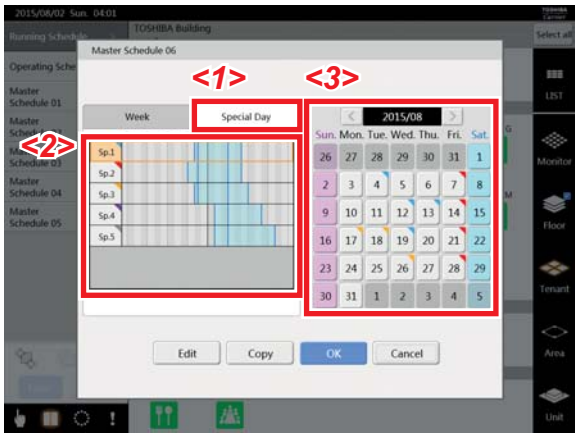


(1) Tap the day to copy <1>.
(2) Tap the [Copy] button <2>.
The screen for copying appears.
(3) Tap the place to copy to <3>. (More than one can be selected)
(4) Tap the [OK] button <4>.
The Master Schedule Weekly Pattern Settings screen appears and the schedule has been copied to it.

[4] Setting special days in the Master Schedule Special Day Pattern Settings screen

Sets days that are special days and creates schedules for special days.

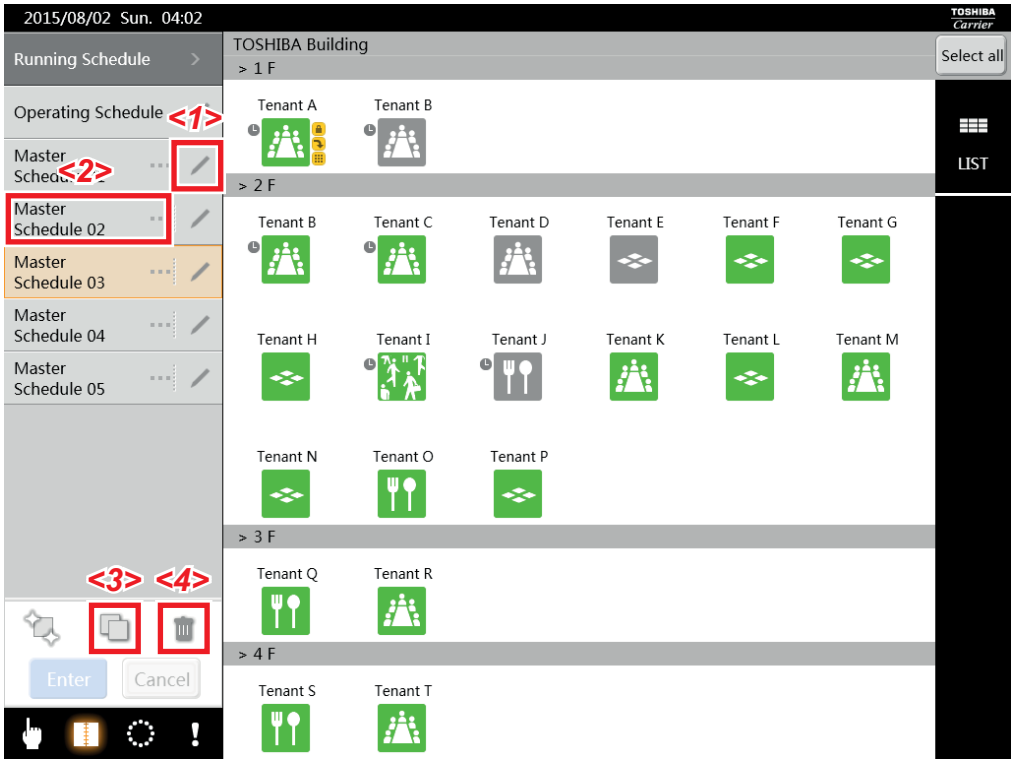
[Master Schedule Special Day Pattern Settings screen]



(1) Tap the [Special Day] tab <1>.
The setting procedure is the same as the weekly pattern.
(2) Do monthly settings.
Tap the special day <2> to set.
(3) Tap the [Calendar] < > button <3> for the month and year you want to set to select them.
(4) Tap the date on the calendar <3> that you want to set as a special day.
It appears the same colour as a special day.

[5] Changing, copying, and deleting master schedules in the Running Schedule screen

[Running Schedule screen]



▼Changing a master schedule

(1) Tap the [Edit] icon <1> for the name of the master schedule you want to edit.
The Master Schedule Weekly Pattern Settings screen appears.

(2) Edit the master schedule in the same way you created it.

▼Copying a master schedule

(1) Tap the "Master schedule name" <2> for the one to copy.

(2) Tap the [Copy] icon <3>.
The copied master schedule is created.

▼Deleting a master schedule

(1) Tap the "Master schedule name" <2> for the one to delete.

(2) Tap the [Delete] icon <4>.
The confirmation screen appears.

(3) Tap the [OK] button.
The master schedule is deleted.

[6] Registering new master schedules in the Running Schedule screen

Schedules are set by registering a master schedule to an air conditioner.

[Running Schedule screen]



(1) Do "Level Shift" <1> to a level on which there is a group icon you want to register.
(2) Tap the master schedule name <2> you want to register.
The system enters the schedule registration mode, and you cannot shift levels. The group Icon <3> to which the selected master schedule was registered is highlighted so you can confirm the current registration status.
(3) Tap the group icon that you want to register.
The selection frame of the group icon <4> that you tapped flashes.
(4) Tap the [Enter] button <5>.
The selection frame of the group icon lights, the schedule icon appears, and registration is finished.

▼Condition of icons in schedule registration mode


A schedule has been registered.


Schedules have been registered to some air conditioners.


A different schedule has been registered.


A schedule has not been registered.

▼Condition of icons in schedule registration mode, registered or deleted

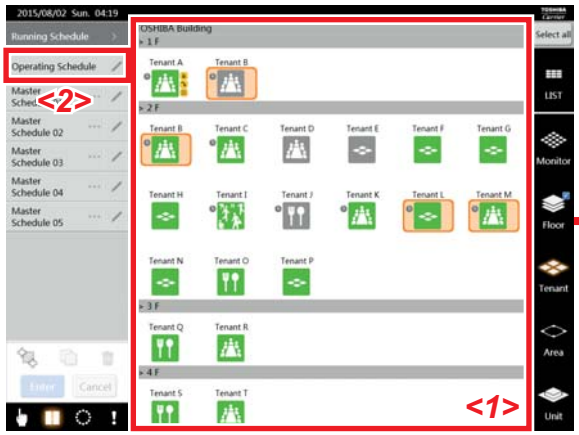

Register schedules. (Frame flashes)


Reset schedules. (grey)

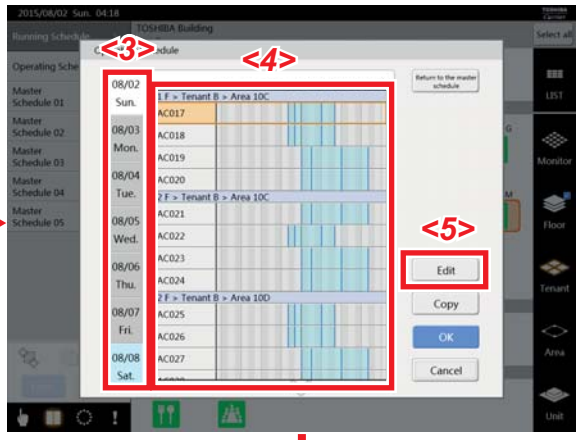
[7] Confirming and changing the content of schedules registered in the Running Schedule screen

You can confirm and change the content of a schedule that is registered for each air conditioner up to a week from the present.

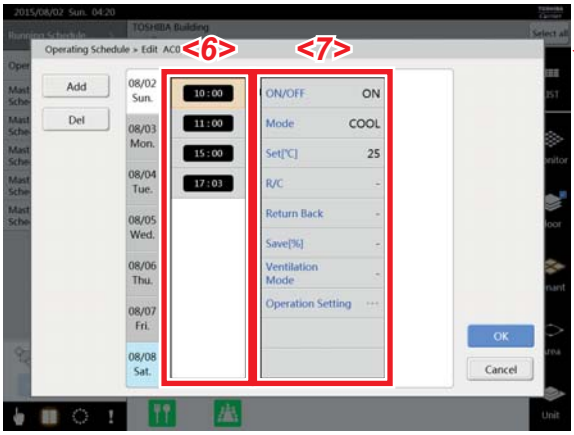
[Running Schedule screen]



[Operating Schedule Settings screen]



[Operating Schedule Detailed Settings screen]

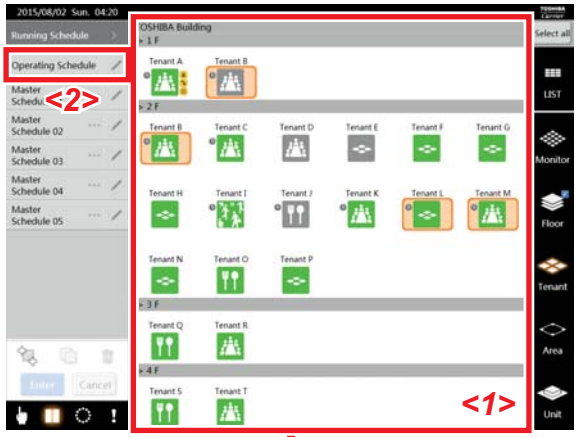


(1) Tap the group icon **<1>** for the schedule that you want to confirm or change.
(2) Tap [Operating Schedule] **<2>**.
The Operating Schedule Settings screen appears.
(3) Tap the [Date] tab **<3>** for the schedule that you want to confirm or change.
(4) Tap the "Air Conditioner" **<4>** for the schedule details that you want to confirm or change.
(5) Tap the [Edit] button **<5>**.
The Operating Schedule Detailed Settings screen appears.
(6) Tap the time **<6>** and the setting contents **<7>** that you want to confirm or change.
Changing the schedule turns the colour of the air conditioner's name and the schedule gauge to pink on the Operating Schedule Settings screen.
The procedure to create a schedule is the same as for the master schedule.

[8] Returning the content of the changes to the operating schedule to the master schedule

Air conditioners that have a changed schedule appear pink in the Operating Schedule Detailed Settings screen. Return this schedule to the settings of the master schedule.

[Running Schedule screen]



[Operating Schedule Settings screen]



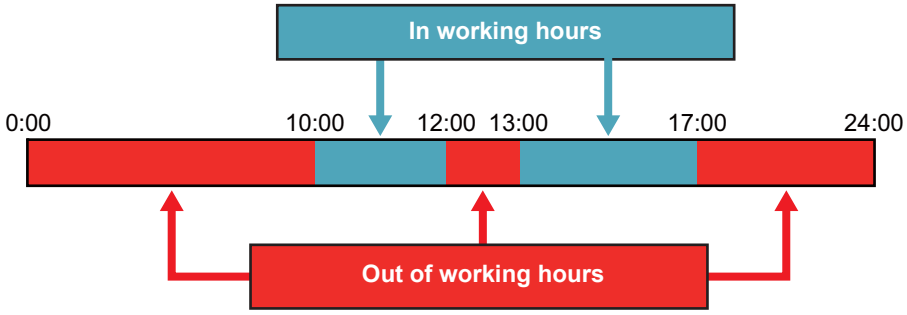
(1) Tap the group icon <1> for the operating schedule you want to return to the master schedule.
(2) Tap [Operating Schedule] <2>.
The Operating Schedule Settings screen appears.
(3) Tap the [Return to the Master Schedule] button <3>.
The confirmation screen appears.
(4) Tap the [OK] button.
Return all the edited content of the operating schedule to the master schedule. (Names that were pink and gauges return to black or blue.)
(5) Tap the [OK] button <4> to confirm.

4-4. Billing Schedule settings

The billing schedule can be set to total operating time and power distribution separately for in working hours and out of working hours.

▼The periods for in working hours can be set for the billing schedule.

Example: If 10:00 to 12:00 and 13:00 to 17:00 are set as in working hours in the billing schedule, then the periods for in working hours and out of working hours for one day are shown below.



▼Procedure for setting the billing schedule

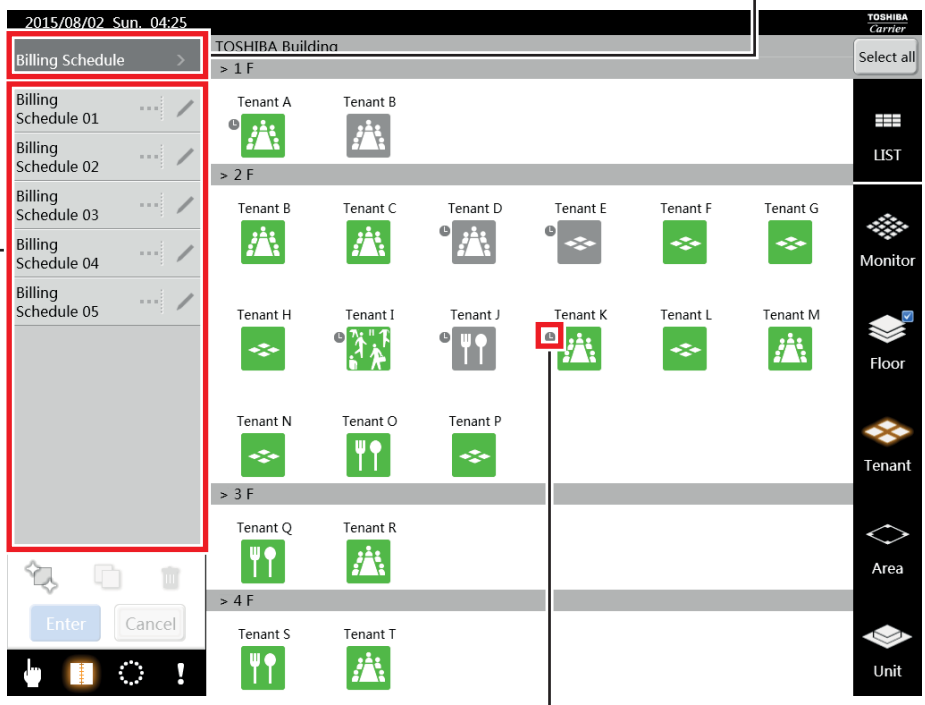
(1) Create a billing schedule
Creates a weekly pattern.
Creates monthly settings and creates schedules for special days if special day patterns are required.

