

USER'S MANUAL

ORIGINAL INSTRUCTIONS

CENTRAL CONTROL (CENTRE CONSOLE) SC-SL5-E



SC-SL5-E

USER MANUAL
CENTRAL CONTROL SC-SL5-E
MANUEL DE L'UTILISATEUR
CONSOLE CENTRALE SC-SL5-E
BENUTZERHANDBUCH
Hauptsteuerpult SC-SL5-E
MANUALE D'USO
CONSOLE CENTRALE SC-SL5-E
MANUAL DEL USUARIO
CONSOLA CENTRAL SC-SL5-E
GEBRUIKERSHANDLEIDING
CENTRALE CONSOLE SC-SL5-E
MANUAL DO USUARIO
CONSOLE CENTRAL SC-SL5-E
ΕΓΧΕΙΡΙΔΙΟ ΧΡΗΣΤΗ
ΚΕΝΤΡΙΚΗ ΚΟΝΣΟΛΑ SC-SL5-E
КОРИСТУВАЦЬКИЙ ПОСІБНИК
ЦЕНТРАЛЬНА КОНСОЛЬ SC-SL5-E
KULLANICI KILAVUZU
MERKEZ KONSOLU SC-SL5-E
INSTRUKCJA OBSŁUGI
KONSOLA CENTRALNA SC-SL5-E
用户手册
中央控制台 SC-SL5-E

ENGLISH

FRANÇAIS

DEUTSCH

ITALIANO

ESPAÑOL

NEDERLANDS

PORTUGUÊS

ΕΛΛΗΝΙΚΑ

УКРАЇНСЬКА

TÜRKÇE

POLSKI

中文



This product complies with following directives.

EU	GB
EMC2014/30/EU	EMC S.I. 2016/1091
LVD 2014/35/EU	LVD S.I. 2016/1101
RoHS 2011/65/EU	RoHS S.I. 2012/3032

CE and UKCA markings are applicable to the 50 Hz power supply zone.

Ce console centrale est conforme à la directive EMC 2014/30/UE, à la directive Basse Tension 2014/35/UE et à la directive RoHS 2011/65/UE. Le marquage CE s'applique à la zone d'alimentation à 50 Hz.

Dieses zentrale Bedienfeld entspricht der EMC-Richtlinie 2014/30/EU, der Niederspannungsrichtlinie 2014/35/EU und der RoHS-Richtlinie 2011/65/EU.

Das CE-Zeichen gilt für den Bereich der Energieversorgung bei 50 Hz.

Questa console centrale è conforme alla direttiva EMC 2014/30/UE, alla direttiva bassa tensione 2014/35/UE e alla direttiva RoHS 2011/65/UE. Il marchio CE si applica alla zona di alimentazione a 50 Hz.

Esta consola central cumple con la directiva EMC 2014/30/UE, la directiva de baja tensión 2014/35/UE y la directiva RoHS 2011/65/UE. La marca CE se aplica a la zona de suministro de energía a 50 Hz.

Dit centrale console voldoet aan de EMC-richtlijn 2014/30/EU, de Laagspanningsrichtlijn 2014/35/EU en de RoHS-richtlijn 2011/65/EU.

Het CE-keurmerk is van toepassing op het voedingsgebied van 50 Hz.

Αυτός ο κεντρικός πίνακας είναι συμβατός με την οδηγία EMC 2014/30/EE, την οδηγία χαμηλής τάσης 2014/35/EE και την οδηγία RoHS 2011/65/EE. Η σήμανση CE ισχύει για την περιοχή τροφοδοσίας στα 50 Hz.

Ця центральна консолі відповідає директиві EMC 2014/30/ЄС, директиві низької напруги 2014/35/ЄС та директиві RoHS 2011/65/ЄС. Знак CE застосовується до зони живлення на 50 Гц.

Bu merkezi konsol, 2014/30/AB EMC direktifine, 2014/35/AB Alçak Gerilim direktifine ve 2011/65/AB RoHS direktifine uygundur. CE işareti, 50 Hz enerji besleme alanına uygulanır.

Ta konsola centralna jest zgodna z dyrektywą EMC 2014/30/UE, dyrektywą niskonapięciową 2014/35/UE oraz dyrektywą RoHS 2011/65/UE. Znak CE ma zastosowanie do obszaru zasilania przy 50 Hz.

该中央控制台符合 EMC 指令 2014/30/EU、低电压指令 2014/35/EU 和 RoHS 指令 2011/65/EU。CE 标志适用于 50Hz 电源供应区域。

PJZ012A254

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Please read before using.

Thank you for purchasing the central control SC-SL5-E

Before using, read this user manual thoroughly for proper operation. After reading, keep it in a safe place for future reference. If any problems occur during operation, you will find it helpful. Please also thoroughly read the user manual which is attached to the air conditioner, hydro module units or heat pump water heaters.

PRECAUTIONS FOR WASTE DISPOSAL



Your central control may be marked with this symbol. It means that waste electrical and electronic equipment (WEEE as per Directive 2012/19/EU) should not be mixed with general household waste. The central control should be treated at an authorised treatment facility for reuse, recycling and recovery and should not be disposed of with municipal waste. Please contact the installer or local authority for more information.



This symbol printed in the batteries attached to your central control is information for end users according to the EU regulation (EU) 2023/1542 Article 13 Annex VI. At the end of their life, batteries should be disposed of separately from general household waste. If a chemical symbol is printed beneath the symbol shown above, this symbol means that the batteries contain a heavy metal at a certain concentration. This will be indicated as follows: Cd: cadmium (0.002%), Pb: lead (0.004%). Please dispose of batteries correctly at your local community waste collection or recycling centre.

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Introduction

Safety precautions

Please read these precautions carefully to operate the central control properly.

You are required to observe these scrupulously because all of these instructions are important for your safety.

 WARNING	Failure to follow these instructions properly may result in serious consequences such as death, severe injury, etc.
 CAUTION	Failure to follow these instructions properly may result in injury or property damage.

This could have serious consequences depending on the circumstances.

The following pictograms are used in the text.

	Never do.		Always follow the instructions given.
	Keep away from water at all times.		Keep wet hands away at all times.

Keep this manual at a safe place where you can consult it whenever necessary. Show this manual to installers when moving or repairing the central control. When ownership of the central control is transferred, this manual should be given to the new owner.

Electrical wiring work must be implemented only by qualified specialists.

WARNING



Consult your dealer or a professional contractor to install the central control.

Incorrectly installing the control without assistance may cause electric shocks or fire, or may cause the central control to drop.



Consult your dealer when moving, disassembling or repairing the central control.

Never modify the central control.

Improper handling may result in injury, electric shocks, fire, etc.



Avoid using combustible substances (hair spray, insecticide, etc.) near the central control. Do not use benzene or paint thinner to clean the central control.

Doing so could cause cracks, electric shocks or fire.



Stop operation in abnormal conditions.

Continuing to operate the control could result in malfunctions, electric shocks, fire, etc.

If any abnormal conditions (burnt odour, etc.) occur, stop operation, turn off the power switch and consult your dealer.



Do not touch damaged cables.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid any hazards.



The appliance is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they are supervised or have received training



Children being supervised are not to play with the appliance.



Cleaning and user maintenance should not be carried out by children unless they are supervised.

⚠ CAUTION



Do not play with the central control or allow others to play with it.
Improper operation could cause ill health or health disorders.



Never disassemble the central control.

If you touch internal parts accidentally, you could receive an electric shock or cause damage. Consult your dealer when the interior needs to be inspected.



Do not wash the central control with water or liquid.
Doing so could cause electric shocks, fire or malfunctions.



Do not touch electric parts or operate buttons or screens with wet hands.

Doing so could cause electric shocks, fire or malfunctions.



Do not dispose of the central control by yourself.

Doing so could harm the environment. Ask your dealer when the central control needs to be disposed of.



Depending on the place of installation, a leakage breaker may be necessary.

If a leakage breaker is not installed, an electric shock may occur.
Consult your dealer.



Do not install the central control in any area where noise is easily generated.

If it is installed near the computer, automatic door, elevator or equipment which generates noise, it will cause improper operation.



Do not install the central control in any area where it is very humid or there is excessive vibration.

If it is installed in an area exposed to humidity, splashing water or excessive vibration, it will cause malfunctions.



Avoid any place which is exposed to direct sunlight or is near a heat source.

If it is installed under direct sunlight or near a heat source, it will cause malfunctions.

Note



The central control should not be installed where it is exposed to direct sunlight or the ambient temperatures reach higher than 40°C or lower than 0°C.

It could cause deformation, discoloration or malfunctions.



Do not use benzene, paint thinner, wipes etc. to clean the central control.

Doing so could discolour the central control or cause it to malfunction. Wipe it with a piece of tightly squeezed cloth after wetting the cloth with diluted neutral detergent. Finish cleaning by wiping with a piece of dry cloth.



Do not pull or twist the central control cable.

It could cause malfunctions.



A static electric discharge to the unit could cause a malfunction.

Before carrying out any work, touch a grounded metal object and discharge any static electricity.



Do not perform repetitive work with significant force.

Otherwise the touch panel will deteriorate, and screen response times may be affected.

Security support and vulnerability report

To report vulnerability information for our product, please find the contact point at the following website.

<https://www.mhi-mth.co.jp/en/support/reporting-vulnerability-information/>

The following web site provides information on the security support duration of this product.

<https://www.mhi-mth.co.jp/en/support/>

Overview

Central controls are made to collectively control air conditioning indoor units, hydro module units or heat pump water heaters. All controls such as unit monitoring, operation, settings and scheduling can be operated on the touch panel.

Warning

This is a class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to adopt appropriate measures. This unit is not for domestic use.

Important

The energy consumption calculated by this unit does not conform to OIML, and there are no guarantees concerning the results of calculations.
This unit only calculates energy consumption distribution (gas, electric power). Air conditioning rates need to be calculated.

Selling, leasing or transferring this product in any other way to countries specified under export control laws (currently, Cuba, Iran, North Korea, Sudan and Syria) is prohibited, as they are subject to the export control laws of the United States. Additionally, selling, leasing or transforming this product in any other way to a third party (a third party recorded on a "list of organisations subject to embargo" for the U.S. Department of Commerce Bureau of Industry and Security) is strictly prohibited.

- Please note that no compensation will be provided in the event that the centre console fails and we are unable to calculate fees.
- The fee calculations based on this data do not comply with the Measurement Law and therefore cannot be applied to public transactions. Additionally, we do not provide compensation for the calculation results.
- Customers are responsible for providing the necessary equipment for fee calculations, including a computer, spreadsheet software such as Excel, a printer, an electricity meter and a gas flow meter.

Note

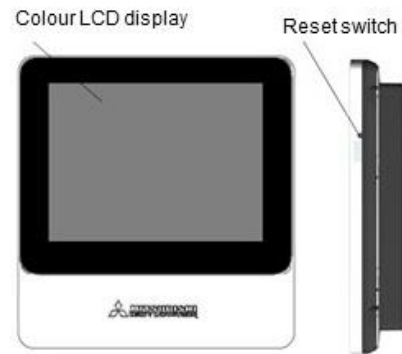
The screens in this manual may differ from the actual screens.

Unit specification

Item	Description
Product dimensions	264 (W) x 280 (H) x 50 (25 + 25) 25 is the embedded measurement.
Weight	2.3kg
Power supply	AC100 – 240V 50/60Hz
Power consumption	13W
Usage environment	Temperature 0 to 40 degrees Celsius
Material	ABS + polycarbonate

Names and functions of parts

1. Colour LCD display
The screens are displayed here. Operations are performed by touching it with a finger.
2. Reset switch
Press the switch that is placed in the innermost small hole on the right-hand side of this cover, using a straight clip or similar tool. The screen may be locked as a result of static charge or external noise, etc., but this does not indicate a problem. In this case, the screen can be returned to normal display mode by pressing the reset switch.



Warning

A static electric discharge to the unit could cause a malfunction.

Do not push the reset switch with your finger before performing operations; instead, touch a grounded metal object and discharge any static electricity.

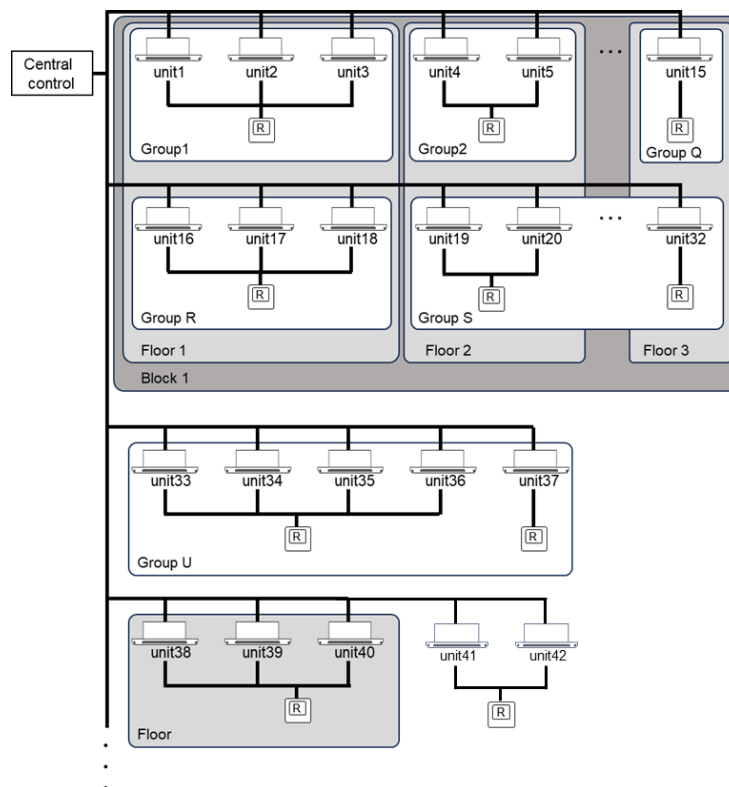
Blocks, floors and groups

SL5 has a functionality that allows you to classify and register connected units into areas (groups, floors, blocks), making it easier to control and monitor statuses on an area basis. An explanation of each area is described below.

- Floor: The “floor” generally refers to an area for registering units installed on the same level of the building. While it is possible to register units across different levels, it is recommended to use it for managing units on the same floor.
- Group: The “group” is essentially an area designed to consolidate nearby units or units within a specific area. Since it is possible to register units across different floors, you can group and control/monitor the status of units from multiple tenant floors.
- Block: The “block” is a series of floors and groups. By further categorising the registered floors and groups into larger units, it becomes possible to operate a large number of units collectively.

[Example of connections]

 Remote controller

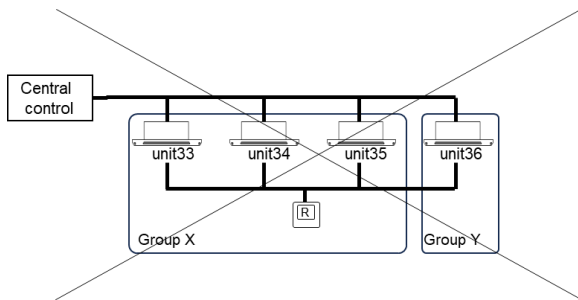


- Up to 16 units can be set up in one group/floor.
- 12 groups or floors can be set up in one block at the most.
- 20 blocks can be provided at the most.
- A unit can be registered to one group and one floor.
- Registering a group to a block is not mandatory.
- Registering a floor to a block is not mandatory.
- Registering a unit to a floor is not mandatory.
- Registering a unit to a group is not mandatory.

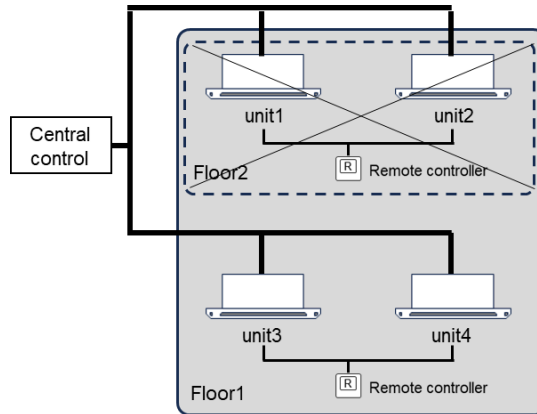
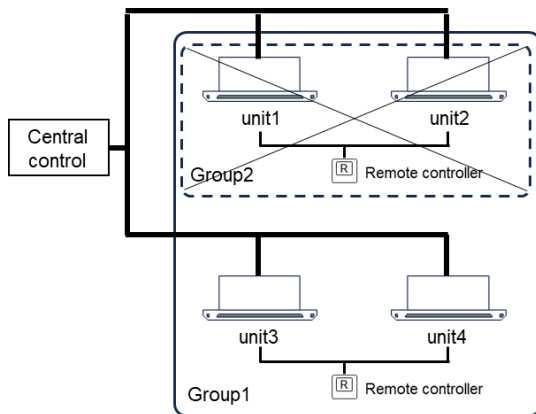
Note: Units that do not belong to a group or a floor can only be monitored and cannot be operated.

<Prohibited configuration>

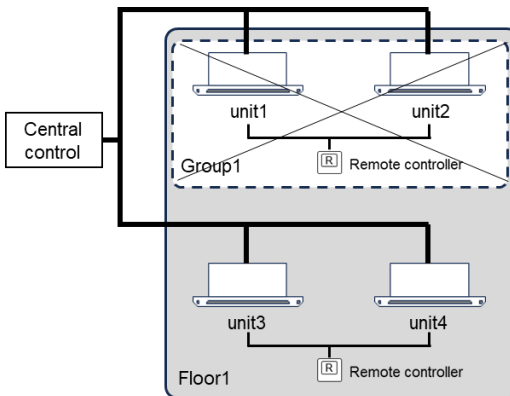
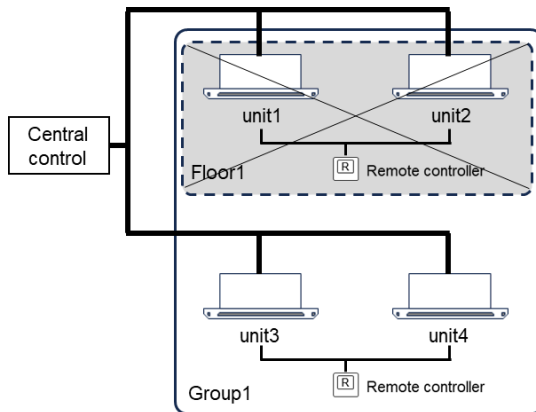
- Do not use one remote controller for different groups of units.



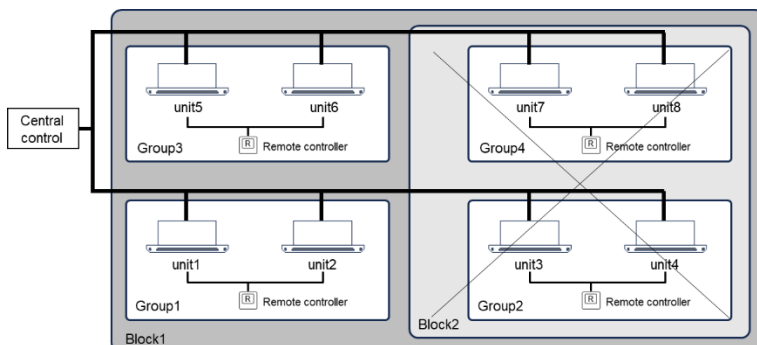
- A unit cannot be registered to several groups.
- A unit cannot be registered to several floors.



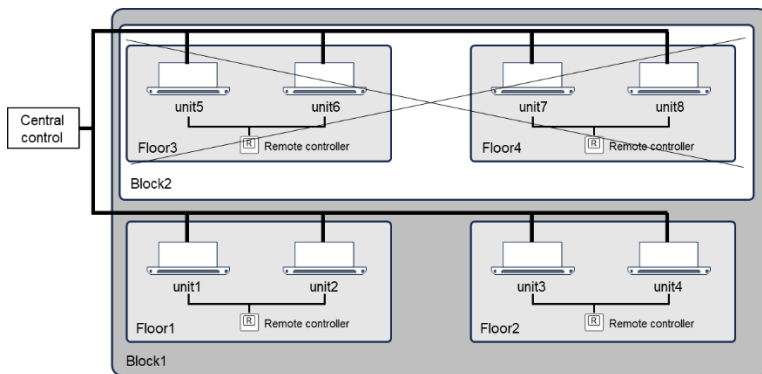
- A group cannot be registered to a floor.
- A floor cannot be registered to a group.



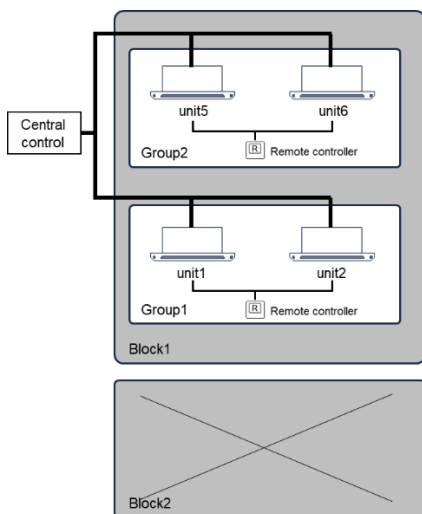
- A group cannot be registered to several blocks.



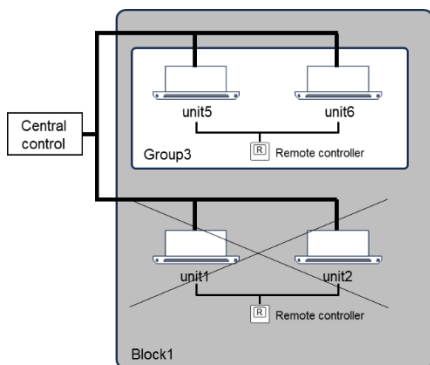
- A floor cannot be registered to several blocks.



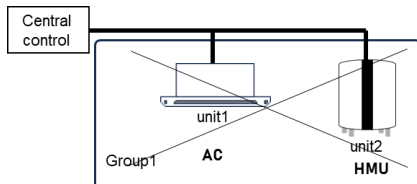
- An empty block cannot be created.



- A unit cannot be registered to a block directly.



- Different equipment types cannot be mixed in the same group/floors.



Screen operation

Startup screen

Power-up



After power-up, these screens are displayed for about 1 minute until initial processing is completed.



Initial language setting

This screen is displayed only when the first start up after factory shipment. User can select language that displayed on this product by touching language button then touch arrow button.



Log-in

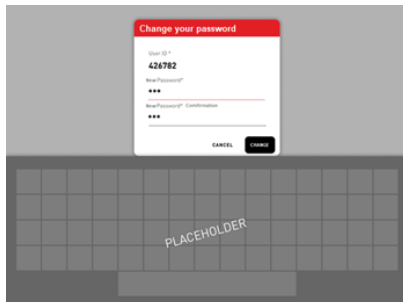


The log-in screen is displayed after initial processing is complete. Please log in using the following ID for the first log-in.

ID: "Administrator"

Password: "Administrator"

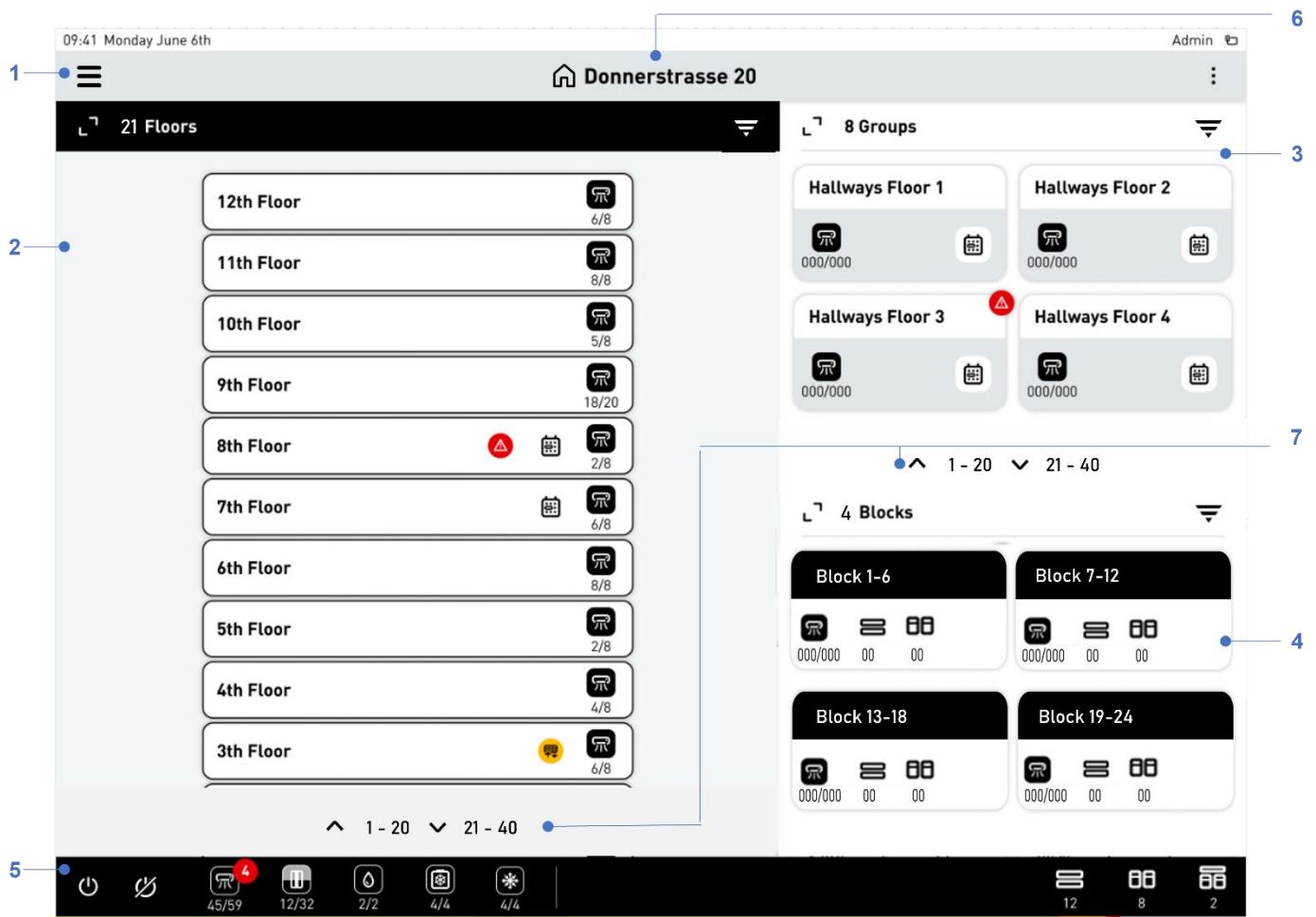
Note



A password change is required when a user logs in for the first time.

(This note not only applies to the default administrator account but also applies to all user accounts that are created by the default administrator.)

Home screen



After log-in, if the initial area setting is completed, the home screen is displayed. This screen has the following functionality.

1	Menu button	The menu bar to go to another screen is displayed. The menu bar is shown in detail on page 15.
2	Floor window	This window shows the status of each floor. Each icon is a button to go to the screen that shows details of each floor. The upper left-hand corner of this window has the maximise button to show the floor window as a full screen. Usage details for this window are shown on page 17.
3	Group window	This window shows the status of each group. Each icon is a button to go to the screen showing details of each group. The upper left-hand corner of this window has the maximise button to show the group window as a full screen. Usage details for this window are shown on page 16.
4	Block window	This window shows the status of each block. Each icon is a button to go to the screen that shows details of each block. The upper left-hand corner on this window has the maximise button to show the block window as a full screen. Usage details for this window are shown on page 18.
5	Bottom bar	This bar shows the status of the whole system. In addition, it has a switch to turn on/off all equipment that is connected to SL5. Details of this bar are described on page 14.

6	Building name	This part shows the building name set by the administrator in the area setting screen. If this part is touched, contact information is displayed.
7	Next page button	Pressing this button will move you forward to the next page in the sequence. The button is displayed if 20 or more target areas or units are defined.

Bottom bar details

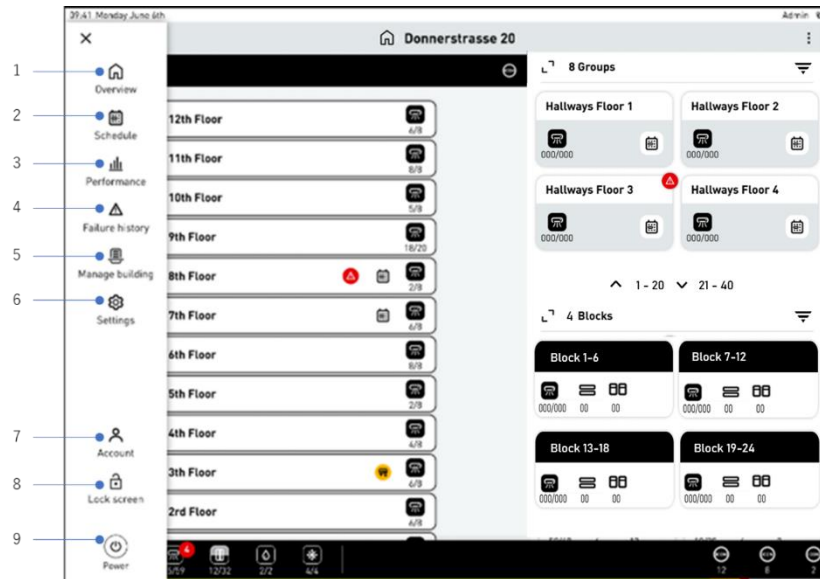


The bottom bar on the home screen has the following elements.

1	System status bar	This part shows the ratio of unit status. Green: ratio of running unit. Yellow: ratio of unit that needs maintenance. Red: ratio of unit that is affected by an error. Gray: ratio of stop unit.
2	All ON button	If the user touches this button, all units connected to SL5 are turned ON. (*Note 1)
3	All OFF button	If the user touches this button, all units connected to SL5 are turned OFF. (*Note 1)
4	Number of air conditioners	This part shows the number of air conditioners. Numerator: number of air conditioning units currently running. Denominator: total number of air conditioning units.
5	Number of HMUs	This part shows the number of HMUs. Numerator: number of HMU units currently running. Denominator: number of all HMU units.
6	Number of water heaters	This part shows the number of water heater units. Numerator: number of water heater units currently running. Denominator: number of all water heaters.
7	Number of chillers	This part shows the number of chiller units. Numerator: the number of chiller units currently running. Denominator: number of all chiller units.
8	Number of freezers	This part shows the number of freezer units. Numerator: number of freezer units currently running. Denominator: number of all freezer units.
9	Number of floors	This part shows the number of floors defined by the administrator from the area setting screen.
10	Number of groups	This part shows the number of groups defined by the administrator from the area setting screen.
11	Number of blocks	This part shows the number of blocks defined by the administrator from the area setting screen.

*Note 1: target area (group/floor) for all ON/OFF operations can be configured from the [Edit area \(group/floor\)](#) screen.

Menu

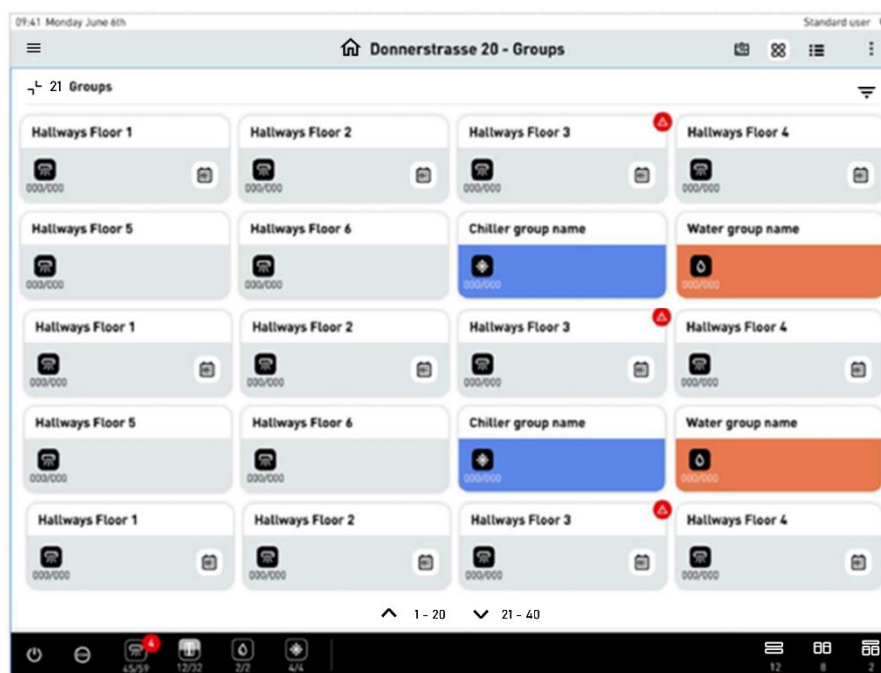


When the user touches the menu button, the menu bar (referred to as number 1 in the picture above) is displayed. This menu bar has the following capabilities.

1	Overview button	The home screen is displayed.
2	Schedule button	The screen to edit the program schedule is displayed.
3	Performance button	The screen that shows energy consumption or equipment runtime on screen is clearly displayed by touching this button.
4	Failure history	The failure history screen is displayed.
5	Manage building button	The administrator can use this function. They can set up/edit the configuration of floor, group and block settings.
6	Setting	The screen goes to the setting screen, which has several settings for this device.
7	Account	The user can check account info and the administrator can create the general account.
8	Lock screen	The user can log off or lock the screen.
9	Power button	SL5 can be turned off safely by touching this button.

Group window

The following is the group window when it is displayed in full-screen mode.

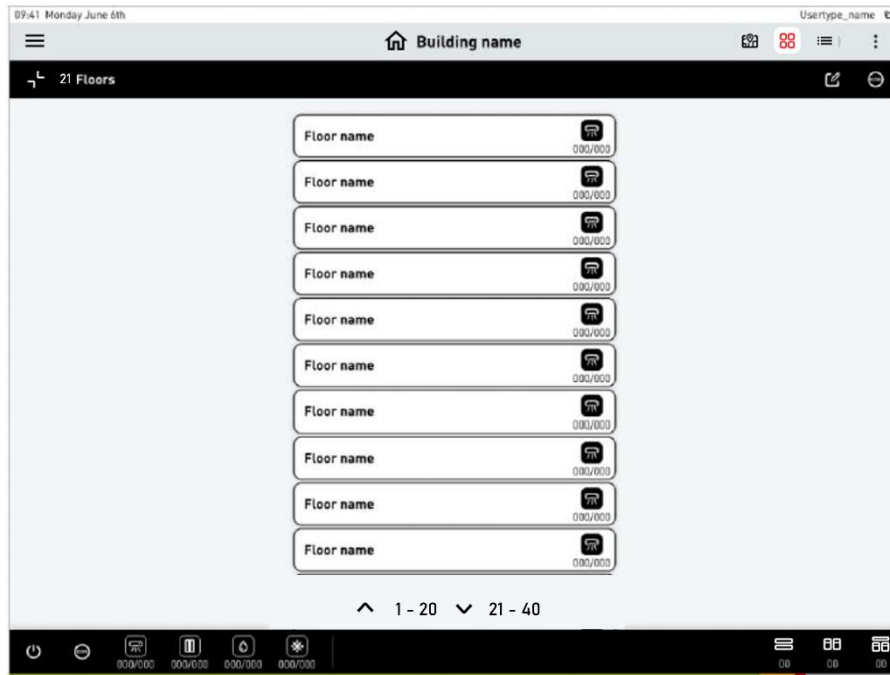


This window shows all groups defined by the administrator in the [“Area settings”](#) screen.

Each group is shown as one box (area button) and the box has an icon that shows the status of units included in the group. You can see more details of each area by touching the area button. Details of icons are described under [“Icons”](#) in this chapter.

Floor window

The following is the floor window when it is displayed in full-screen mode.



This window shows all floors defined by the administrator in the [“Area settings”](#) screen.

Each floor is shown as one box (area button) and the box has an icon that shows the status of units included in the floor. You can see more details of each area by touching the area button. Details of icons are described under [“Icons”](#) in this chapter.

Block window

The following is the block window when it is displayed in full-screen mode.



This window shows all blocks defined by the administrator in the ["Area settings"](#) screen.

Each block is shown as one box (area button) and the box has an icon that shows the status of units included in the block and the number of groups and floors are displayed in the box. Details of icons are described under ["Icons"](#) in this chapter. You can see more details of each area by touching the area button.

The displayed area is limited by account controls. Please see ["Screens for area settings"](#) for more details.

Icons

- Unit status button

The area button has a unit status button. This button is able to show the piece of equipment and the run/stop status. The following table has icons for each piece of equipment and status.

	Ratio of running unit										
	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
FDT											
FDTS											
FDTW											
FDU											
FDR											
FDF											
FDFW											
FDK											
FDE											
HMU											
Water heater											
Chiller											
Freezer											
Mixed (for block icon)											

- Programmed schedule button

The area may have a programmed schedule and if it is running, the following icon is displayed.

If the user touches this button, the “[Current running schedule](#)” screen is displayed. You can change the schedule by temporarily executing a schedule until the end of the day in that screen.



- Error indicator

The following icon is displayed when an error/malfunction has occurred on a unit in the area.



- Maintenance indicator

The following icon is displayed when a unit that requires maintenance is in the area. When the error occurs, this icon is not displayed because displaying this icon is lower in priority than signalling an error.



- Clean filter

When a unit that needs a cleaning filter is present, an area button for the unit shows the following indicator



- Non-communication icon

When a unit that does not communicate with SL5 during 2min is present, an area button for the unit shows the following indicator.



- Demand icon

When a unit that is under demand control is present, an area button for the unit shows the following indicator.



- Number of areas

Only the block window has this icon. This icon shows what kind of area and how many areas are included the blocks.