(2) Register the billing schedule
Billing schedules are set by registering a billing schedule used for each air conditioner.

Schedule list
Shows the list of billing schedules.

Schedule title
Switches between the Running Schedule and the Billing Schedule.

[Billing Schedule screen]



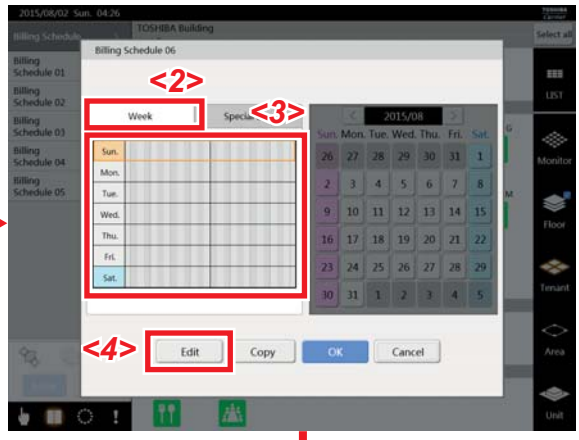
Schedule icon
Appears if a billing schedule has been registered.

[1] Creating new billing schedules in the Billing Schedule screen

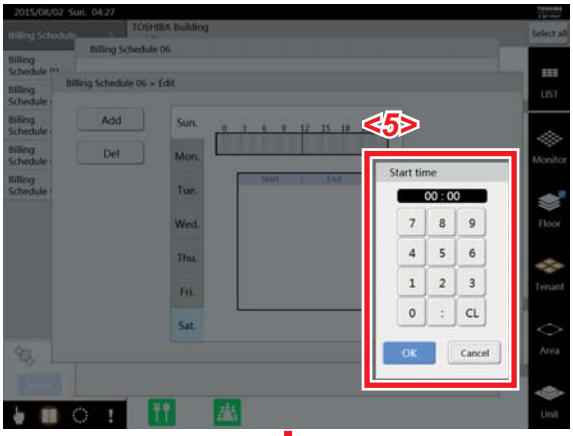
[Billing Schedule screen]



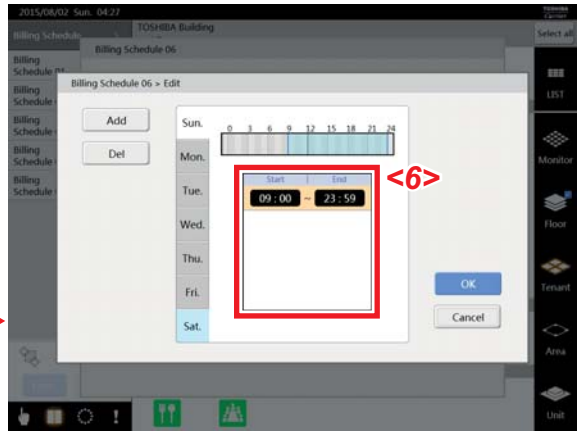
[Billing Schedule Weekly Pattern Settings screen]



[Schedule Setup screen]

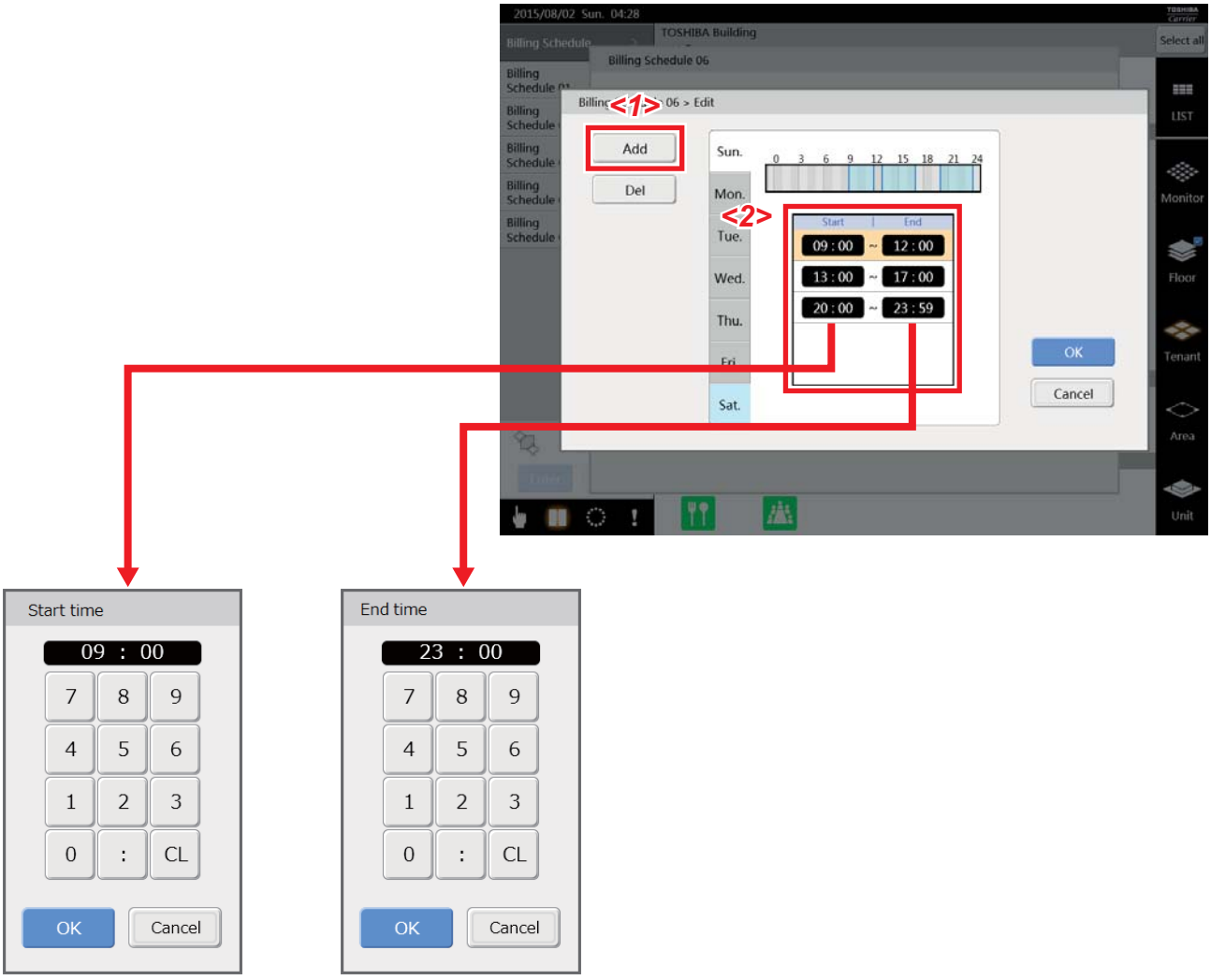


[Billing Schedule Detailed Settings screen]



(1) Tap the [Create New] button **<1>**.
The Billing Schedule Weekly Pattern Settings screen appears.
(2) Tap the [Week] tab **<2>**.
(3) Tap the day **<3>** that you want to set.
(4) Tap the [Edit] button **<4>**.
The screen for setting the Start time for normal time appears.
(5) Set the "Start time" **<5>**.
Tap the [OK] button to add the start time to the Billing Schedule Detailed Settings screen.
(6) Tap the end time in "Normal Time Period list" **<6>**.
The screen for setting the end time for normal time appears.
(7) Set the end time and tap the [OK] button.
The end time is added to the Billing Schedule Detailed Settings screen.
(8) Tap the [OK] button in the Billing Schedule Detailed Settings screen.
The settings are reflected in the Billing Schedule Weekly Pattern Settings screen.
(9) Tap the [OK] button in the Billing Schedule Weekly Pattern Settings screen.
A new billing schedule is created.

[2] Creating schedules in the Billing Schedule Detailed Settings screen



▼Add

(1) Tap the [Add] button <1>.
The screen for setting the time to start normal time appears.

(2) Set the "Start time".
Tap the [OK] button to add a new time to the "Normal Time Period list" <2>.

▼Change

(1) Tap the period that you want to change on the "Normal Time Period list" <2>.
The period is highlighted.

(2) Tap the time that you want to change.
The screen for setting the time appears.

(3) Set the time and tap the [OK] button.

The following items are the same as for the master schedule.

[3] Copying daily schedule in the Billing Schedule Weekly Pattern Settings screen

[4] Setting special days in the Billing Schedule Special Day Pattern Settings screen

[5] Changing, copying, and deleting billing schedules in the Billing Schedule screen

[6] Registering billing schedules in the Billing Schedule screen

4-5. Setting outdoor demand schedule

The schedule can be managed for the demand function of the air conditioner (outdoor) according to the peak hour by 90 - 0%.

▼ The content that can be set in the outdoor demand schedule is the outdoor demand rate.

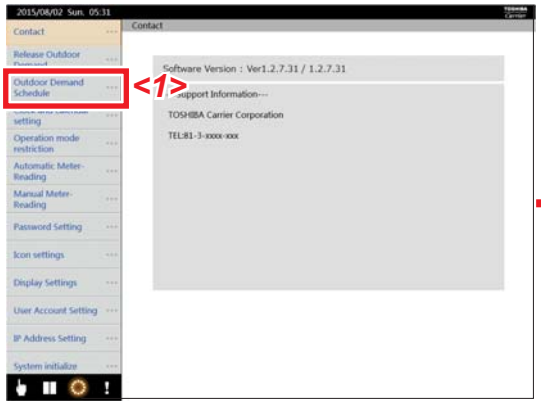
▼ Procedure for setting outdoor demand schedule

(1) Creating outdoor demand schedule
Creates a weekly pattern.
Creates monthly settings and creates schedules for special days if special day patterns are required.

(2) Registering outdoor demand schedule
Register a created demand schedule to the outdoor line to perform scheduled running of the outdoor demand.

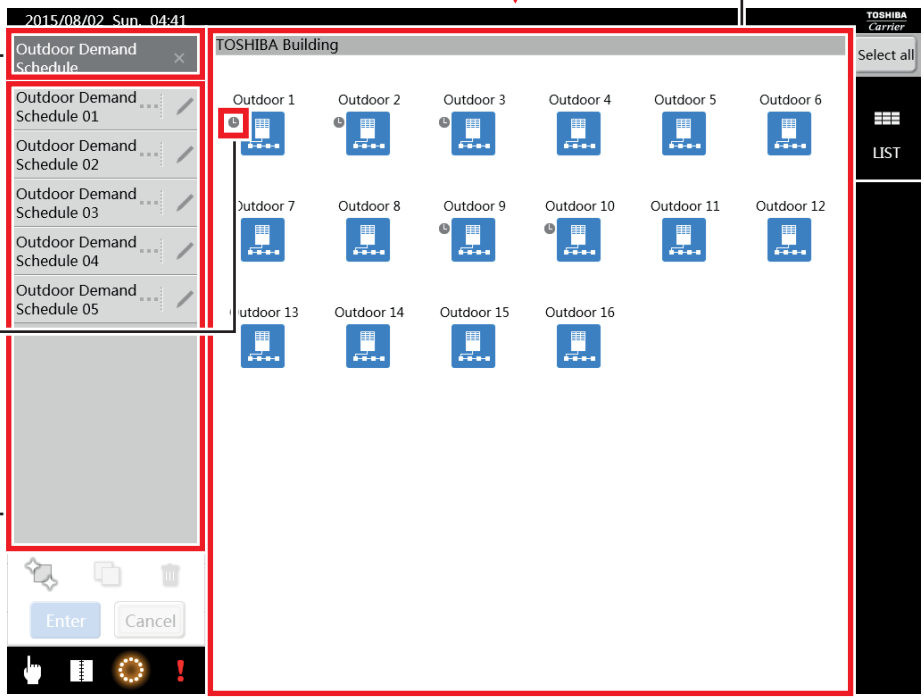
[1] Opening the Outdoor Demand Schedule screen

[Option screen]



Outdoor line icon area
Each outdoor line is shown by an icon.

[Outdoor Demand Schedule screen]



Schedule title
Returns to the option screen.

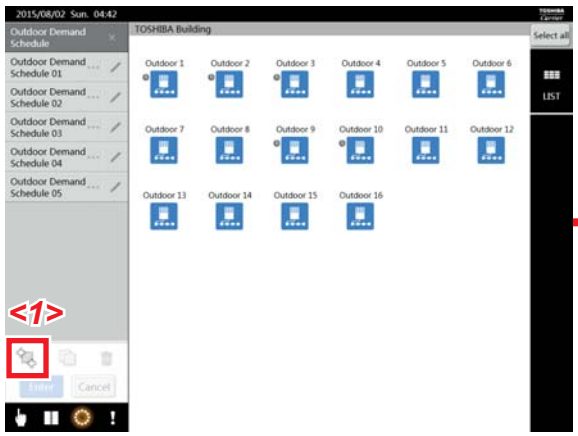
Schedule icon
Appears if an outdoor demand schedule has been registered.

Schedule list
Shows the list of outdoor demand schedules.

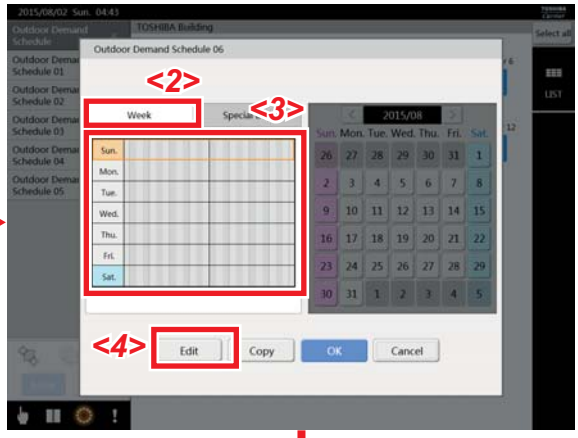
Tap the [Outdoor Demand Schedule] <1> in the option screen.
The Outdoor Demand Schedule screen appears.

[2] Creating new outdoor demand schedules in the Outdoor Demand Schedule screen

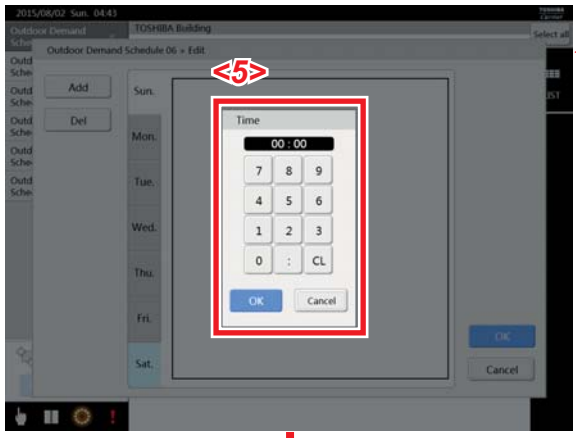
[Outdoor Demand Schedule screen]



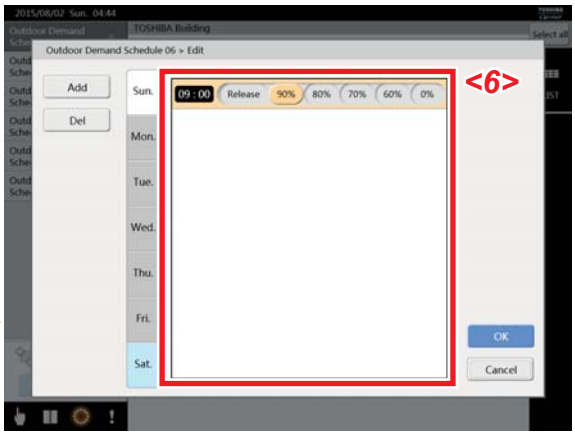
[Outdoor Demand Schedule Weekly Pattern Settings screen]



[Schedule Setup screen]

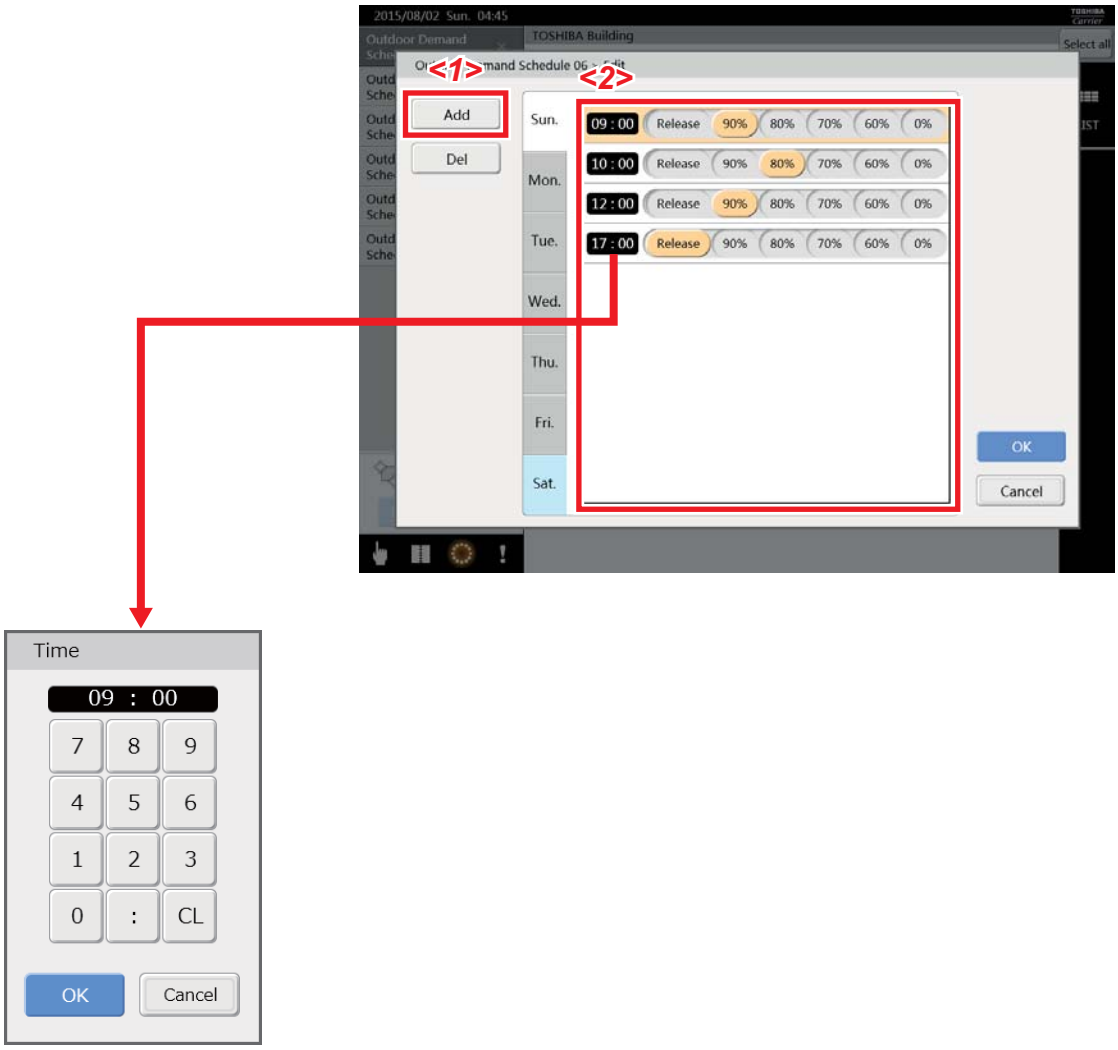


[Outdoor Demand Schedule Detailed Settings screen]



(1) Tap the [Create New] icon **<1>**.
The Outdoor Demand Schedule Weekly Pattern Settings screen appears.
(2) Tap the [Week] tab **<2>**.
(3) Tap the day **<3>** that you want to set.
(4) Tap the [Edit] button **<4>**.
The screen for setting the time appears.
(5) Set the "Schedule Time" **<5>**.
Tap the [OK] button to add the scheduled time to the Outdoor Demand Schedule Detailed Settings screen.
(6) Select a demand rate **<6>**.
(7) Tap the [OK] button.
The changes are reflected in the Outdoor Demand Schedule Weekly Pattern Settings screen.
(8) Tap the [OK] button in the Outdoor Demand Schedule Weekly Pattern Settings screen to create a new outdoor demand schedule.

[3] Creating schedules in the Outdoor Demand Schedule Detailed Settings screen



▼Add

(1) Tap the [Add] button <1>.
The screen for setting the time appears.

(2) Set the time.
Tap the [OK] button to add a new time to the "Operations list" <2>.

▼Change

(1) Tap the schedule that you want to change on the "Operations list" <2>.
The schedule is highlighted.

(2) Tap the schedule and select demand rate or change time.

The following items are the same as for the Master Schedule.

[4] Copying daily schedule in the Outdoor Demand Schedule Weekly Pattern Settings screen

[5] Setting special days in the Outdoor Demand Schedule Special Day Pattern Settings screen

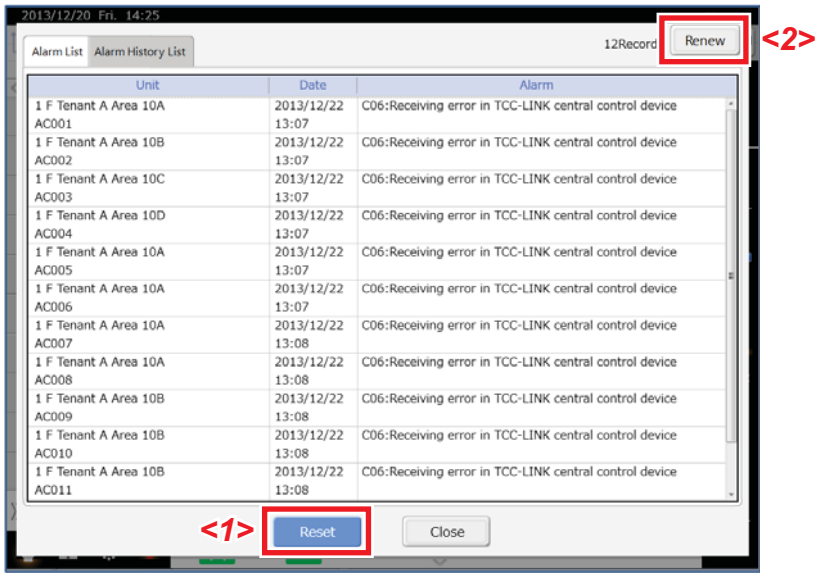
[6] Changing, copying, or deleting Outdoor Demand Schedules in the Outdoor Demand Schedule screen

[7] Registering outdoor demand schedules in the Outdoor Demand Schedule screen

4-6. Alarm List and Alarm History List screen

[1] Alarm List screen

Tapping the alarm icon in the menu opens the Alarm List screen. A list of current errors is displayed. Displays the name of the air conditioner, date the error occurred, and a description of the error.

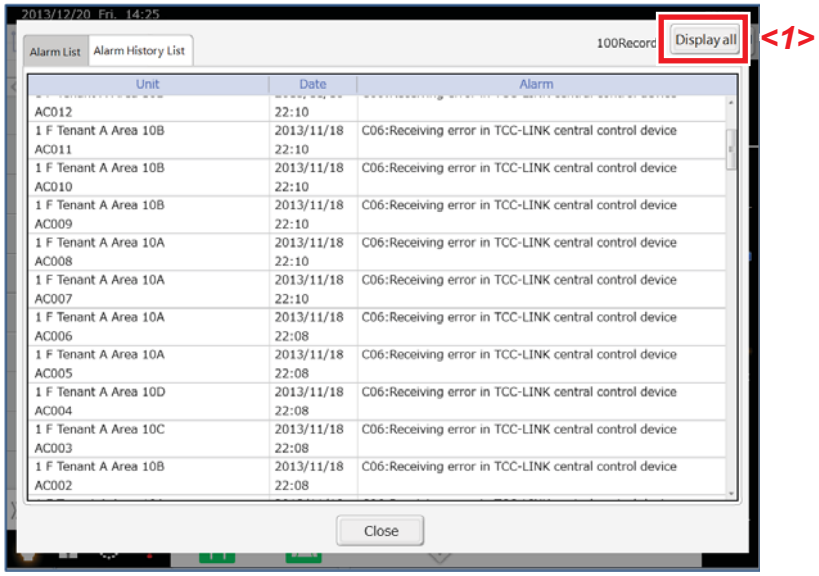


Resetting the error
Tapping the [Reset] button <1> sends a clear error signal to the air conditioner.

Displaying new alarms
Tap the [Renew] button <2> to renew the screen and display the latest alarms.

[2] Alarm History List screen

Tapping the [Alarm History List] tab in the Alarm List screen opens the Alarm History List screen. It can show a history of past alarms. Displays the name of the air conditioner, date the error occurred, and a description of the error.



Displaying the entire alarm history
Tap the [Display all] button <1>.
The entire alarm history is displayed. A maximum of 5120 items.

4-7. List display

By tapping the list icon in the display switch icon area, you can check the set schedule and the operating status of the selected air conditioner in the list. Or, in the outdoor demand schedule screen, display the name of the air conditioner that is connected to the selected outdoor line.

Level name
Shows the floors, tenants, and area names of the air conditioners.

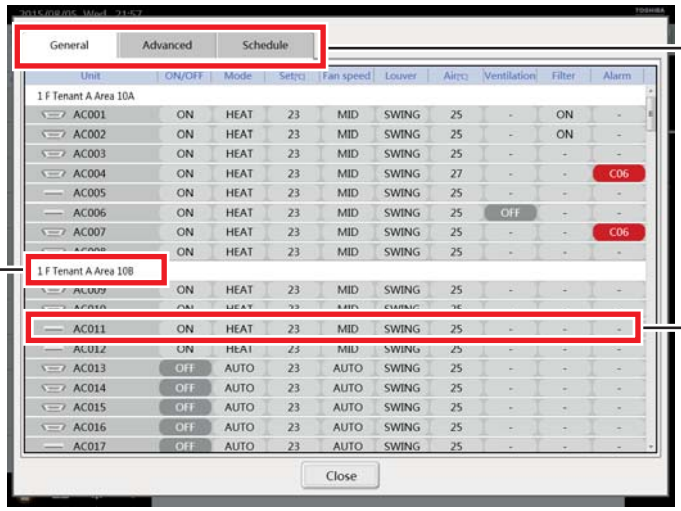
Tab

General : Changes to the [General] tab.