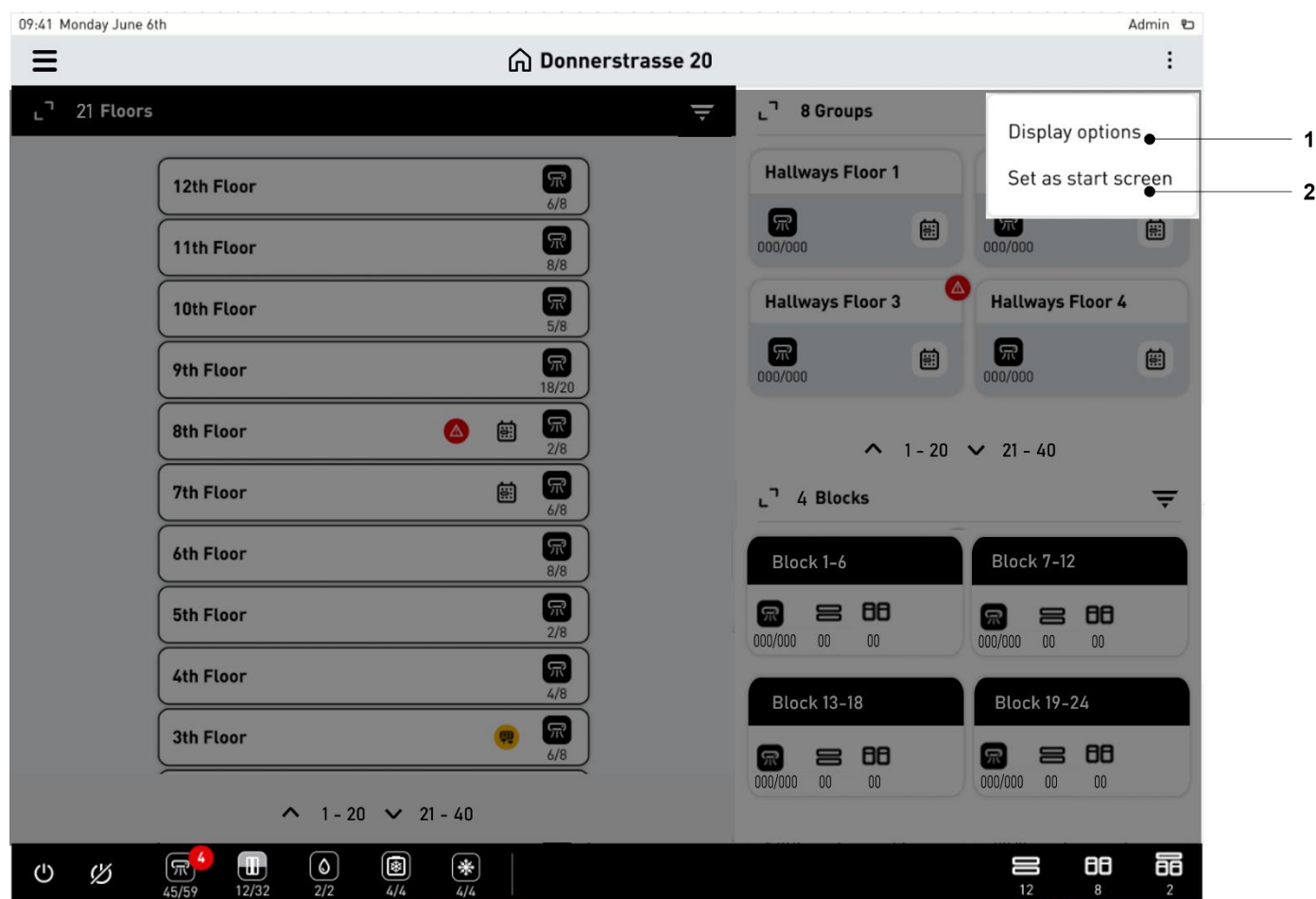
: Floor icon



: Group icon

Display option

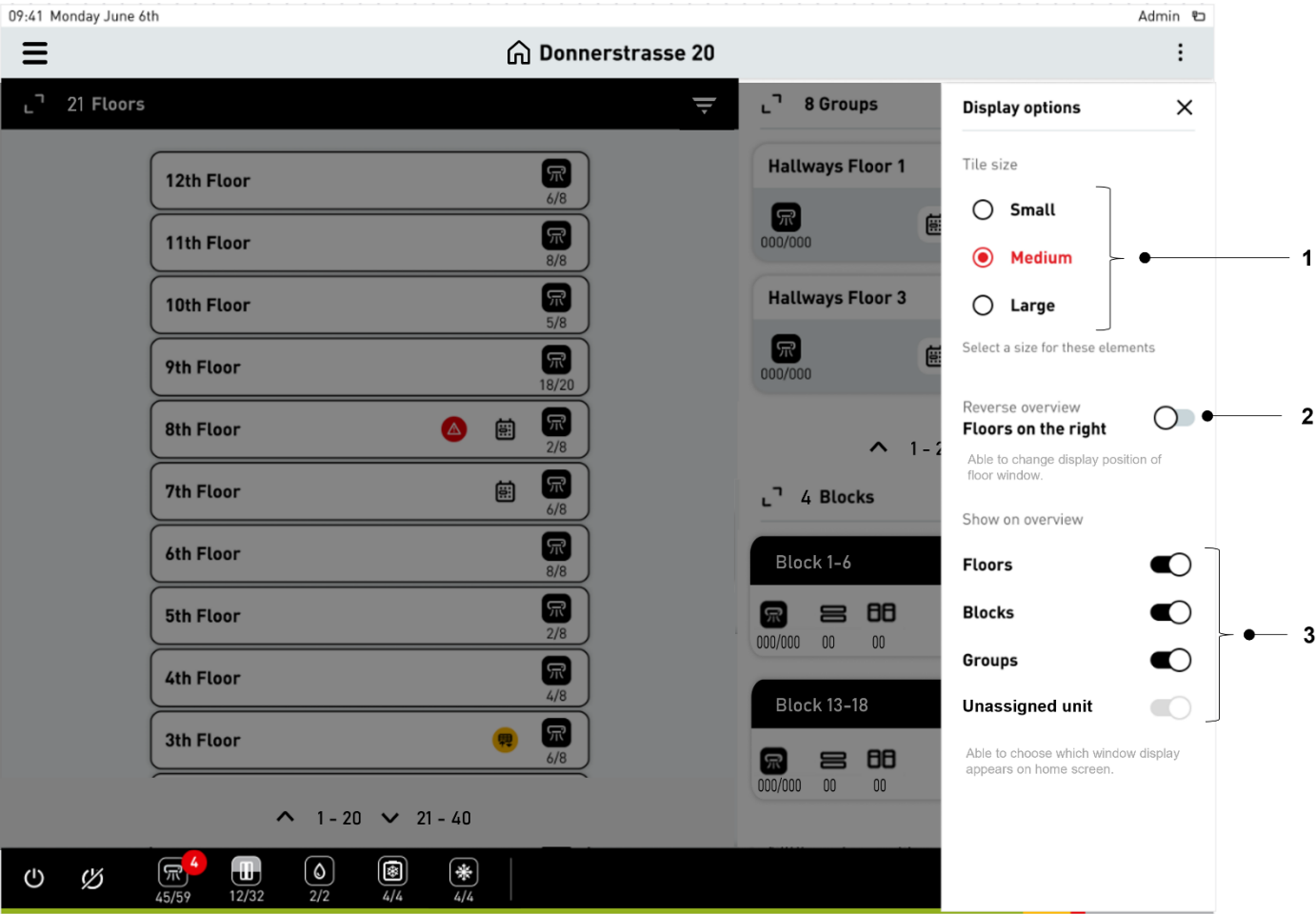
- Display option menu



When “⋮” in the upper right-hand corner is touched, the display option menu appears. This menu has two items.

1. Display option: A detailed display option tab will be displayed when this item is touched.
2. Set as start screen: You can set the current display option setting as the home screen start status. The displayed window and window position on the home screen, etc. can be customised to contain a detailed display option as described in the next page.

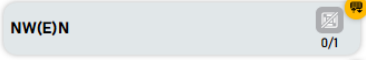
- Detailed display option



1. Button size switch

You can change the size of the tile on each window. The following table shows a tile image for each size.

		Image of button size	Explanation
Large	Block		The item listed below should be displayed on the button. - Name of area - Error/maintenance indicator - Schedule - Status of area (run/stop) Note: If there is a block button, the information listed below should also be displayed. - Number of groups - Number of floors
	Group		
	Floor		

	Unit		
Medium	Block		The item listed below should be displayed on the button. - Name of area - Error/maintenance indicator - Status of area (run/stop)
	Group		
	Floor		
	Unit		
Small	Block		The item listed below should be displayed on the button. - Error/maintenance indicator - Status of area (run/stop)
	Group		
	Floor		
	Unit		

2. Floors on the right-hand switch

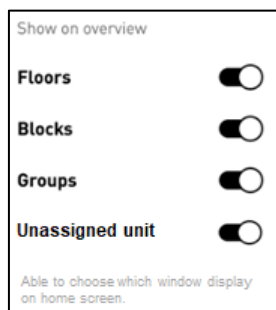
The floor window is displayed on the left-hand side by default. You can change the position of the floor window to the right-hand side by switching this option.

3. Switch to change the window shown on the home screen.

You can choose the window shown on the home screen by switching to this option.

NOTE

If a unit is not assigned to any area, the unassigned unit switch is enabled and you can choose whether unassigned unit view is enabled or not. If it is enabled, the bottom bar will have a button to show which screen has unassigned unit status.



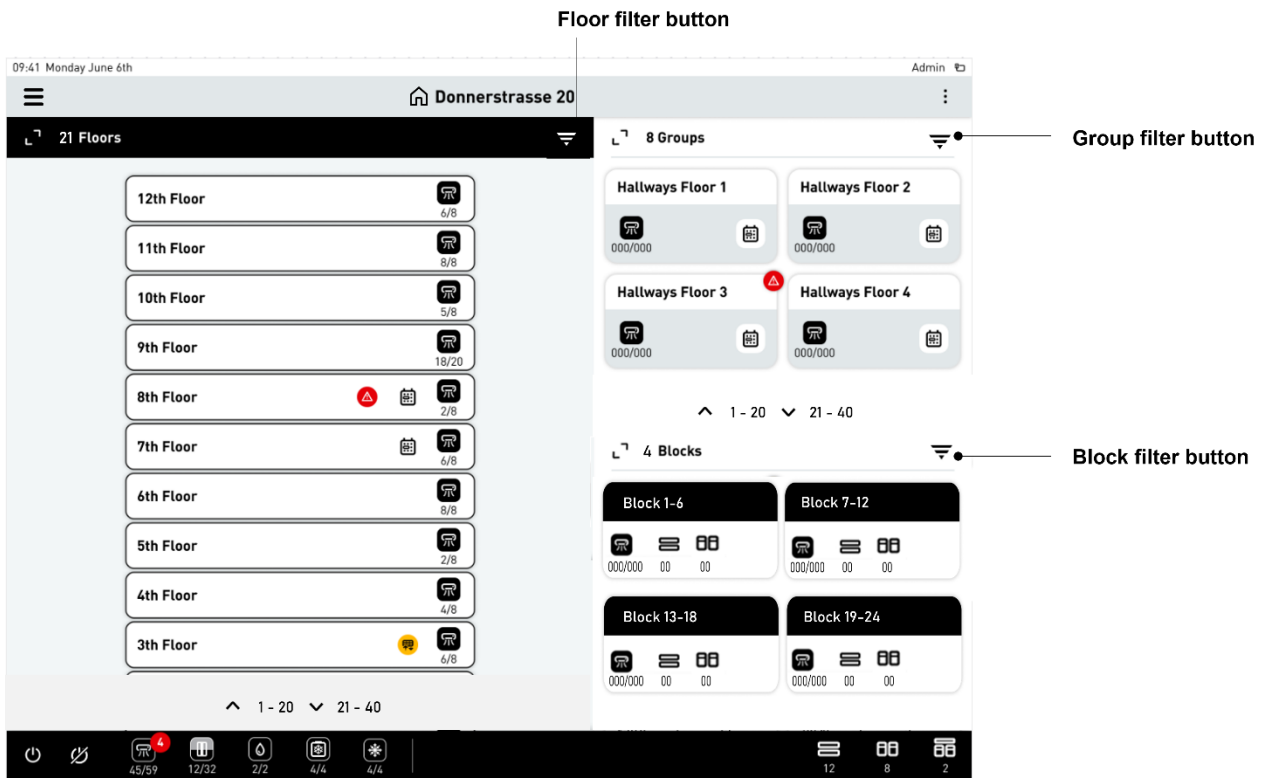
The unassigned unit is displayed.

The unassigned unit button will appear on the bottom bar as shown below. If you touch the button, the screen reads “unassigned unit screen”.

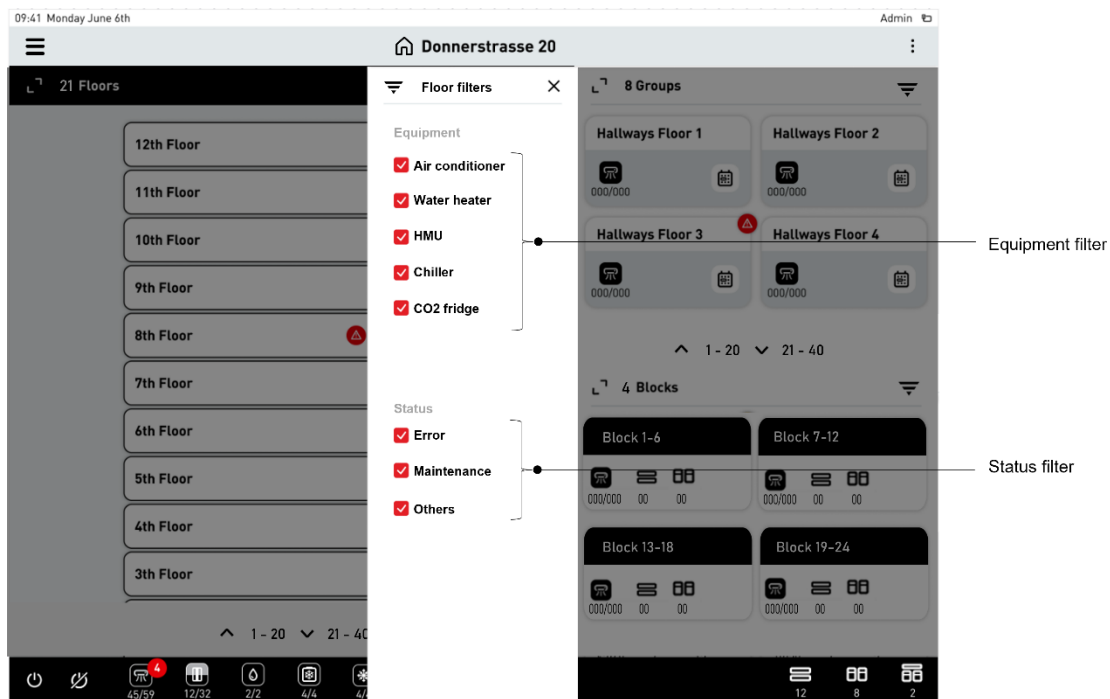


This functionality is enabled only for the administrator account.

View filter



Each window has a filter button to change displayed contents by filter option. If you touch the button, the following bar is displayed on the window and the change filter view option appears.



1. Equipment filter

If you want to filter display contents by selecting which equipment, please specify target equipment by touching the tick mark. If the tick mark is ON, that equipment is displayed on the window.

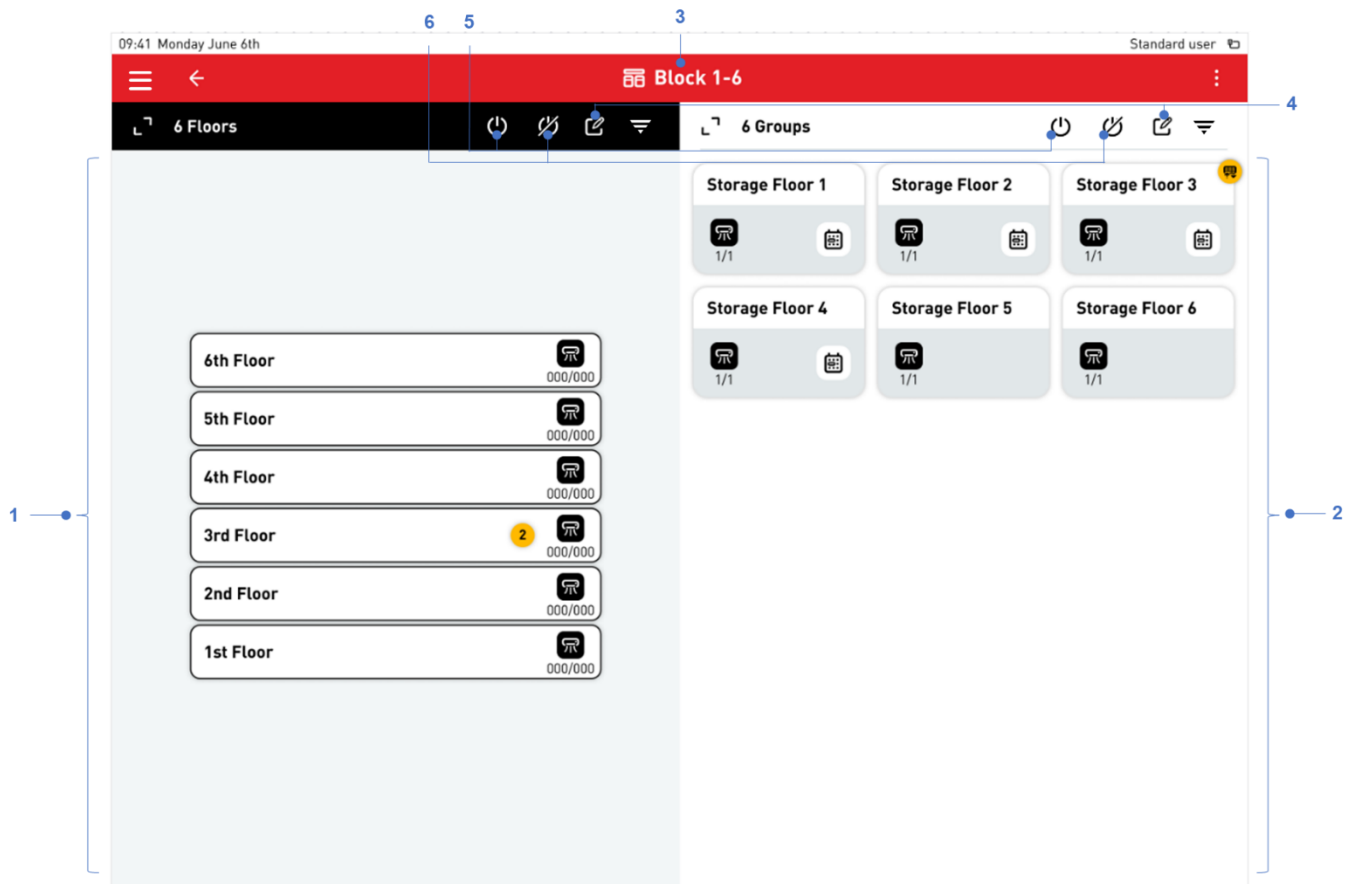
2. Status filter

If you only want to see the area that includes units that are affected by an error or are undergoing maintenance, please tick them.

Monitoring screen

Block monitoring screen

When a block button is touched in the block window on the home screen, a block monitoring screen is displayed. The following image is an example of the block screen.



1. Floor window
This window has a floor button that shows floor information including the block. If you touch any place in this window, the screen goes to the floor monitoring screen.
2. Group window
This window has a group button that shows group information including the block. If you touch any part of this window, the screen goes to the floor monitoring screen.
3. Block name
The block name defined in [Area settings](#) by the administrator is displayed here.
4. Edit button
The screen goes to the operation screen if this button is touched. If the edit button is pressed on the floor window, "[floor operation screen](#)" is displayed, if the edit button is pressed on the group window, "[group operation screen](#)" is displayed.

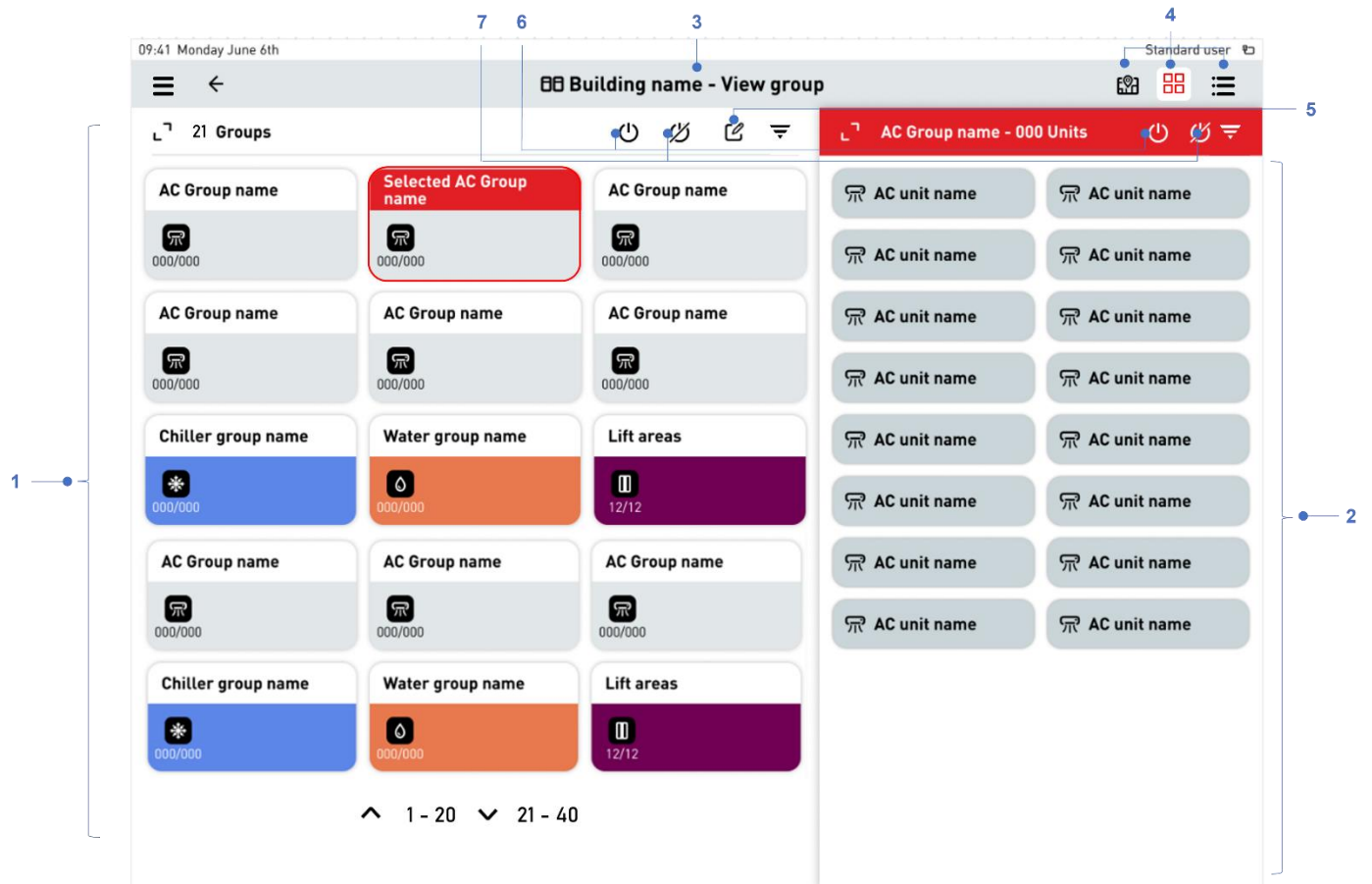
5. All ON button

This button has the capability to turn ON all units in the area located in this window.

6. All OFF button

This button has the capability to turn OFF all units in the area located in this window.

Group monitoring screen



1. Group window

This window has a group button that shows group information. If you touch this button, the unit window that has all unit buttons included in the touched group is displayed on the right-hand side of the screen.

2. Unit window

This window has a button that shows units included in the touched group on the left-hand side of the group window. This window is not displayed if any group is not selected in the group window.

The unit window button switches on the run/stop feature for each unit. If you touch the button that shows the unit is ON, it will be turned OFF. Conversely, if you touch the button that shows the unit is OFF, it will be turned ON.

3. Screen name

View group is displayed.

4. View style switch

You can change the style of view to the following style by using this switch.

- List view
- Map view

- Tile view

Additionally, the List view has a scroll bar at the bottom of the screen. You can use this scroll bar to reveal any hidden parameters.

5. Edit button

The screen goes to the operation screen if this button is touched. If the edit button is pressed on the group window, "[group operation screen](#)" is displayed.

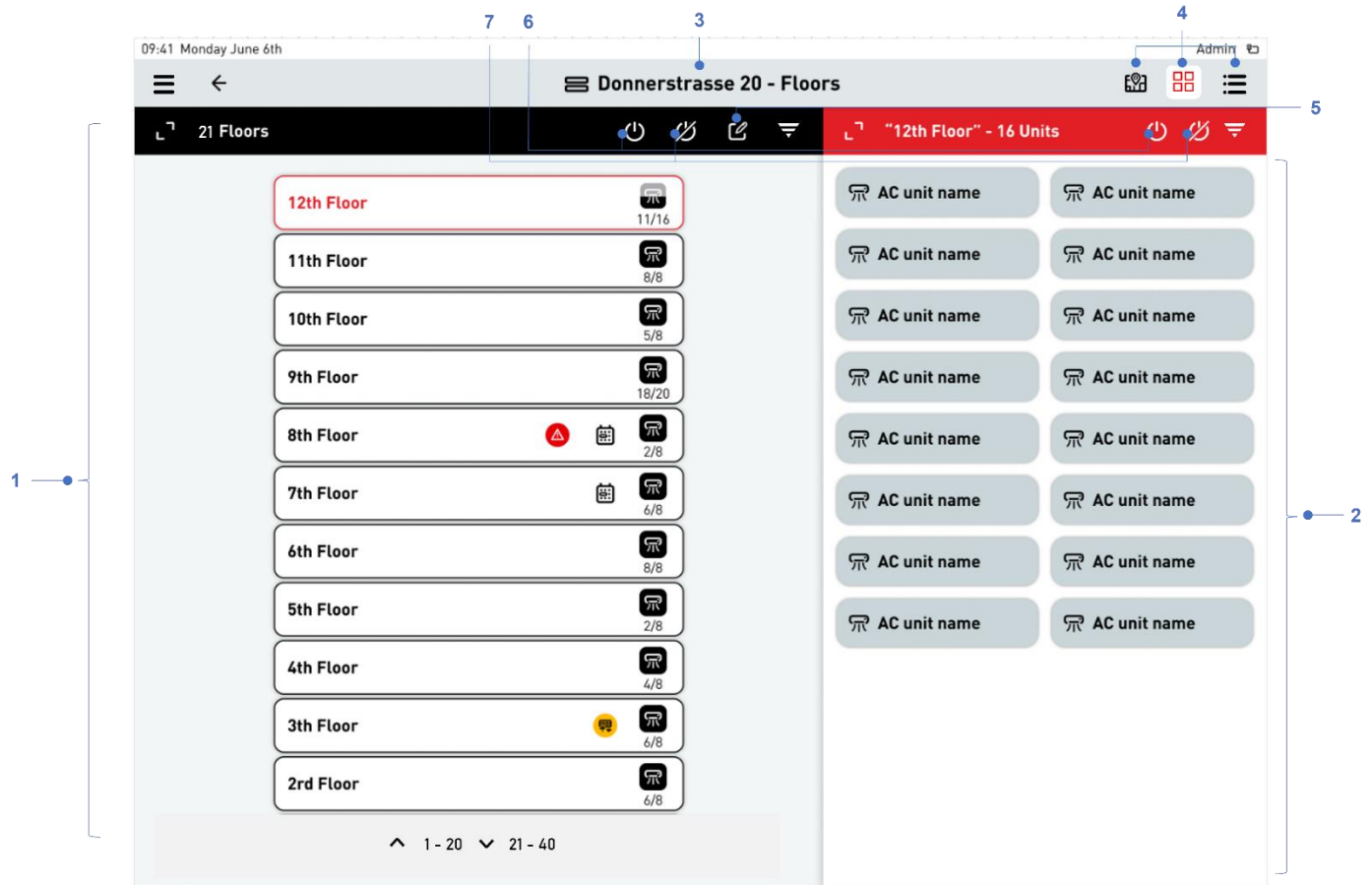
6. All ON button

This button has the capability to turn ON all units in the area located in this window.

7. All OFF button

This button has the capability to turn OFF all units in the area located in this window.

Floor monitoring screen



1. Floor window

This window has a group button that shows floor information. If you touch the button, the unit window that has all unit buttons included in the touched floor is displayed on the right-hand side of the screen.

2. Unit window

This window has a button that shows units included in the touched floor on the left-hand side of the group window. This window is not displayed if any floor is not selected in the group window.

The unit window button switches on the run/stop feature for each unit. If you touch the button that shows the unit is ON, it will be turned OFF. Conversely, if you touch the button that shows the unit is OFF, it will be turned ON.

3. Screen name

View group is displayed.

4. View style switch

You can change the style of view to the following style by using this switch.

- List view
- Map view
- Tile view

Additionally, the List view has a scroll bar at the bottom of the screen. You can use this scroll bar to reveal any hidden parameters.

5. Edit button

The screen goes to the operation screen if this button is touched. If the edit button is pressed on the group window, "[floor operation screen](#)" is displayed.

6. All ON button

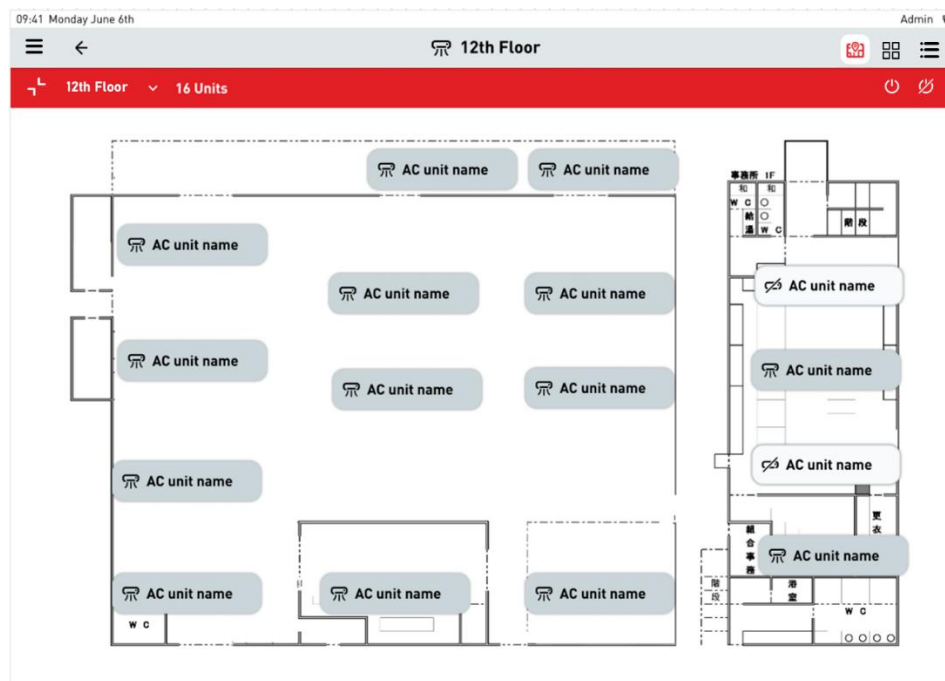
This button has the capability to turn ON all units in the area located in this window.

7. All OFF button

This button has the capability to turn OFF all units in the area located in this window.

Map view

You can see the location of each unit in the floor/group. You can also see the location of the group/floor in the block. You need to set up the area configuration to use this map view functionality on the "[Area settings](#)" screen.



The functionality of each button and icon is the same as the "block monitoring screen", "group monitoring screen" and "floor monitoring screen".

Unassigned unit monitoring screen

This screen can be displayed when the administrator account is logged in and the unassigned unit can be viewed in the display option of the home screen.

09:41 Monday June 6th

Donnerstrasse 20

Unassigned units

2 — **Air conditioner** Water heater HMU Chiller CO2 fridge

AC Units	Unit type	Unit ID	Run/stop	Mode	Setpoint
AC unit name	FDT	*****	⏻	🌀	25℃
AC unit name	FDT	*****	⏻	🌀	25℃
AC unit name	FDT	*****	⏻	🌀	26℃
AC unit name	FDT	*****	⏻	🌀	27℃
AC unit name	FDT	*****	⏻	🌀	23℃
AC unit name	FDT\$	*****	⏻	🌀	19℃
AC unit name	FDTW	*****	⏻	🌀	24℃
AC unit name	FDU	*****	⏻	🌀	25℃
AC unit name	FDR	*****	⏻	🌀	25℃
AC unit name	FDF	*****	⏻	🌀	26℃
AC unit name	FDFW	*****	⏻	🌀	27℃
AC unit name	FDK	*****	⏻	🌀	23℃
AC unit name	FDE	*****	⏻	🌀	19℃
AC unit name	FDT\$	*****	⏻	🌀	24℃
AC unit name	FDT\$	*****	⏻	🌀	24℃

1 —

These units are detected by communication but still not registered to any area (group floor).

If you wish to control features from this central control device, please go to the area settings screen.

[>> Go to area settings](#)

1. Unassigned unit list

Units that are not assigned to any area are displayed on this list.

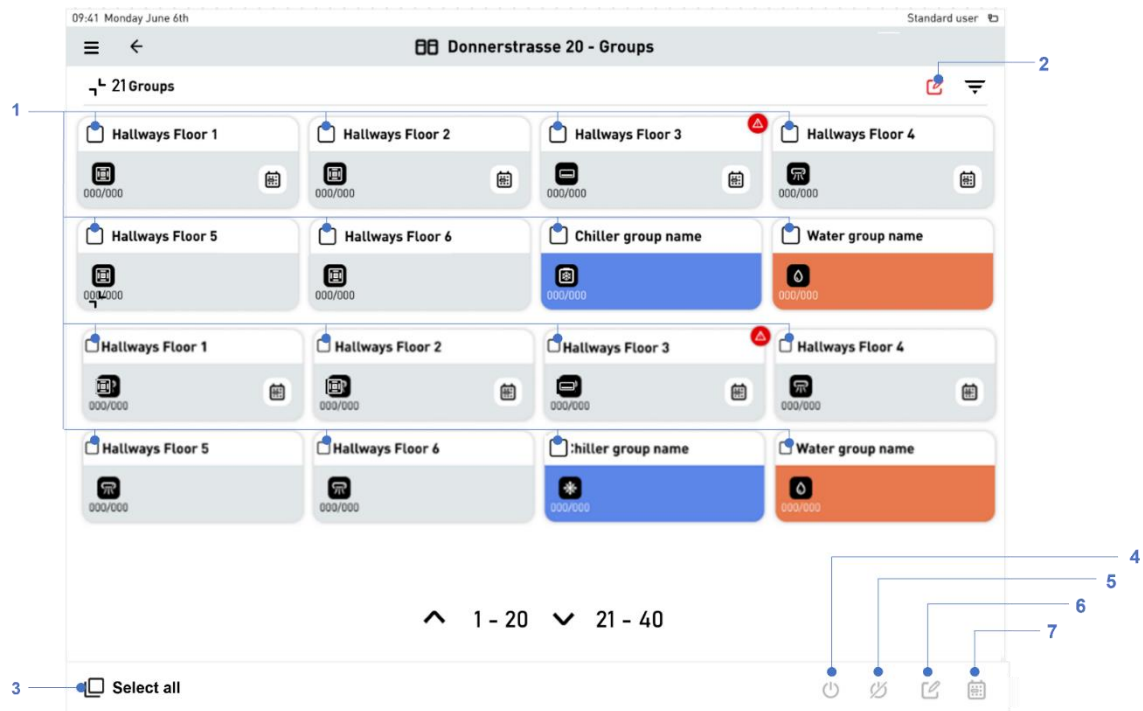
2. Tabs for equipment

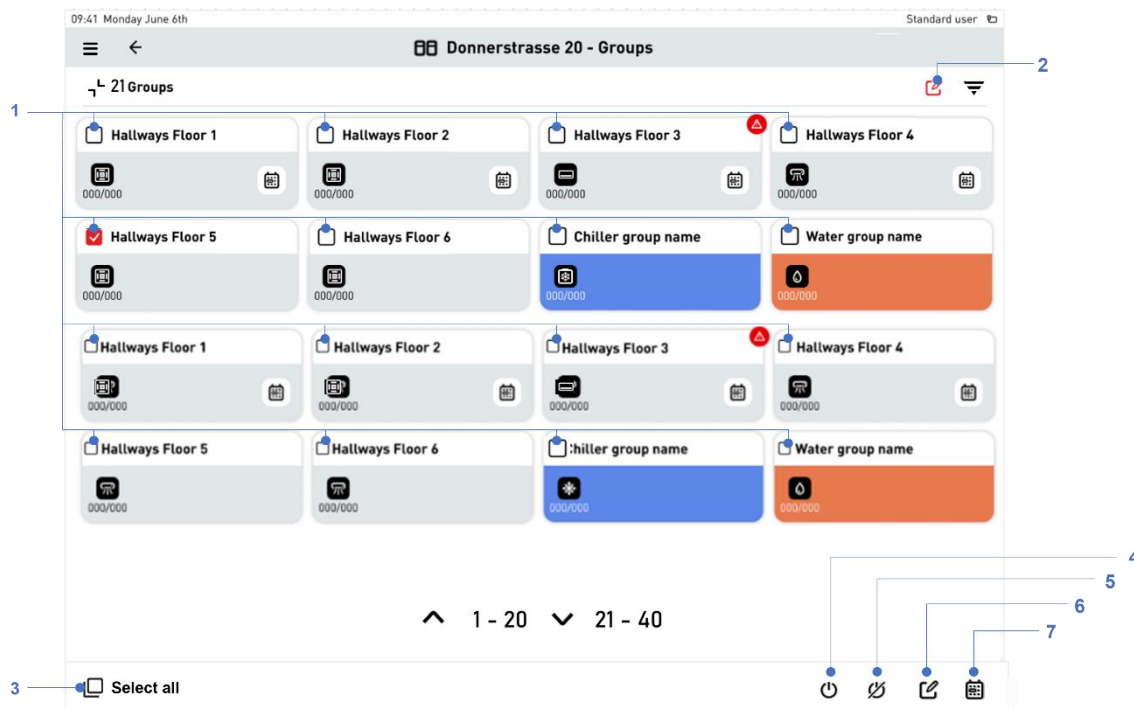
You can switch the display to other equipment by touching this button.

Operation screen

You can change settings from the operation screen. The operation screen can be categorized by group, floor or unit. The following section explains the functionality in each screen.

Group operation screen





1. Select box

You can choose groups for which you want to change settings. The change setting screen will be displayed when you touch the edit button described in #6 below after ticking.

2. Edit end button

If you touch this button, the screen goes back to the monitoring screen state.

3. Select all box

You can choose all groups in this window by touching this tick box. This button is activated when at least one group is selected.

4. All ON button

If you touch this button, all units in selected groups will be turned ON.