Advanced : Changes to the [Advanced] tab.

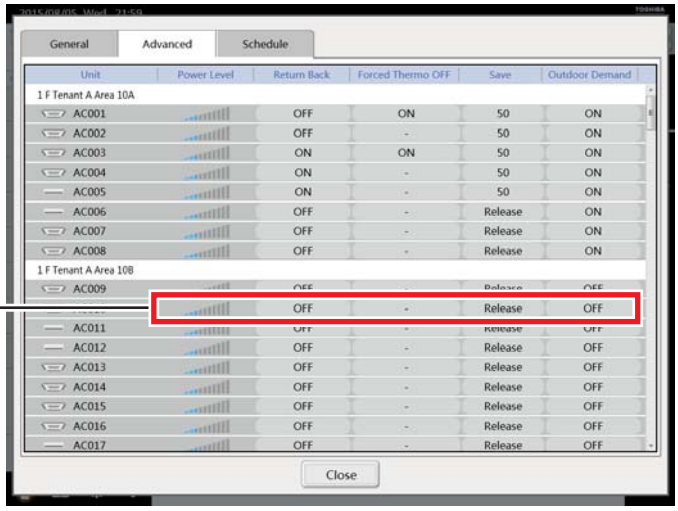
Schedule : Changes to the [Schedule] tab.

[List display screen] ([General] tab)



Air conditioner status
Shows the operating status and air conditioner's name.

[List display screen] ([Advanced] tab)



Power Level
Displays the performance status of the running air conditioner in 10 steps. The more bars are lit, the stronger the operation.

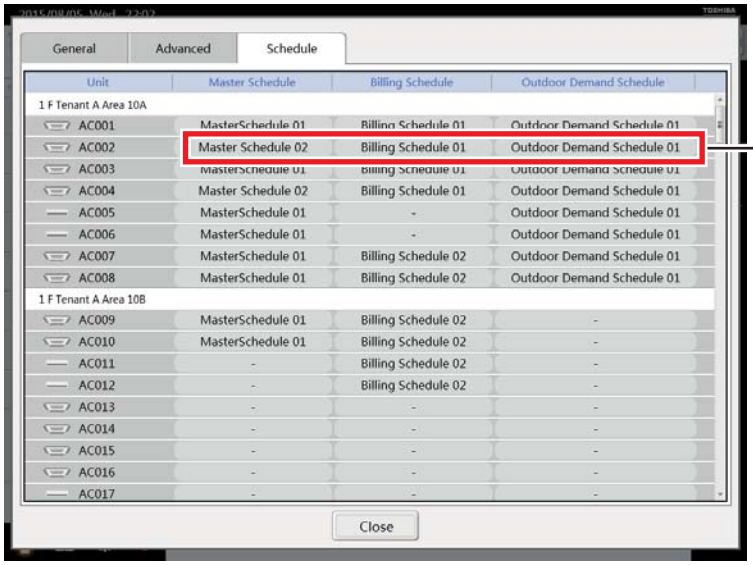
Return Back
Displays "ON" while Return Back is set.

Forced Thermo OFF
Displays "ON" while Forced Thermo OFF is set.

Save
Displays "Release", "Max", "50", "0".

Outdoor Demand
Displays "ON" while Outdoor Demand is set.

[List display screen] ([Schedule] tab)

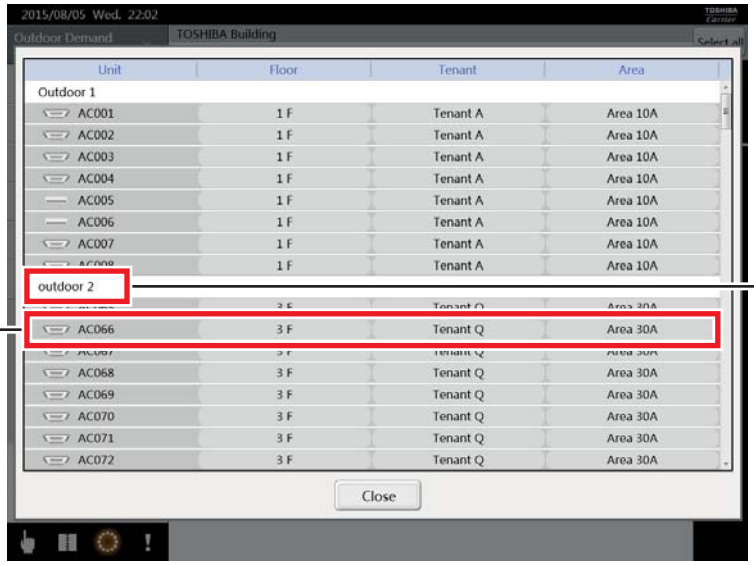


Master Schedule
Displays the name of registered master schedules.

Billing Schedule
Displays the name of registered billing schedules.

Outdoor Demand Schedule
Displays the name of outdoor demand schedules registered to outdoor units that are connected.

[List display screen] (moves from the Outdoor Demand Schedule screen)



Name of indoor unit
Displays the level name and name of indoor units connected to outdoor units.

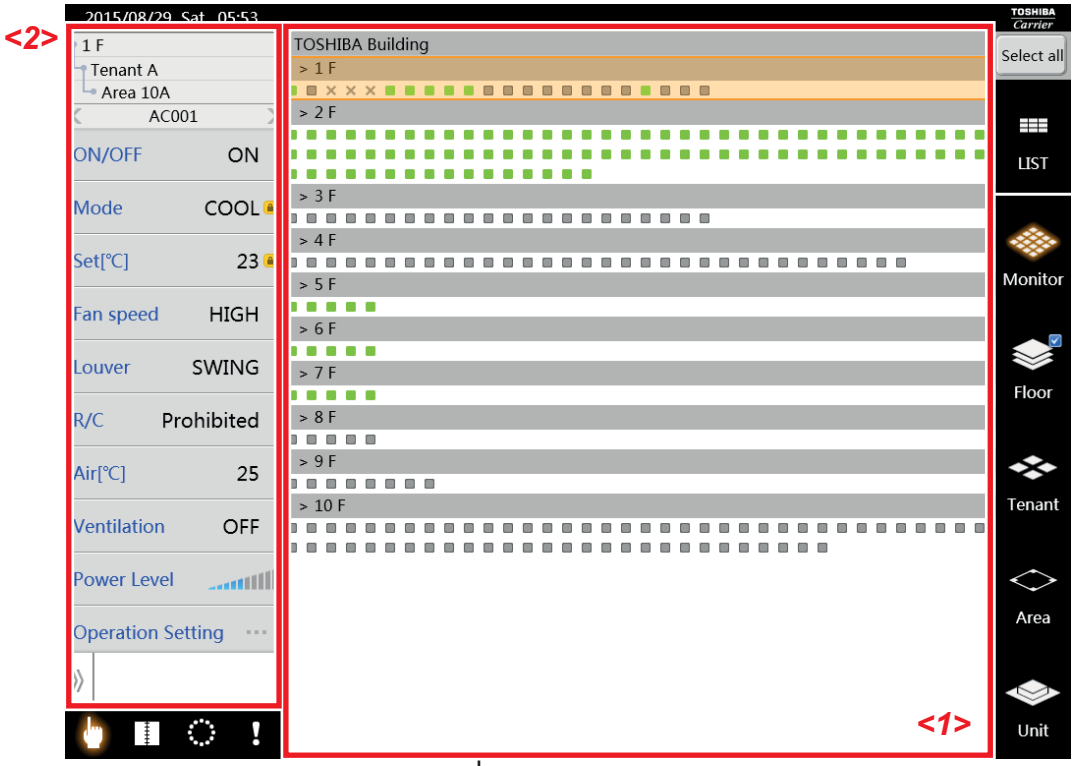
Name of outdoor line
Displays the name of the outdoor unit.

4-8. Monitor screen

Tapping the [Monitor] icon in the display switching icon area opens the Monitor screen. You can check the operating status of many air conditioners in a single screen. It is also possible to change the status of air conditioners.

[1] Changing the settings of air conditioners on the Monitor screen

[Monitor screen]



Unit icon area

Shows the status of air conditioners.

- : Indicates it is operating (red or green).
- : Indicates it is not operating (grey).
- : Indicates an alarm has occurred.

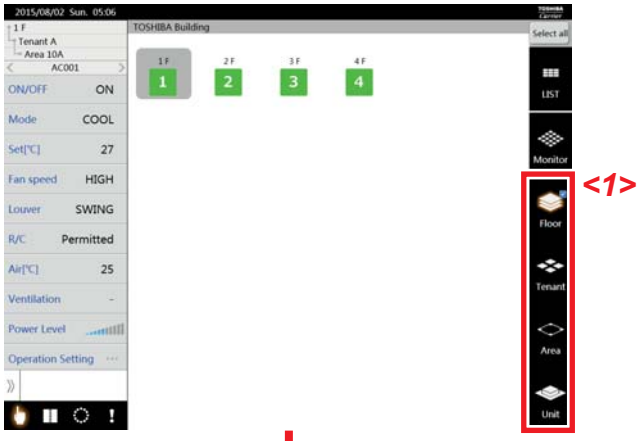
(1) Tap the unit icon group **<1>** that you want to set.
All the levels to which that unit belongs are highlighted.
(2) Change the air conditioner settings in the same way as "4-2.Changing air conditioner settings" from the "Air conditioner status list" **<2>**.

4-9. Changing the top level

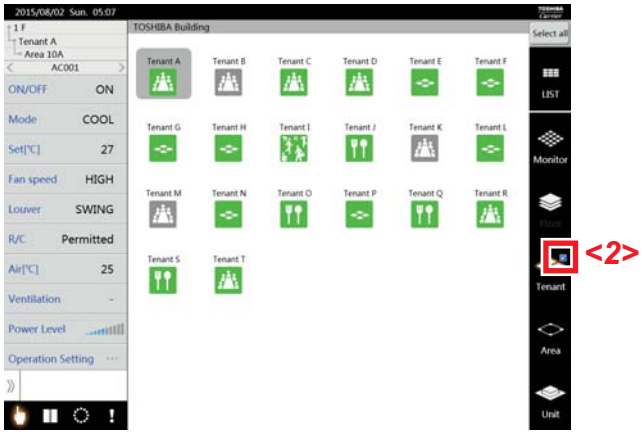
By long tapping the [Floor], [Tenant], [Area], or [Unit] icon on the display switch icon, you can change the top level to floor, tenant, area, or unit. Floor is normally selected for the top level. If the top level is below tenant, it is not possible to move to a level higher than the top level. (Example: If the top level is area, it is not possible to tap the floor/tenant icon.)

[1] Changing the top level on the control screen

[Control screen] (separate display for each floor)



[Control screen] (separate display for each tenant)



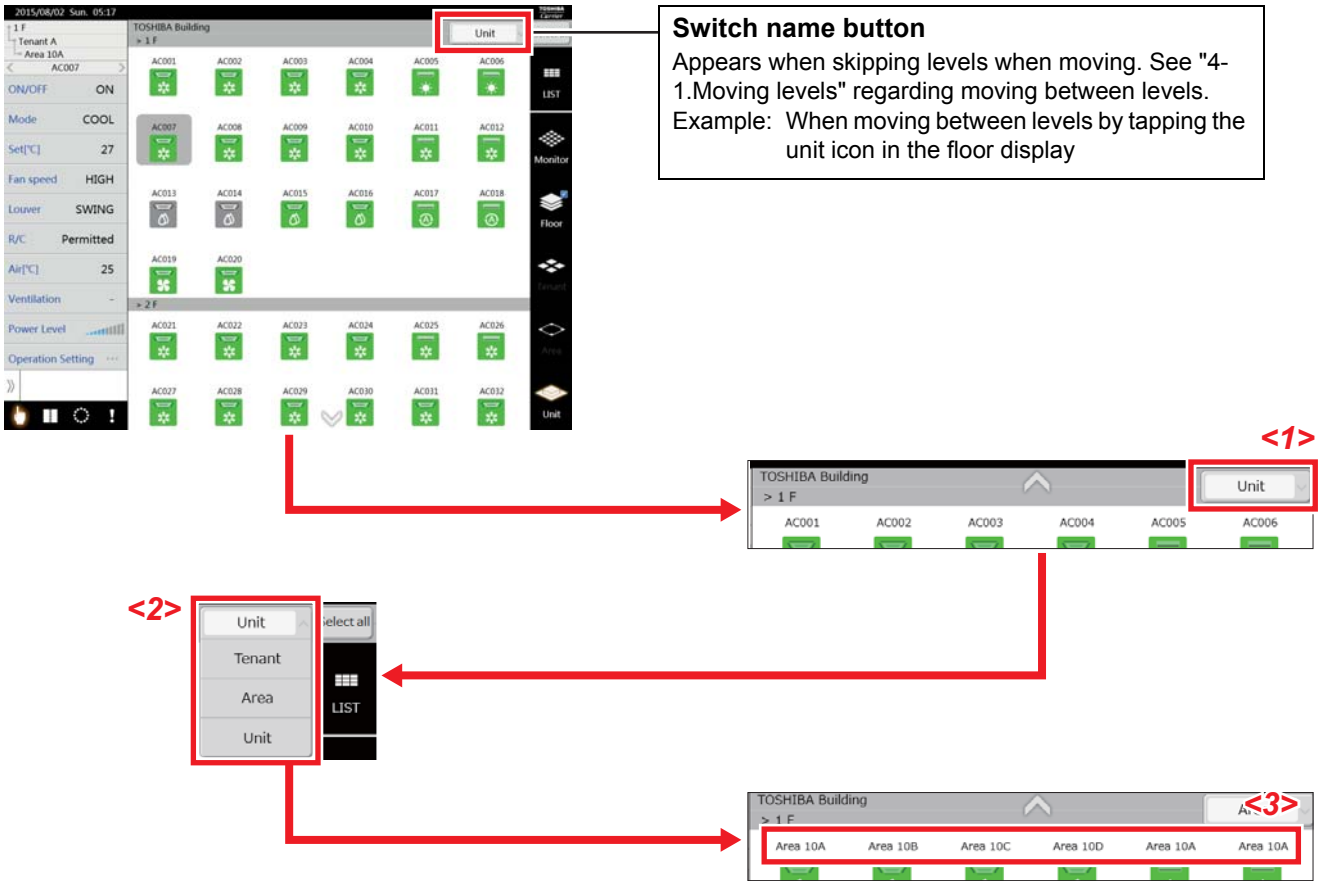
(1) Long tap any one of the [Display Switch (level switch)] icons **<1>**.
(2) Moves to the level for which the top level mark **<2>** was long-tapped and that level becomes the top level.

4-10. Switching the display of the unit names

You can switch the display from air conditioner name to upper level name if the unit display skips a level such as from floor display to unit display. By using this function, you can check the names of the levels of all the air conditioners at one time.

[1] Switching unit names in the control screen

[Per floor unit display]



Switch name button

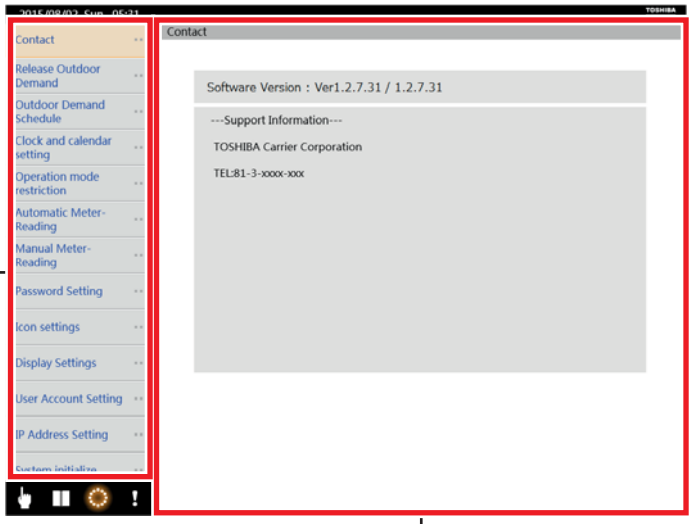
Appears when skipping levels when moving. See "4-1.Moving levels" regarding moving between levels.

Example: When moving between levels by tapping the unit icon in the floor display

(1) Tap the [Switch name] icon <1>.
The list of level names is displayed.
(2) Tap the level name <2> that you want to display. (Example: Tap an area name)
(3) Unit name changes to the level name <3> selected in (2). (Example: Changes to area name)

4-11. Option screen

Tapping the option icon in the menu icon area opens the option screen. You can do system settings, such as date and time settings and support information and settings related to the air conditioners, such as Outdoor Demand Schedule settings (see "4-5.Setting outdoor demand schedule") and Operation mode restriction.



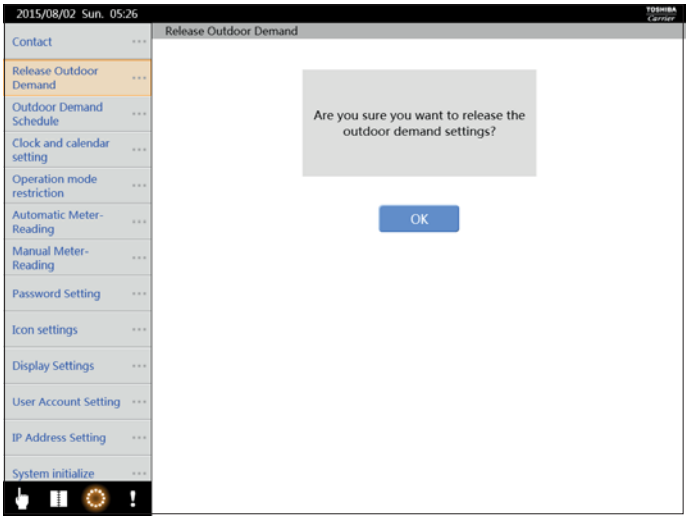
Optional functions list
Each function is shown in the list. The functions can be used by selecting them.
Flick to scroll up or down the list.

Optional function screen
Tapping a function in the list opens that function's screen.

[1] Settings related to air conditioners

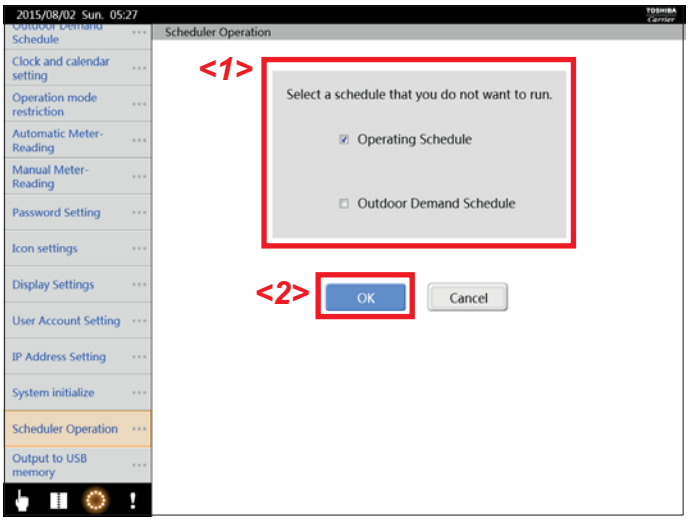
[1-1] Release Outdoor Demand

Tap the [OK] button to release demand for all the outdoor units.



[1-2] Disabling schedules

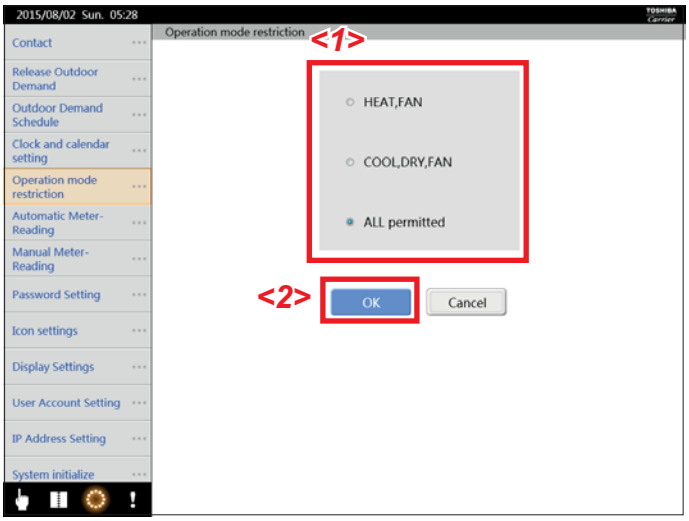
You can set whether to operate an outdoor demand schedule or operating schedule.



(1) Select the "Schedule" <1> that you will not operate.
(2) Tap the [OK] button <2> to apply the setting.

[1-3] Operation mode restriction

This is used only when the system's operation modes are limited to cooling (COOL, DRY, or FAN) or heating (HEAT or FAN). Use it to prohibit heating or cooling with multiple air conditioners.

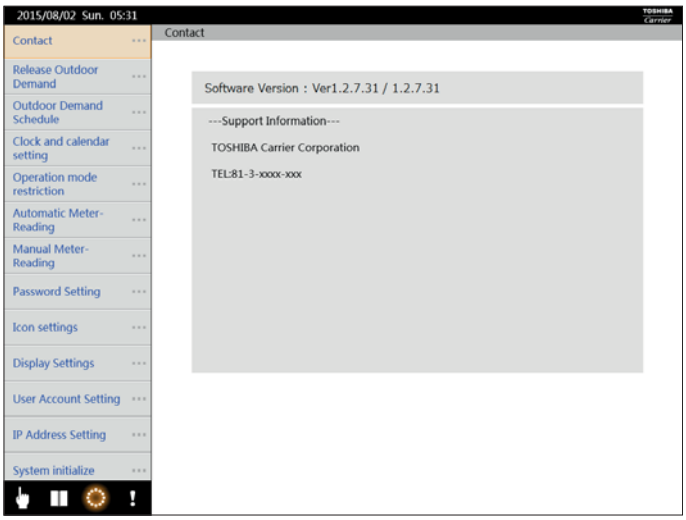


(1) Select [HEAT,FAN], [COOL,DRY,FAN] or [All Permitted] <1>.
(2) Tap the [OK] button <2> to apply the setting.

[2] System settings

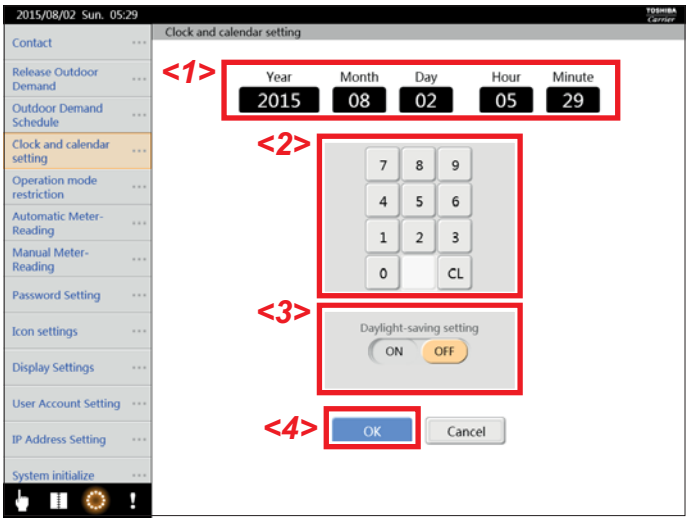
[2-1] Contact information

Shows the versions of the software and contact information.



[2-2] Clock and calendar settings

You can set the clock and calendar. You can also set the clock for daylight savings time.



▼ When daylight savings time is set



Setting the clock and calendar

(1) Tap the year, month, date, hour, or minute <1> that you want to change.
(2) Enter a new value <2>.
(3) Tap the [OK] button <4> to apply the setting.

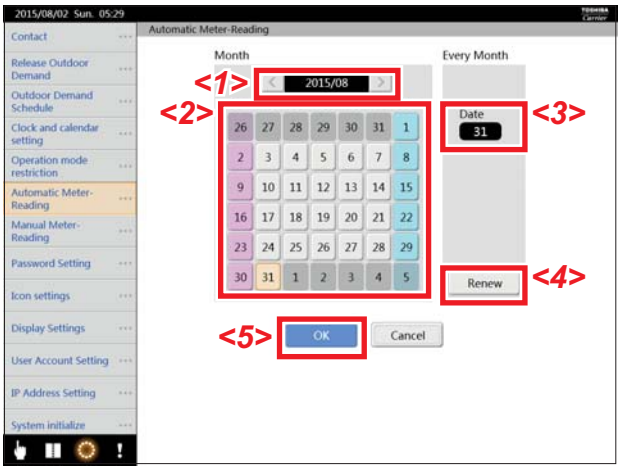
Setting daylight savings time

(1) Tap the [ON] button under [Daylight-saving setting] <3>. The time setting advances one hour.
(2) Tap the [OK] button <4> to apply the setting.
A daylight savings time mark appears near the clock when daylight savings time is set.

Tap the [OFF] button under [Daylight-saving setting] to set the clock back one hour. (Daylight savings time is cleared)

[2-3] Automatic Meter-Reading

Use this setting if you want to add or change automatic meter reading days. The initial values for the settings are set in the settings files.



Setting for each month individually

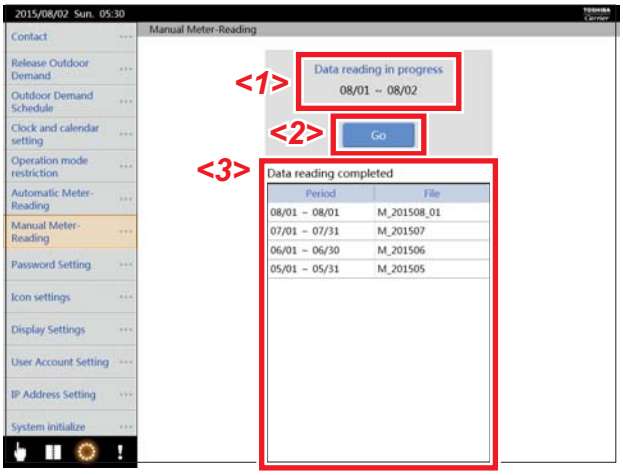
(1) Select the month <1> to change or set.
(2) Tap the date <2> that you want to change.
(3) Tap the [OK] button <5> to apply the settings.
To change the meter reading date, tap the date that is clear the setting, it will no longer be highlighted.

Batch setting all months together

(1) Tap the date <3> that you want to batch set.
The Date screen appears.
(2) Set the date to set.
(3) Tap the [Renew] button <4>. The date selected in (2) is highlighted in all the months.
(4) Tap the [OK] button <5> to apply the settings.

[2-4] Manual Meter-Reading (TOUCH SCREEN CONTROLLER only)

Use this setting if you want to do provisional totalling before the date that the meter is read automatically. The period from the last meter reading until the current date appears in [Data reading in progress] <1>. Operating time and power distribution are reset, and new calculations start after totalling.