5. All OFF button

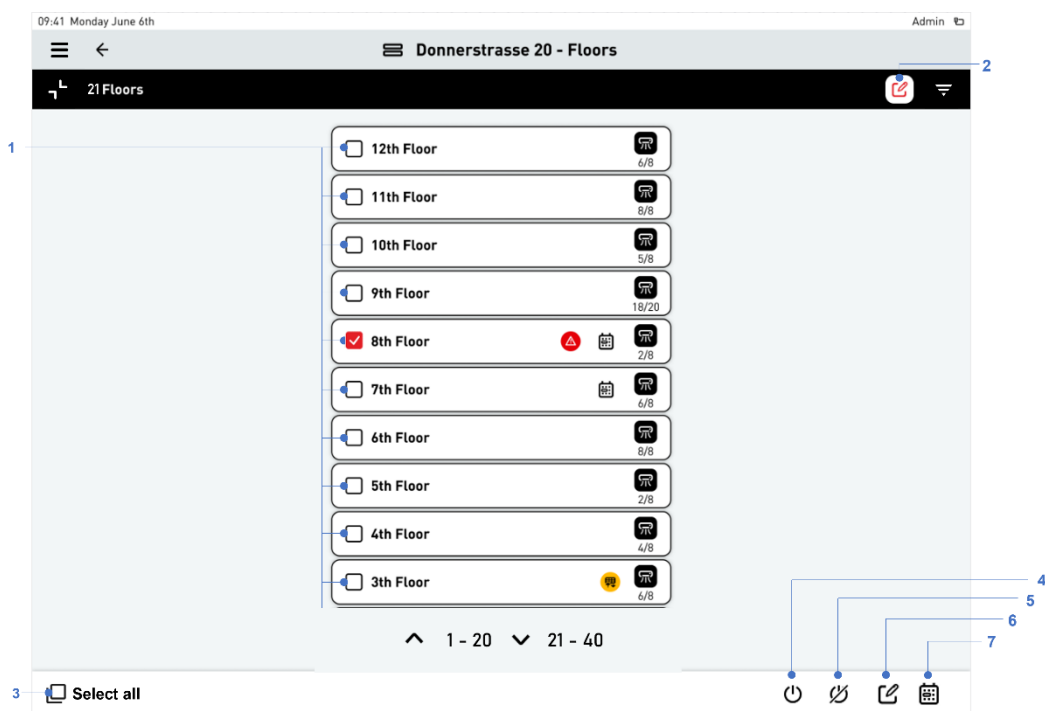
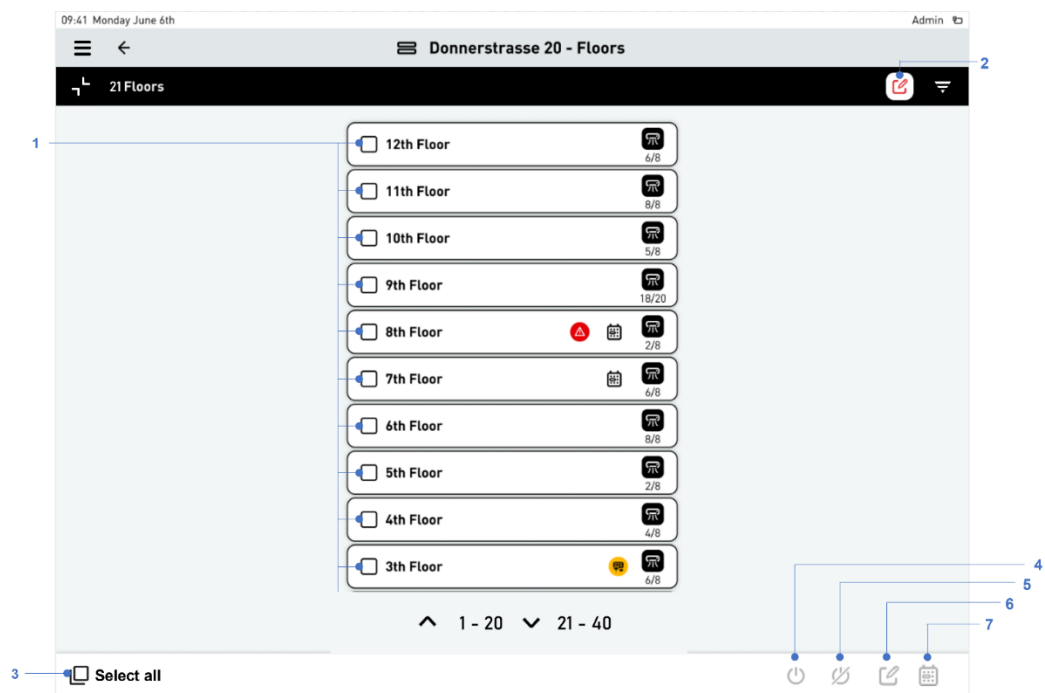
If you touch this button, all units in selected groups will be turned OFF. This button is activated when at least one group is selected.

6. Edit selected group button

If you touch this button, the edit setting screen for selected groups will be displayed. This button is activated when at least one group is selected.

7. Schedule button

If you touch this button, the current running schedule screen for selected groups will be displayed. This button is activated when at least one group is selected and that group has a registered schedule.



1. Select box

You can choose floors for which you want to change settings. The change setting screen will be displayed when you touch the edit button described in #6 below after ticking.

2. Edit end button

If you touch this button, the screen goes back to the monitoring screen state.

3. Select all box

You can choose all floors in this window by touching this tick box. This button is activated when at least one group is selected.

4. All ON button

If you touch this button, all units in selected floors will be turned ON.

5. All OFF button

If you touch this button, all units in selected floors will be turned OFF. This button is activated when at least one floor is selected.

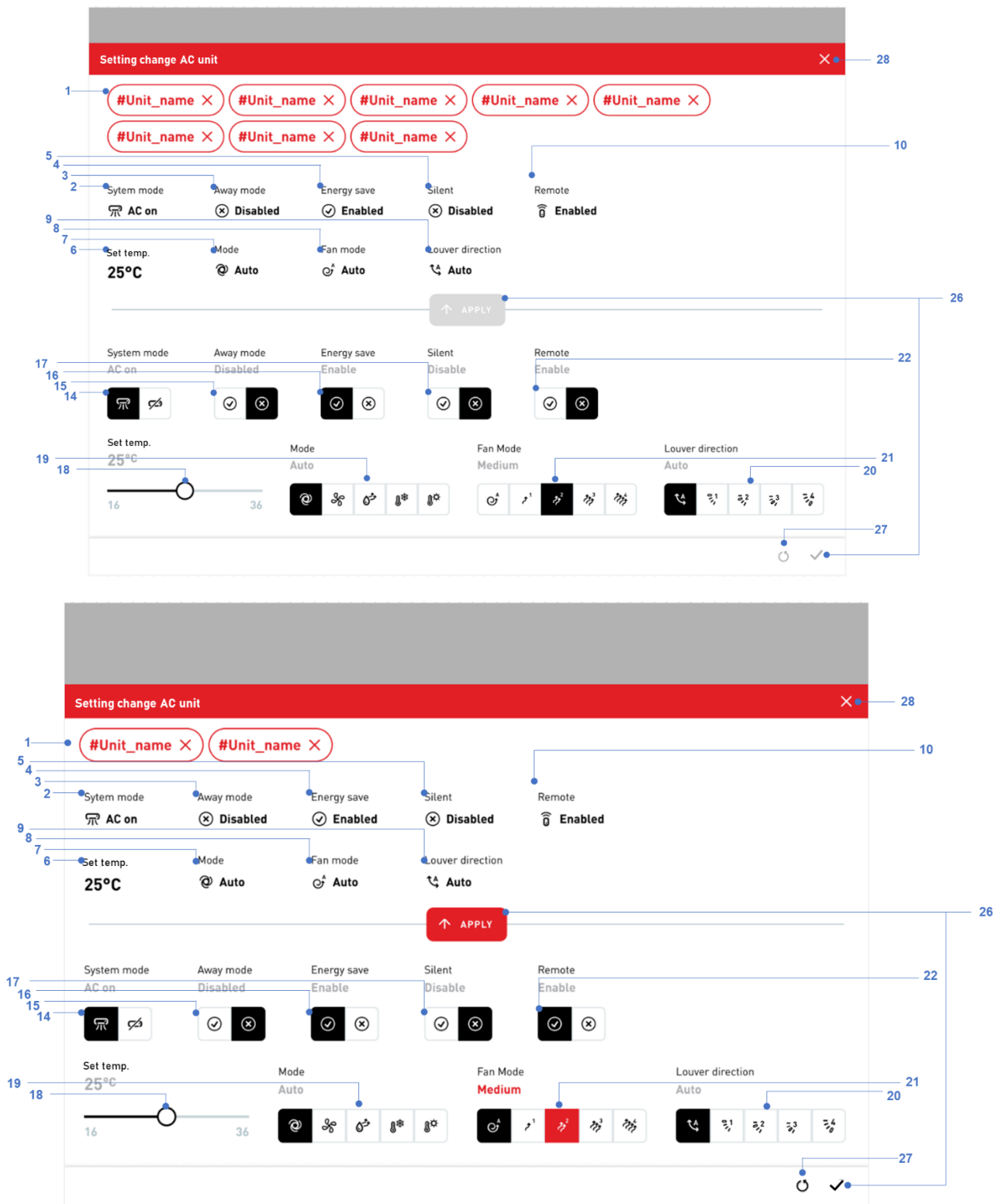
6. Edit selected floor button

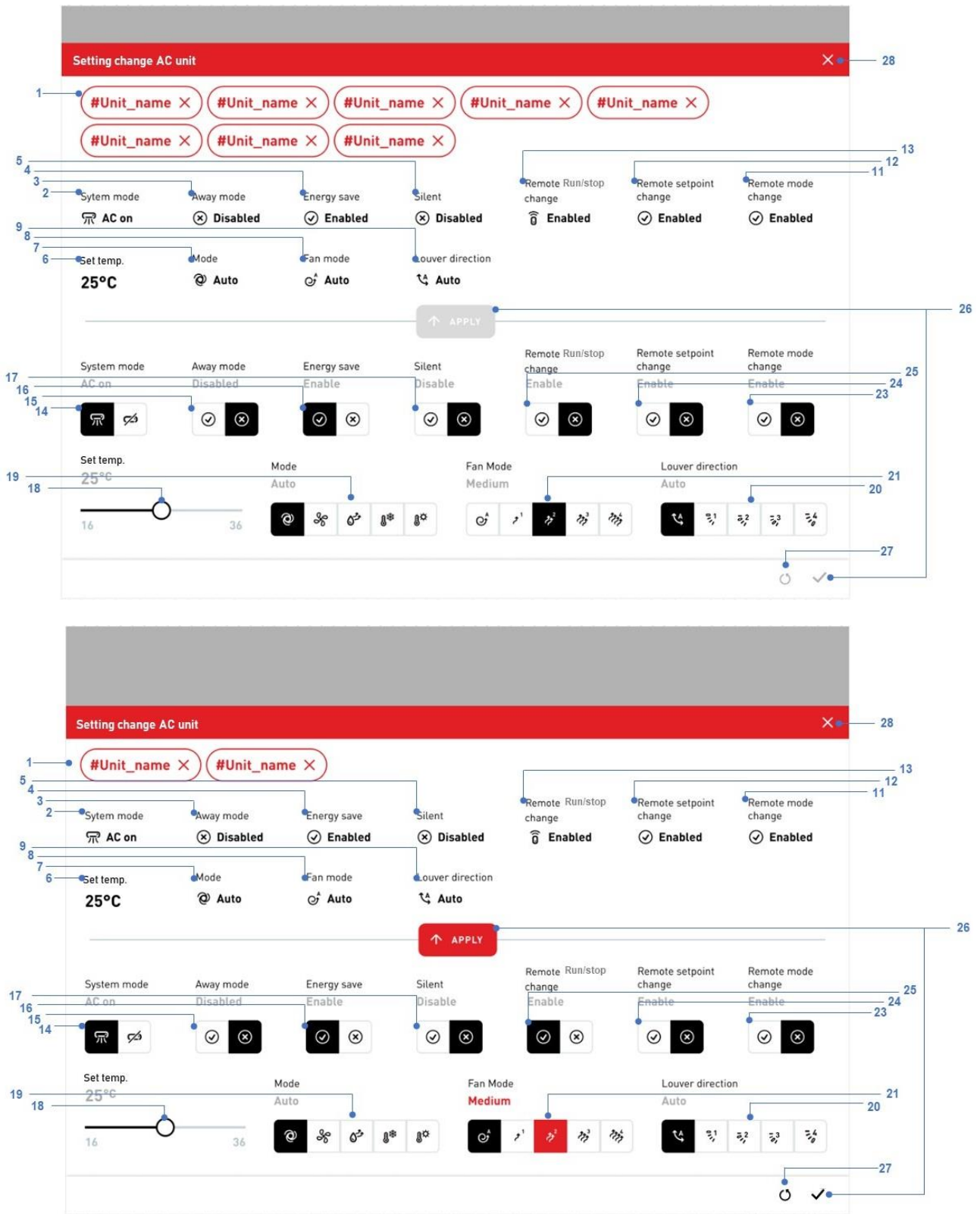
If you touch this button, the edit setting screen for selected floors will be displayed. This button is activated when at least one floor is selected.

7. Schedule button

If you touch this button, the current running schedule screen for selected floors will be displayed. This button is activated when at least one floor is selected and that floor has a registered schedule..

Setting change screen (for air conditioner)





1. Target unit/area

This area shows the target unit/area to which a setting change will be applied from this screen operation. You can delete the target unit/area by touching the "x" button next to the unit/area name.

2. Current system mode (run/stop)

The current system mode (on or off) is displayed here. If both on and off are selected in target units/areas, the representative unit stated in the area will be displayed here.

3. Current away mode

The current away mode setting (Enable or Disable) is displayed here. If both Enable and Disable are selected in target units/areas, the representative unit state in the area will be displayed here.

4. Current energy save setting

The current energy mode setting (Enable or Disable) is displayed here. If both Enable and Disable are selected in target units/areas, the representative unit state in the area will be displayed here.

5. Current silent setting

The current silent setting (Enable or Disable) is displayed here. If both Enable and Disable are selected in target units/areas, the representative unit state in the area will be displayed here.

6. Current set temperature

The current set temperature setting is displayed here. If several values are set in target units/areas, the set temperature value of the representative unit in the area will be displayed here.

7. Current mode

The current mode (heat, cool, dry, fan or Auto) is displayed here. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

8. Current fan setting

The current fan mode (1, 2, 3, 4 or AUTO) is displayed here. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

9. Current Louver direction

The current Louver direction setting (1, 2, 3, 4 or AUTO swing) is displayed here. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

10. Current setting for setting changes permitted from remote controller

This part shows which settings are permitted, where the user can change settings from a remote controller. If this setting is enabled, the mode can be changed from the remote controller. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as not permitted.

11. Current setting for mode changes permitted from remote controller

This part shows which settings are permitted, where the user can change modes from the remote controller. If this setting is enabled, the mode can be changed from the remote controller. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.

12. Current setting for set temperature changes permitted from remote controller

This part shows which settings are permitted, where the user can change the set temperature from the remote controller. If this setting is enabled, the set temperature can be changed from the remote controller. This setting can be seen if the “Controls available from remote control” setting is set as permitted and the “Individual functional control available from remote control” setting is set as permitted.

13. Current setting for run/stop changes permitted from remote controller

This part shows which settings are permitted, where the user can switch between run/stop from the remote controller. If this setting is enabled, you can change between run and stop from the remote controller. This setting can be seen if the “Controls available from remote control” setting is set as permitted and the “Individual functional control available from remote control” setting is set as permitted.

14. Setting button for system mode (run/stop)

You can apply the run/stop setting for the target units/area by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

15. Setting button for away mode

You can apply the away mode setting for the target units/areas by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

16. Setting button for energy save setting

You can apply the energy save setting for the target units/areas by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

17. Setting button for silent setting

You can apply the silent setting for the target units/areas by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

18. Setting button for set temperature

You can apply the set temperature for the target units/areas by sliding this button. If you change the set temperature, it will be highlighted in red and that setting will be applied to target units/areas after the apply

button described in 26 is touched.

19. Setting button for mode

You can apply the mode setting for the target units/areas by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

20. Setting button for fan setting

You can apply the fan setting for the target units/areas by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

21. Setting button for Louver direction

You can set the Louver direction setting for the target units/areas by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

22. Setting button for change setting permitted from remote controller

You can change the permitted operation from the remote controller by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as not permitted.

23. Setting button for mode change permitted from remote controller

You can apply the mode change permitted from the remote controller by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.

24. Setting button for set temperature change permitted from remote controller

You can set the temperature change permitted from the remote controller by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched

again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the “Controls available from remote control” setting is set as permitted and the “Individual functional control available from remote control” setting is set as permitted.

25. Setting button for run/stop change permitted from remote controller

You can set the run/stop change permitted from the remote controller by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button described under 26 is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the “Controls available from remote control” setting is set as permitted and the “Individual functional control available from remote control” setting is set as permitted.

26. Apply button

This button is activated when at least one setting is changed. If this button is touched, the set parameter will be applied to units/areas.

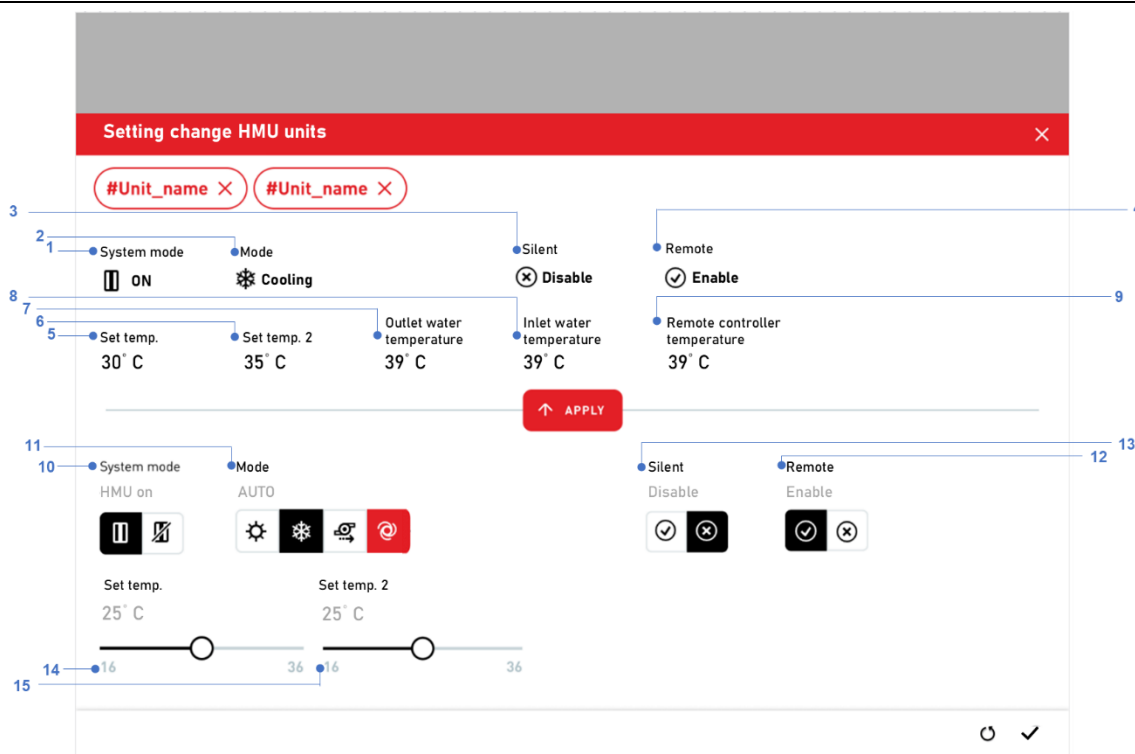
27. Undo button

This button is activated when at least one setting is changed. If this button is touched, all changed parameters change back to the status that was set just after the screen was displayed.

28. Close button

You can close this screen by touching this button. If the parameter is changed and this button is touched, a confirmation dialogue is displayed to confirm whether changes should be discarded or not.

Setting change screen (for HMU)



Setting change HMU units [X]

#Unit_name X #Unit_name X

System mode	Mode	Silent	Remote Run/stop change	Remote setpoint change	Remote mode change
ON	Cooling	Disable	Enable	Enabled	Enabled
Set temp. 30° C	Set temp. 2 35° C	Outlet water temperature 39° C	Inlet water temperature 39° C	Remote controller temperature 39° C	

[↑] APPLY

System mode	Mode	Silent	Remote Run/stop change	Remote setpoint change	Remote mode change
HMU on	AUTO	Disable			
Set temp. 25° C	Set temp. 2 25° C				

[Power] [Checkmark]

Callout numbers: 16, 17, 18, 20, 21

1. Current on/off state

The current system mode (on or off) is displayed here. If both on and off are selected in target units/areas, the representative unit stated in the area will be displayed here.

2. Current mode

The current mode (heat, cool, dry, pump or AUTO) is displayed here. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

3. Current silent mode state

The current silent setting (Enable or Disable) is displayed here. If both Enable and Disable are selected in target units/areas, the representative unit state in the area will be displayed here.

4. Current state permitted for control from remote controller

This part shows which settings are permitted, where the user can change settings from a remote controller. If this setting is enabled, the mode can be changed from the remote controller. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as not permitted.

5. Current set temperature

The current set temperature setting is displayed here. If several values are set in target units/areas, the set temperature value of the representative unit in the area will be displayed here.

6. Current set temperature 2

The current set temperature 2 setting is displayed here. If several values are set in target units/areas, the set temperature value of the representative unit in the area will be displayed here.

7. Outlet water temperature

This part shows the outlet water temperature. If several values can be observed in target units/areas, set temperature value of representative unit in area will be displayed at here.

8. Inlet water temperature

This part shows the inlet water temperature. If several values can be observed in target units/areas, set temperature value of representative unit in area will be displayed at here.

9. Remote controller temperature

This part shows the indoor temperature measured by the remote controller. If several values can be observed in target units/areas, set temperature value of representative unit in area will be displayed at here.

10. Button to change run/stop

You can apply the run/stop setting for the target units/area by touching this button. Black showing current setting. If you touch this button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

11. Mode button

You can apply the mode setting for the target units/areas by touching this button. Black showing current setting. If you touch the button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

12. Button to change to silent mode

You can apply the silent setting for the target units/areas by touching this button. Black showing current setting. If you touch the button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas.

13. Button to change permitted for control from remote controller

You can apply a setting change permitted from the remote controller by touching this button. Black showing current setting. If you touch the button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as not permitted.

14. Slider for set temperature

You can apply the temperature for the target units/areas by sliding this part. If you change the set temperature, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched.

15. Slider for set temperature 2

You can apply temperature 2 for the target units/areas by sliding this button. If you change the set temperature, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched.

16. Current setting for mode changes permitted from remote controller

This part shows which settings are permitted, where the user can change modes from the remote controller. If this setting is enabled, the mode can be changed from the remote controller. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.

17. Current setting for set temperature changes permitted from remote controller

This part shows which settings are permitted, where the user can change the set temperature from the remote controller. If this setting is enabled, the set temperature can be changed from the remote controller. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.

18. Current setting for run/stop changes permitted from remote controller

This part shows which settings are permitted, where the user can switch between run/stop from the remote controller. If this setting is enabled, you can change between run and stop from the remote controller. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.

19. Setting button for mode change permitted from remote controller

You can apply the mode change permitted from the remote controller by touching this button. Black showing current setting. If you touch the button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.

20. Setting button for set temperature change permitted from remote controller

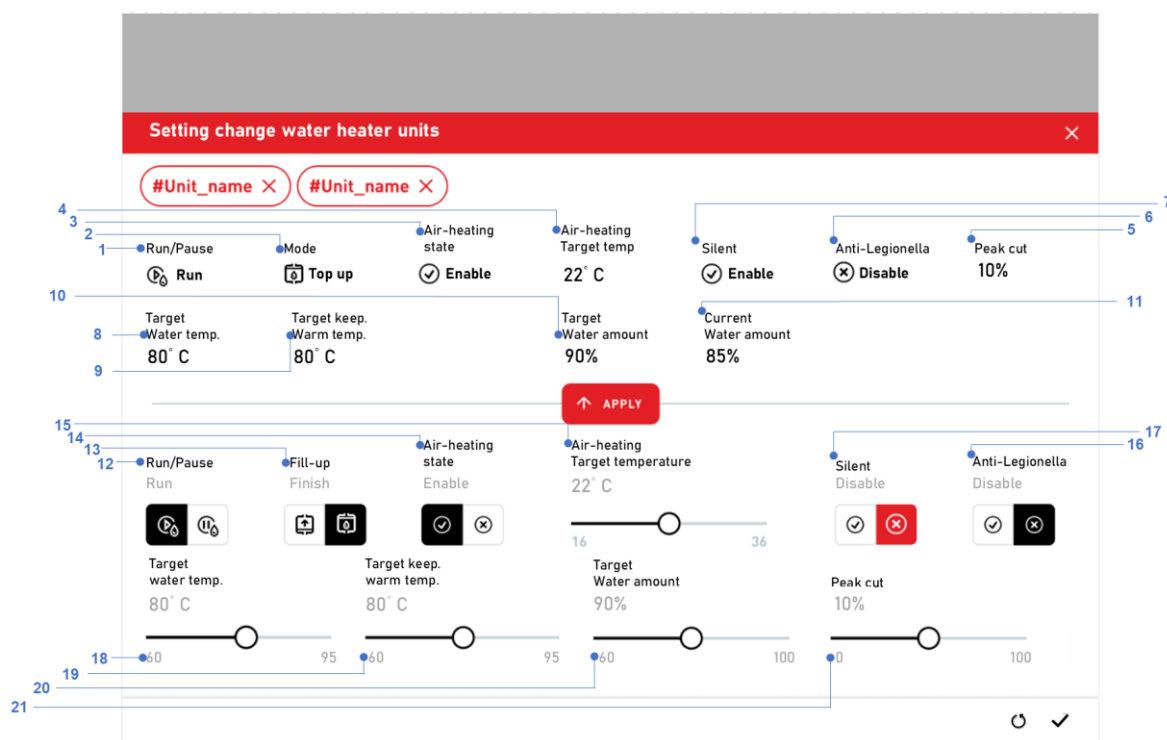
You can set the temperature change permitted from the remote controller by touching this button. Black showing current setting. If you touch the button, it will be highlighted in red and that setting will be applied to

target units/areas after the apply button is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the “Controls available from remote control” setting is set as permitted and the “Individual functional control available from remote control” setting is set as permitted.

21. Setting button for run/stop change permitted from remote controller

You can set the run/stop change permitted from the remote controller by touching this button. Black showing current setting. If you touch the button, it will be highlighted in red and that setting will be applied to target units/areas after the apply button is touched. If the highlighted button is touched again, it will change back to un-selected and the change setting will not be applied to target units/areas. This setting can be seen if the “Controls available from remote control” setting is set as permitted and the “Individual functional control available from remote control” setting is set as permitted.

Setting change screen (for water heater)



1. Current run/pause/stop state

The current system mode (run, pause or stop) is displayed here. If both on and off are selected in target units/areas, the representative unit stated in the area will be displayed here.

2. Current mode

Current mode (stop, top-up, fill-up, keep warm, freeze prevention, defrost, initialising or pumping) is displayed here. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

3. Current setting for air heating

This part shows whether the air heating functionality is enabled or not. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

4. Current target air heating target temp.

This part shows the target temperature (set temperature) for air heating. If the air heating functionality is disabled, this part will be invisible. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

5. Current value of peak-cut ratio

You can see the current peak-cut ratio for Demand control. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

6. Current anti-Legionella setting state

You can see the current anti-Legionella setting. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

7. Current silent mode state

You can check the current silent mode setting. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

8. Target water temperature

This part shows the current target water temperature. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

9. Target keep warm temperature

This part shows the current target water temperature. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

10. Target water amount

This part shows the water amount. If several settings are selected in target units/areas, the representative unit state in the area will be displayed here.

11. Current water amount

You can see the current water amount. If several values are present in target units/areas, the representative unit state in the area will be displayed here.

12. Button to change run/pause

You can switch between run/pause by touching this button.

13. Fill-up button

If you want to fill up the tank, touch the fill up button to start it. Conversely, if you want to stop a fill-up operation, please touch the stop button located here.

14. Button to change air heating state

If the air heating functionality is needed, please enable the functionality by touching this button.

15. Slider to set air heating target temperature

If the air heating functionality is enabled, this slide bar may be available. You can set the target temperature for air heating.

16. Button to apply anti-Legionella setting

You can enable/disable the setting by touching this button.

17. Button to change to silent mode

You can enable/disable the setting by touching this button.

18. Slider for target water temperature

You can set the target water temperature by using this slider.

19. Slider for target keep warm temperature

You can set the target keep warm temperature by using this slider.

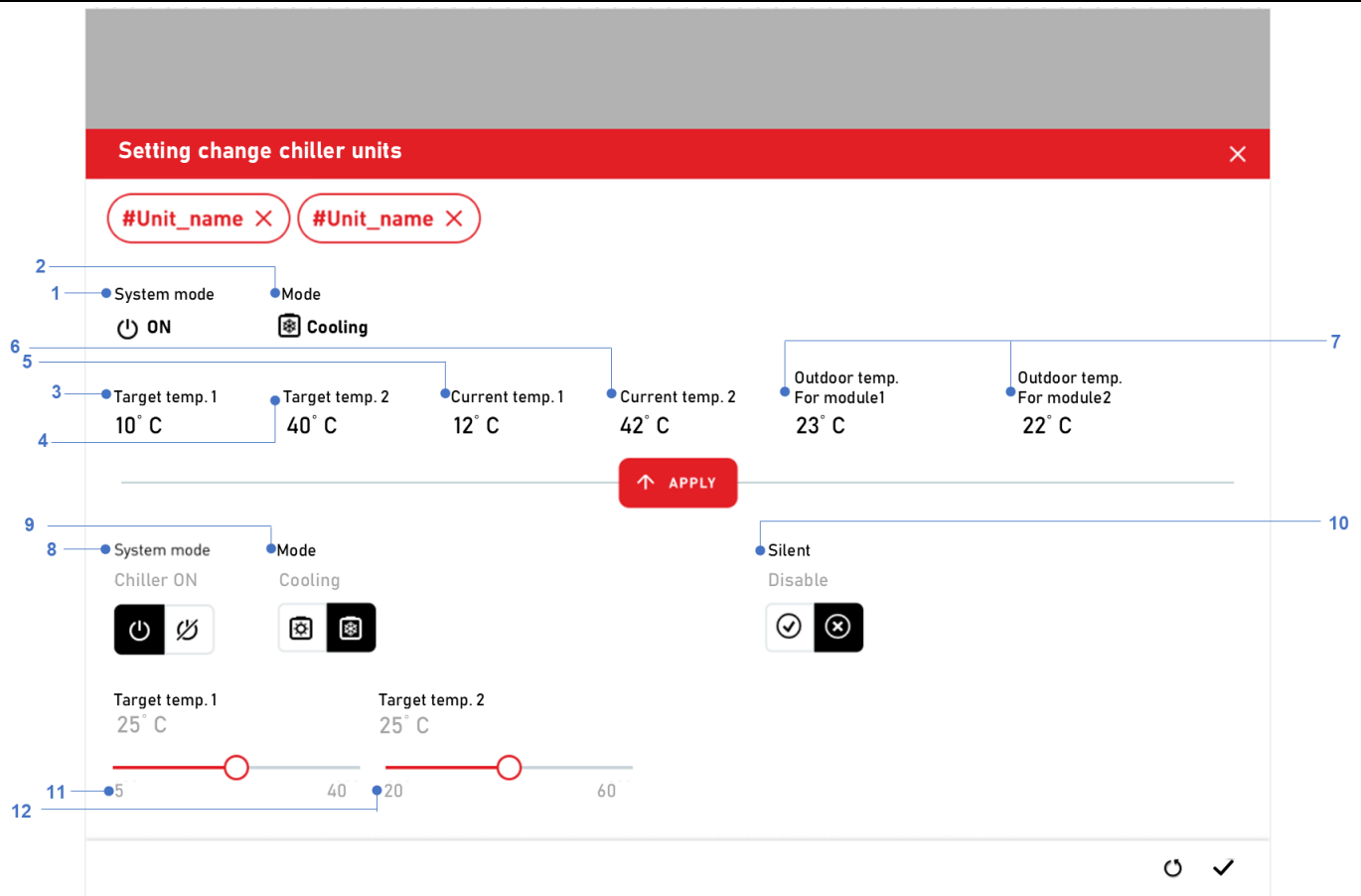
20. Slider for target water amount

You can set the target water amount by using this slider.

21. Slider to set peak-cut value

You can set the peak-cut ratio by sliding this bar.

Setting change screen (for chiller)



1. Current on/off state

You can see the current system status (on/off) of the chiller.

2. Current mode

You can see the current mode (cooling/heating).

3. Current target water temperature 1

You can see the setting for the current target water temperature1.

4. Current target water temperature 2

You can see the setting for the current target water temperature 2.

5. Current water temperature 1

You can see the water temperature 1.

6. Current water temperature 2

You can see the water temperature 2.

7. Outdoor temperature for module 1 and 2

You can see the outdoor temperature sent from modules inside the chiller outdoor unit.

8. Button to switch between on/off

You can turn on/off using this button.

9. Mode button

You can change mode (cooling/heating) using this button.

10. Button to change setting for silent mode

You can set the silent mode setting.

11. Slider to set target water temperature 1

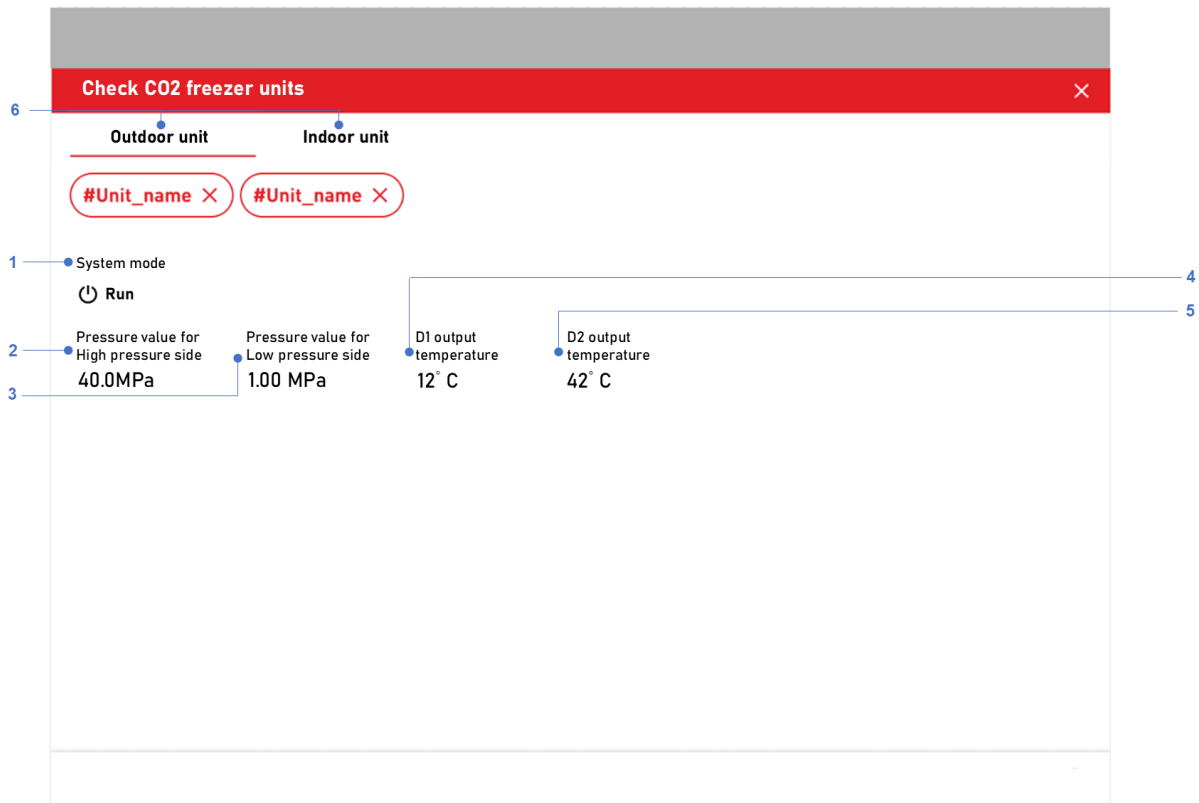
You can set the target temperature for water1.

12. Slider to set the target water temperature 2

You can set the target temperature for water2.

Check parameter status screen for outdoor unit of CO2 freezer

You can check the status and current setting for the CO2 freezer in this screen.



1. Current system mode

You can see the current status for the outdoor unit of the CO2 freezer system.

2. Current pressure value for high pressure side

You can check the current pressure value for the high pressure side.

3. Current pressure value for low pressure side

You can check the current pressure value for the low pressure side.

4. D1 output temperature

This part shows the temperature value for the D1 output.

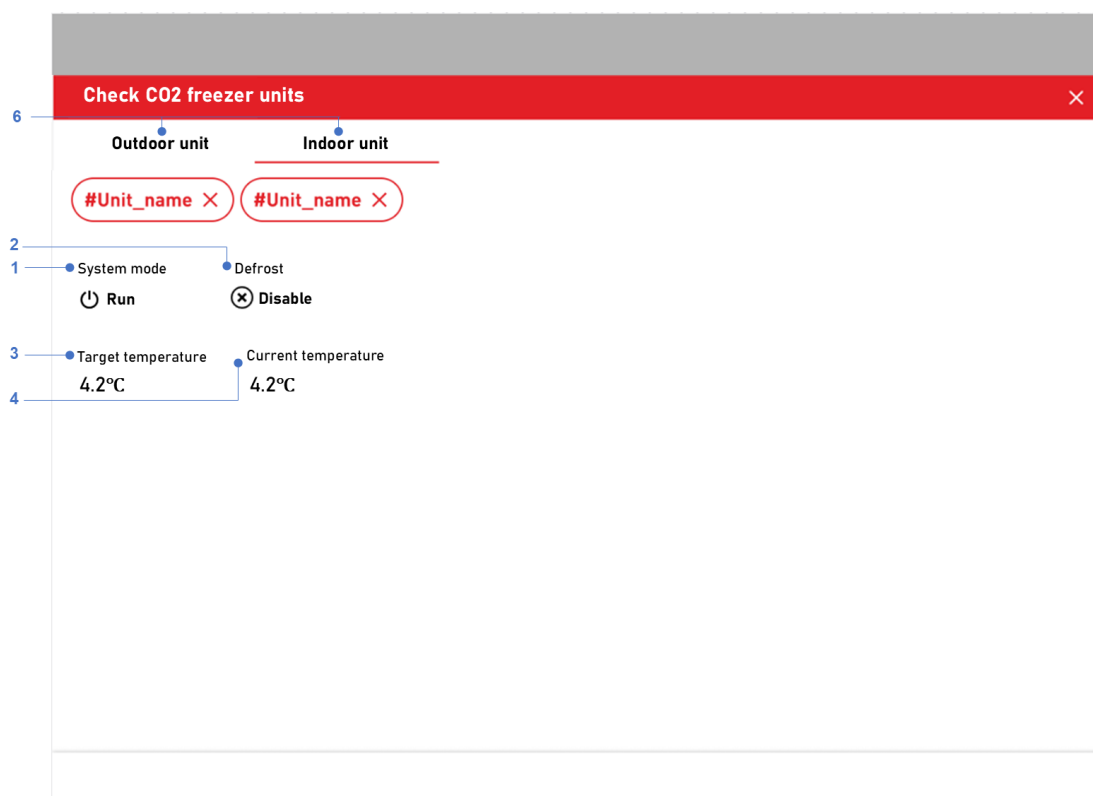
5. D2 output temperature

This part shows the temperature value for the D2 output.