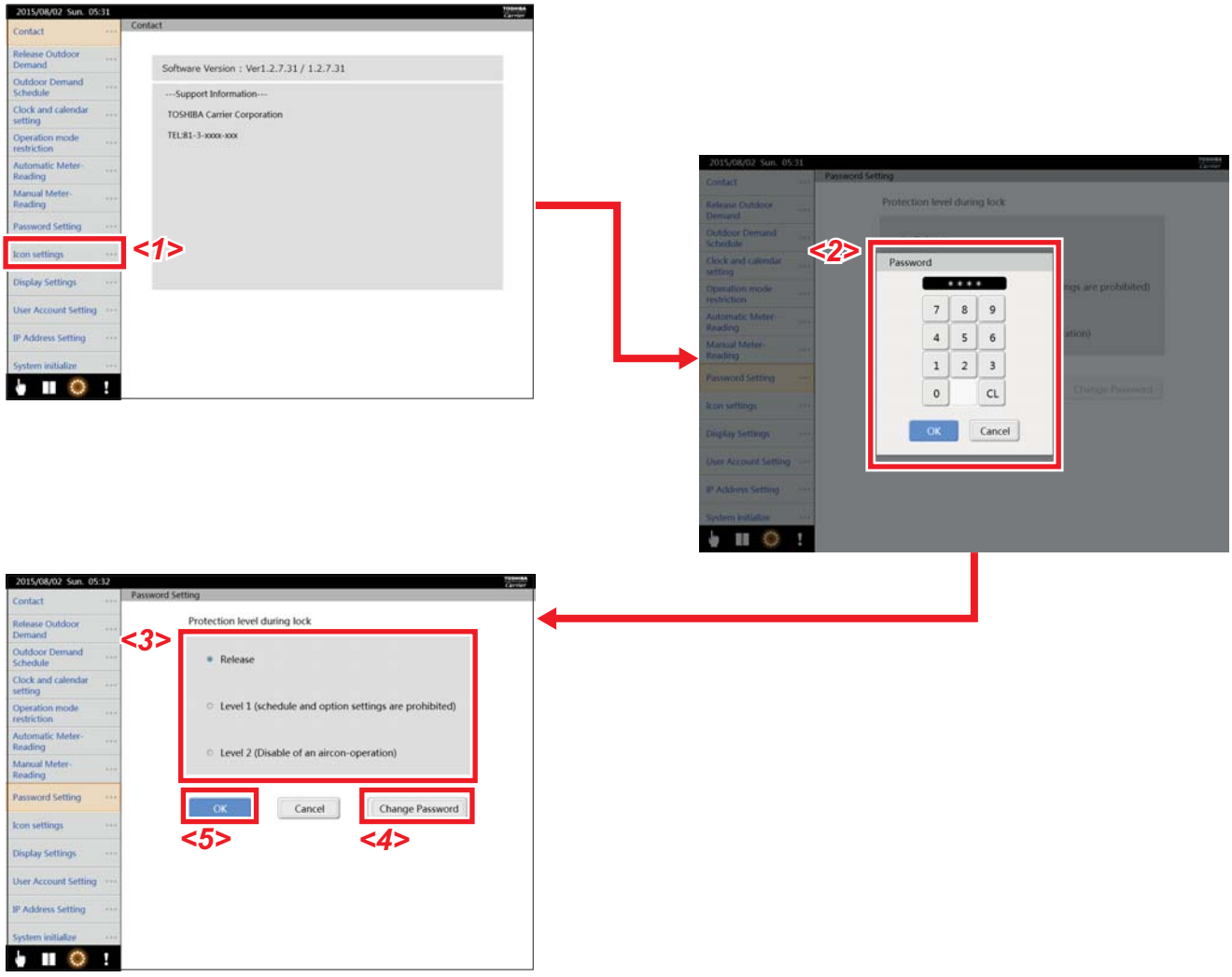


Tap the [Go] button <2>.
Totalling is done, and the file is added to "Meter reading file list" <3>.

[2-5] Password setting (TOUCH SCREEN CONTROLLER only)

Input a password and use it to prevent people from operating the air conditioner, or checking or setting schedules or option icons until the system is unlocked.

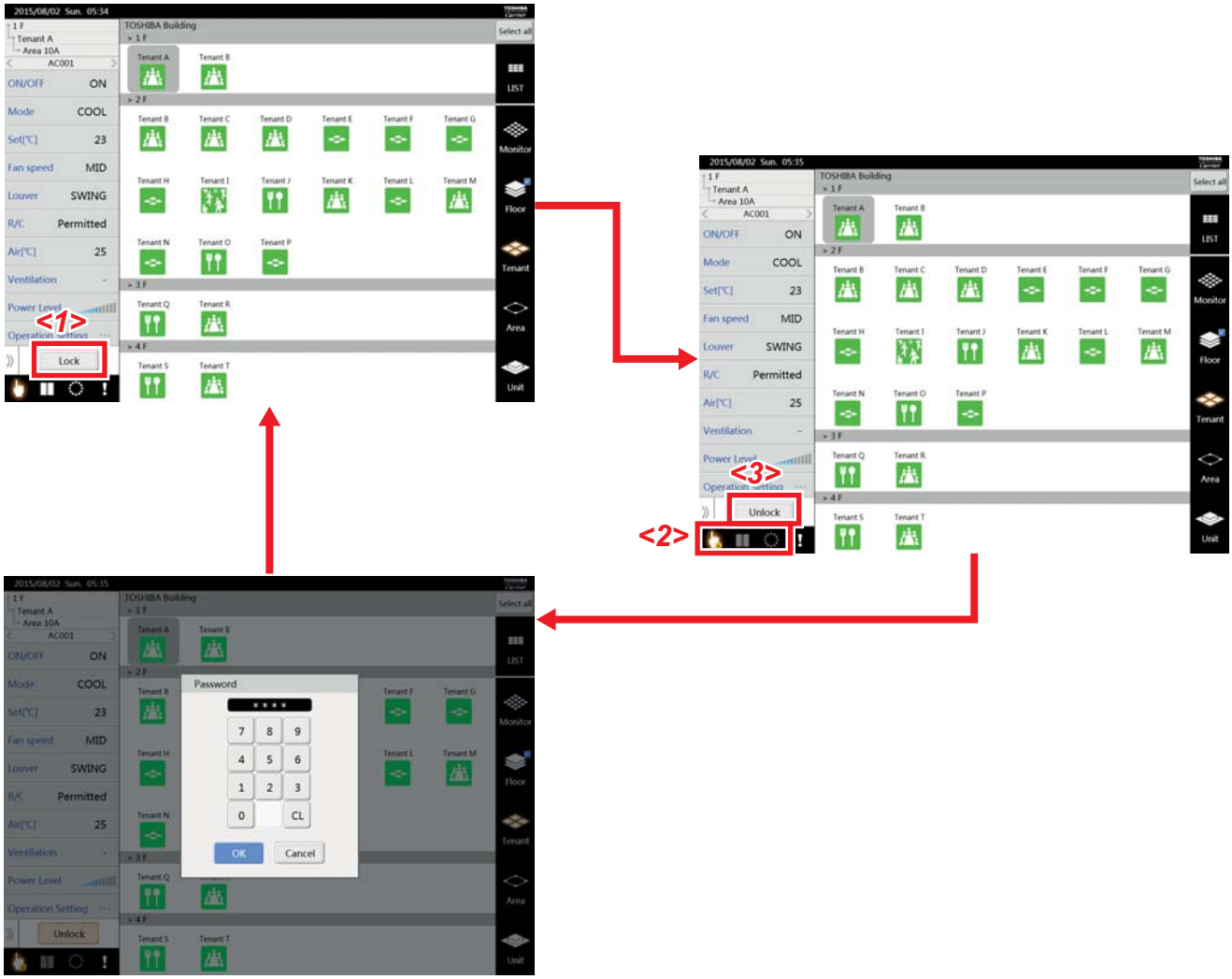
▼Setting limits on operations



(1) Tap [Password setting] <1>.
The Password Input <2> screen appears.
(2) Enter a four digit password. The initial default settings is set to 1048.
(3) Set the [Protection level during lock] <3>.
Release: Do not limit functions with the password.
Level 1: Prevent setting and checking operations done with the [Schedule] and [Option] icons.
Level 2: Prevent setting and checking operations done with the [Schedule] and [Option] buttons and operations to set air conditioners.
(4) If you want to change the password, tap the [Change password] button <4>.
The Password Input screen opens. Enter any four digit password. When you tap the [OK] button a screen for re-entering the password appears, enter the password again.
(5) Tap the [OK] button <5> to apply the settings.

▼Limiting operations and clearing limits on operations on the control screen

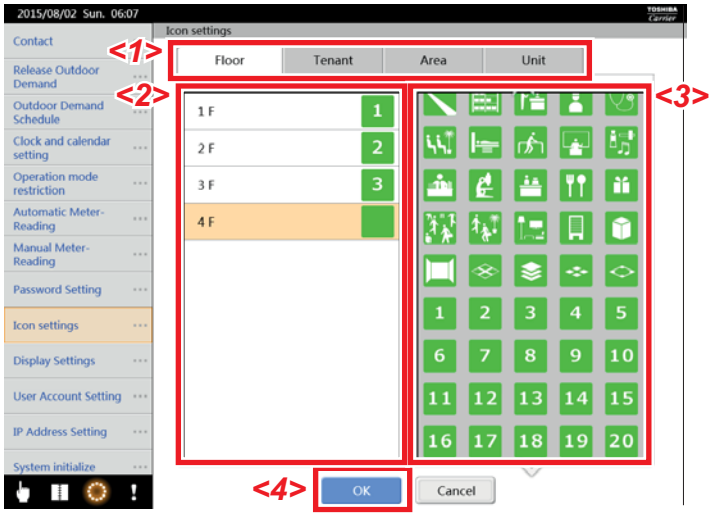
When operation limits are set, the [Unlock/Lock] button <1> appears on the control screen. This button limits operations and clears the limits on operations.



(1) The [Lock] button <1> is on the control screen when it opens.
(2) Tap the [Lock] button <1> or do no operations for five minutes.
It becomes impossible to do the operations at the level set in the password setting screen. (Refer to the menu icon display <2>)
(3) Tap the [Unlock] button <3>.
The Password input screen appears. Enter the password that was set and tap the [OK] button.
The [Unlock] button becomes the [Lock] button, and operation limits are released. However, note that if the wrong password is input three times, the password cannot be entered again for 30 minutes.

[2-6] Icon settings (TOUCH SCREEN CONTROLLER only)

You can set the images that appear for group icons.

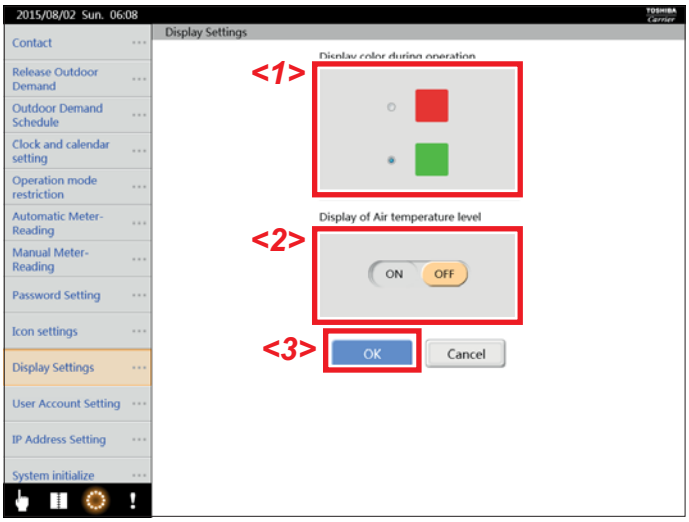


Setting the icons for each level name

(1) Tap the [Name] tab of the level <1> that you want to change.
(2) Tap the name that you want to change on the "Name list" <2>.
(3) Tap the icon that you want to register on the "Icon list" <3>.
(4) Repeat operations (1) to (3) to set icons for each level name.
(5) Tap the [OK] button <4> to apply the setting.

[2-7] Display settings (TOUCH SCREEN CONTROLLER only)

You can set whether the Air temperature level is displayed and the colour of icons that indicate air conditioners are operating.



Setting the colour displayed during operations

(1) Tap the [Colour] <1> that you want to set.
(2) Tap the [OK] button <3> to apply the setting.

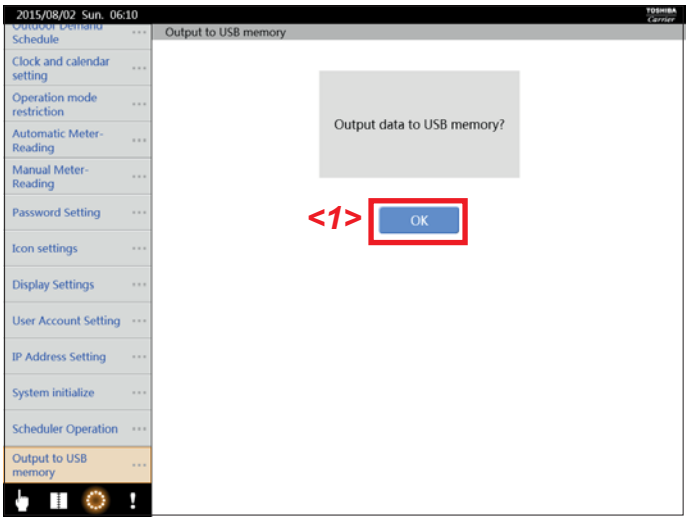
Displaying the Air temperature level

(1) Tap the [ON] button for [Display of Air temperature level] <2>.
(2) Tap the [OK] button <3> to apply the setting.

Tap the [OFF] button for the Air temperature level display to not display the Air temperature level.

[2-8] Output to USB memory (TOUCH SCREEN CONTROLLER only)

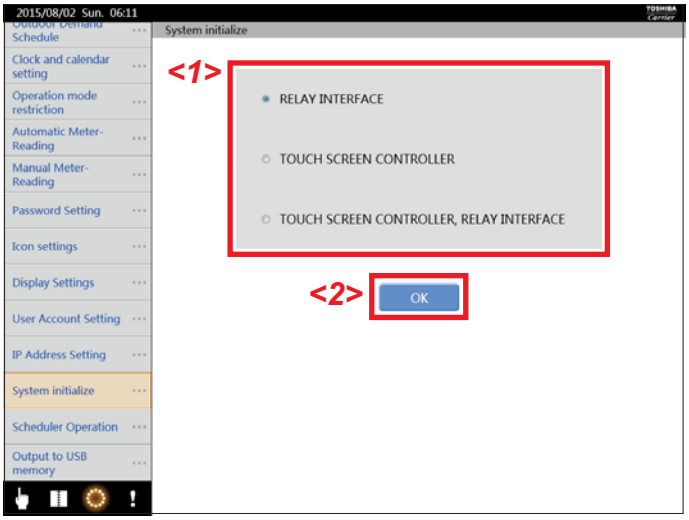
This is used to output alarm data and data for power distribution to a USB memory that is connected.



(1) Connect a USB memory to the USB port.
(2) Tap the [OK] button <1> to output the alarm files, and monthly and daily reports to the USB memory.
(3) The [OK] button <1> is enabled, when the process is complete, remove the USB memory.

[2-9] System reset (TOUCH SCREEN CONTROLLER only)

Restarts and resets the selected machine.

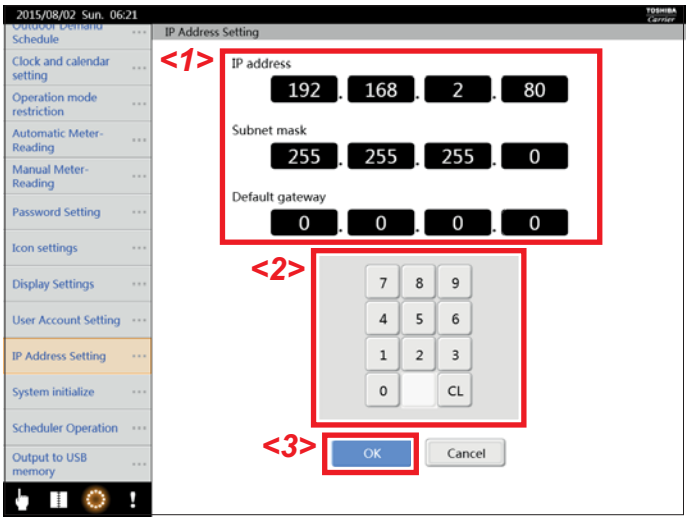


(1) Select the machine <1> to reset.
(2) Tap the [OK] button <2> to reset the selected machine.

[2-10] IP address settings (TOUCH SCREEN CONTROLLER only)

This is used to set the TOUCH SCREEN CONTROLLER IP address. The controller is restarted if the settings are changed.
The default settings are as follows.

- IP address: 192.168.2.80
- Subnet mask: 255.255.255.0
- Default gateway: 0.0.0.0 (not set)



(1) Tap the address that you wish to change **<1>**.
(2) Enter the new value **<2>**.
(3) Tap the [OK] button **<3>**.
A confirmation screen appears.
(4) Tap the [OK] button. The TOUCH SCREEN CONTROLLER restarts, and the new IP address is set.

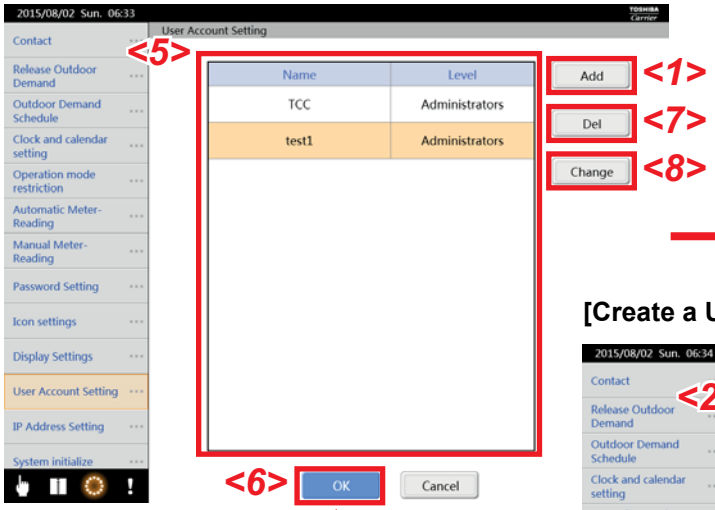
[2-11] User account settings (TOUCH SCREEN CONTROLLER only)

This is used to set up user accounts.
A user account is required to use your computer to monitor and control air conditioners via the TOUCH SCREEN CONTROLLER. Access levels can be set to limit the operations possible.

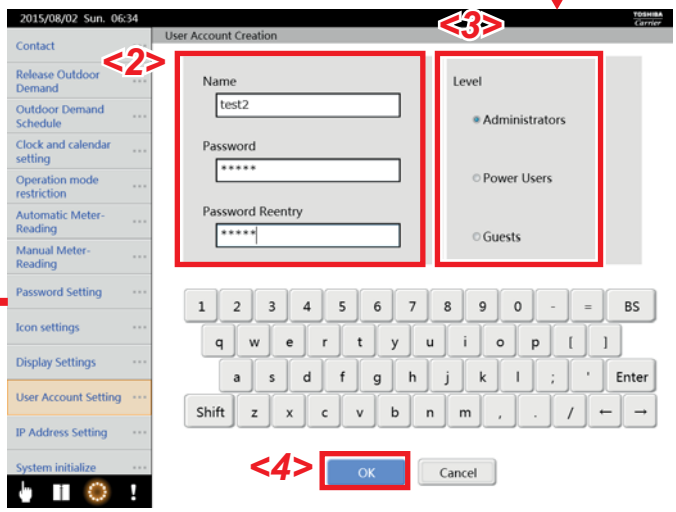
* There are three access levels.
  Administrator: Administrators can perform all operations possible from a computer.
  Power user: Power users cannot change or confirm settings using the [Schedule] and [Options] icons.
  Guest: Guests cannot change or confirm settings using the [Schedule] and [Option] buttons, and cannot perform operations to set air conditioners.

▼Adding/deleting/changing a user account

[User Account Settings screen]



[Create a User Account screen]



▼ Adding a user account

(1) Tap the [Add] button **<1>**.
The Create a User Account screen appears.
(2) Enter a user name, password, and then the password again **<2>**.
You can enter between 1 and 24 characters.
(3) Select the “Access level” **<3>**.
(4) Tap the [OK] button **<4>**.
(5) The newly created user is added to the [User account list] **<5>**.
(6) Tap the [OK] button **<6>** to confirm.

▼Deleting a user account

(1) Tap the user you wish to delete from the [User account list] **<5>**.
(2) Tap the [Delete] button **<7>**.
A confirmation screen appears.
(3) Tap the [OK] button.
(4) The [User account list] **<5>** is updated.
(5) Tap the [OK] button **<6>** to confirm.

▼Changing a user account

(1) Tap the user you wish to change in the [User account list] **<5>**.
(2) Tap the [Change] button **<8>**.
The Create a User Account screen appears.
(3) Enter a new password, and then the same password again **<2>**. You can enter between 1 and 24 characters. The user name cannot be changed.
(4) Select the “Access level” **<3>**.
(5) Tap the [OK] button **<4>**.
(6) The user appears on the [User account list] **<5>**.
(7) Tap the [OK] button **<6>** to confirm.

5 Monitoring/controlling using a computer

You can use your computer to monitor and control air conditioners via the TOUCH SCREEN CONTROLLER. This section explains operations that differ from those performed using the TOUCH SCREEN CONTROLLER.
*Refer to the network connection guide for information on how to connect the computer and TOUCH SCREEN CONTROLLER.
The display may be slowed down if the number of group icons is large.

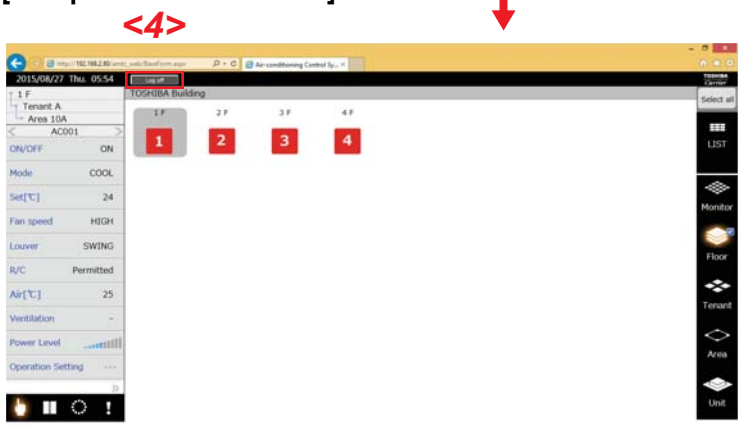
5-1. Log on/Log off

[Log on screen]





[Computer control screen]



▼Log on

Make a note of the user name and password set in [2-11 User account settings] in 4-11 Option screen.
(1) Open your browser and connect to the TOUCH SCREEN CONTROLLER.
A log on screen appears.
(2) Enter your [User name] **<1>**.
(3) Enter your [Password] **<2>**.
(4) Click the [Log on] button **<3>**.
The computer control screen appears.
*Up to 2 users can be logged on.
The system will automatically log off at 1 am to protect the TOUCH SCREEN CONTROLLER. Log on again if you want to continue to monitor and control the system from a PC.

▼Log off

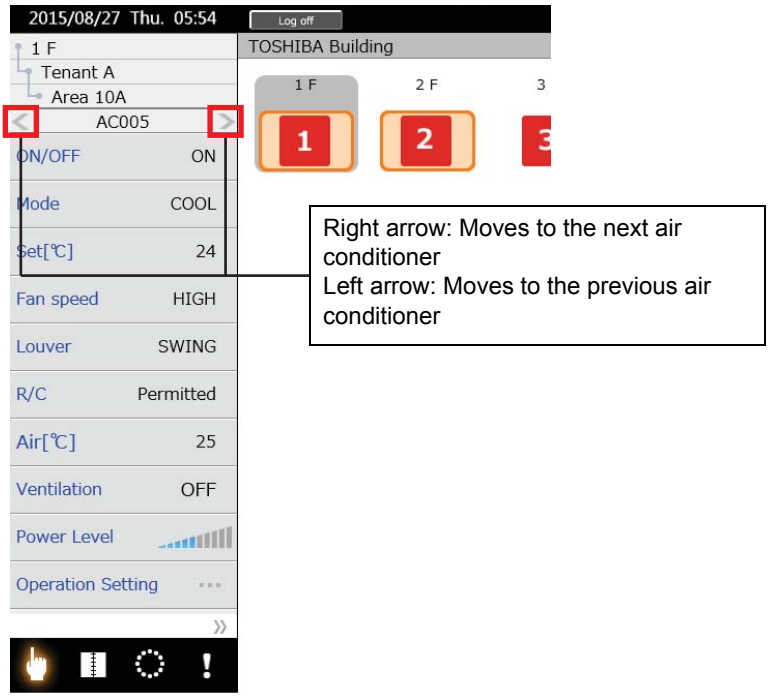
(1) Click the [Log off] button **<4>**.
The browser will return to the log on screen.

NOTE
* The screen configuration and operations that can be performed after logging on are fundamentally the same as on the TOUCH SCREEN CONTROLLER. For operation procedures, refer to [4. How to operate]. However, as some of the screens and operations differ, be sure to read the following information.

5-2. Air conditioner status list display

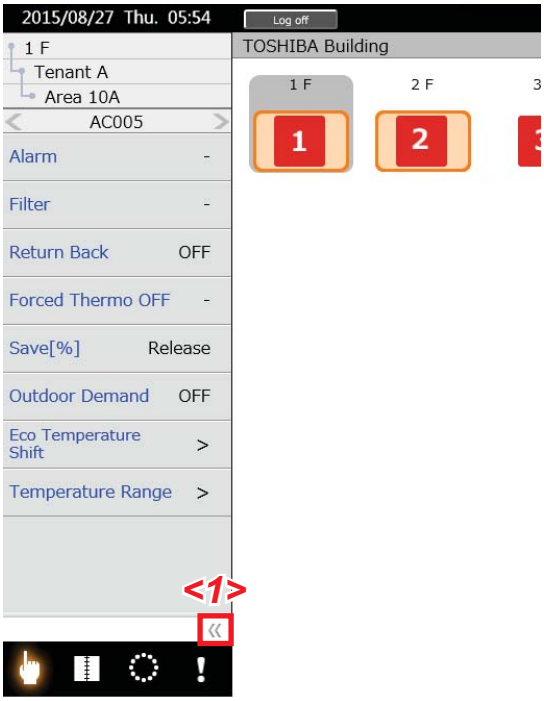
▼Changing the air conditioner that is shown on the air conditioner status list

The "flick" gesture has been replaced by arrow buttons. Click the arrow buttons to move between the air conditioners in the selected group icon.



▼Showing advanced items on the air conditioner status list

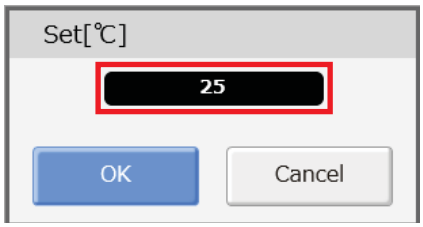
The "Advanced tag" has changed to an [Advanced] button <1>. Click the [Advanced] button <1> to turn the advanced display on or off.