6. Tab to switch outdoor unit view and indoor unit view

You can change the view for the outdoor/indoor unit by touching this tab.

Check parameter status screen for indoor unit for CO2 freezer



1. Current system mode

You can see the current status for the indoor unit of the CO2 freezer system.

2. Current setting for defrost function

You can see the current setting (Enable/Disable) for the defrost functionality.

3. Target temperature

You can check the current target temperature setting.

4. Current temperature

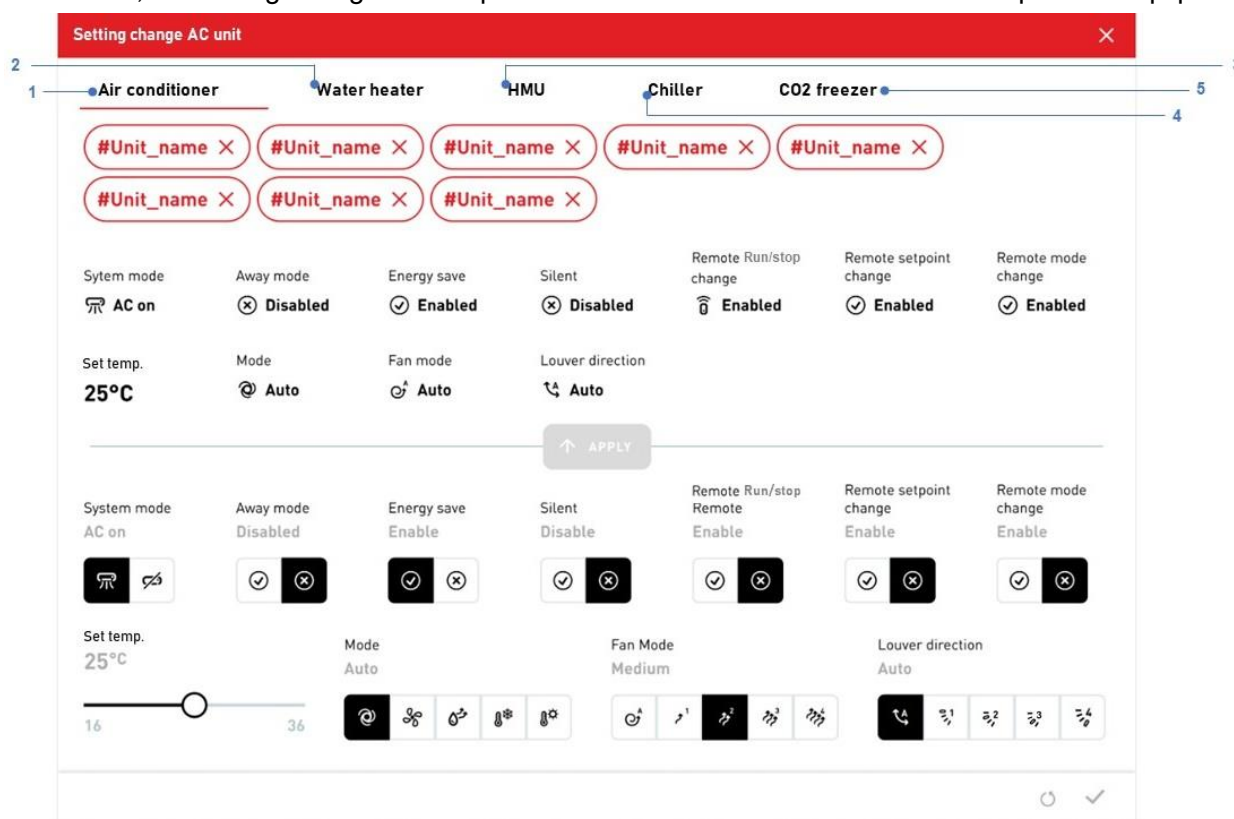
You can see the current actual temperature.

5. Tab to switch outdoor unit view and indoor unit view

You can change the view for the outdoor/indoor unit by touching this tab.

Setting change screen if several pieces of equipment are selected

If the system has several pieces of equipment and if several pieces of equipment are selected on the group/floor operation screen, the setting change screen provides tabs to switch the screen for each piece of equipment.



1. Tab button for air conditioner

You can change the screen view to the air conditioner operations screen.

2. Tab button for water heater

You can change the screen view to the water heater operations screen.

3. Tab button for HMU

You can change the screen view to the HMU operations screen.

4. Tab button for chiller

You can change the screen view to the chiller operations screen.

5. Tab button for CO2 freezer

You can change the screen view to the CO2 freezer operations screen.

Create/edit program schedule screen (for administrator)

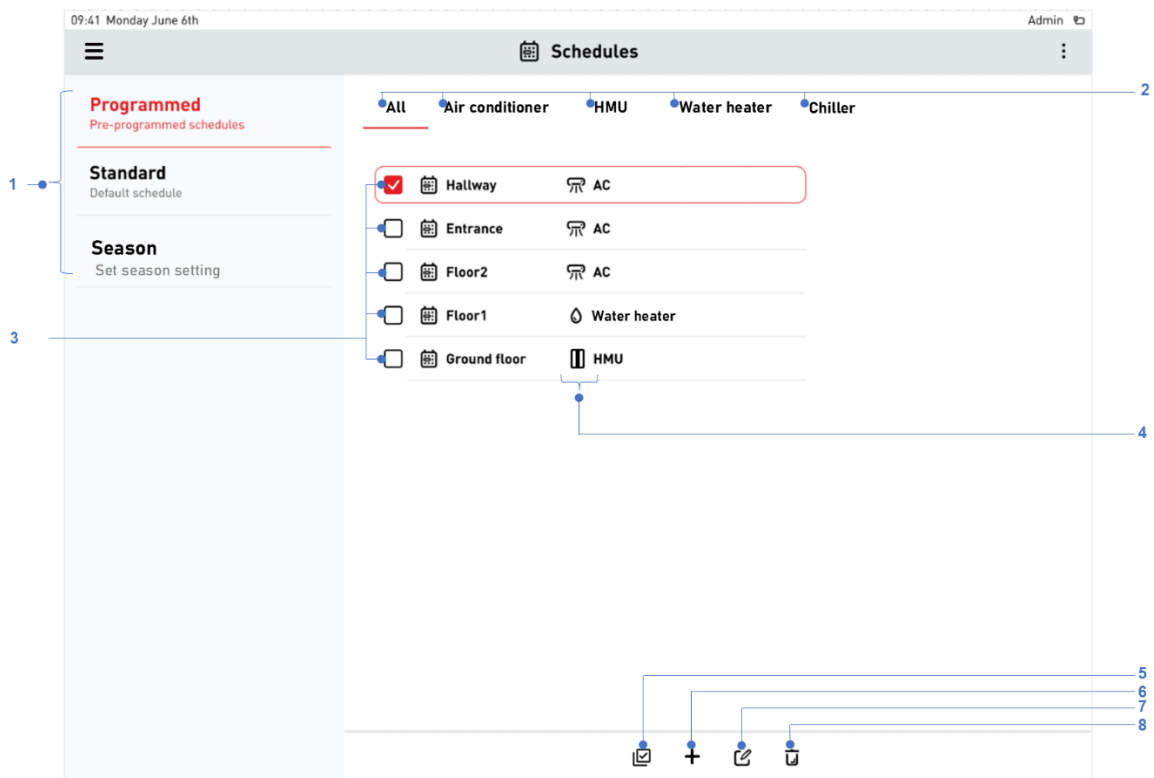
SL-5-E has a functionality to program schedules. You can program run/stop, mode and set temperature from this screen and SL-5-E automatically controls these functions based on that program.

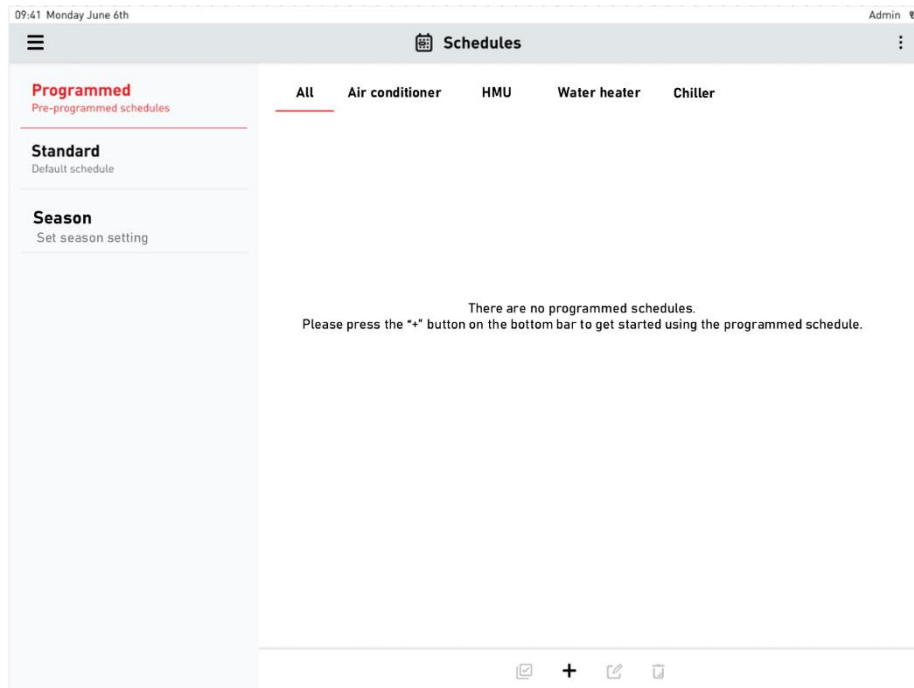
NOTE

Editing a programmed schedule from this screen will only affect the original programmed schedule. This means that the changed/edited programmed schedule applied from the "[change current running schedule](#)" screen will not be affected by editing from this screen. Please see "[Programmed schedule](#)" for more details.

List of programmed schedules

SL-5-E can have several program schedules. A programmed schedule can be applied to any area but one area can have one schedule. If a unit is registered to a floor and a group, there is possibility that the unit has two schedules but a schedule registered from the group setting has priority.





1. Program schedule menu

You can choose “programmed” or “standard” in this menu bar.

- Programmed: to create/edit an actually executed programmed schedule
- Standard: to make a base schedule. This will be useful when you make many similar schedules before you start making an actual programmed schedule.
- Season: to set temperature for seasonal AUTO change over functionality.

2. Switch tab for pieces of equipment

You can change the view list using this tab. It will be helpful to filter the list of all equipment by touching this button.

3. Select box

You can choose the programmed schedule that you want to edit/delete from the list.

4. Equipment

This part shows which equipment to specify for each programmed schedule.

5. Select all button

You can choose all schedules displayed in the list by touching this button. If the device-specific screen is clearly displayed, only the schedule for specified equipment is selected.

6. Add new schedule button

If you create a new schedule, please press this button. The operation to create a new schedule is described in “[Add/edit programmed schedule](#)”.

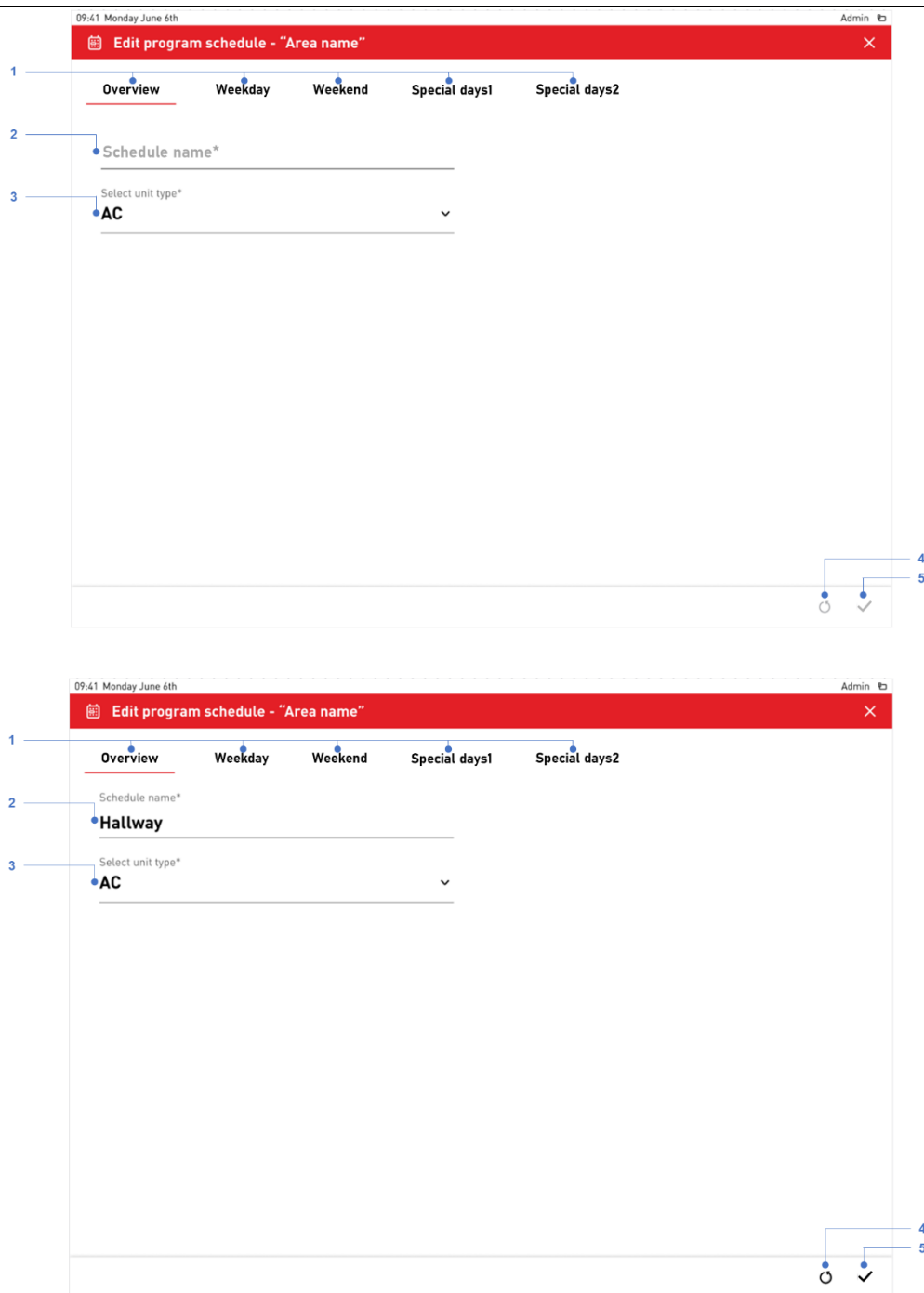
7. Edit programmed schedule button

This button is activated when one schedule is selected (i.e. if several schedules are selected, this button will be inactive). When this button is pressed, the edit programmed schedule screen will be displayed. The operation to edit a new schedule is described in "[Add/edit programmed schedule](#)".

8. Delete programmed schedule button

This button is activated when one or more schedules are selected. You can delete a selected programmed schedule by touching this button.

Add programmed schedule



1. Tab to go to screen for other program schedule settings
The user can go to the screen for other settings by touching this tab.
2. Schedule name
The user can set the schedule name to make it clarify the purpose of each program by naming them appropriately.
3. Unit type
The user can specify the unit type (AC, HMU, water heater or chiller) using this part. The operations parameter for programmed schedules is changed according to this unit type.

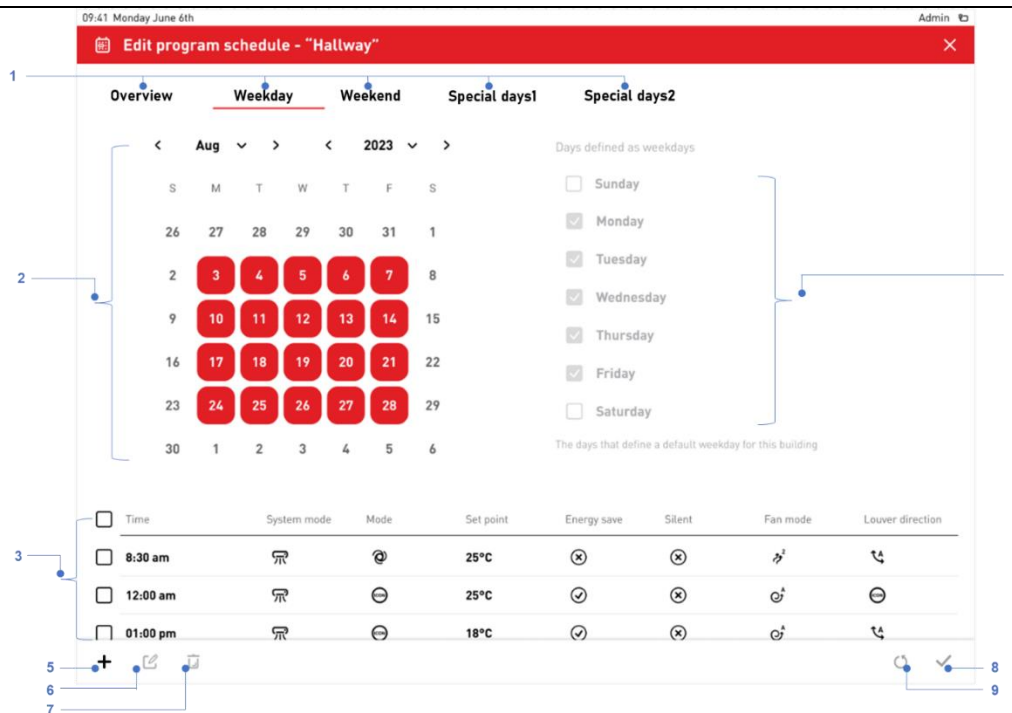
4. Undo button

The changed setting reverts to the value just after the screen transition.

5. Apply button

The changed setting is applied to the programmed schedule.

Edit programmed schedule (weekday/weekend)



1. Tab to go to screen for other program schedule settings

The user can go to the screen for other settings by touching this tab.

2. Select date on which the program schedule was applied

In the weekday tab, you can choose the days on which the program schedule set in the weekday settings tab will run. In the weekend tab, you can choose the days on which the program schedule set in the weekend settings tab will run. The default weekday and weekend value can be specified in the standard schedule described later.

3. Contents of time slots

This part shows the contents of each time slot for programmed schedules

4. Default settings

This part shows the default weekday/weekend setting set for the standard schedule.

5. Time slot addition button

You can add new time slots by touching this button. See “Create new time slot” for more details.

6. Time slot edit button

You can edit the selected time slot by touching this button. See “Edit time slot” for more details. This button is activated when at least one time slot is selected using the tick box.

7. Time slot delete button

You can delete the selected time slot by touching this button. This button is activated at least once when the

slot is activated and at least one time slot is selected using the tick box.

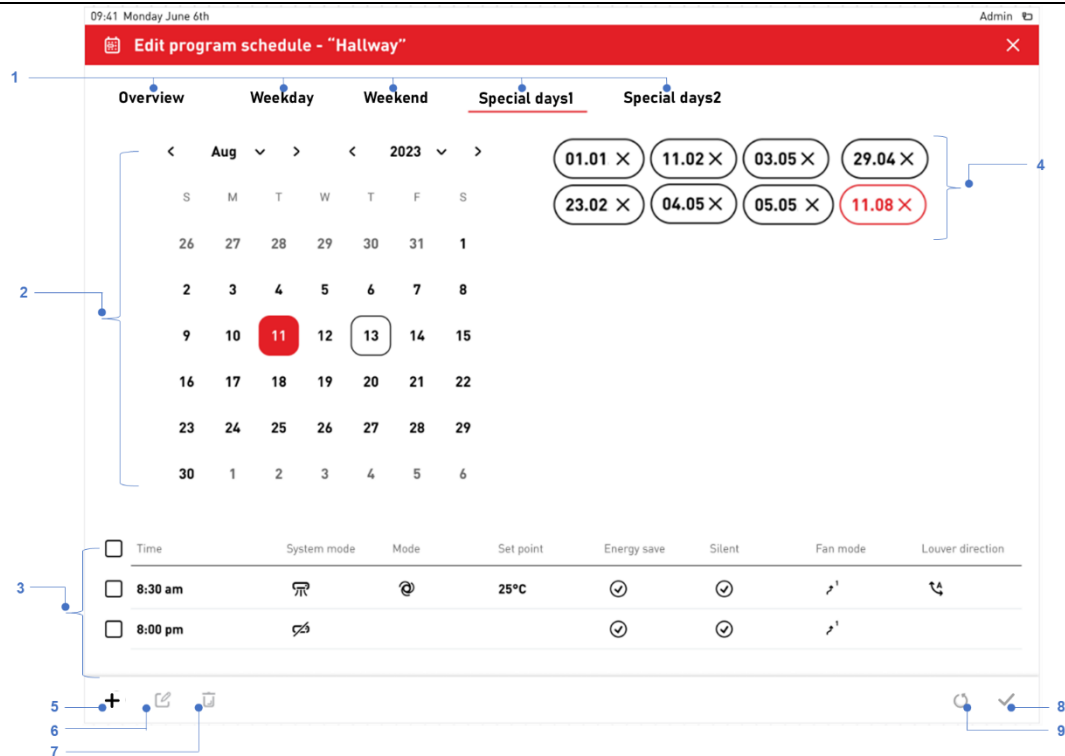
8. Apply button

The changed setting is applied to the programmed schedule.

9. Undo button

The changed setting reverts to the value just after the screen transition.

Edit programmed schedule (special days 1/2)



1. Tab to go to screen for other program schedule settings

The user can go to the screen for other settings by touching this tab.

2. Select date on which the program schedule was applied

You can choose on the days on which the program schedule set in the special days 1/2 will run.

3. Contents of time slots

This part shows the contents of each time slot for programmed schedules

4. Special days

This part shows the special days specified in this screen.

5. Time slot addition button

You can add new time slots by touching this button. See “Create new time slot” for more details.

6. Time slot edit button

You can edit the selected time slot by touching this button. See “Edit time slot” for more details. This button is activated when at least one time slot is selected using the tick box.

7. Time slot delete button

You can delete the selected time slot by touching this button. This button is activated when at least one time slot is selected using the tick box.

8. Apply button

The changed setting is applied to the programmed schedule.

9. Undo button

The changed setting reverts to the value just after the screen transition.

Create new time slot

The screenshot shows a 'New schedule timeslot' dialog box with a red header bar and a close button (X) in the top right corner. The dialog is divided into several sections for configuring a new time slot. Numbered callouts (1-12) point to specific UI elements:

- 1: Schedule name input field
- 2: Unit type dropdown menu (currently set to AC)
- 3: Schedule type dropdown menu (currently set to Weekend)
- 4: Time input field (currently set to 12:00)
- 5: Setpoint slider (currently set to 25°C)
- 6: Mode dropdown menu (currently set to Auto)
- 7: System mode dropdown menu (currently set to AC on)
- 8: Away mode toggle (currently set to Enable)
- 9: Energy save toggle (currently set to Enable)
- 10: Silent toggle (currently set to Disable)
- 11: Remote run/stop Remote toggle (currently set to Enable)
- 12: Remote setpoint change toggle (currently set to Enable)

Other visible UI elements include a 'Louver direction' dropdown menu (currently set to Auto) and a 'Fan Mode' dropdown menu (currently set to Medium). The bottom of the dialog features a refresh icon and a checkmark icon.

1. Unit type

This part shows the schedule for each unit type (AC, HMU, water heater or chiller) added by the operation.

2. Schedule name

This part shows the schedule name that the user named when the schedule was added.

3. Run/stop setting

The user can set the run/stop operation that is executed when the time defined in the “Time” setting is entered in the time slot.

4. Time

The user can set any time to carry out the operation defined in the screen. You cannot specify a time that is already registered in the schedule.

5. Mode

The user can set the mode that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

6. Set temperature

The user can set the temperature that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

7. Energy save

The user can set the energy save setting that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details

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8. Away mode

The user can set the Away mode that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

9. Silent

The user can set the silent mode that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

10. Fan mode

The user can set the fan mode that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air

conditioner) for more details.

11. Louver direction

The user can set the Louver direction setting that is executed when the time defined in the "Time" setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

12. Permit operation from remote controller.

The user can set the permit operation setting from the remote controller that is executed when the time defined in the "Time" setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

The above diagram is shown for the air conditioner. Parameters for the other equipment that can be edited in this screen is listed below.

- The parameter list can be edited in the time slot screen for the air conditioner (list 1)

1	Set temperature	You can set the temperature within the upper limit and bottom limit.
2	Run/stop	You can set the run or stop setting
3	Mode	You can set from AUTO, fan, dry, cool and heat season
4	Away mode	Enable, Disable
5	Energy save	Enable, Disable
6	Silent	Enable, Disable
7	Fan mode	Auto, 1, 2, 3, 4
8	Louver direction	Auto, 1, 2, 3, 4
9	Change setting permitted from remote controller	Enable, Disable (this parameter is displayed only when the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as not permitted.
10	Mode change allowable from remote controller	Enable, Disable (this parameter is displayed only when the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.
11	Set temperature change permitted from remote controller	Same as above
12	Run/stop change allowable from remote controller	Same as above

- The parameter list can be edited in the time slot screen for HMU (list 2)

1	Set temperature	You can set the temperature within the upper limit and bottom limit.
2	Run/stop	You can set the run or stop setting
3	Mode	You can set from AUTO, pump, cool and heat season
4	Silent	Enable, Disable
5	Set temperature 2	You can set the temperature within the upper limit and bottom limit.
6	Change setting permitted from remote controller	Enable, Disable (this parameter is displayed only when the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as not permitted.
7	Mode change allowable from remote controller	Enable, Disable (this parameter is displayed only when the "Controls available from remote control" setting is set as permitted and the "Individual functional control available from remote control" setting is set as permitted.
8	Set temperature change permitted from remote controller	Same as above
9	Run/stop change allowable from remote controller	Same as above

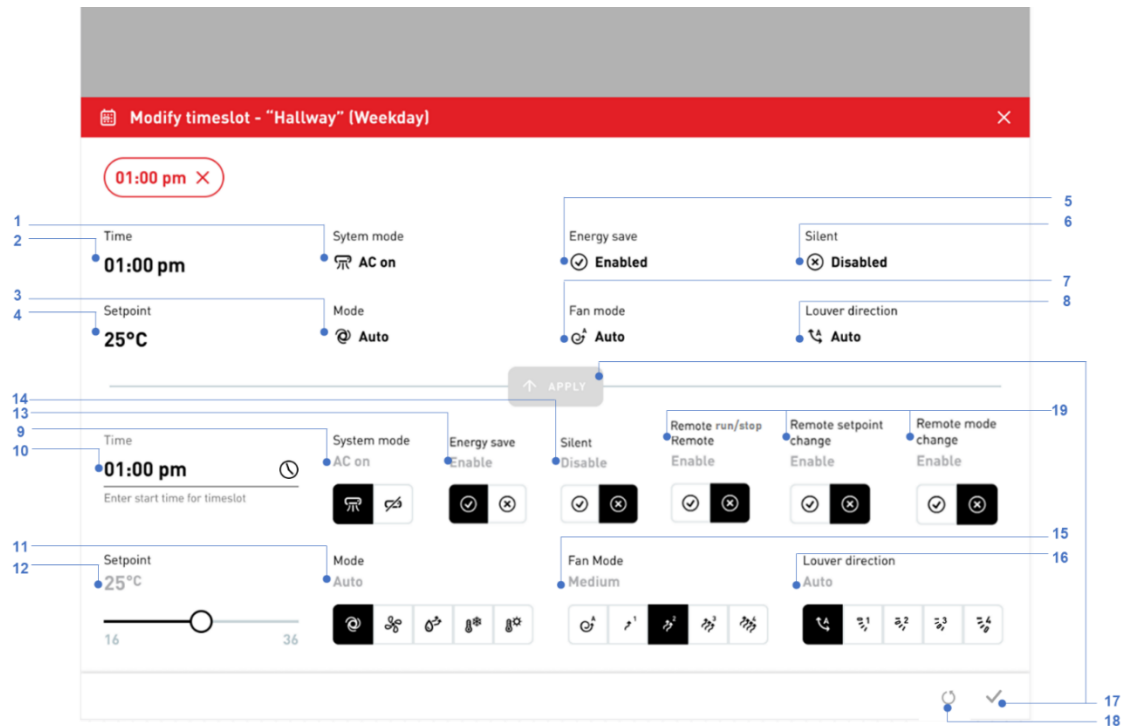
- The parameter list can be edited in the time slot screen for the water heater (list 3)

1	Run/pause	Run/pause
2	Top up	Start/stop
3	Heating for air conditioner	Enable, Disable
4	Set temperature for air conditioner	You can set the temperature within the upper limit and bottom limit.
5	Silent	Enable, Disable
6	Anti-Legionella	Enable, Disable
7	Target water temperature	You can set the temperature within the upper limit and bottom limit.
8	Target keep warm water temperature	You can set the temperature within the upper limit and bottom limit.
9	Target water amount	You can set the temperature within the upper limit and bottom limit.
10	Peak cut value.	You can set the temperature within the upper limit and bottom limit.

- The parameter list can be edited in the time slot screen for the chiller (list 4)

1	Run/stop	Run, stop
2	Mode	Heat, cool
3	Silent	Enable, Disable
4	Target water temperature 1	You can set the temperature within the upper limit and bottom limit.
5	Target water temperature 2	You can set the temperature within the upper limit and bottom limit.

Edit time slot



1. Current run/stop setting

This part shows current run/stop setting executed when the time is specified in the current “Time” setting.

2. Current time setting

This part is showing the current time setting for the time slot.

3. Current mode setting

This part shows the current mode setting executed when the time is specified in the current “Time” setting.

4. Current set temperature setting

This part shows the current temperature setting executed when the time is specified in the current “Time” setting.

5. Current energy save setting

This part shows the current energy save setting executed when the time is specified in the current “Time” setting.

6. Current silent setting

This part shows the current silent setting executed when the time is specified in the current “Time” setting.

7. Current fan mode setting

This part shows the current fan mode setting executed when the time is specified in the current “Time” setting.

8. Current Louver direction setting

This part shows the current Louver direction setting executed when the time is specified in the current “Time” setting.

9. System mode

The user can set the run/stop operation that is executed when the time defined in the “Time” setting is entered in the time slot.

10. Time

The user can set any time to carry out the operation defined in the screen. You cannot specify a time that is already registered in the schedule.

11. Mode

The user can set the mode that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

12. Set temperature

The user can set the temperature that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

13. Energy save

The user can set the energy save setting that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

14. Silent

The user can set the silent mode that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

15. Fan mode

The user can set the fan mode that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air

conditioner) for more details.

16. Louver direction

The user can set the Louver direction setting that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details.

17. Apply button

Changed setting is applied when this button is touched.

18. Undo button

Changed parameter is reverted back.

19. Permit operation from remote controller.

The user can set the permit operation setting from the remote controller that is executed when the time defined in the “Time” setting is entered in the time slot. This setting is the same as the operation screen. Please see the setting change screen (for air conditioner) for more details. (22 to 25)

The editable parameter in this screen is the same as in list 1 to list 4.

Standard schedule

The standard schedule is a function for applying the default setting of each programmed schedule. This function is useful by setting parameters that are used most frequently by users before make actual program schedules.

1 Select the tab for choosing “standard”, “special days1” and “special days2”.

2 Definition of weekday and weekend (display)

3 Tick box for select all

4 Time slot setting

5 The days that define a default weekday for this building

6 The days that define a default weekday for this building

7 The days that define a default weekday for this building

1. Select the tab for choosing “standard”, “special days1” and “special days2”.
The user can switch between setting screens “standard”, “special days1” and “special days2”.
2. Definition of weekday and weekend (display)
This part shows whether weekday or weekend has been specified by the user using #5 in this screen.
3. Tick box for select all
The user can select all time slots by touching this part.
4. Time slot setting
This part shows settings for each time slot in the standard schedule.

5. Definition of weekday and weekend (setting)

The user can specify either weekday or weekend by selecting days.

6. Select date for special days 1 or 2

The user can select the default date of a special day by touching this calendar.

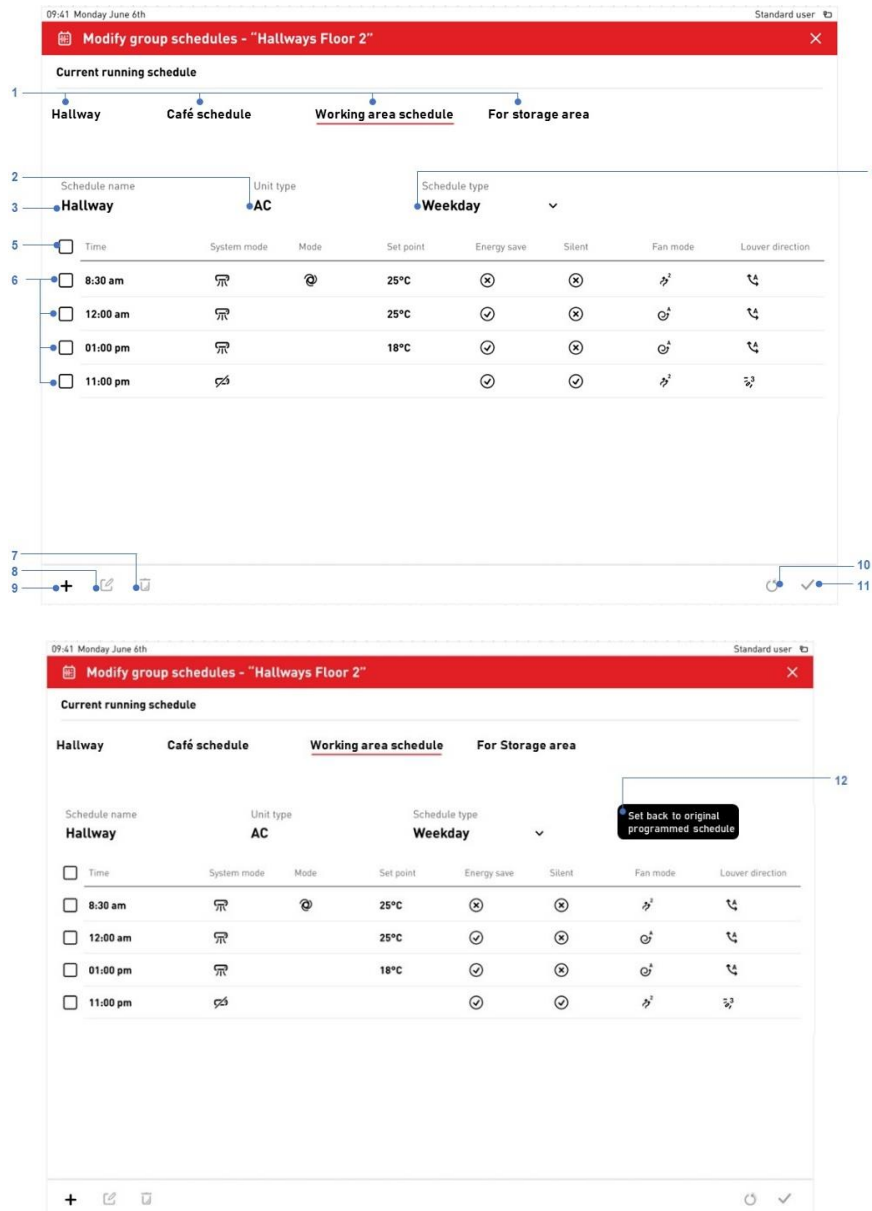
7. Current date for special days 1 or 2

The user can tick and delete the default date of a special day by touching this calendar.

The addition/edit time slot for the standard schedule is the same functionality as "[Edit time slot](#)" and "[Create new time](#)".

Change current running programmed schedule screen

The user can change the schedule setting from this screen. A changed schedule is executed until the end of the day and it will change back to the original schedule automatically.



1. Tabs for selecting current running schedule in the area

This tab shows the current running schedule for the area. If the screen is displayed from the block monitoring screen, there is an option to show several schedules if the block has several groups or floors. The user can select the schedule to be edited by touching this section.

2. Unit type

This part shows the unit type for the schedule.

3. Schedule name

This part shows the schedule name. If you edit this schedule, "(Edited)" is displayed next to the schedule name.

4. Schedule type

This part shows the schedule type (weekday, weekend, special day 1 or 2).

5. Select all box

You can select all time slots described below.

6. Time slots

This part shows the time slots defined in the current running schedule. The user can select each time slot to be deleted or edited.

7. Delete button

You can delete time slots by touching this button when the time slot is selected. Please note that this deletion operation is only carried out under the current running schedule (i.e. the original schedule has not been effected and the deleted time slot is reverted back at the end of the day). If you would like to delete the time slot from the schedule, you need to edit the original schedule at "[edit programmed schedule screen](#)".

8. Edit button

You can edit the selected time slot by touching this button. "[Time slots edit](#)" shows details of the time slot edit.

9. Time slot addition button

You can add the time slot by touching this button. "[Time slot addition](#)" shows details of the time slot addition.

10. Undo button

The changed setting reverts to the value just after the screen transition.

11. Apply button

The changed setting is applied to the programmed schedule.

12. Button for changing back to original schedule.

You can change the parameter edited by this screen operation to the original schedule by using this button.

Time slot addition

User can add a new time slot to the current running schedule by using this screen. The screen operation is the same as “[Create new time slot](#)” but it will be applied to the temporary schedule that will be executed by the end of the day.

The screenshot shows the 'New schedule timeslot' interface. It features a red header bar with the title and a close button. The main area contains several input fields and toggle switches. Numbered callouts point to specific elements: 1 points to the 'Schedule name' field; 2 points to the 'Unit type' dropdown (set to 'AC'); 3 points to the 'Time' field (set to '12:00 am'); 4 points to the 'Enter start time for timeslot' text; 5 points to the 'Setpoint' slider (set to '25°C'); 6 points to the 'Mode' dropdown (set to 'Auto'); 7 points to the 'System mode' dropdown (set to 'AC on'); 8 points to the 'Energy save' toggle (set to 'Enable'); 9 points to the 'Silent' toggle (set to 'Disable'); 10 points to the 'Remote run/stop' toggle (set to 'Enable'); 11 points to the 'Remote setpoint change' toggle (set to 'Enable'). Other visible elements include 'Remote mode change' (Enable), 'Fan Mode' (Medium), and 'Louver direction' (Auto). At the bottom right, there are 'Apply' and 'Cancel' buttons.

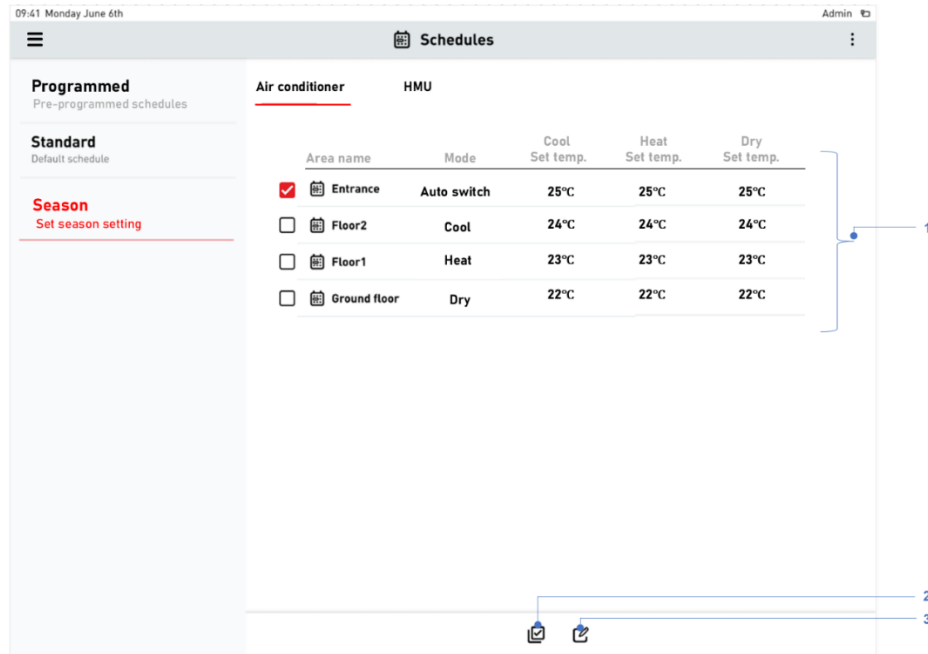
Time slot edit

User can add a new time slot to the current running schedule by using this screen. The screen operation is the same as “[Edit time slot](#)”, but it will be applied to the temporary schedule that will be executed by the end of the day.

The screenshot shows the 'Modify current running schedule' interface. It features a red header bar with the title and a close button. The main area contains several input fields and toggle switches. Numbered callouts point to specific elements: 1 points to the 'Time' field (set to '01:00 pm'); 2 points to the 'System mode' dropdown (set to 'AC on'); 3 points to the 'Setpoint' slider (set to '25°C'); 4 points to the 'Mode' dropdown (set to 'Auto'); 5 points to the 'Energy save' toggle (set to 'Enabled'); 6 points to the 'Silent' toggle (set to 'Disabled'); 7 points to the 'Fan mode' dropdown (set to 'Auto'); 8 points to the 'Louver direction' dropdown (set to 'Auto'); 9 points to the 'Time' field (set to '01:00 pm'); 10 points to the 'Enter start time for timeslot' text; 11 points to the 'Setpoint' slider (set to '25°C'); 12 points to the 'Mode' dropdown (set to 'Auto'); 13 points to the 'System mode' dropdown (set to 'AC on'); 14 points to the 'Energy save' toggle (set to 'Enable'); 15 points to the 'Silent' toggle (set to 'Disable'); 16 points to the 'Remote run/stop' toggle (set to 'Enable'); 17 points to the 'Remote setpoint change' toggle (set to 'Enable'); 18 points to the 'Remote mode change' toggle (set to 'Enable'). An 'APPLY' button is located in the center. At the bottom right, there are 'Apply' and 'Cancel' buttons.

Season settings

User can configure parameters for [Seasonal AUTO change over](#) functionality in this screen.



1. List of areas

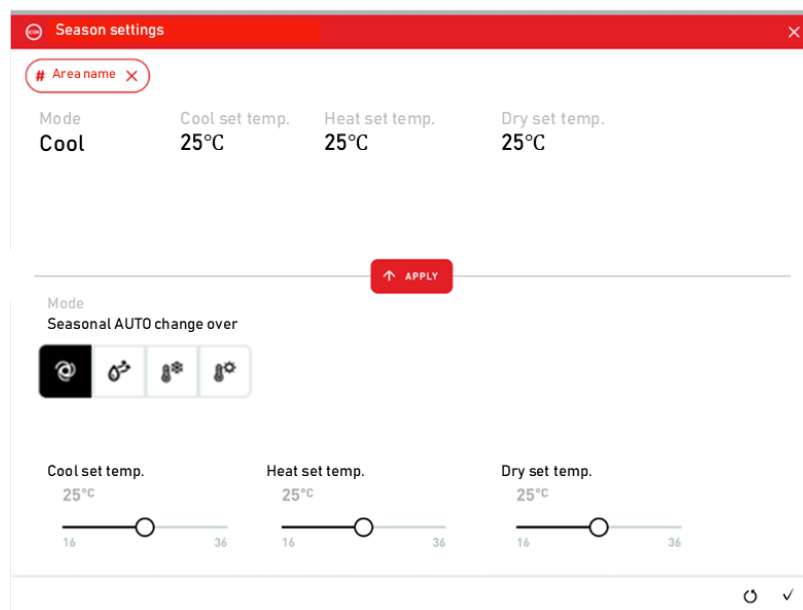
This part shows group/floor registered from [Screens for Area settings](#). User can select some areas by touching check box.

2. Select all button

User can select all area by touching this button.

3. Edit button

Once user select area in List of areas, this button is activated. Then if user touches this button the following screen is displayed to set parameters for Seasonal AUTO change over.



Screens for Area settings (for administrator)

If the administrator account touches the “building management” button in the menu bar under the home screen, this screen is displayed. This setting assigns equipment such as air conditioning units and water heaters to specific areas (groups, floors, blocks), enabling efficient centralised management. Specifically, it monitors the operational status and energy consumption of equipment in each area, with the ability to control and adjust as necessary.

Menu for Area settings

The building management screen has a menu bar that has the following items on the left-hand side of the screen.

1. Building info
2. Groups definition
3. Floors definition
4. Blocks definition
5. Unit settings
6. Payment method

The screenshot displays the 'Manage building' interface. At the top, the status bar shows '09:41 Monday June 6th' and 'Admin'. The main header is 'Manage building'. On the left, a sidebar menu lists six items, each with a blue dot and a number: 1. Building info (Building name and overview), 2. Groups (User account management), 3. Floors (Display settings such as brightness), 4. Blocks (Network connection), 5. Units (General software settings), and 6. Payment method (Billing information). The main content area is divided into two sections. The top section, 'Building information', contains a form for 'Building name*' with the value 'AAA company building' and a placeholder 'Give your building a name'. The bottom section, 'Contact information', contains a form for 'Name' with the value 'Mr. AAA', 'Phone' with the value '090xxxxxxx', and 'E-mail' with the value 'xxxxxxxxxxx'.

Menu Item	Description
1. Building info	Building name and overview
2. Groups	User account management
3. Floors	Display settings such as brightness
4. Blocks	Network connection
5. Units	General software settings
6. Payment method	Billing information

Section	Field	Value
Building information	Building name*	AAA company building
	Give your building a name	
Contact information	Name	Mr. AAA
	Phone	090xxxxxxx
	E-mail	xxxxxxxxxxx

Building information screen

The administrator can set the building name that is displayed on the home screen. Contact information (name, phone number, email address) can also be registered.

The screenshot shows the 'Manage building' interface. At the top, there is a header bar with a hamburger menu icon, the title 'Manage building', and an 'Admin' link with a user icon. On the left, a sidebar contains several menu items: 'Building info' (highlighted in red), 'Groups', 'Floors', 'Blocks', 'Units', and 'Payment method'. The main content area is divided into two sections. The top section, 'Building information', contains a 'Building name*' field with the value 'AAA company building' and a sub-label 'Give your building a name'. The bottom section, 'Contact information', contains three fields: 'Name' (Mr. AAA), 'Phone' (090xxxxxxx), and 'E-mail' (xxxxxxxxxx). Three blue lines with numbers point to specific elements: line 1 points to the building name input field, line 2 points to the 'Admin' link in the top right, and line 3 points to the 'Contact information' section header.

1. Building name

The administrator can input any characters for the building name. These characters are shown in the home screen.

2. Performance button

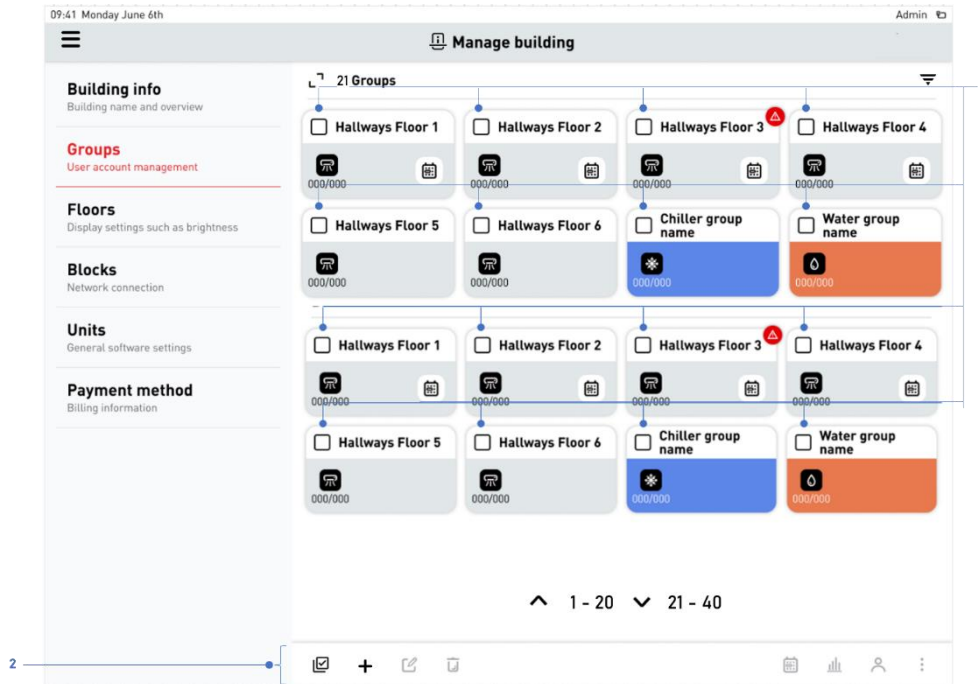
The screen goes to the [performance screen](#).

3. Contact information

The administrator can input the name, phone number and email address of the contact person for general users. This information is displayed when the user touches the building name on the home screen.

Group definition

The following screen shows groups that are defined in the system.



1. Groups

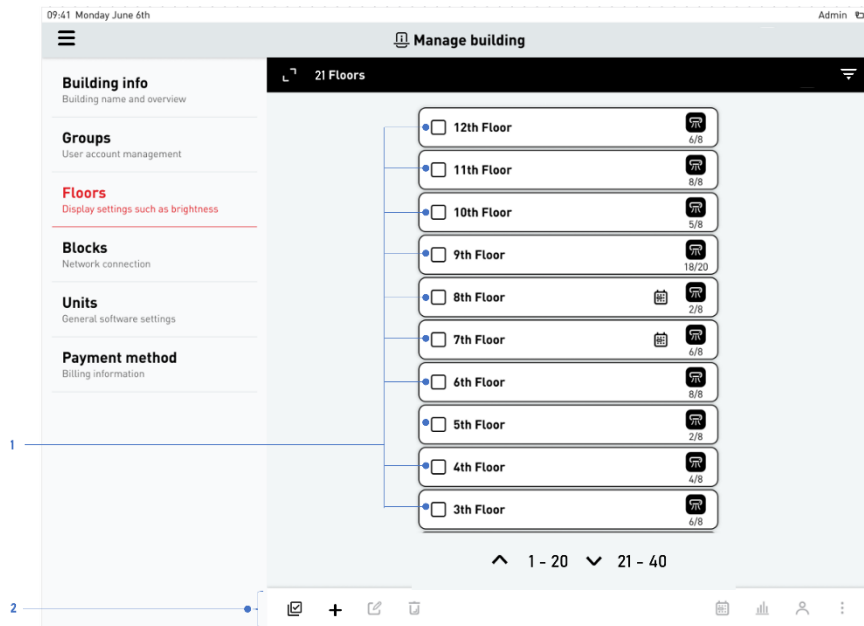
Groups defined by the administrator are shown as a group button in this screen. The administrator can select the group to be deleted/edited by tapping the tick box.

2. Bottom bar for area setting

Please see "[bottom bar for area setting](#)".

Floor definition

The following screen shows floors that are defined in the system. The functionality of each part is the same as in the group definition screen.



1. Floors

Floors defined by the administrator are shown as a floor tile in this screen. The administrator can select the floor to be deleted/edited by tapping the tick box.

2. Bottom bar for area setting

Please see "[bottom bar for area setting](#)".

Bottom bar for Area settings (group/floor)



1. Select all button

The administrator can select all areas (group or floor) by touching this button.

2. Area addition button

The administrator can add a new area by touching this button. The new area pop-up described in "[Area addition](#)" will be displayed.

3. Edit area

The administrator can edit the selected area by touching this button. "[Edit area screen](#)" will be displayed.

4. Delete area

The administrator can delete the selected area by touching this button.

5. Schedule assignment button

The programmed schedule can be assigned to "selected" by touching this button. Please see "[Schedule assignment](#)" for more details.

6. Performance button

The screen goes to "[Performance screen](#)".

7. Account button

The administrator can assign a general user account. The user account will be able to access the area (monitoring and operation) through this assignment.

Area addition

The screenshot shows a dialog box titled "Add group" with a red header bar. It contains two main sections: "Enter group name*" and "Select the unit type". The "Enter group name*" section has a text input field with "Hallways Floor 7" entered. The "Select the unit type" section has a dropdown menu with "AC" selected. A list of options is visible below the dropdown: "AC", "HMU", "Water heater", "Chiller", and "CO2 fridge". The "AC" option is highlighted in red. To the right of the dropdown, there are two buttons: "CANCEL" and "CONTINUE". The "CONTINUE" button is disabled (grayed out). Two blue lines with numbers "1" and "2" point to the "Enter group name*" and "Select the unit type" sections respectively.

1. Group name

You can input any character (within 30) as the area (group/floor) name.

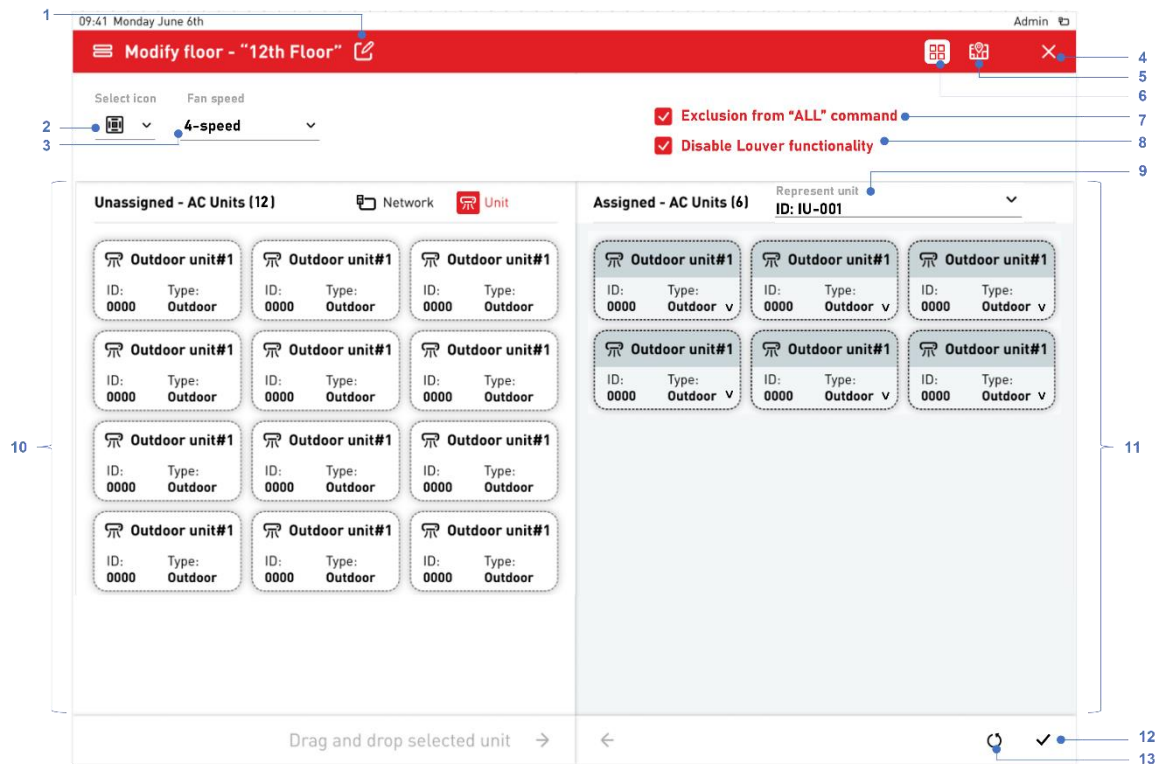
2. Equipment type

The equipment type needs to be specified for the area (group/floor) to decide which type of area will be created by the next screen.

After inputting the above two items, the continue button is activated and you can go to the next screen to define the area setting.

Edit area (group/floor)

The administrator can define an area in this screen. The main functionality of this screen is registering units to the area. The home screen (floor/group) is defined according to the setting in this screen.



1. Rename edit area

The administrator can change the area name by touching this button.

2. Select icon for the area on home screen

The icon is displayed only if the equipment is the air conditioner. The administrator can select the icon for the area. The selected icon will be displayed on the floor/group window.

The icon can be selected from the following.



3. Select fan speed for the area

This setting is displayed only if the equipment is the air conditioner. The administrator can set the limit for the fan speed in the area through this setting.

4. Close button

Edit area window is closed.

5. This is the button to go to the layout map configuration screen

The screen goes to "[Layout map configuration](#)".

6. Button to go to unit configuration screen

The screen goes back to this screen if the administrator touches this button when the screen shows the layout map screen.

7. Tick box for exclusion from “ALL on/off” command for the area

This box is displayed only if the equipment is not the refrigerator. If this box is ticked, the “ALL on/off” command no longer applies to the area when operated from the all on/off button on the home screen and each window of the monitoring screen.

8. Tick box to disable Louver functionality for the area

This box is displayed only if the equipment is the air conditioner. If this box is ticked, operation of the Louver will be disabled. i.e. Louver operation in “Setting change screen” for the area is not displayed if the box is ticked.

9. Represent unit

The administrator can choose to represent the unit in this area. The represent unit status will be displayed when several statuses are in the area on the home screen.

10. Unassigned units window

All unassigned units are displayed in this window. The administrator can register units to the area by dragging and dropping each card to the assigned unit window.

11. Assigned units window.

All assigned units in the area are displayed in this window. The administrator can unregister the unit to the area by dragging and dropping each card to the unassigned unit window.

12. Apply button

Create/changed setting is applied.

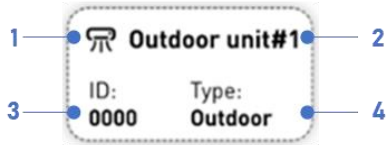
13. Undo button

The create/changed setting is changed back to the value just after this screen is displayed.

Unit card

The unit card is displayed in the unassigned units window and assigned units window. If you touch this card, the setting pop-up is displayed.

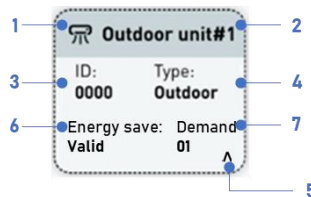
<Unit card in unassigned unit window>



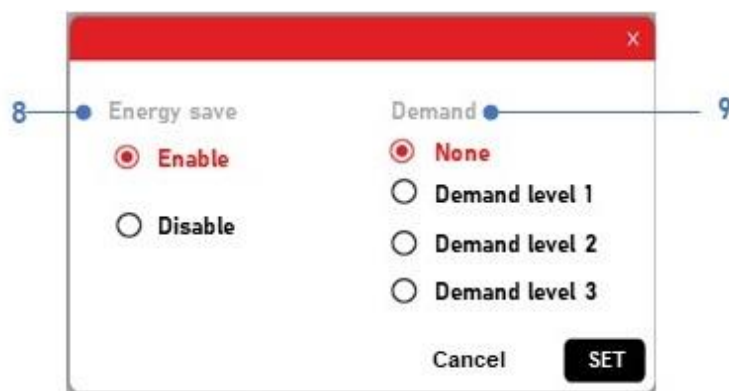
< Unit card in assigned unit window >



1. Unit icon
This icon shows the equipment.
2. Unit name
The unit name set in "[unit setting screen](#)" is displayed.
3. Unit ID
The unit ID is displayed. This ID is defined according to the address setting.
4. Unit type
This part shows the equipment.
5. Option button
This button can be pressed when the unit card is in the assigned window. Once the user has touched this button, the form of icon is changed to show other information on the unit as shown below.



6. Energy save
This part shows if the selected unit is in the energy save control or not. This setting can be changed on the pop-up for the unit cards as shown under #8 on this page.
7. Demand
This part shows the demand level for the unit to start a demand operation. This setting can be changed on the pop-up for the unit card as shown under #9 on this page.
Note: If demand support is not enabled in the input terminal settings, Demand Levels 1, 2, and 3 will not be displayed. If only Demand Level 1 is available in the input terminal settings, hide Demand Levels 2 and 3 will not be displayed.



Setting pop-up for unit card

8. Energy save setting

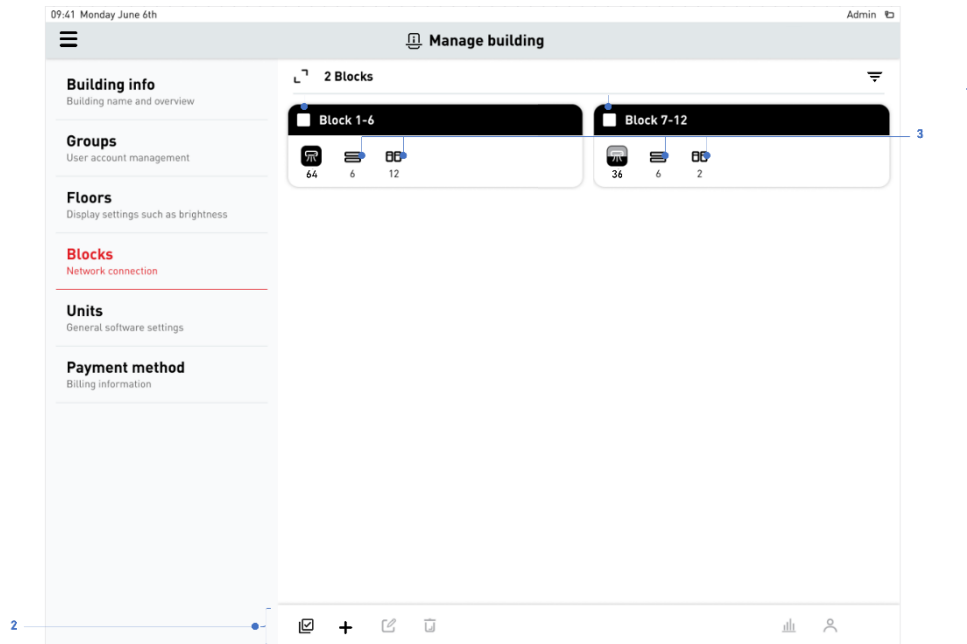
The user can select the enable or disable energy save control for the unit. Details of energy save are described in [“Energy save”](#).

9. Demand setting

The user can select the demand level for the unit. Details of the demand control are described in [“Demand control”](#).

Block definition

The administrator can create/check/configure blocks in this screen.



1. Block cards

The registered block is shown as a card.

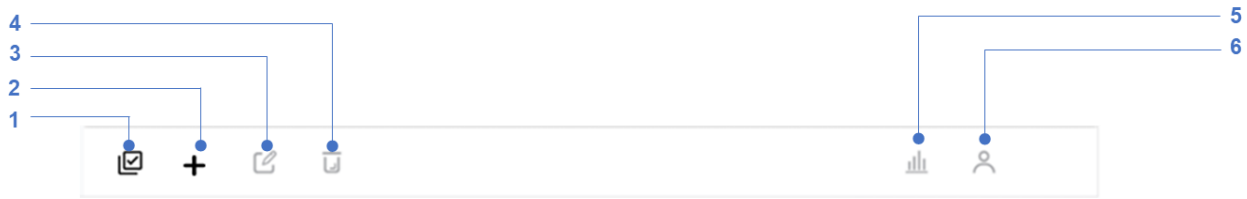
2. Bottom bar

See [“Bottom bar for block definition”](#) for more details.

3. Area indicator

Block cards show the number of floors and the number of groups included in the block.

Bottom bar for block definition



1. Select all button

The administrator can select all blocks by touching this button.

2. Block addition button

The administrator can add a new area by touching this button. The new area pop-up described in the “[Block addition](#)” screen will be displayed.

3. Edit block

The administrator can edit the selected area by touching this button. The “[Edit block](#)” screen will be displayed.

4. Delete block

The administrator can delete the selected area by touching this button.

5. Performance button

The screen goes to “[Performance screen](#)”.

6. Account button

The administrator can assign general user accounts to a block. The user account will be able to access (monitoring and operation) the block through this assignment.

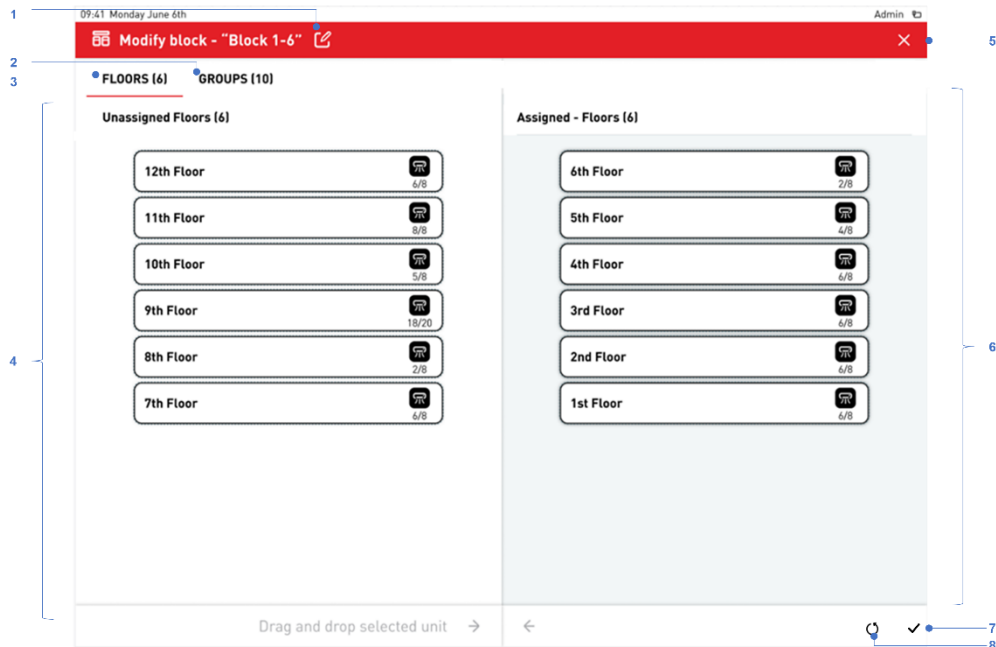
Block addition



1. Block name

You can input any character (within 30) as the area block name.

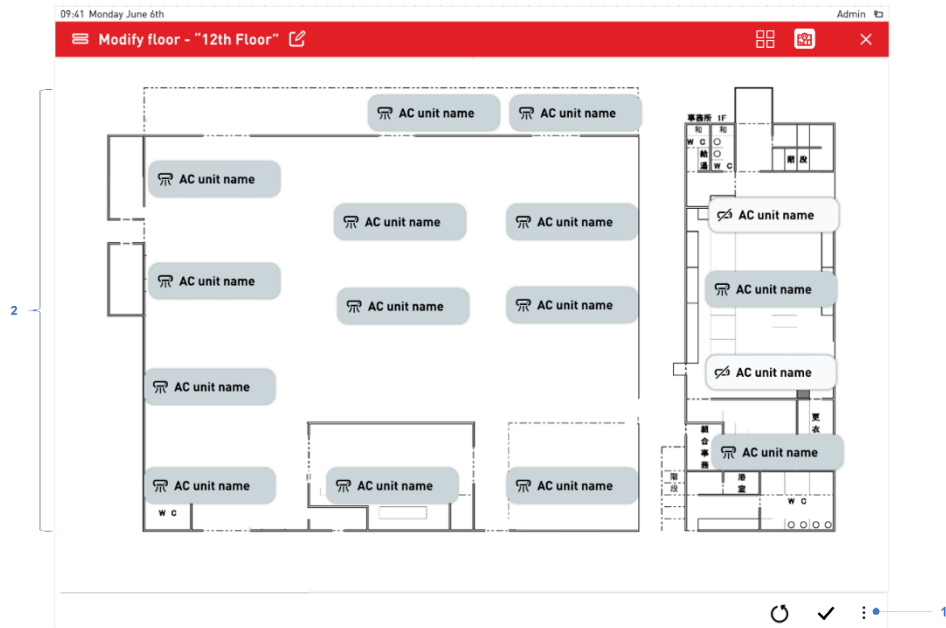
Edit block



1. Rename block name
The administrator can change the block name by touching this button.
2. Groups tab
If this tab is touched, groups which are included in the block are displayed.
3. Floors tab
If this tab is touched, floors which are included in the block are displayed.
4. Unassigned area window
All unassigned areas are displayed in this window. Displayed contents are switched by the groups tab and floors tab.
5. Close button
Close this screen.
6. Assigned area window
The area assigned to the block is displayed in this window. Displayed contents are switched by the groups tab and floors tab.
7. Apply button
The changed/created setting will be applied.
8. Undo button
The changed/created setting will be changed back to the previous setting just after this screen is displayed.

Layout map configuration

The administrator can register a map image to an area. This will help to understand the location of each unit in the area.



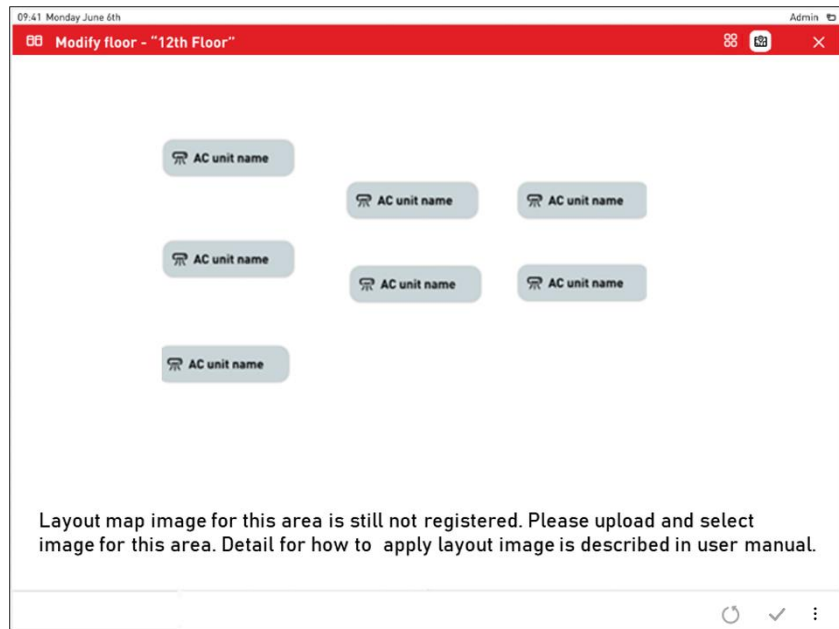
1. Layout map configuration menu button

When you would like to change the layout map configuration, touch this button.

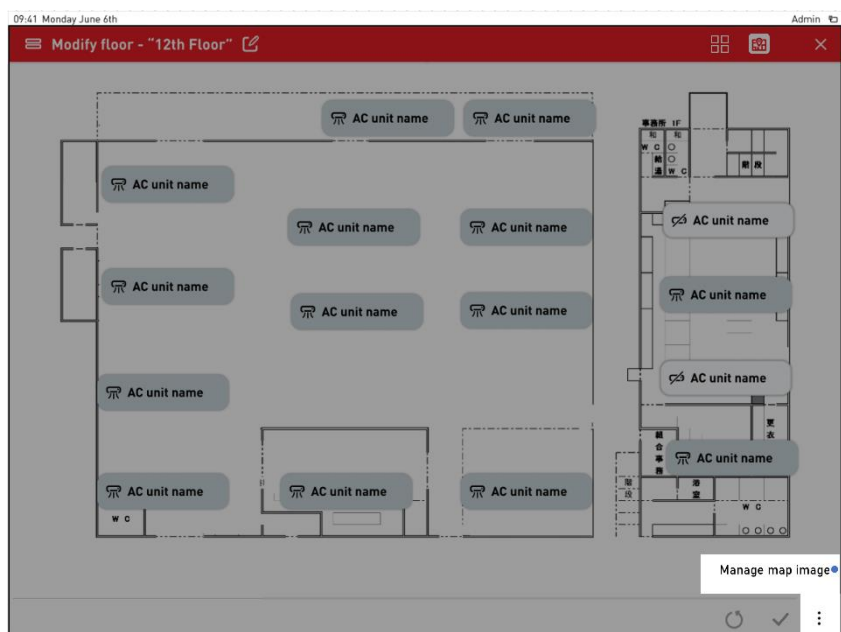
2. Current layout map

If the map image is registered and the position of each unit is configured, units are displayed on the map image.

If you are shown the screen for the first time, the following screen will be displayed since the image is still not set.

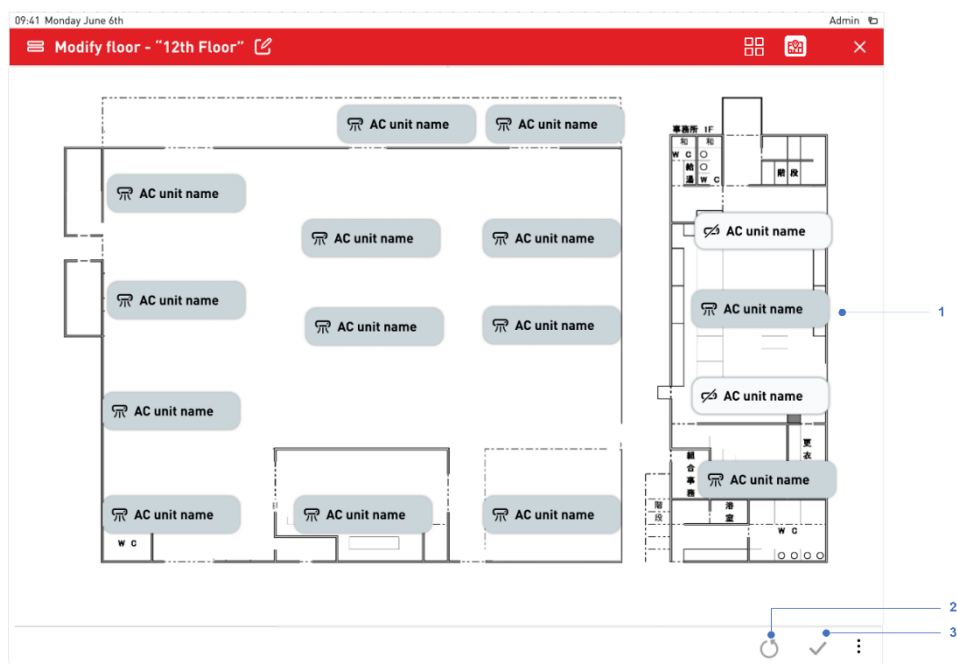


Layout map menu



1. Manage map image

The pop-up screen to register the map image is displayed. Edit icon position



1. Unit icons

The position of these icons can be moved by dragging and dropping each icon. The administrator can set each icon to the appropriate position on the map.

2. Apply button

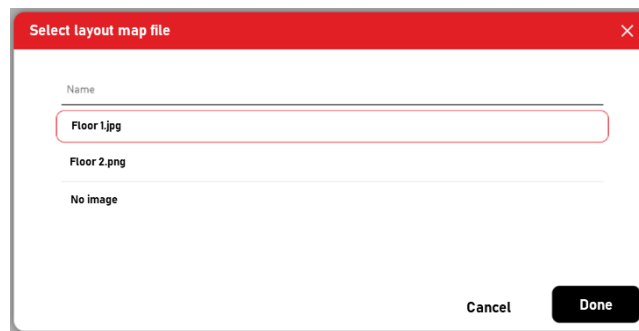
Changed contents will be applied.

3. Undo button

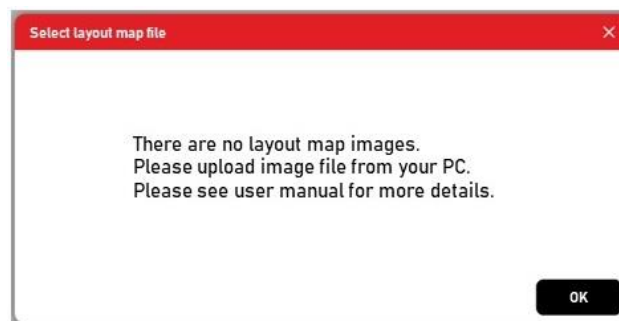
The value of changed contents change back just after this screen is displayed.

Change layout map image

The administrator can register the map image to the area through this operation. Please note that images should be uploaded from your PC before you perform this operation. Please see “[Web functionality](#)” for more details. Once a file is uploaded, the file list is displayed in the pop-up as shown below. You can select any file from the list.