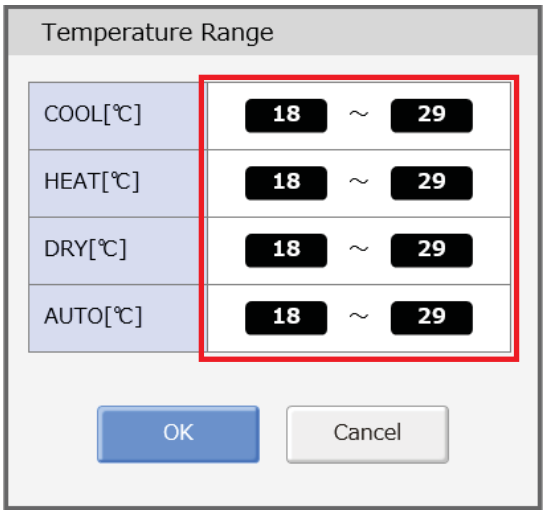


5-3. Entering numbers

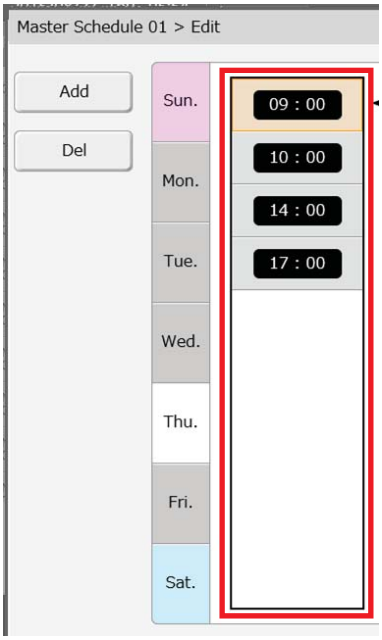
Numbers are entered directly from the computer for things such as the set temperature and schedule times. For this reason, the number input button and number input screens (e.g. screen for setting the time) are not included.

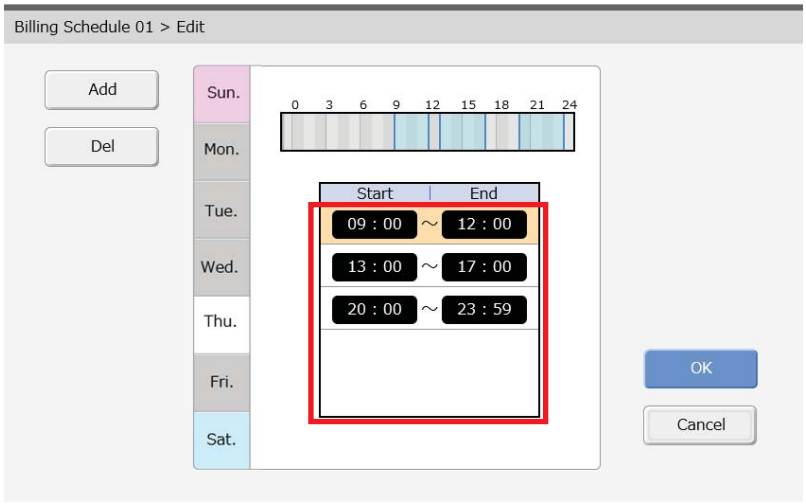
▼Examples of screens that do not have a number input button

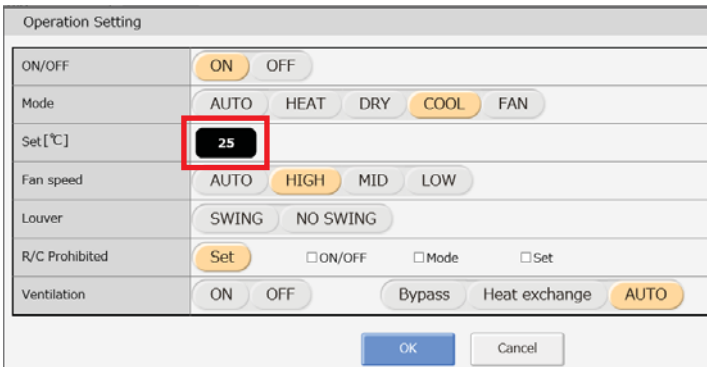




▼Examples of screens that do not have a number input screen



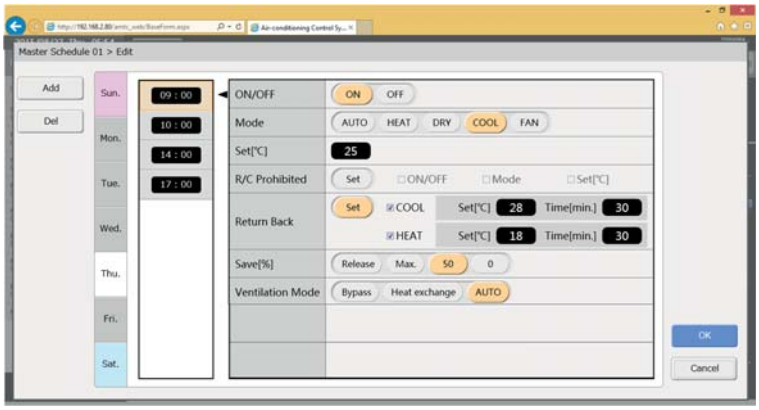




5-4. Schedule detailed settings screen display

The settings displayed on the Master Schedule Detailed Settings screen and Operating Schedule Detailed Settings screen are different. All settings for each time in the schedule can be changed at the same time.

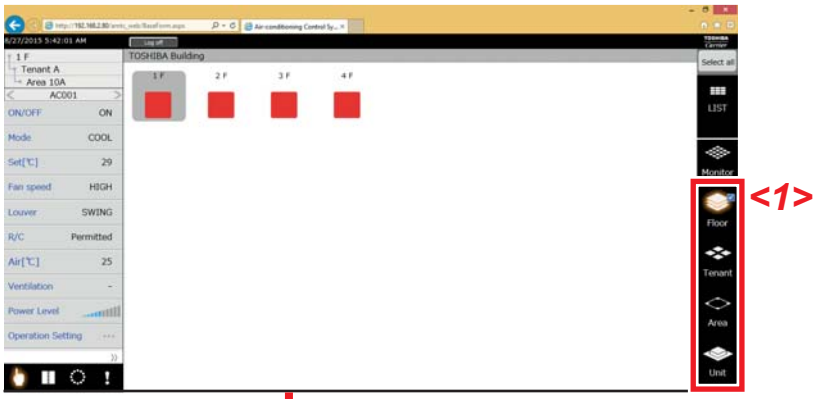
[Master Schedule Detailed Settings screen]



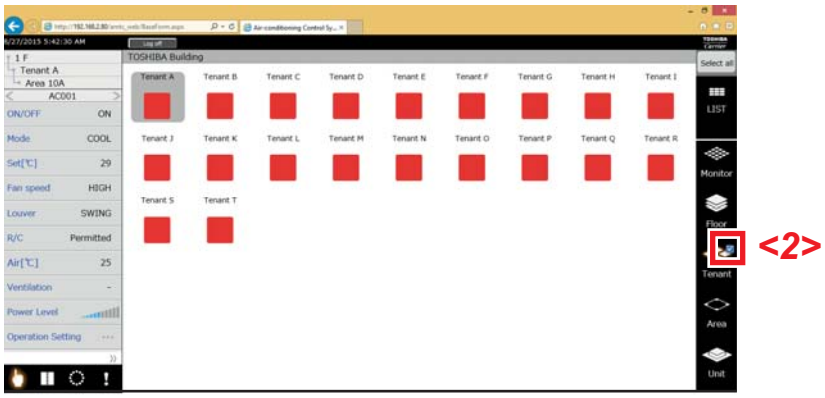
5-5. Changing the top level

The "long tap" gesture has been replaced by right clicking. You can change the top level to floor, tenant, area, or unit by right clicking the [Floor], [Tenant], [Area], or [Unit] icon in the display switch icons.

[Control screen] (separate display for each floor)



[Control screen] (separate display for each tenant)

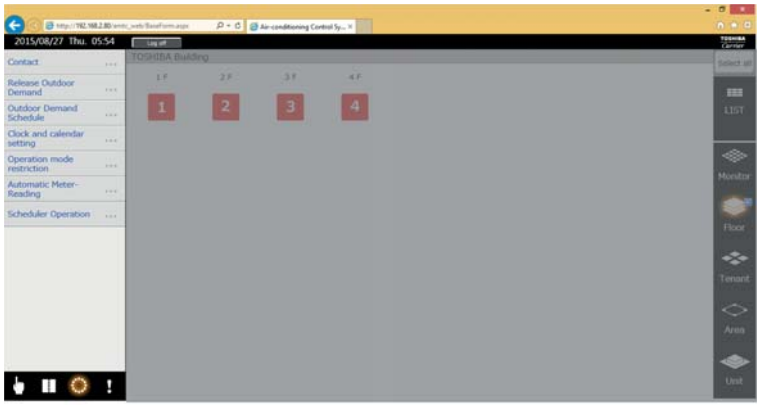


(1) Right click one of the [Display switch] icons <1>.
(2) The top level mark <2> moves to the level that was right clicked, and that level becomes the top level.

5-6. Option screen display

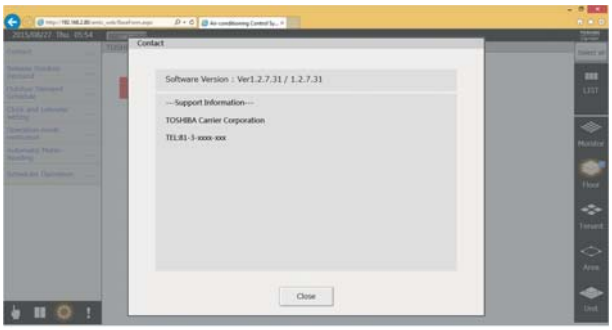
Each function on the option screen now has a dialog box.

[Option screen]

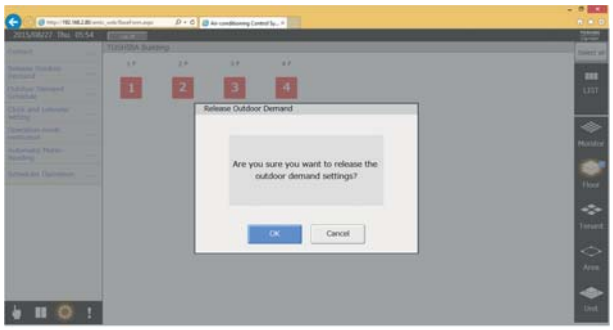


▼Each function on the Option screen

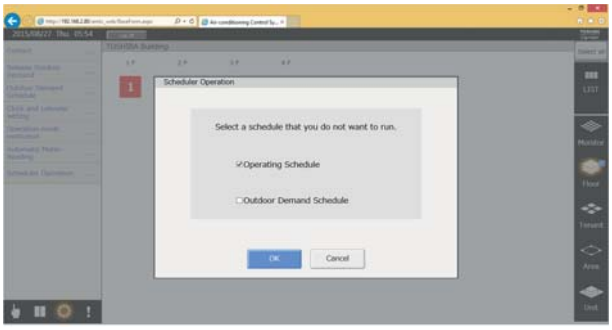
[Contact Information screen]



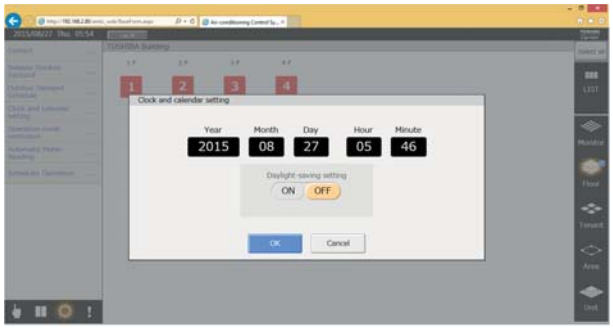
[Release Outdoor Demand screen]



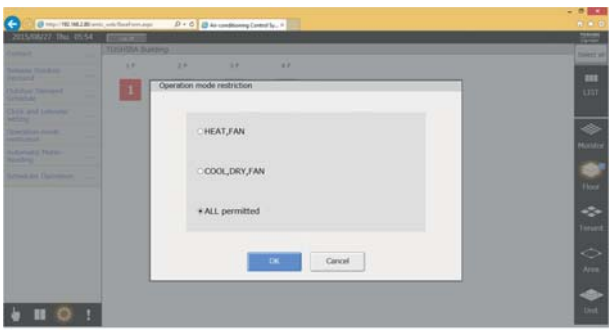
[Scheduler Operation screen]



[Clock and Calendar Settings screen]



[Operation Mode Restriction screen]



[Automatic Meter-Reading screen]



6 Important information

■ Extracting monthly report data and power distribution data

Use the Report Creation Software provided to create reports from monthly report data and power distribution data.
Refer to the Owner's Manual of the Report Creation Software for data extraction and operating procedures.

■ Troubleshooting

Nothing appears on the screen	Has the backlight gone out? →Tap the screen. The backlight turns on, and the screen contents appear.
Operations cannot be performed even when the screen is tapped.	Turn the power off and then on again.
The scheduler does not work even if a schedule is set.	Is only the master schedule set? Is the schedule setting disabled?
The remote control does not work.	Has operation of the remote control been prohibited?
Cooling/Heating cannot be performed during the storage operation at night.	Is a heater (or cooler) on the same refrigerant line operating? Is the local remote control set so the operation mode cannot be changed? Is a heater (or cooler) selected in the selected operation mode range?

■ Contact your dealer

- To change the names of the floors, tenants, areas, or refrigerant lines
- To install more air conditioners
- To output a power distribution report

MEMO

MEMO

MEMO

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