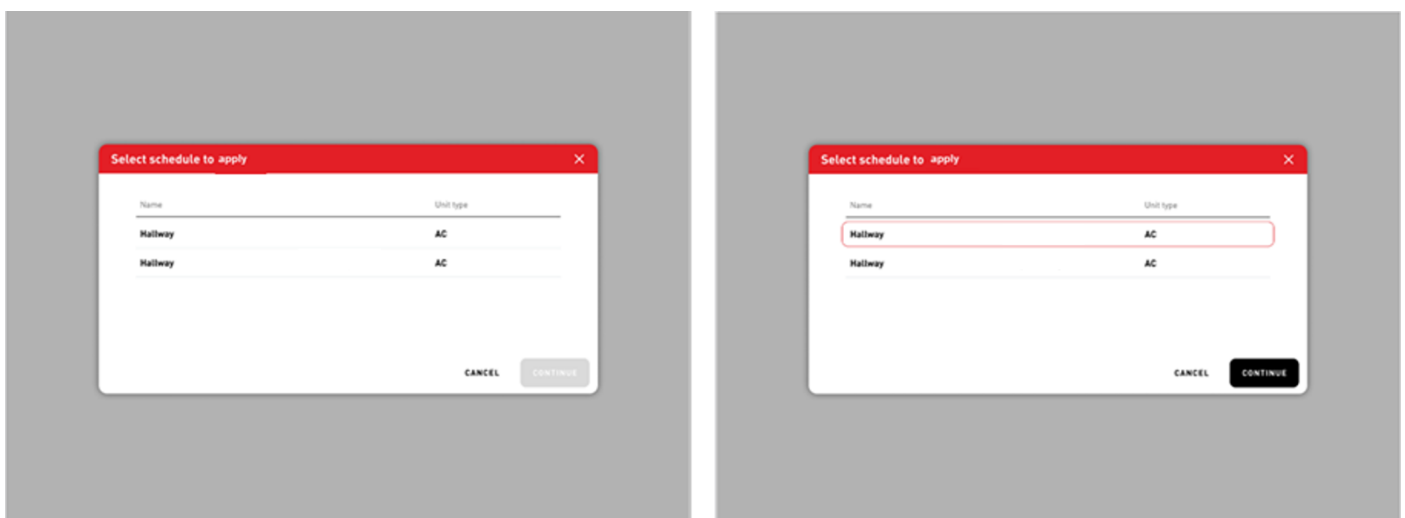


If the map image is still not uploaded from your PC, the following message is displayed.



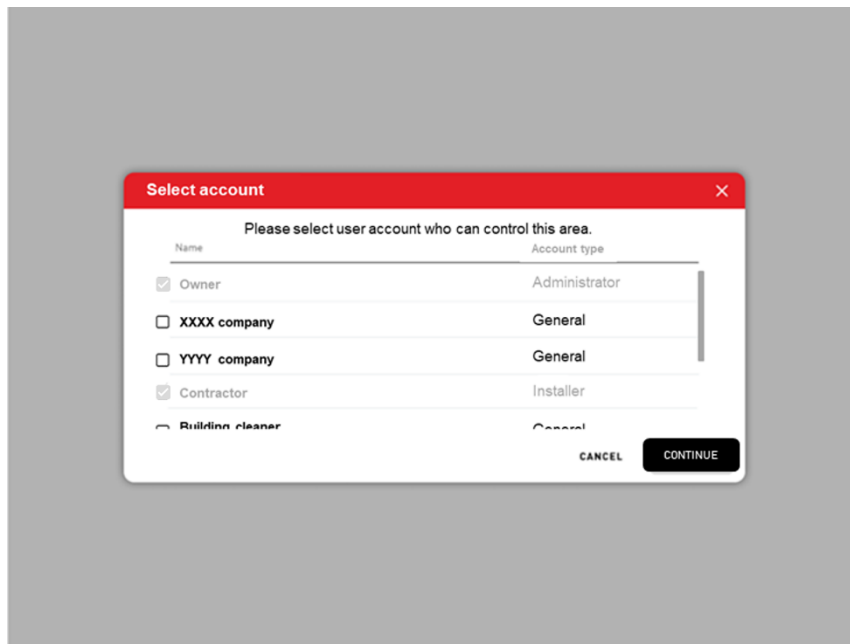
Schedule assignment

You can assign a programmed schedule created in the “[Create/edit program schedule](#)” screen to any area.

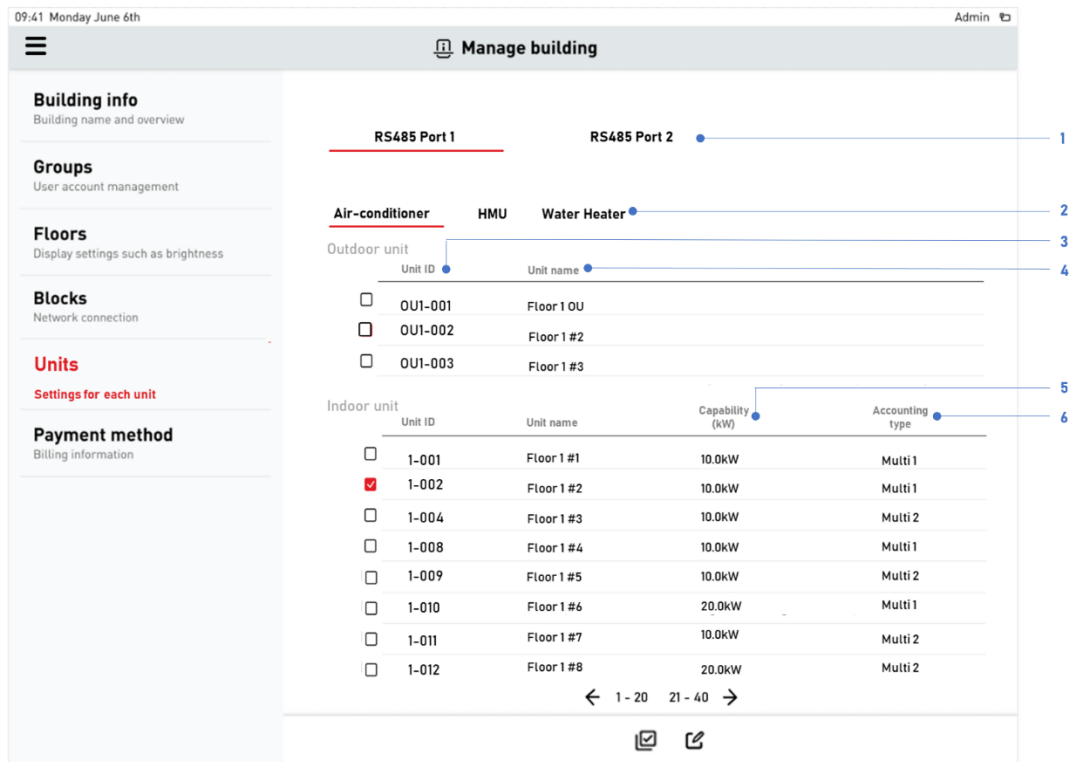


1. The programmed schedule that is created will have been listed in the pop-up. You can choose the schedule in the list and it will be applied to the area once the “continue button” is touched.

Account assignment



1. You can assign the general user account the area from the list on the pop-up screen. Please note that the administrator account and installer account can access the entire area.



1. Communication port tab

You can choose the communication port to show units that are connected to the port by this tab.

2. Unit type tab

You can choose the unit type to show in the list.

3. Unit ID

The unit ID is the system ID to recognise each unit. It is basically decided according to the communication address defined by the DIP switch on the unit.

4. Unit name

The unit name can be set in this screen. Once you tick the tick box and touch the edit button on the bottom bar, the edit pop-up window will be displayed and you can input any character for a unit name, with a maximum character limit of 20 for the unit name.

5. Capability

You can set a value of 0.0 – 200.0. This value is used for the accounting functionality.

6. Accounting type

This value is used for the accounting functionality. Please see "[Account function](#)" for more details.

Unit setting screen

09:41 Monday June 6th Admin

Manage building

Building info

Building name and overview

Groups

User account management

Floors

Display settings such as brightness

Blocks

Network connection

Units

Settings for each unit

Payment method

Billing information

RS485 Port 1
RS485 Port 2

Air-conditioner
HMU
Water Heater

Outdoor unit

Unit ID	Unit name
☐ OU1-001	Floor 1 OU
☐ OU1-002	Floor 1 #2
☐ OU1-003	Floor 1 #3

Indoor unit

Unit ID	Unit name	Capability (kW)	Accounting type
☐ 1-001	Floor 1 #1	10.0kW	Multi 1
☒ 1-002	Floor 1 #2	10.0kW	Multi 1
☐ 1-004	Floor 1 #3	10.0kW	Multi 2
☐ 1-008	Floor 1 #4	10.0kW	Multi 1
☐ 1-009	Floor 1 #5	10.0kW	Multi 2
☐ 1-010	Floor 1 #6	20.0kW	Multi 1
☐ 1-011	Floor 1 #7	10.0kW	Multi 2
☐ 1-012	Floor 1 #8	20.0kW	Multi 2

1 - 20
21 - 40

☒
☐

1. Tab to select communication port

By touching this tab, you can toggle the display of the list of units shown on the screen. The units connected to the communication port of the touched tab will be displayed.

2. Tab to select equipment

By touching this tab, you can toggle the display of the list of units shown on the screen. Touched tab equipment will be listed.

3. Unit ID

The unit list shows the unit ID of each unit.

4. Unit name

The unit name entered on a unit setting pop-up screen will be displayed.

5. Capability

The capability that was entered on a unit setting pop-up screen will be displayed.

6. Accounting type

The accounting type that was entered on a unit setting pop-up screen will be displayed. This setting can be selected from Multi1, Multi2, ON/OFF or Single.

7. Select box

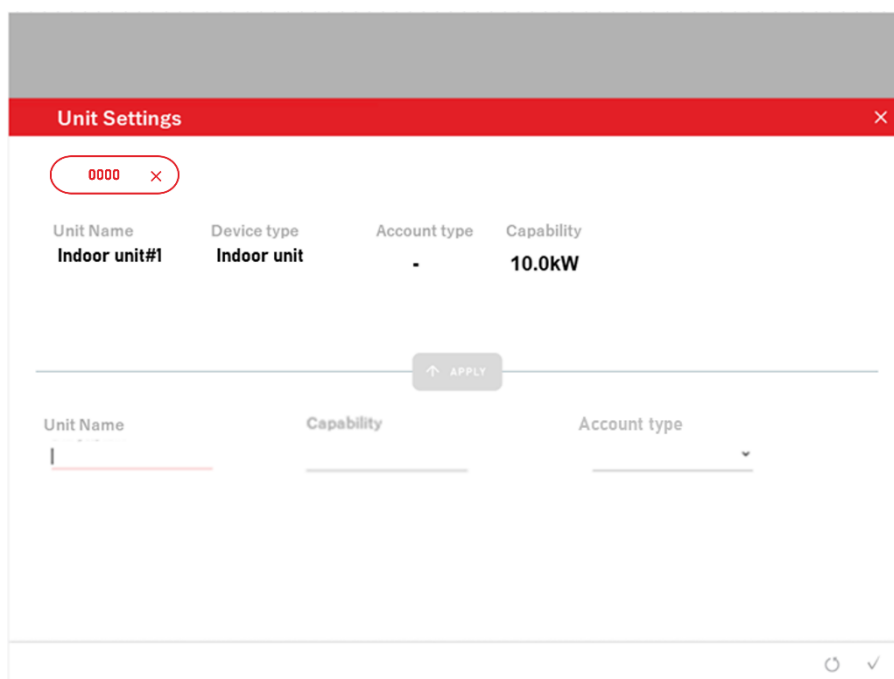
You can select the target unit to edit by touching this button.

8. Edit button

By touch this button, the unit setting pop-up screen for the selected unit will be displayed.

9. Select all button

Displayed all units will be selected by this button.



The image shows a 'Unit Settings' pop-up screen. At the top is a red header bar with the title 'Unit Settings' and a close button (X). Below the header is a red rounded rectangle containing the text '0000' and a close button (X). The main content area displays four fields: 'Unit Name' with the value 'Indoor unit#1', 'Device type' with the value 'Indoor unit', 'Account type' with the value '-', and 'Capability' with the value '10.0kW'. Below these fields is a horizontal line with an 'APPLY' button in the center. Under the line are three input fields: 'Unit Name' with a red underline, 'Capability' with a red underline, and 'Account type' with a dropdown arrow. At the bottom right of the screen are two small icons: a refresh icon and a checkmark icon.

Unit setting pop-up screen (in case of indoor unit for AC and HMU)

Note: if several units are selected, the unit name cannot be entered.

Unit Settings

0000

Unit Name

Floor1 OU

↑

APPLY

Unit Name

Unit setting pop-up screen (in case of outdoor unit for AC and water heater, chiller and CO2 fridge)

Accounting time settings

09:41 Monday June 6th Admin

Manage building

Building info
Building name and overview

Groups
User account management

Floors
Display settings such as brightness

Blocks
Network connection

Units
Settings for each unit

Payment method
Billing information

Accounting

☒ Enable

☐ Disable

Method to decide time for accounting

☒ Internal clock

☐ External input

Time 1

Start time: 14:30 End time: 18:00

Time 2

Start time: 14:30 End time: 18:00

☒ Enable/disable

Time 3

Start time: 14:30 End time: 18:00

☐ Enable/Disable

Electric bill	Gas bill	Currency	EUR
Electric bill for Time1	1.5	/kWh	
Electric bill for Time2	1.2	/kWh	
Electric bill for Time3	2.5	/kWh	
Electric bill for time except if above Time 1 to 3	0.5	/kWh	

09:41 Monday June 6th Admin

Manage building

Building info
Building name and overview

Groups
User account management

Floors
Display settings such as brightness

Blocks
Network connection

Units
General software settings

Payment method
Billing information

Accounting

☒ Enable

☐ Disable

Method to decide time for accounting.

☐ Internal clock

☒ External input

The accounting time is decided according to external inputs as described below.

If you assigned 1 input to account functionality.

DI2 state	Account time
OFF	Time1
ON	Out of account time

If you assigned 2 inputs to account functionality.

DI2 state	DI3 state	Account time
OFF	OFF	Time1
ON	OFF	Time2
OFF	ON	Time3
ON	ON	Out of account time

Electric bill	Gas bill	Currency	EUR
Electric bill for Time1	1.5	/kWh	(0.00 - 10000.00)
Electric bill for Time2	1.2	/kWh	(0.00 - 10000.00)
Electric bill for Time3	2.5	/kWh	(0.00 - 10000.00)
Electric bill for time except if above Time 1 to 3	0.5	/kWh	(0.00 - 10000.00)

1. Accounting

If you use the accounting functionality, set this setting as Enable.

2. Method to decide accounting time

This setting is activated only when the accounting setting is applied, as described above in point 1. This setting determines how the accounting time is decided. You can choose from the following options.

- Internal clock: If this option is selected, the accounting time is decided by the SL5 clock, and the account

time setting described in point 4.

- External input: If this option is selected, the accounting time is decided by external inputs. You need to prepare the external timer or another device that has a digital output. You also need to configure the DI terminal correctly to use this functionality. Please see [“Digital input terminal”](#) for more details.

3. Electric bill setting

This setting is activated only when the accounting setting is applied, as described above in point 1. You need to input electric bill information for each accounting time. You can set a value of 0.00 – 10000.00. If the input value falls outside this range, a pop-up screen will be displayed, and the settings will not be applied.

4. Accounting time

This setting is activated only when the accounting time is set in the internal clock. You can specify three account times by inputting the start time and end time. Time 1 is always enabled but time 2 and time 3 are an option. If you would like to use time 2 or 3, please touch the tick box and turn it to Enable. If you attempt to apply overlapping Time 1, Time 2, or Time 3, pop-up screen will be displayed, and the settings will not be applied.

5. Tab to switch gas/electric bill

If you select both gas and electric in the PI setting screen, this tab appears to input each bill for gas and electricity. You can switch displays for them by touching this tab.

6. Explanation for usage of DI input

- 7. If the external input is set as “Method to decide accounting time”, this part appears. This description shows how the accounting time is decided by the external input terminal.

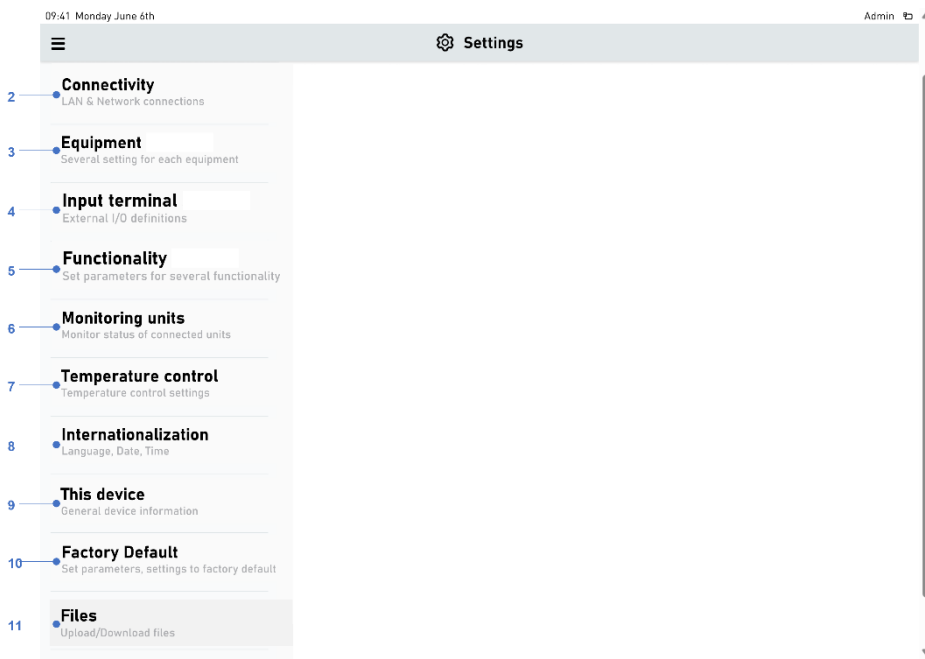
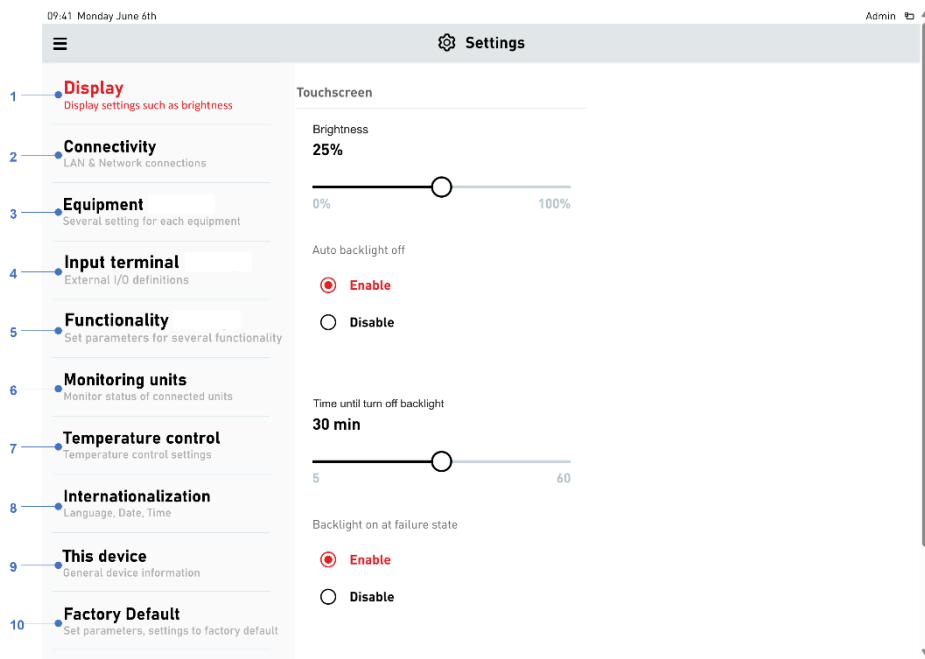
Setting screen (for administrator or installer)

If the administrator account touches the “Settings” button in the menu bar of the home screen, this screen is displayed.

This setting allows the following configurations for this device.

Menu for device settings

The settings screen has a menu bar on the left-hand side of the screen that contains items listed in the table on the next page. If you touch the menu bar, the screen will switch to the corresponding settings screen. Additionally, there is a scroll bar on the right-hand side of the screen. You can use this scroll bar to reveal any hidden settings.



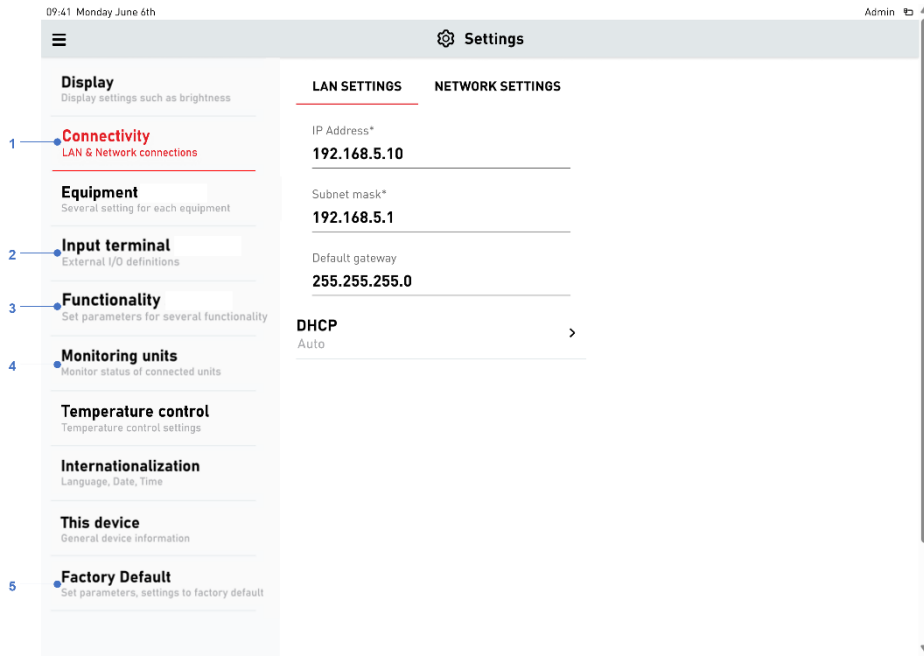
1	Display	Selecting this item will display the settings screen for “Display”. For more details, please refer to Display . This item is displayed only on the SL5 main unit screen and will not be displayed on the web interface.
2	Connectivity	Selecting this item will display the settings screen for “Connectivity”. For more details, please refer to Connectivity .
3	Equipment	Selecting this item will display the settings screen for Equipment. For more details, please refer to “Equipment”.
4	Input terminal	Selecting this item will display the settings screen for the Input terminal. For more details, please refer to Input terminal .
5	Functionality	Selecting this item will display the settings screen for Functionality. For more details, please refer to Functionality .

6	Monitoring Units	Selecting this item will display the settings screen for Monitoring units. For more details, please refer to Monitoring units .
7	Temperature control	Selecting this item will display the settings screen for Temperature control. For more details, please refer to Temperature control .
8	Internationalisation	Selecting this item will display the settings screen for Internationalisation. For more details, please refer to Internationalisation .
9	This device	Selecting this item will display the settings screen for This device. For more details, please refer to This device .
10	Factory default	Selecting this item will display the settings screen for Factory default. For more details, please refer to Factory default .
11	Files	Selecting this item will display the settings screen for Files. For more details, please refer to Files . This item is displayed only on the web interface and will not be displayed on the SL5 main unit screen.

Settings for installer

This section explains the settings for features intended for the installer.

The following screen displays several settings for this device. You can access these settings if you are an installer or administrator.

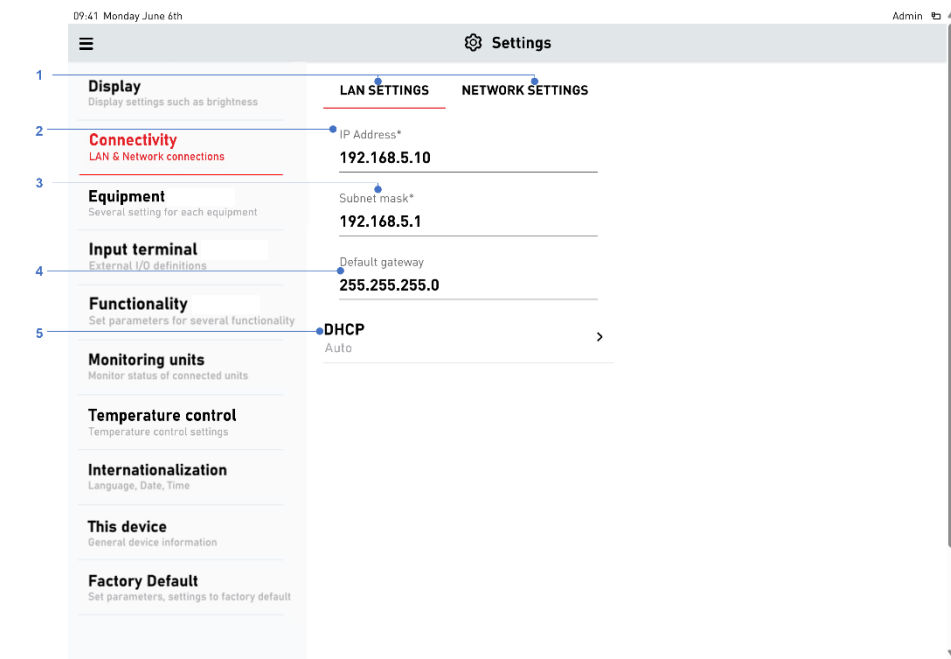


1	Connectivity	You can change display settings such as brightness. The details are described in the Connectivity section.
2	Input terminal	You can change the external I/O definitions. The details are described in the Input terminal section.
3	Functionality	You can set the parameters for various functionalities. The details are described in the Functionality section.
4	Monitoring units	You can monitor the status of connected units. The details are described in the Monitoring units section.
5	Factory default	You can reset the parameter settings to the factory default settings. The details are described in the Factory default section.

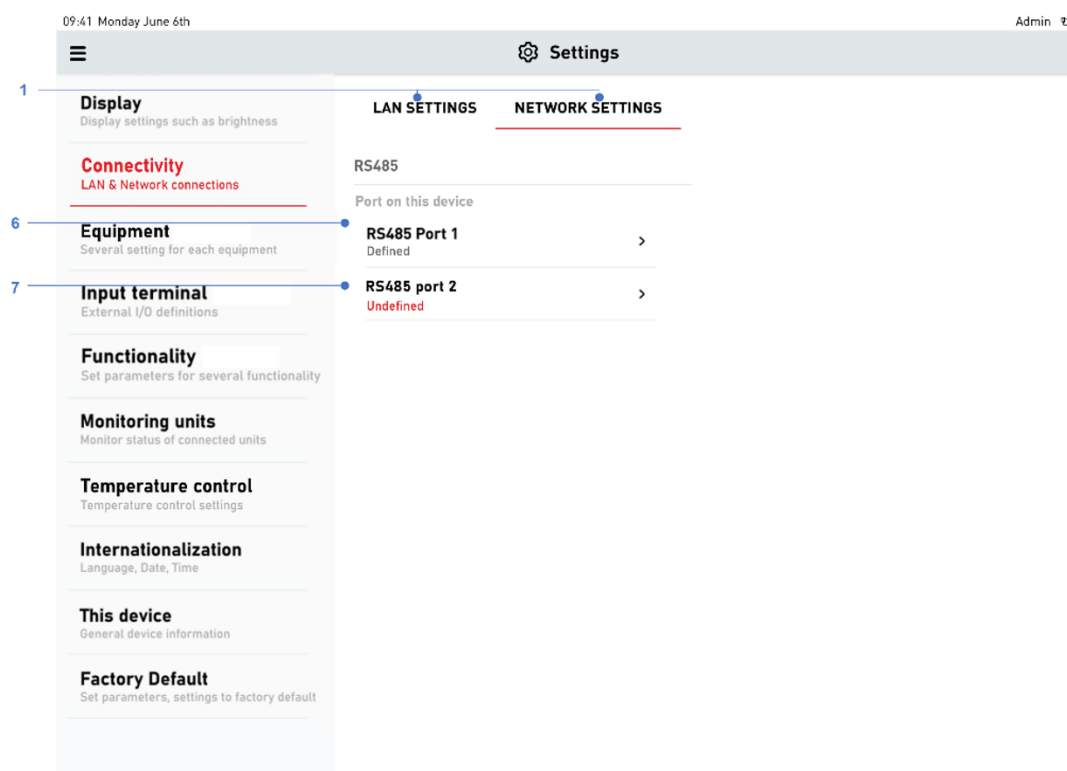
Connectivity

The following screen displays several network related settings such as LAN and RS485. By selecting the selected tab on this page, you can switch between LAN settings and RS485 communication settings.

When you select the “LAN SETTINGS” tab, you can view the following page.



When you select the “NETWORK SETTINGS” tab, you can view the following page.



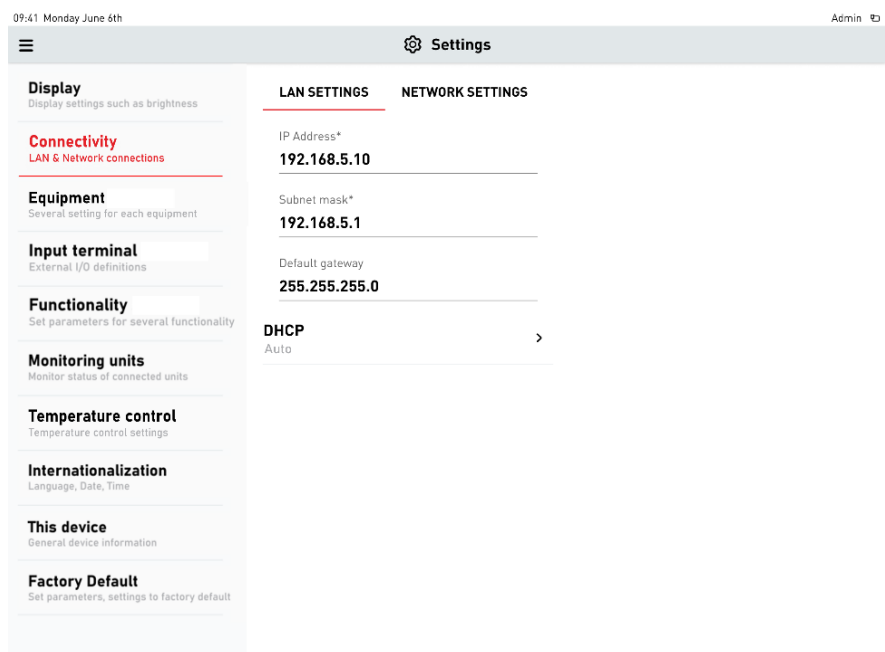
1	Select tab	You can switch between LAN settings and RS485 communication settings by touching
2	IP address	You can view the current IP address when you select the “LAN settings” tab.
3	Subnet mask	You can view the subnet mask when you select the “LAN settings” tab.
4	Default gateway	You can view the default gateway when you select the “LAN settings” tab.
5	IP configuration	You can view the IP configuration status when you select the “LAN settings” tab. If you touch this option, an IP configuration pop-up will appear. The details are described in the IP configuration section.
6	RS485 port 1	You can view the configuration status of RS485 port 1 on this device when you

		select the “NETWORK settings” tab. If configured, it will display “Defined” below; if not configured, it will show “Undefined”. When you press this option, you can view the RS485 configuration screen for port 1. The details are described in the RS485 settings section.
7	RS485 port 2	You can view the configuration status of RS485 port 2 on this device. When you select the “NETWORK settings” tab, the information displayed below is the same as above. You can view the RS485 configuration screen for port 2. The details are described in the RS485 settings section.

IP configuration

This section explains the settings for LAN settings, which you can view by selecting the “LAN SETTINGS” tab. When you select this option, the following pop-up will appear, and you can switch between automatic IP address assignment using DHCP and manual assignment in the IP settings. If you choose “Fix (Manual)” options, you can touch each setting to edit the IP address, subnet mask and default gateway. However, if you select the “DHCP (AUTO)” option, you cannot edit the IP address, subnet mask or default gateway.

You can view by selecting the “LAN SETTINGS” tab.



The following pop-up will appear by selecting the “DHCP (AUTO)” option.

IP address settings [X]

☒ **DHCP (AUTO)**

☐ **Fix (manual)**

IP address*
192.168.5.10

Subnet mask*
192.168.5.10

Default gateway*
192.168.5.10

CANCEL DONE

The following pop-up will appear by selecting “Fix (manual)” options.

IP address settings [X]

☐ **DHCP (AUTO)**

☒ **Fix (manual)**

IP Address*
192.168.5.10

Subnet mask*
192.168.5.10

Default gateway*
192.168.5.10

CANCEL DONE

RS485 settings

This section explains the settings for RS485 setting. When you select the port, the screen will switch to the corresponding port setting screen and for each port you can select the type of device that will be connected to the chosen communication port. The available devices to choose from are either a SuperLink compatible device, a chiller or a CO2 refrigeration unit. A detailed description is given of the [SuperLink settings](#), [Chiller settings](#) and the [CO2 fridge settings](#)

After you edit the RS485 settings, you can apply the changes by pressing the checkmark (apply button) in the bottom right-hand corner. However, you will need to restart the product to implement these changes. Therefore, before restarting, the following pop-up will be displayed. If you press the “Proceed” button, the restart will occur. If you press “Cancel”, the system will revert to the state it was in just before the tick mark was pressed.

When you press the “Apply” button, the following pop-up will appear.

1	Connected device	You can choose from either a SuperLink compatible device, a chiller , a CO2 refrigeration unit or None. The screen you view will differ depending on the choice you make. If you select option “None”, the configuration items will not be displayed, and no communication will be established.
2	“Apply” button	When you press this button, the pop-up will appear, and you can apply the changes by pressing the “Proceed” button in the pop-up. If you press “Cancel” in the pop-up, the changes do not apply.

Chiller settings

If you select the “Chiller” option, the following screen will appear, prompting you to configure the details of the devices to be connected, such as unit address, equipment and stop bits, including baud rate and parity bit. Since

there is a possibility of connecting to five different chiller models, you can select the appropriate model by address and specify the baud rate, stop bits and parity bits as shown in the following table.

When you apply the settings, a pop-up (alert pop-up) will be displayed if there are duplicate addresses.

1	Connected device	You can choose from either a SuperLink compatible device, a chiller , a CO2 refrigeration unit or None. The screen you view will differ depending on the choice you make. If you select option “None”, the configuration items will not be displayed, and no communication will be established.
2	Baud rate	You can change the baud rate. The rate available is either “9600” or “19200”. The details are described in the following table (communication configuration).
3	Stop bit	You can change the parity bit. Either “1” or “2” are available. The details are described in the following table (communication configuration).
4	Parity bit	You can change the parity bit. Those available are either a “None”, an “Even” or an “Odd”. The details are described in the following table (communication configuration).
5	Unit address	You can choose a range from either “01” to “20” or “21” to “99”. The unit address will vary depending on your choice of equipment. The details are described in the following table (chiller device configuration).
6	Equipment	You can choose from the following options: “MSV1”, “MSV2-C (Hydrolution Pro)”, “MSV2 (Hydrolution Pro)”, “MSVB”, “MSVB-C” or “None”. The unit address you can select will differ based on your choice. The details are described in the following table (chiller device configuration).

Table: Chiller device configuration

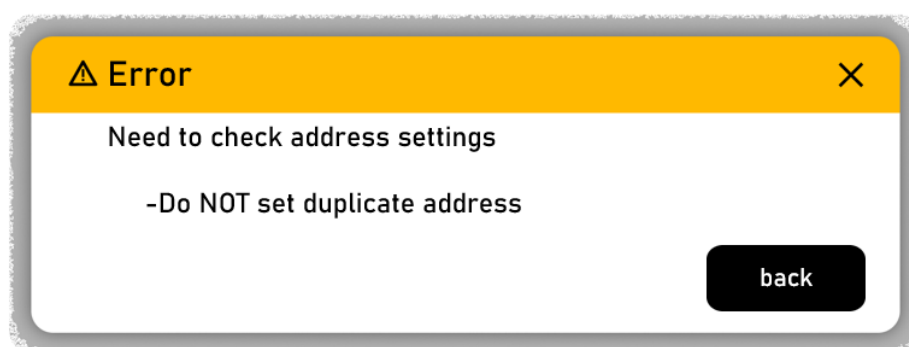
Device type	Option name	Configuration address range
MSV1	MSV1	from 01 to 20
MSV2-C	MSV2-C (Hydrolution Pro) Note:Web interface does not include the term "Hydrolution Pro."	from 21 to 99

MSV2	MSV2 (Hydrolution Pro) Note: Web interface does not include the term "Hydrolution Pro."	from 01 to 20
MSVB	MSVB	from 01 to 20
MSVB-C	MSVB-C	from 21 to 99
None (default)		-

Table: Communication configuration

Baud rate (bps)	Stop bit	Parity bit
9600 or 19200	1 or 2	"None", "Even" or "Odd"

Alert pop-up



SuperLink settings

When you select the "SuperLink supported" option, the following screen will appear, and you can change the SuperLink protocol version. You can choose between the "Old" or "New" protocol versions.

Additionally, you can see all the units connected to SuperLink, along with their unit types and unit IDs. If you press the "SL Communication" button at the top right of this page, the device will start communicating with the SuperLink connected units. You can view the information from the responding units. If an address doesn't respond, you can view a "-". If a response is received but the information can't be obtained, you can view an "Unused".

09:41 Monday June 6th

RS485 port 2

✕

Usertype_name

🔍

1

Connected devices

☒ SuperLink supported

☐ Chiller

☐ CO2 fridge

☐ None

The air conditioner, water heater and HMU can share a port. The chiller and CO2 fridge occupy one port

2

SuperLink protocol version

☐ New

☒ Old

3

Scan network

Outdoor units on this SL line

Unit Id	Device type
OU-001	Outdoor unit ▾
OU-002	Outdoor unit ▾
OU-003	Unused ▾

←

1 - 20

21 - 40

→

Indoor units on this SL line

Unit Id	Device type	Connected OU
1-000	Indoor unit ▾	OU1-001 ▾
1-001	Indoor unit ▾	OU1-001 ▾
1-002	door unit ▾	OU1-002 ▾
1-003	Unused ▾	- ▾
1-004	Indoor unit ▾	OU1-002 ▾
1-005	HMU ▾	OU1-002 ▾
1-006	Unused ▾	- ▾

←

1 - 20

21 - 40

→

🔄

✓

1	Connected device	You can choose from either a SuperLink compatible device, a chiller , a CO2 refrigeration unit or None. The screen you view will differ depending on the choice you make. If you select option “None”, the configuration items will not be displayed, and no communication will be established.
2	SuperLink protocol version	You can change to the SuperLink protocol version. The available SuperLink protocol versions to choose from are either “Old” or “New”.
3	SL Communication button	You can view all the SuperLink connected units, if you press the button. This device will start communicating with the SuperLink connected units, and you can view the information from the responding units.
4	Connected OU	You can set the outdoor unit from the same RS485 system if you select “HMU” or “indoor air conditioner” as the unit type.

CO2 fridge settings

If you select the “CO2 fridge” option, the following screen will appear, prompting you to specify the device model to be connected, which can include two different types of CO2 refrigeration units. If a model is not available, you can add the device model by reading a RAM data definition file.

After that, you can select which address to set the indoor unit (cooler unit) connection from 1 to 16.

When selecting, press the Cooler unit section. The following pop-up (cooler unit setting pop-up) will appear, and you can select which indoor unit (cooler unit) connects.

09:41 Monday June 6th

RS485 port 2

✕

1

Connected devices

2

☐ SuperLink supported

Air conditioner, water heater and HMU can share a port. The chiller and CO2 fridge occupy one port

☐ Chiller

☒ CO2 fridge

☐ None

3

Configuration

4

equipment

address

equipment

Cooler unit

address	equipment	Cooler unit
01	HCCV1001E(A)	#1, #2, #3 ... >
02	HCCV1001E(A)	#1, #2, #3 ... >
03	HCCV1001E(A)	#1, #2, #3 ... >
04	HCCV1001E(A)	#1, #2, #3 ... >
05	HCCV1001E(A)	#1, #2, #3 ... >
06	HCCV1001E(A)	#1, #2, #3 ... >
07	HCCV1001E(A)	#1, #2, #3 ... >
08	HCCV1001E(A)	#1, #2, #3 ... >
09	HCCV1001E(A)	#1, #2, #3 ... >
10	HCCV1001E(A)	#1, #2, #3 ... >
11	HCCV1001E(A)	#1, #2, #3 ... >

↺

✓

1	Connected device	You can choose from either a SuperLink compatible device, a chiller , a CO2 refrigeration unit or None. The screen you view will differ depending on the choice you make. If you select option “None”, the configuration items will not be displayed, and no communication will be established.
3	Unit address	You can select the unit address
4	Equipment	You can change select the indoor unit address
	Cooler unit address	You can change the indoor unit address

Cooler unit setting pop-up

Choose connected cooler address

✕

Target cooler unit address

☒ #1
 ☐ #2
 ☐ #3
 ☐ #4
 ☐ #5
 ☐ #6
 ☐ #7
 ☐ #8
 ☐ #9
 ☐ #10
 ☐ #11
 ☐ #12
 ☐ #13
 ☐ #14
 ☐ #15
 ☐ #16

CANCEL

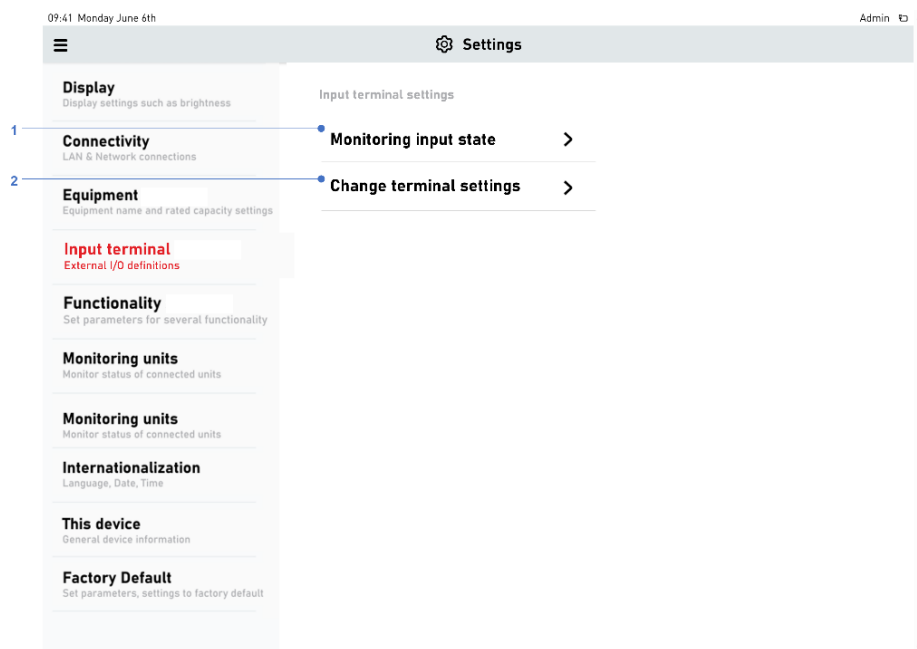
CONTINUE

Input terminal

This section explains the input terminal related settings. You can view and change the settings for the two main types of input terminals: “Multipurpose input terminals” and “Pulse input terminals”.

If you touch “Monitoring input state”, the screen will switch to the corresponding monitoring input state screen and you can monitor the status of each terminal. A detailed description is given in the [Monitoring input terminal](#) section.

If you touch “Change terminal settings”, the screen will switch to the corresponding terminal setting screen and you can set the role of each terminal. A detailed description is given in the [Change terminal settings](#) section.



1	Monitoring input state	You can monitor the status of each terminal. The details are described in the Monitoring input state section.
2	Change terminal settings	You can set the role of each terminal. The details are described in the Change terminal settings section.

Monitoring input terminal

This section explains the settings related to the input terminal state.

You can monitor the assignment functions for each DI terminal, the current terminal status and the pulse counts applied to each PI terminal since the start of the day. The terminal status will be updated every 10 seconds.

you can view the following page.

09:41 Monday June 6th
User type_name

Monitoring input terminal

Multipurpose input terminal

Terminal#	Functionality	State
DI 1	Emergency stop	OFF
DI 2	Account time	ON
DI 3	Demand	ON

Pulse counter for accounting

Terminal#	Pulse count from beginning of today
PI 1	10
PI 2	100
PI 3	1000
PI 4	2000
PI 5	3000
PI 6	0
PI 7	0
PI 8	300

🔄
✓

1	State	You can view the DI state
2	Functionality	You can view how each function is assigned to each terminal. The available functions you can choose from are either an “Emergency stop”, an “account time”, or a “Demand”.
3	Terminal	You can view the target DI terminal
4	Pulse count	You can view the pulse count
5	PI terminal	You can view the target PI terminal

Change terminal settings

This section explains the terminal settings.

You can switch the DI functions to Enable or Disable. If you select Enable on the “DI Function available” button, you can assign functions to each terminal and set options for functionalities that utilise the input terminals. Additionally, you can switch between Enable and Disable PI functions and view the settings for each PI terminal. If you touch the PI terminal setting button, it will be transited to the settings change screen.

you can view the following page.

Setting input terminals
✕

Multipurpose input terminal

1 ☒ Enable

2 ☐ Disable

Pattern#	D1 function	D2 function	D3 function
Pattern1	Emergency stop	Account1	Account2
Pattern2	Emergency stop	Demand	Account
Pattern3	Emergency stop	Demand1	Demand2
Pattern4	Emergency stop	Account1	Run/stop
Pattern5	Emergency stop	Demand	Run/stop
Pattern6	Emergency stop	Run/stop1	Run/stop2

3

4

5 ☒ Enable

☐ Disable

Run schedule after releasing Emergency stop

Run schedule after releasing Demand Control

☒ Enable

☐ Disable

Run schedule in demand control

☒ Enable

☐ Disable

Pulse input terminal

6 ☒ Enable

☐ Disable

Terminal#	Pulse constant value	Gas/Elec
P1	100	Elec
P2	200	Elec

7

↺ ✓

1	Each function	You can change how each function is assigned to each terminal. If the “ DI Function Enable/Disable” button is set to “Enable”, you can configure this parameter. If it is set to “Disable”, you cannot configure this parameter. The details are described in the DI settings section.
2	DI function available button	You can switch the function, whether you can set the parameter or not. If you set the parameter to “Enable”, you can assign each function to each terminal. If you set the parameter to “Disable”, you cannot assign each function to each terminal.
3	Run schedule in Demand control	You can switch the function “Run schedule” in Demand control, whether available or not. If you set the parameter to “Enable”, the schedule program runs in Demand control. If you set the parameter “Disable”, the schedule program does not run in Demand control.
4	Run schedule after releasing Demand control	After releasing Demand control, you can enable or disable the “Run schedule” function. If you set the parameter to “Enable”, the schedule program will work after operating the Demand control. If you set the parameter to “Disable”, the schedule program will not work after operating the Demand control.
5	“Run schedule” after releasing emergency stop	After releasing the emergency stop, you can enable or disable the function “Run schedule”. If you set the parameter to “Enable”, the schedule program will work after applying the emergency stop. If you set the parameter to “Disable”, the schedule program will not work after applying the emergency stop.
6	PI terminal available button	You can switch this function to enable or disable the parameter. If you set the parameter to “Enable”, you change the setting such as time constants, unit assignment and the gas/electric types. If you set the parameter to “Disable”, you cannot change the setting such as time constants and gas/electric types
7	PI Terminal	You can change the settings such as time constants, unit assignment and gas/electric types.

When you press this button, the screen will switch to the corresponding PI setting screen. The details are described in the [PI settings](#) section.

When you select the “Disable” option on the “Function available” button, you cannot assign each function to each terminal as in the following page.

09:41 Monday June 6th User type_name

Monitoring input terminal ✕

Multi purpose input terminal

☐ Enable
 ☒ Disable

Pattern#	D1 Function	D2 Function	D3 Function
☐ Pattern1	Emergency stop	Account1	Account2
☐ Pattern2	Emergency stop	Demand	Account
☐ Pattern3	Emergency stop	Demand1	Demand2
☐ Pattern4	Emergency stop	Account1	Run/Stop
☐ Pattern5	Emergency stop	Demand	Run/Stop
☐ Pattern6	Emergency stop	Run/Stop1	Run/Stop2

>

Pulse Input terminal

☐ Enable
 ☒ Disable

Terminal#	Pulse constant value	Gas/Elec
P1	100	Elec >
P2	200	Elec >
P3	300	Elec >
P4	300	Gas >
P5	100	Elec >
P6	200	Elec >
P7	300	Elec >
P8	200	Gas >

⏻ ✓

When you select the “Disable” option on the PI terminal available button, you cannot set the parameters as in the following page.

09:41 Monday June 6th User type_name

Monitoring input terminal ✕

Multi purpose input terminal

☐ Enable
 ☒ Disable

Pattern#	D1 Function	D2 Function	D3 Function
☐ Pattern1	Emergency stop	Account1	Account2
☐ Pattern2	Emergency stop	Demand	Account
☐ Pattern3	Emergency stop	Demand1	Demand2
☐ Pattern4	Emergency stop	Account1	Run/Stop
☐ Pattern5	Emergency stop	Demand	Run/Stop
☐ Pattern6	Emergency stop	Run/Stop1	Run/Stop2

Pulse counter for accounting

☒ Enable
 ☐ Disable

Terminal#	Pulse constant value	Gas/Elec
P1	100	Elec >
P2	200	Elec >
P3	300	Elec >
P4	300	Gas >
P5	100	Elec >
P6	200	Elec >
P7	300	Elec >
P8	200	Gas >

⏻ ✓

DI settings

If you select the Enable, option on the “Function available” button, you can change the function assignment. The choices available are described in the following table.

Table: Pattern of function assignment

Pattern#	DI1 function assignment	DI 2 function assignment	DI 3 function assignment
1	Emergency stop	Account 1	Account 2
2	Emergency stop	Demand	Account
3	Emergency stop	Demand 1	Demand 2
4	Emergency stop	Account	Run/stop
5	Emergency stop	Demand	Run/stop
6	Emergency stop	Run/stop 1	Run/stop 2

If you select “Pattern 4” or “Pattern 5” or “Pattern 6”, that includes the option “Run/stop” for the DI function, the screen will change to the following screen, and you can set the “Run/stop” target area. If you select “Pattern 6”, which includes two “Runs/stops” for the DI function, you can set two settings for the “Run/stop” target area.

A maximum of eight are available to set for the target areas

if you set over eight target areas. The message “Please press here to register target area” will appear and you can select target areas under eight by pressing the message button. When you press the button, the pop-up will appear, and you can select which area is the target “Run/stop”.

When you set under eight target areas, the following page will appear.

09:41 Monday June 6th User type_name

Setting input terminals ✕

Multipurpose input terminal

☒ Enable
 ☐ Disable

Pattern#	D1 function	D2 function	D3 function
☐ Pattern1	Emergency stop	Account1	Account2
☐ Pattern2	Emergency stop	Demand	Account
☐ Pattern3	Emergency stop	Demand1	Demand2
☐ Pattern4	Emergency stop	Account1	Run/stop
☐ Pattern5	Emergency stop	Demand	Run/stop
☒ Pattern6	Emergency stop	Run/stop1	Run/stop2

Target area for run/stop 1 input

>>Edit

Target area for run/stop 2 inputs

>>Edit

🔄 ✓

When you set over eight target areas, the following page will appear.

09:41 Monday June 6th
Usertype_name

Setting input terminals

Multipurpose input terminal

☒ Enable
☐ Disable

Pattern#	D1 function	D2 function	D3 function
☐ Pattern1	Emergency stop	Account1	Account2
☐ Pattern2	Emergency stop	Demand	Account
☐ Pattern3	Emergency stop	Demand1	Demand2
☐ Pattern4	Emergency stop	Account1	Run/stop
☐ Pattern5	Emergency stop	Demand	Run/stop
☒ Pattern6	Emergency stop	Run/stop1	Run/stop2

Target area for run/stop 1 input

#Area_name X
#Area_name X
#Area_name X
#Area_name X
#Area_name X

#Area_name X
#Area_name X
#Area_name X
>>See all target area or edit

Target area for run/stop 2 inputs

#Area_name X
#Area_name X
#Area_name X
#Area_name X
#Area_name X

>>Edit

if you set over eight target areas. the following pop-up will appear, and you can select the target area.

Select area

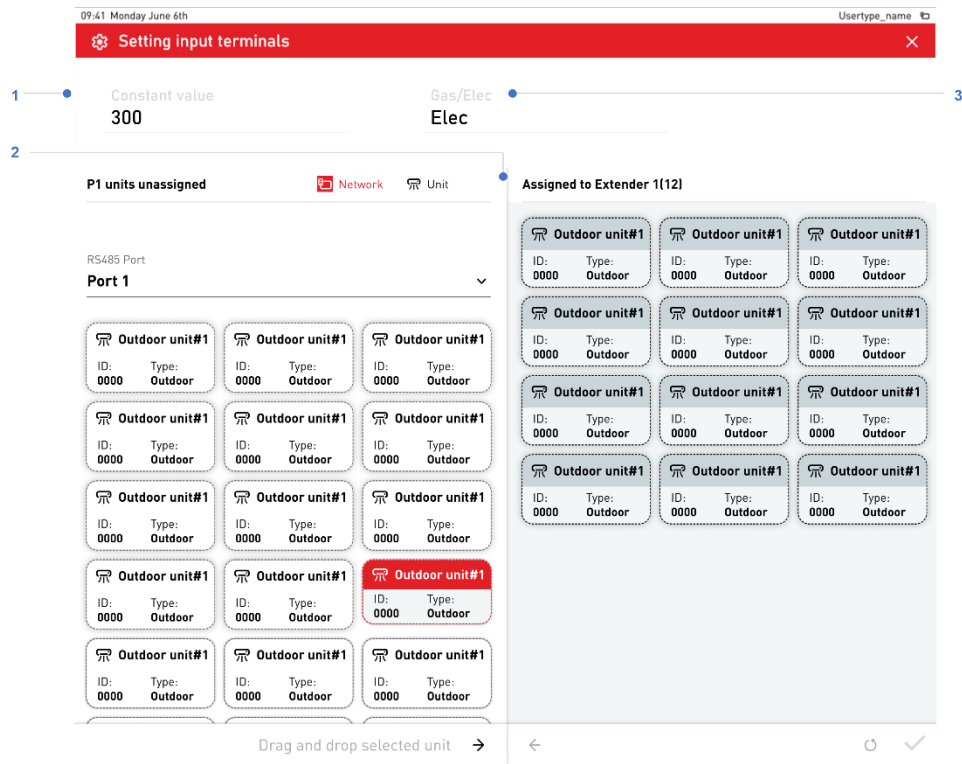
Name	Area type
☐ East building	Block
☐ West building	Block
☐ Ground floor	Floor
☐ Entrance	Group

CANCEL
CONTINUE

PI settings

If you select the Enable option on the “PI terminal available” button, you can change settings such as time constants and the types of gas/electric for each PI terminal by pressing the “PI terminal” button.

When you press the button, the following screen will appear, and you can change the setting.



1	Constant value input	You can set the constant value which is used to calculate payment
2	Assigned/unassigned unit	You can assign the unit for the pulse input terminal
3	Gas/electric set	You can select the type of power meter connected to the PI terminal as either gas or electric.

Functionality

This section explains the functionality settings.

You can set each function, such as remote-control operation permission, which allow you to prevent certain actions.

The available functions you can set are described below in the table (function table).

09:41 Monday June 6th

Admin

Settings

1

Display

Display settings such as brightness

2

Connectivity

LAN & Network connections

3

Equipment

Several setting for each equipment

4

Input terminal

External I/O definitions

5

Functionality

Set parameters for several functionality

6

Monitoring units

Monitor status of connected units

7

Temperature control

Temperature control settings

8

Internationalization

Language, Date, Time

9

This device

General device information

10

Factory Default

Set parameters, settings to factory default

Switching remote controller availability

☒ Allowed

☐ Not allowed

Availability of individual functional control from remote controller

☒ Allowed

☐ Not allowed

Availability of timer functionality from remote controller

☒ Allowed

☐ Not allowed

Availability of AUTO mode

☒ Allowed

☐ Not allowed

Availability of AUTO fan mode

☒ Allowed

☐ Not allowed

Abnormal output

☒ Open

☐ Close

09:41 Monday June 6th

Admin

Settings

5

Display

Display settings such as brightness

6

Connectivity

LAN & Network connections

7

Equipment

Several setting for each equipment

8

Input terminal

External I/O definitions

9

Functionality

Set parameters for several functionality

10

Monitoring units

Monitor status of connected units

11

Temperature control

Temperature control settings

12

Internationalization

Language, Date, Time

13

This device

General device information

14

Factory Default

Set parameters, settings to factory default

Availability of AUTO fan mode

☒ Allowed

☐ Not allowed

Abnormal output

☒ Open

☐ Close

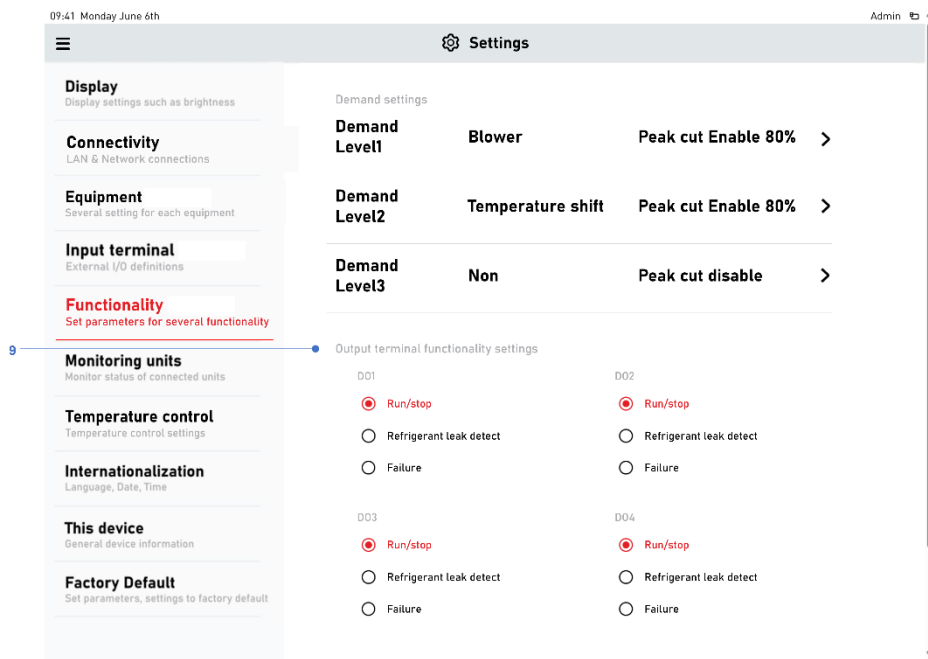
Input terminal run/stop functionality logic

☒ Open

☐ Close

Demand settings

Demand Level1	Blower	Peak cut enable 80%	>
Demand Level2	Temperature shift	Peak cut Enable 80%	>
Demand Level3	Non	Peak cut disable	>



1	Remote control operation permission	You can switch the permission for operating from the remote controller. If you select “Allow”, you can change the permission status for remote access from the time slot add/edit screens. If you select “Not permitted”, you cannot operate from the remote controller.
2	Function control permission	You can switch the permission for each functionality from the remote controller. If you select “Allow”, you can change the permission status for remote access from the time slot add/edit screens. If you select “Not permitted”, you cannot change the setting related to functions from the remote controller.
3	Timer function permission	You can switch the permission for timer function from the remote controller. If you select “Permit”, a signal for remote control timer operation will be sent. If you select “Not permitted”, a prohibition signal for remote control timer operation will be sent.
4	Automatic mode permission	You can switch the permission for automatic operation. If you select “Permit”, you can change the mode from the time slot add/edit screens. If you select “Not permitted”, you cannot change the mode from the time slot add/edit screens.
5	Automatic fan mode permission	You can switch the permission for automatic fan operation. If you select “Permit”, a permission signal for remote control automatic airflow operation will be sent. If you select “Not permitted”, a prohibition signal for remote control automatic airflow operation will be sent.
6	Abnormal output	You can determine the output state of the abnormal output terminal (open/close) during abnormal conditions.
7	Input terminal run/stop functionality logic	You can determine the output state logic of the abnormal output terminal (open/close) during abnormal conditions.
8	Demand setting	You can change the demand setting if you select “Demand” in the input terminal settings. The Demand pop-up will appear. Configuration details are described in the Demand section.
9	Input terminal setting	You can configure each function for four output terminals.

Demand

This section explains the demand settings. If you select the “Demand” option, the following pop-up (Demand setting pop-up) will appear and you can change several details of the demand settings based on the number of

demands which you assign to the input terminals. If you assign two demands to the input terminals, you can change three demand detail settings. If you assign one demand, you can change only one demand setting. Each demand setting you can change is described in the following table (“Demand setting” table).

Note: If you assign no demand to the input terminals, you can not change the demand settings.

Demand setting table

Name	Setting value	Description
Demand control method	Temperature shift/blower/none	You can select “Temperature shift”, “Blower”, or “None”. If you select “Temperature shift”, you can adjust the “Temperature shift” value.
“Temperature shift” value	1 to 9	This option appears when the “Temperature shift” is selected with the Demand control method.
Peak cut	Enable/Disable	You can choose to set the peak cut ratio.
Peak cut ration	0, 20, 40, 60, 80	This option appears when you select “Enable” in the “Peak cut” section.

the following pop-up (Demand setting pop-up) will appear when you select “Temperature shift”.

The image shows a "Demand settings" pop-up window. At the top, it says "D1". Under "Temperature shift", there is a radio button that is selected (indicated by a red dot). Below it is a slider with a value of 4, ranging from 1 to 9. Under "Blower", there is an unselected radio button. Under "Non", there is an unselected radio button. On the right side, under "Peak cut", there is a radio button that is selected (indicated by a red dot) and labeled "Enable". Below it is an unselected radio button labeled "Disable". To the right of the "Enable" radio button is a dropdown menu showing "21%". At the bottom right, there are two buttons: "CANCEL" and "CONTINUE".

The following pop-up (Demand setting pop-up) will appear when you select “Blower”.

The image shows a "Demand settings" pop-up window. At the top, it says "D1". Under "Temperature shift", there is an unselected radio button. Under "Blower", there is a radio button that is selected (indicated by a red dot). Under "Non", there is an unselected radio button. On the right side, under "Peak cut", there is an unselected radio button labeled "Enable". Below it is a radio button that is selected (indicated by a red dot) and labeled "Disable". At the bottom right, there are two buttons: "CANCEL" and "CONTINUE".

Monitoring Units

This section explains the unit status.

If you select the registered unit (the indoor and outdoor units), you can view detailed information depending on the equipment.

If you select “Air conditioner”, the following “Air conditioner monitoring screen” will be displayed.

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Settings

Display
Display settings such as brightness

Connectivity
LAN & Network connections

Equipment
Equipment name and rated capacity settings

Input terminal
External I/O definitions

Functionality
Set parameters for several functionality

Monitoring units
Monitor status of connected units

Temperature control
Temperature control settings

Internationalization
Language, Date, Time

This device
General device information

Factory Default
Set parameters, settings to factory default

Air conditioner

Indoor unit: 000

1	Run/stop	Stop
2	Operation mode	Heat
3	Set temperature	23.0°C
4	Set fan speed	High
5	Required Hz	0Hz
6	Return air temperature	24.0°C
7	IU EEV opening	60 pulse
8	IU heat exch. Temperature 1	20.0°C
9	IU heat exch. Temperature 2	20.0°C
10	IU heat exch. Temperature 3	20.0°C

Outdoor unit: OU-000

1	Compressor Hz 1	0Hz
2	Compressor Hz 2	0Hz
3	Outdoor air temp.	10.1°C
4	OU heat exch. Temperature 1	34.5°C
5	OU heat exch. Temperature 2	34.5°C
6	OU heat exch. Temperature 3	--°C
7	OU heat exch. Temperature 4	--°C
8	Discharge pipe Temperature 1	70°C
9	Discharge pipe Temperature 2	70°C
10	Compressor bottom temperature 1	32.1°C
11	Compressor bottom temperature 2	--°C
12	High pressure	0.00MPa
13	Low pressure	0.40MPa

Select unit

If you select “HMU”, the following “HMU” will be displayed.

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Settings

Display
Display settings such as brightness

Connectivity
LAN & Network connections

Equipment
Equipment name and rated capacity settings

Input terminal
External I/O definitions

Functionality
Set parameters for several functionality

Monitoring units
Monitor status of connected units

Temperature control
Temperature control settings

Internationalization
Language, Date, Time

This device
General device information

Factory Default
Set parameters, settings to factory default

HMU

Indoor unit: 000

1	Run/stop	Stop
2	Operation mode	Heat
3	Set temperature	23.0°C
4	Set temperature 2	23.0°C
5	Outlet water temperature	34.0°C
6	Inlet water temperature	13.0°C
7	R/C sensor temp.	23.0°C
8	IU heat exch. Temperature 1	20.0°C
9	IU heat exch. Temperature 2	20.0°C
10	IU heat exch. Temperature 3	20.0°C
11	Water pump	23.0°C
12	Required Hz	0 Hz
13	IU EEV Opening	60 pulse

Outdoor unit: OU-000

1	Compressor Hz 1	0Hz
2	Compressor Hz 2	0Hz
3	Outdoor air temp.	10.1°C
4	OU heat exch. Temperature 1	34.5°C
5	OU heat exch. Temperature 2	34.5°C
6	OU heat exch. Temperature 3	--°C
7	OU heat exch. Temperature 4	--°C
8	Discharge pipe Temperature 1	70°C
9	Discharge pipe Temperature 2	70°C
10	Compressor bottom temperature 1	32.1°C
11	Compressor bottom temperature 2	--°C
12	High pressure	0.00MPa
13	Low pressure	0.40MPa

Select unit

If you select “Water heater”, the following “Water heater monitoring screen” will be displayed.



If you select “CO2 fridge”, the following “CO2 fridge monitoring screen” will be displayed.

The screenshot shows the 'Settings' application interface. The top bar displays the time '09:41 Monday June 6th' and the user 'Admin'. The sidebar on the left contains the following sections: 'Display' (Display settings such as brightness), 'Connectivity' (LAN & Network connections), 'Equipment' (Equipment name and rated capacity settings), 'Input terminal' (External I/O definitions), 'Functionality' (Set parameters for several functionality), 'Monitoring units' (Monitor status of connected units), 'Temperature control' (Temperature control settings), 'Internationalization' (Language, Date, Time), 'This device' (General device information), and 'Factory Default' (Set parameters, settings to factory default). The main area is titled 'CO2 fridge' and shows the status of two units: 'Indoor unit: #10' and 'Outdoor unit: OU-000'. Each unit has a table of parameters and their values. Below the tables is a 'Select unit' button.

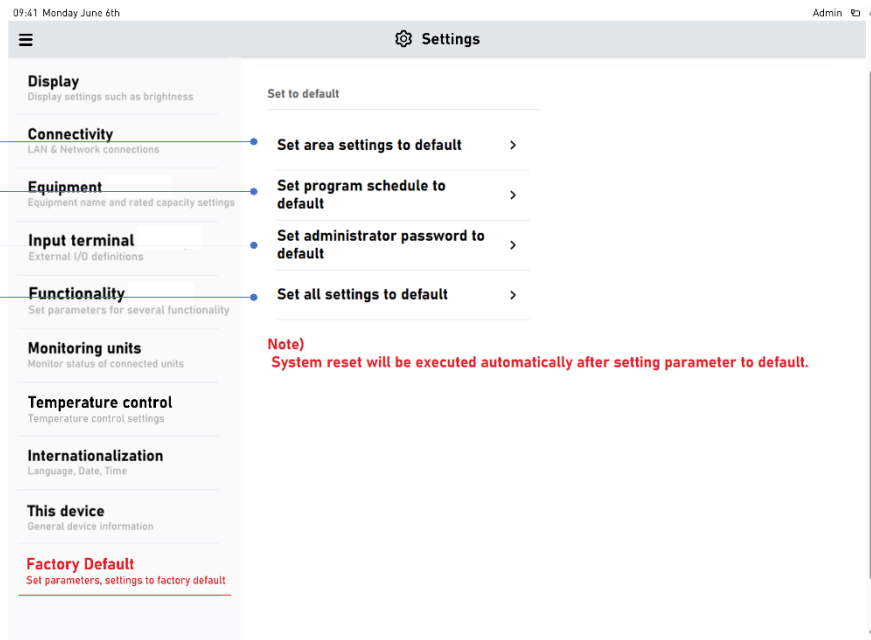
Indoor unit: #10		
1	Run/stop	Run
2	Defrost	ON
3	Set temperature	0°C
4	Inlet temperature	3°C

Outdoor unit: OU-000		
1	Run/stop	0Hz
2	High pressure	0.00MPa
3	Low pressure	0.40MPa
4	Temperature (D1)	20.0°C
5	Temperature (D2)	20.0°C

Select unit

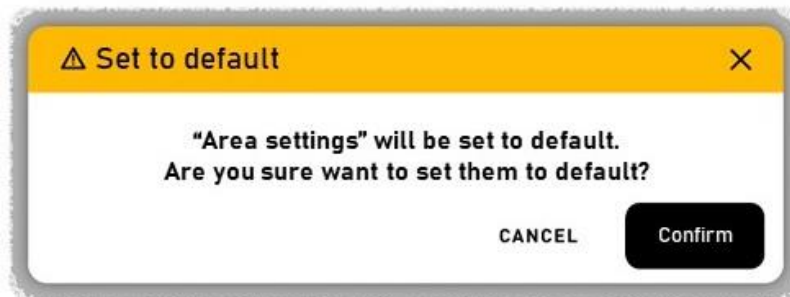
Factory default

This section explains several initialisation settings. If you press the “Set to default” button which you want to reset to factory settings, the confirmation pop-up will appear. If you press the Confirm button on the confirmation pop-up, the parameter will start to be set to the factory default values and SL5 main unit will be restarted. There are four parameters you can reset: the area settings, schedule, administrator password and all settings.

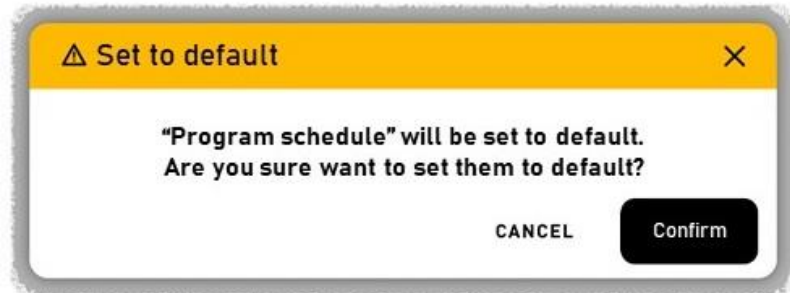


1	Area settings	When you select this option, a pop-up will appear (Reset Area setting pop-up), and you can reset the Area settings.
2	Program schedule	When you select this option, a pop-up will appear (Reset Schedule setting pop-up), and you can reset the program schedule settings.
3	Administrator password	When you select this option, a pop-up will appear (Reset Password setting pop-up), and you can reset the administrator password settings.
4	All settings	When you select this option, a pop-up will appear (Reset All setting pop-up), and you can reset all settings.

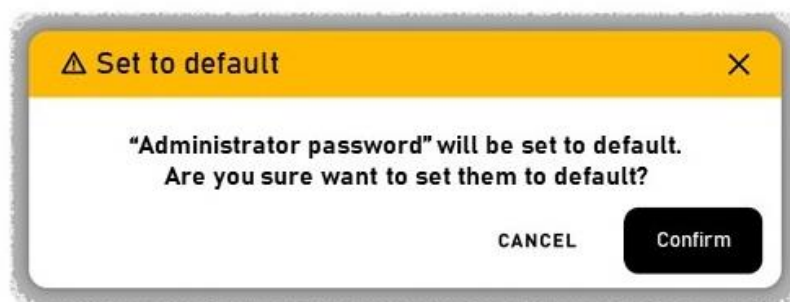
Reset Area setting pop-up



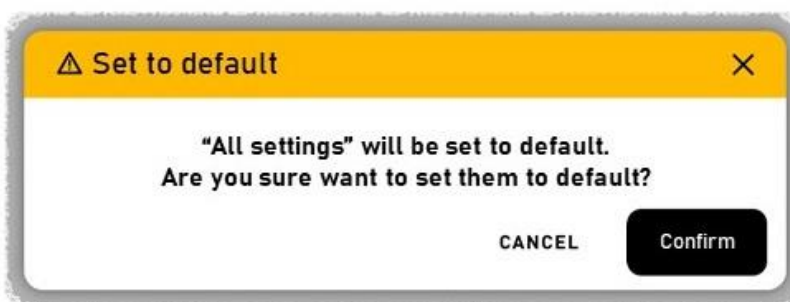
Reset Schedule setting pop-up



Reset Password setting pop-up



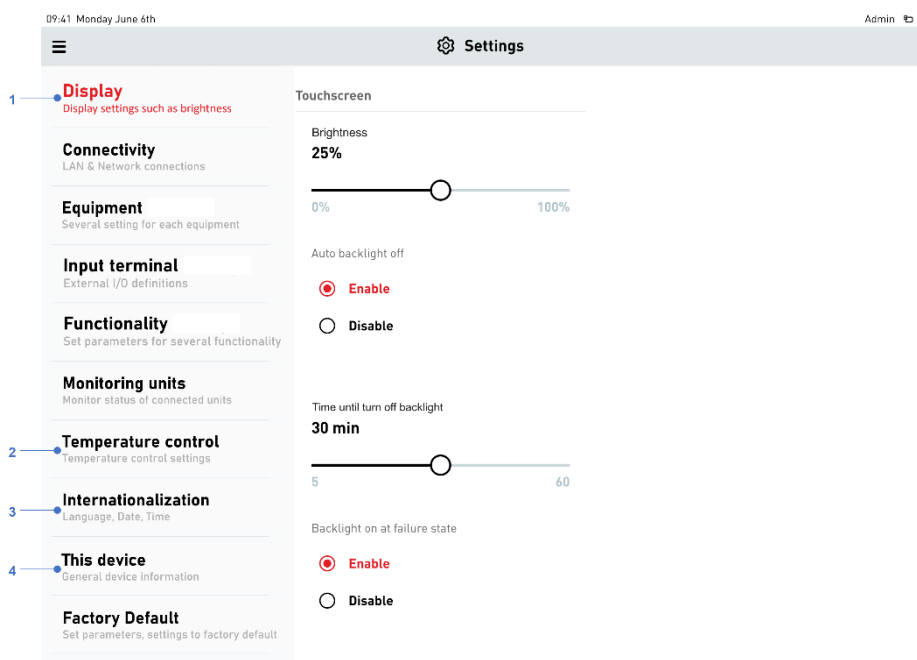
Reset All setting pop-up



Settings for administrator

This section explains the settings for features intended for administrators.

The following screen displays several settings for this device. You can access these settings if you are an administrator or installer.

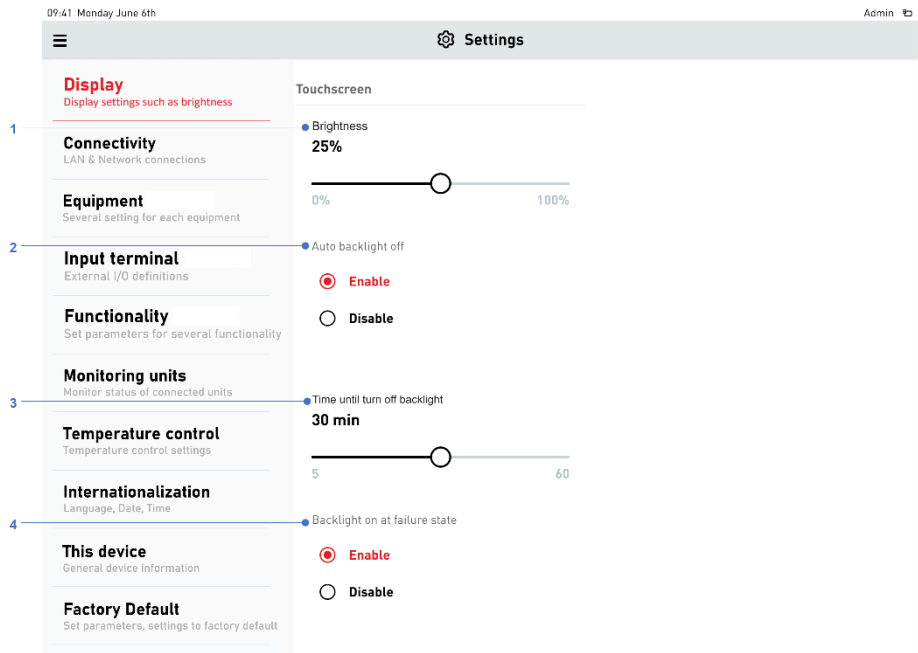


1	Display	You can change the screen settings, such as screen brightness. The details are described in the Display section.
2	Temperature control	You can change the settings related to temperature such as temperature unit.

		The details are described in the Temperature control section.
3	Internationalisation	You can change the system settings such as language and date time. The details are described in the Internationalisation section.
4	This device	You can view the general device information such as IP address. The details are described in the This device section.

Display

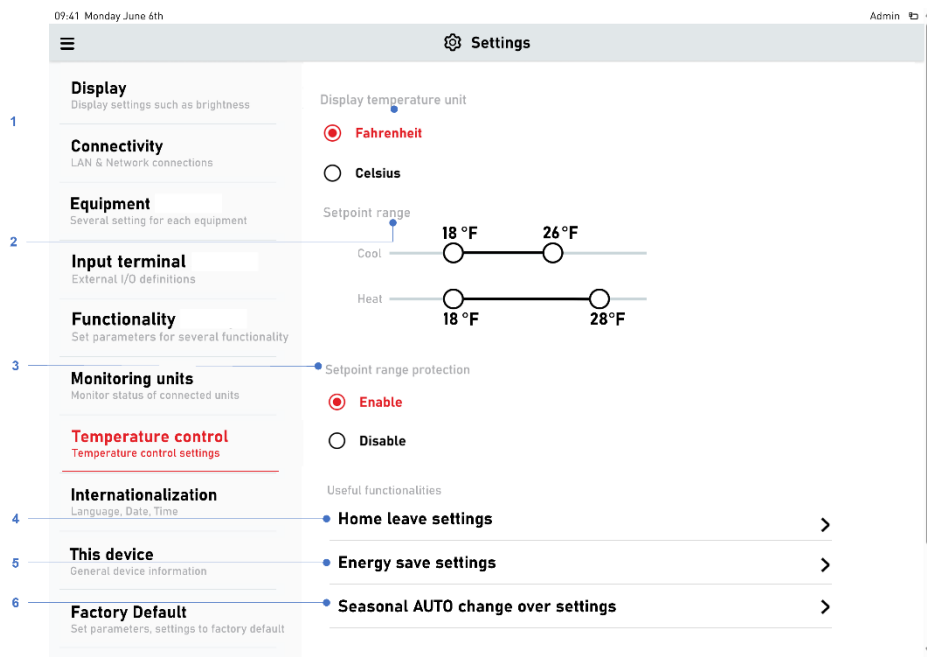
The following screen displays several settings related to the device's display such as brightness, automatic backlight Off, duration until backlight turns Off and automatically turn on the backlight in case of an error.



1	Brightness	You can adjust the display brightness within a range of 10% to 100%, in 1% increments.
2	Auto backlight off	You can choose whether the backlight will turn off automatically. If you select the "Enable" option, the backlight will turn off automatically after the time set in the "Time until backlight off" option has elapsed. If you select the "Disable" option, the backlight will remain on, and you cannot configure the "Time until backlight off" option or the "Backlight on at failure state".
3	Time until turn off backlight	You can set the duration until the backlight turns off within a range of 5 minute to 60 minutes, in 1-minute increments.
4	Backlight on at failure state	You can choose whether the backlight will turn on automatically in case of an error. If you select the "Enable" option, the backlight will turn on in case of an error. If you select the "Disable" option, the backlight will not turn on, even in the event of an error.

Temperature control

The following screen displays several settings related to temperature, including the temperature unit, set temperature range and set temperature range protection, as well as useful functions such as Away mode, Energy save, and Seasonal settings.



1	Display temperature unit	You can choose between Celsius and Fahrenheit as the displayed temperature unit.
2	Set temperature range	You can determine the upper and lower limits of the target temperature for both cooling and heating within the specified limits. The detail range is described in Set temperature range table .
3	Set temperature range protection	You can adjust the set temperature to remain within the range specified by the “Set temperature range” option. When you try to set a temperature that exceeds this range using the remote controller, the adjustment will take place if you select the “Enable” option. However, if you set it to the “Disabled” option, no adjustment will be made.
4	Away mode	When you select this option, a pop-up will appear and you can set the upper and lower limits for the target temperature. This prevents you from setting a temperature outside the specified range using the remote control. The system maintains a comfortable indoor environment by measuring the outdoor temperature. The details are described in the Away mode section.
5	Energy save	When you select this option, a pop-up will appear and you can achieve high-efficiency operation by controlling the target temperature. The details are described in the Energy save section.
6	Seasonal AUTO change	When you select this option, a pop-up will appear and you can switch automatically between cooling mode and heating mode. The details are described in the Seasonal AUTO change section.

Set temperature range table (Air conditioner)

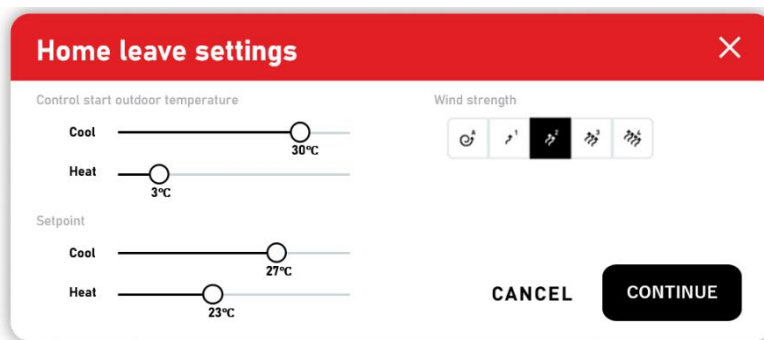
	Adjustable upper limit range	Adjustable lower limit range
Cooling	30°C – 35°C	16°C - 28°C
Heating	19°C - 30°C	10°C - 18°C

Set temperature range table (HMU)

	Adjustable upper limit range	Adjustable lower limit range
Cooling	28°C – 30°C	5°C - 28°C
Heating	19°C - 55°C	15°C - 22°C

Away mode

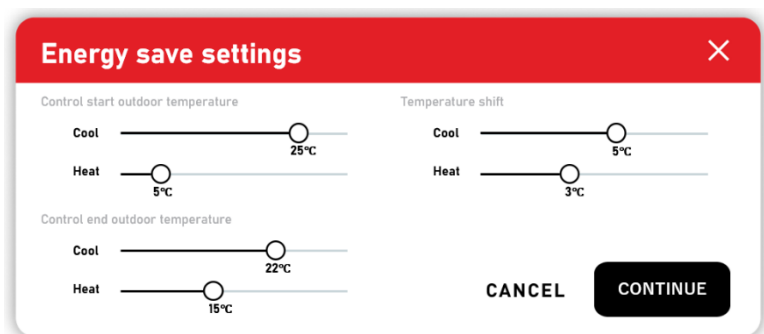
The away mode setting is a function that measures the outdoor temperature and maintains the indoor environment at a comfortable temperature. When you select this option, the following pop-up will appear and you can set the outdoor temperature at which cooling and heating will start, as well as the desired indoor temperature. Additionally, you can adjust the fan speed during temperature regulation.



The 'Home leave settings' pop-up features a red header with a close button. It is divided into three main sections: 'Control start outdoor temperature', 'Wind strength', and 'Setpoint'. The 'Control start outdoor temperature' section has sliders for 'Cool' (set to 30°C) and 'Heat' (set to 3°C). The 'Wind strength' section shows five icons, with the third icon (representing a fan) selected. The 'Setpoint' section has sliders for 'Cool' (set to 27°C) and 'Heat' (set to 23°C). At the bottom right, there are 'CANCEL' and 'CONTINUE' buttons.

Energy save

The home energy save setting is a function that monitors the outdoor temperature to prevent inefficient situations, by automatically adjusting the set temperature. When you select this option, the following pop-up will appear and you can set the outdoor temperatures that trigger the start and end of the energy-saving operation, as well as the shift value for the set temperature during this operation.



The 'Energy save settings' pop-up features a red header with a close button. It is divided into three main sections: 'Control start outdoor temperature', 'Temperature shift', and 'Control end outdoor temperature'. The 'Control start outdoor temperature' section has sliders for 'Cool' (set to 25°C) and 'Heat' (set to 5°C). The 'Temperature shift' section has sliders for 'Cool' (set to 5°C) and 'Heat' (set to 3°C). The 'Control end outdoor temperature' section has sliders for 'Cool' (set to 22°C) and 'Heat' (set to 15°C). At the bottom right, there are 'CANCEL' and 'CONTINUE' buttons.

Seasonal AUTO change

The seasonal AUTO change over setting is a function that you can use to select the seasonal mode on the schedule screen and choose automatic switching in the seasonal settings. It monitors the outdoor temperature automatically to switch between cooling mode and heating mode. When you select this option, the following pop-up will appear and you can set the outdoor temperatures for switching to cooling mode and heating mode.

Seasonal AUTO change over settings

Cooling mode start outdoor temperature

25°C

Heating mode start outdoor temperature

15°C

CANCEL

CONTINUE

Internationalisation

The following screen displays several system settings related to language, date and time.

09:41 Monday June 6th
Admin

Settings

1
2
4
5
6

Display
Display settings such as brightness

Connectivity
LAN & Network connections

Equipment
Several setting for each equipment

Input terminal
External I/O definitions

Functionality
Set parameters for several functionality

Monitoring units
Monitor status of connected units

Temperature control
Temperature control settings

Internationalization
Language, Date, Time

This device
General device information

Factory Default
Set parameters, settings to factory default

Language

Selected language

English

Date and time

NTP usage

Enable

Disable

Date

Set date

23.09.2023

Help text

Time

Set time

14:30

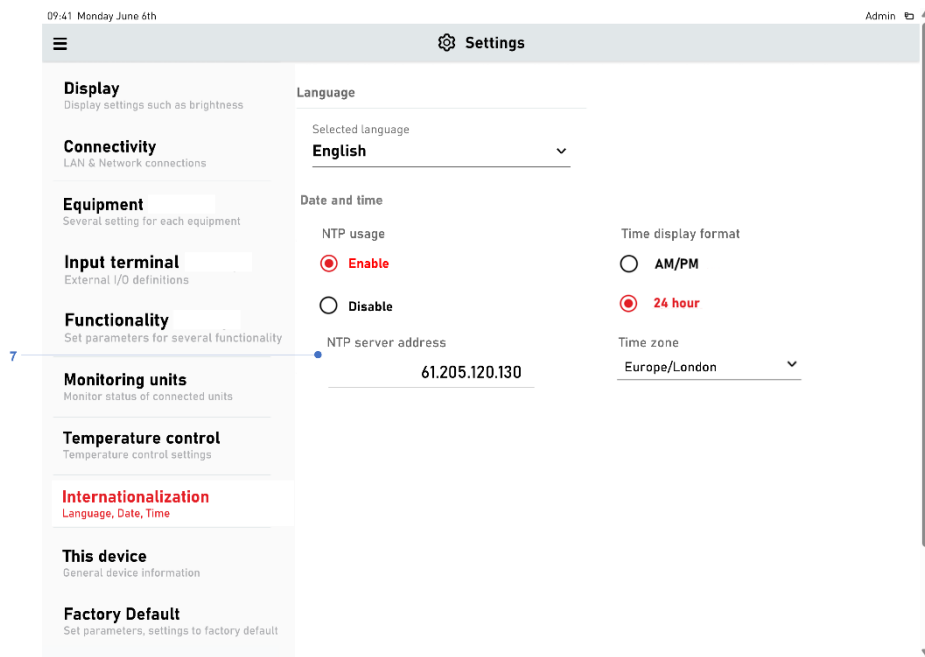
Time display format

AM/PM

24 hour

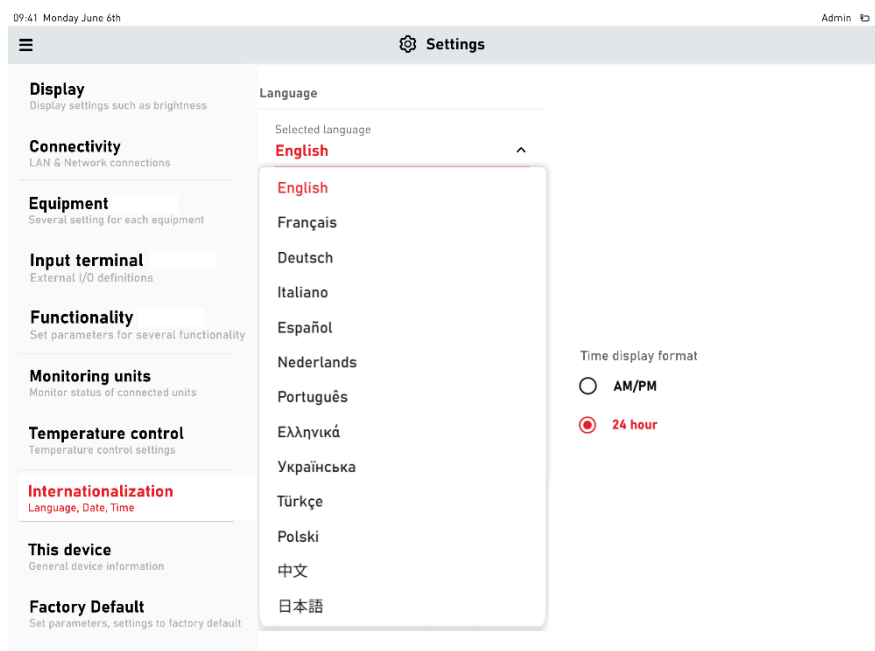
Time zone

Europe/London

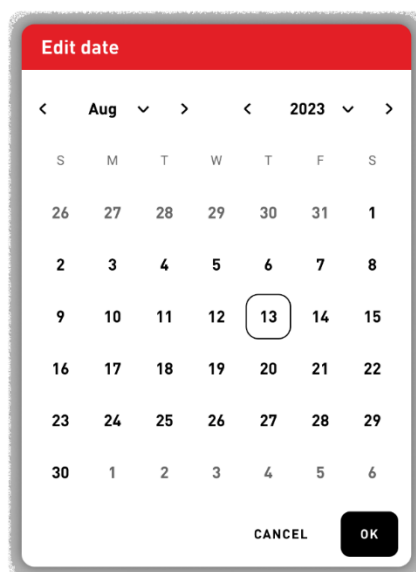


1	Language	When you select this option, following pop-up (Language setting pop-up) will appear and you can change the language settings. The available languages are as follows: • Japanese • English • Chinese • Spanish • German • French • Italian • Dutch • Ukrainian • Portuguese • Greek • Turkish • Polish
2	NTP usage	If you use the NTP server for time adjustment, please select Enable. If not, please select “Disable”.
3	Time display format	Switch between the AM/PM format and the 24-hour format.
4	Date	This option appears only when you set the NTP usage as “Disable”. When you select this option, the following pop-up (Date setting pop-up) will appear, and you can change the date settings.
5	Time	This option appears only when you set the NTP usage as “Disable”. When you select this option, the following pop-up (Time setting pop-up) will appear, and you can change the time settings.
6	Time zone	You can select the time zone from the list and based on your choice, daylight saving time will be applied accordingly.
7	IP address for NPT server	This option appears only when you set the NTP usage as Enable. You can specify the NTP server by entering the IP address.

Language setting pop-up



Date setting pop-up

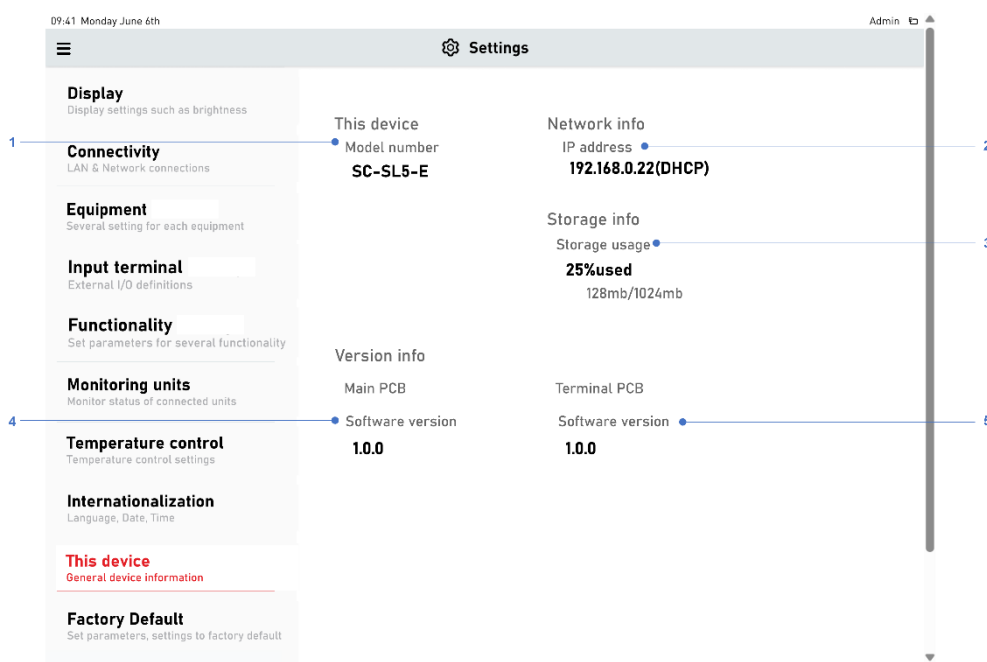


Time setting pop-up

19	15
20	16
21	17
22	18
23	19
	20
	21
OK	

This device

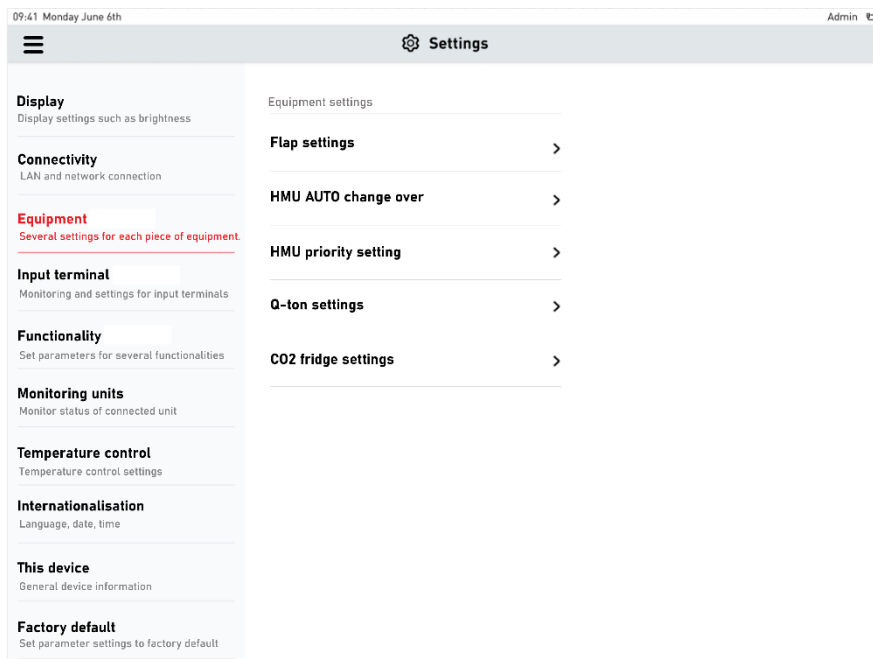
The following screen displays device information such as IP address and serial number.



1	Model number	Device's model number
2	IP address	IP address
3	Storage usage	Device's storage usage
4	Software version (main)	Main PCB software version
5	Software version (terminal)	Terminal PCB software version

Equipment settings (for installer)

You can configure the following parameters in this screen.



#	Setting name	Explanation
1	Flap settings	If you touch this item, the screen goes to the flap setting screen to set the flap direction limits of each unit and the static duct pressure settings of the ducted units. This item is displayed only when the system is configured as the air conditioner is connected. Please see more details in " Flap settings ".
2	HMU AUTO change over	If you touch this item, the screen for HMU AUTO change over settings is displayed. This item is displayed only when the system is configured as the HMU is connected. Details of this setting are described in " HMU AUTO change over ".
3	HMU priority setting	If you touch this item, screen for the HMU priority setting is displayed. This item is displayed only when the system is configured as the HMU is connected. Details of this setting are described in " HMU priority setting ".
4	Q-ton settings	If you touch this item, the setting screen for the water heater will be displayed. This item is displayed only when the system is configured as a water heater is connected. Details of this setting are described in " Q-ton settings ".
5	CO2 fridge settings	If you touch this item, the setting screen for the CO2 fridge will be displayed. This item is displayed only when the system is configured as the CO2 fridge is connected. Details of this setting are described in " CO2 fridge settings ".

Flap settings

You can set the control limits of each flap for the air conditioner connected unit and the static duct pressure for ducted units in the system in this screen. Once you reach this screen, the list containing all units described below is displayed.

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Admin

Settings

≡

Display

Display settings such as brightness

Connectivity

LAN and network connection

Equipment settings

Several settings for each piece of equipment.

Input terminal settings

Monitoring and settings for input terminals

Functionality settings

Set parameters for several functionalities

Monitoring units

Monitor status of connected unit

Temperature control

Temperature control settings

Internationalisation

Language, date, time

This device

General device information

Factory default

Set parameter settings to factory default

Flap settings

AC unit	Unit type	Flap1	Flap2	Flap3	Flap4	Air-Flex	Static pressure
☒ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	None	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	None	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	None	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	None	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	Yes	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	1
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	2
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	
☐ Unit name	 FDT	1 to 6	1 to 6	1 to 6	1 to 6	-	

←

1 - 20

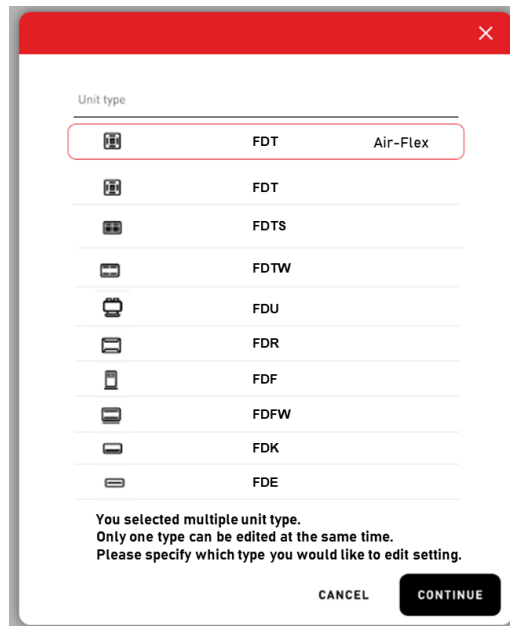
21 - 40

→

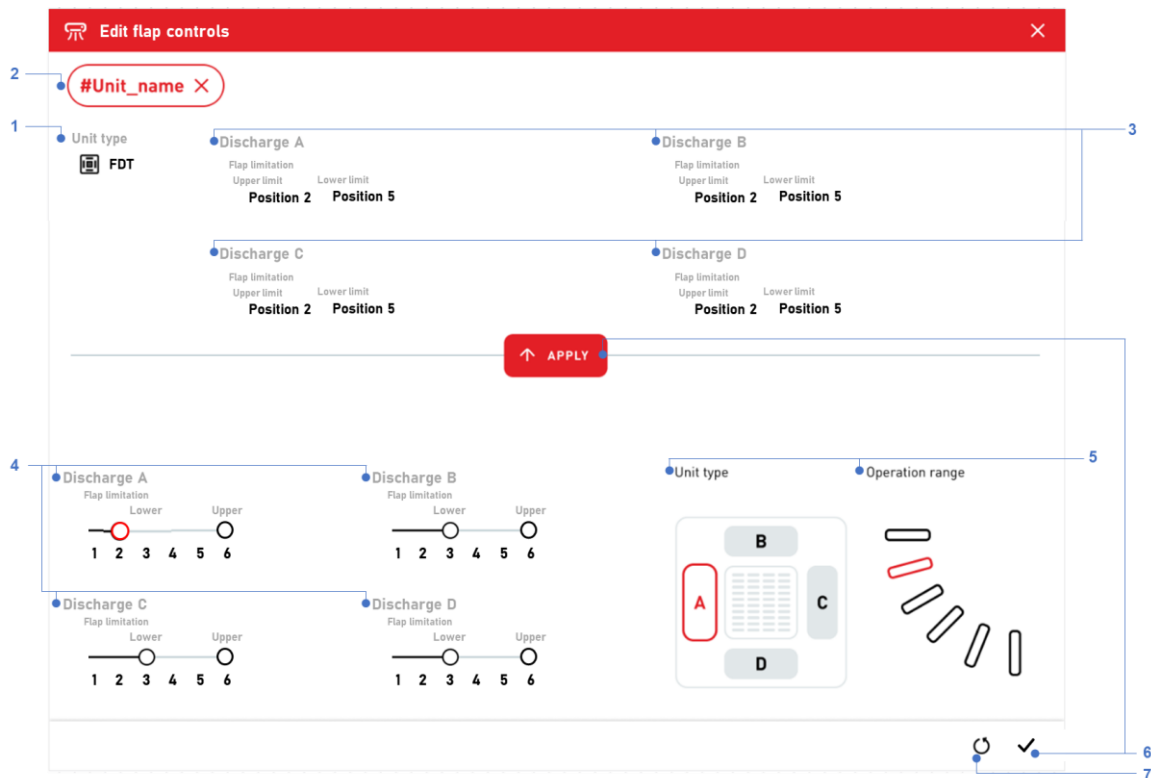
☒



You can select units on this screen by tapping the tick box. You can then touch the edit button on the bottom bar and the screen goes to the edit flap settings screen or the static duct pressure screen. If you select multiple unit types, the following pop-up screen will be displayed to choose which type of unit needs to be edited.



Edit flap settings



1. Unit type
This part shows unit type of selected unit.
2. Selected unit name
This part shows the unit name selected in the previous screen. If several units are selected in the previous screen, the name of selected units is displayed in this place.
3. Current limit position of each flap

You can see the current setting for the upper limit position and lower limit position of each flap on selected units.

4. Setting for limit position of each flap

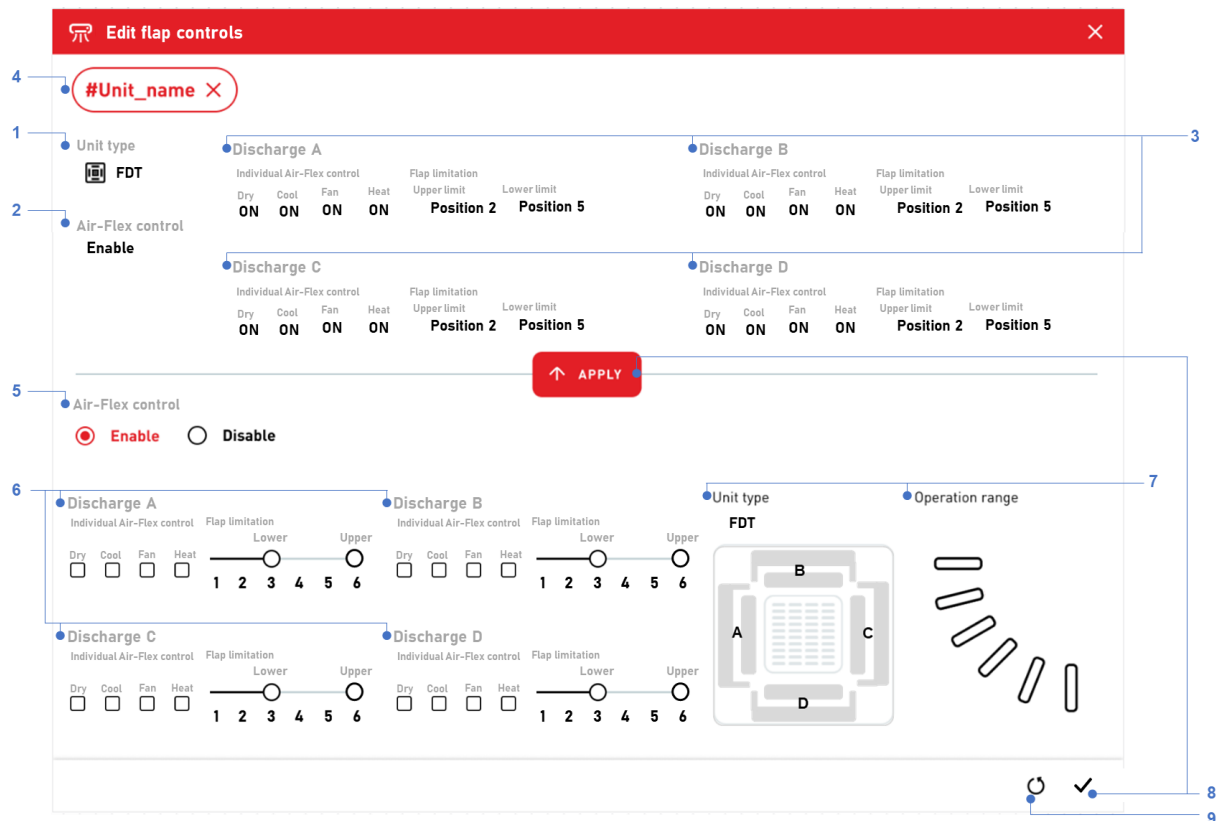
You can change the setting for the upper limit position and lower limit position of each flap on selected units.

5. Selected flap and its position

The selected flap and position are highlighted in red in the diagram.

Edit flap settings (in case of unit that has Air-flex functionality)

The flap for the unit with Air-flex has a special setting.



1. Unit type

This part shows unit type of selected unit.

2. Current Air-Flex control setting

This part shows the current setting of the Air-flex control. This setting enables/disables Air-flex control for the whole of this system (i.e. if this setting is disabled, all Air-flex control is disabled).

3. Current limit position of each flap and individual Air-flex control

You can see the current setting of the upper limit position and lower limit position. The current individual Air-flex control is also shown in this part. (Individual Air-flex control: Air-flex control can be set on/off by each mode.)

4. Selected unit name

This part shows the unit name selected in the previous screen. If several units are selected in the previous screen, the name of selected units is displayed in this place.

5. Air-flex control

You can change between Enable/Disable for Air-flex control.

6. Limit position of each flap and individual Air-flex control

You can change the current setting of the upper limit position and lower limit position. The current individual Air-flex control can be changed in this part.

7. Selected flap and its position

The selected flap and position are highlighted in red in the diagram.

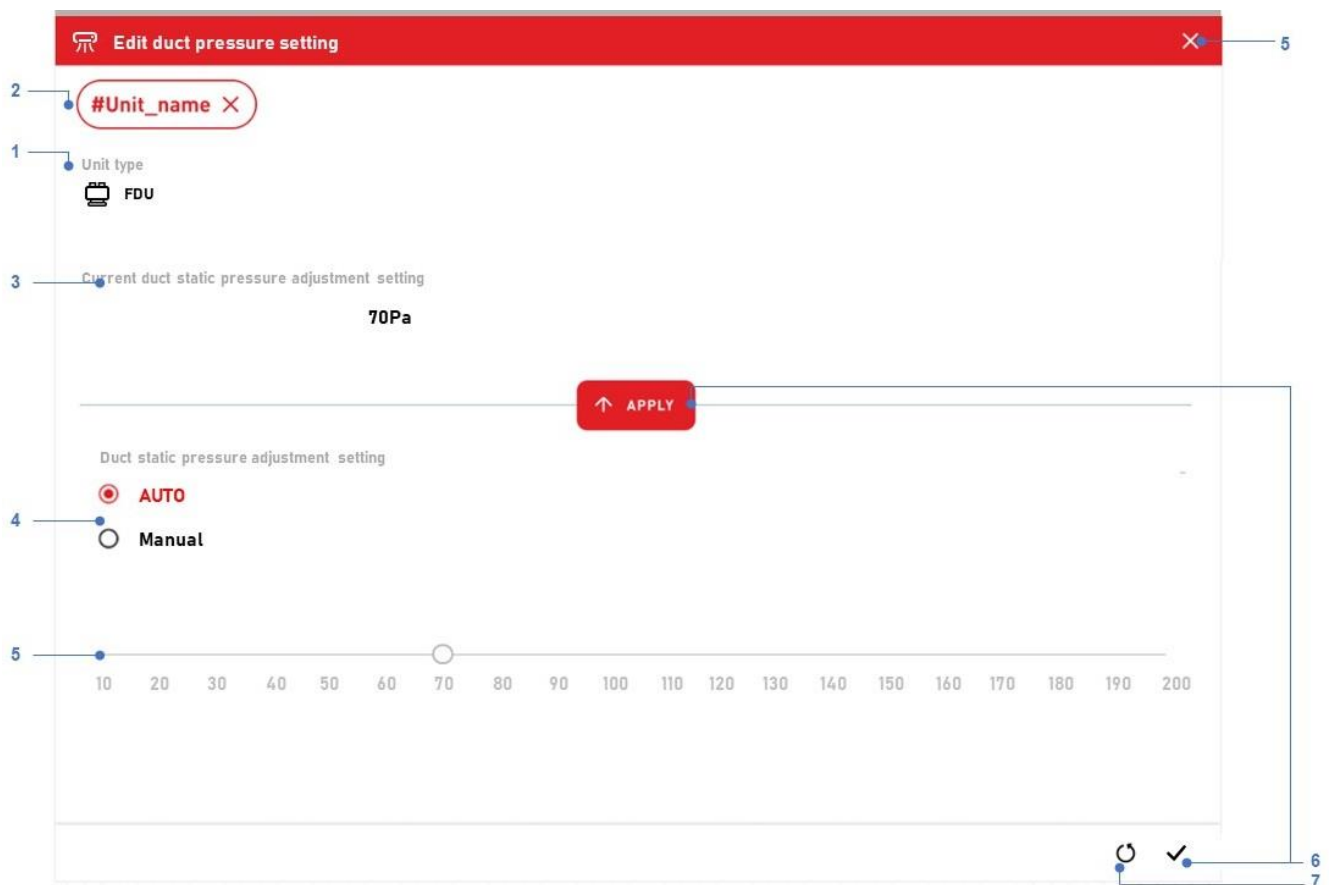
8. Apply button

This button is activated if you change the setting of this screen. The changed setting is applied to the system by touching this button.

9. Undo button

This button is activated if you change the setting of this screen. The changed setting is reverted to by touching this button.

Edit static duct pressure



1. Unit type

This part shows unit type of selected unit.

2. Selected unit name

This part shows the unit name selected in the previous screen. If several units are selected in the previous screen, the name of selected units is displayed in this place.

3. Current duct static pressure adjustment setting

You can see the current duct static pressure setting of the selected unit.

4. Duct static pressure mode

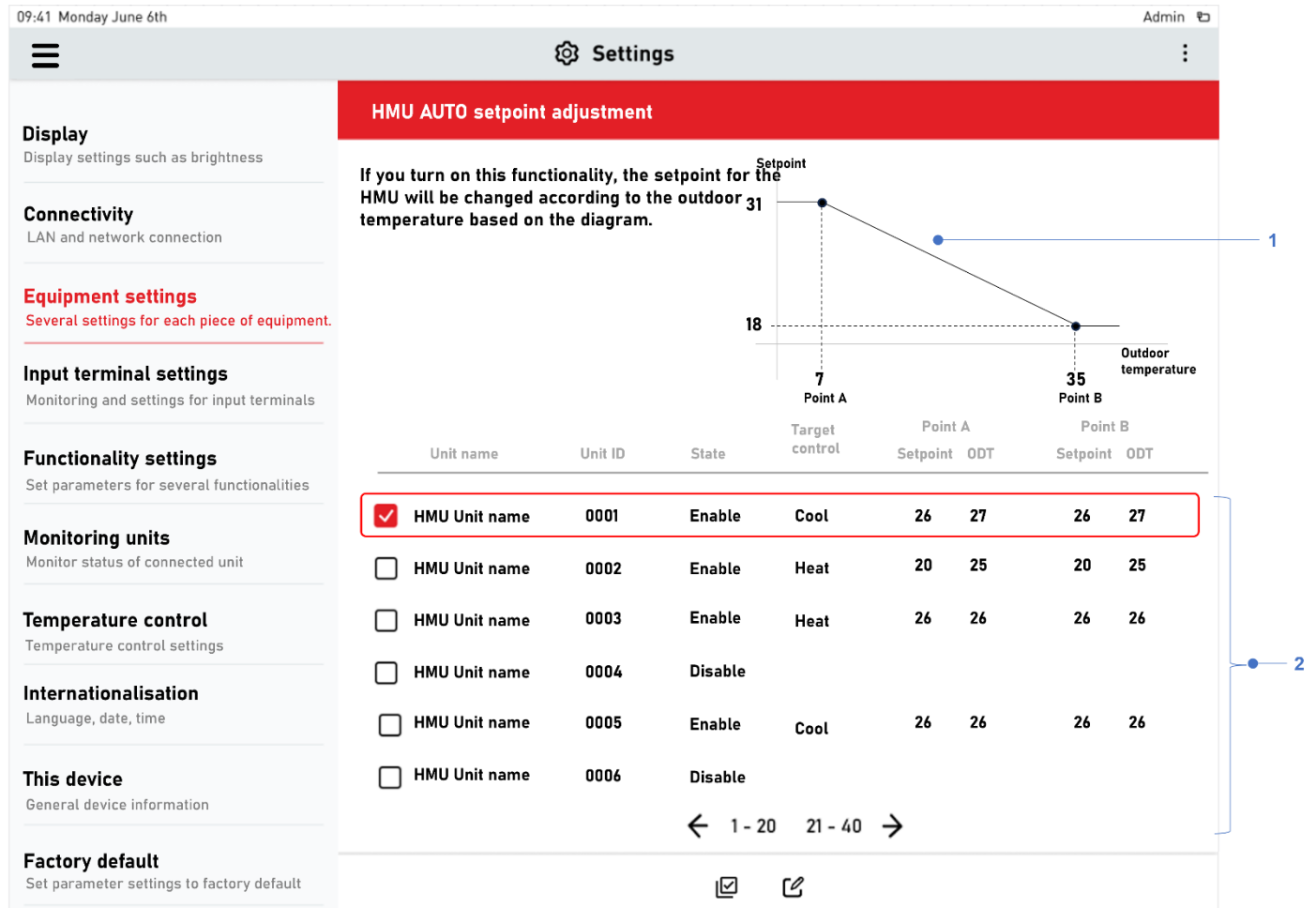
You can choose the duct static pressure mode (AUTO or manual) with this button

5. Static pressure setting for manual mode

If duct static pressure mode is set as manual, this slider bar is activated and you can change the pressure value using this slider.

HMU AUTO set temperature adjustment

SL5 has a functionality that changes the HMU set temperature automatically according to the outdoor temperature and setting of this screen.



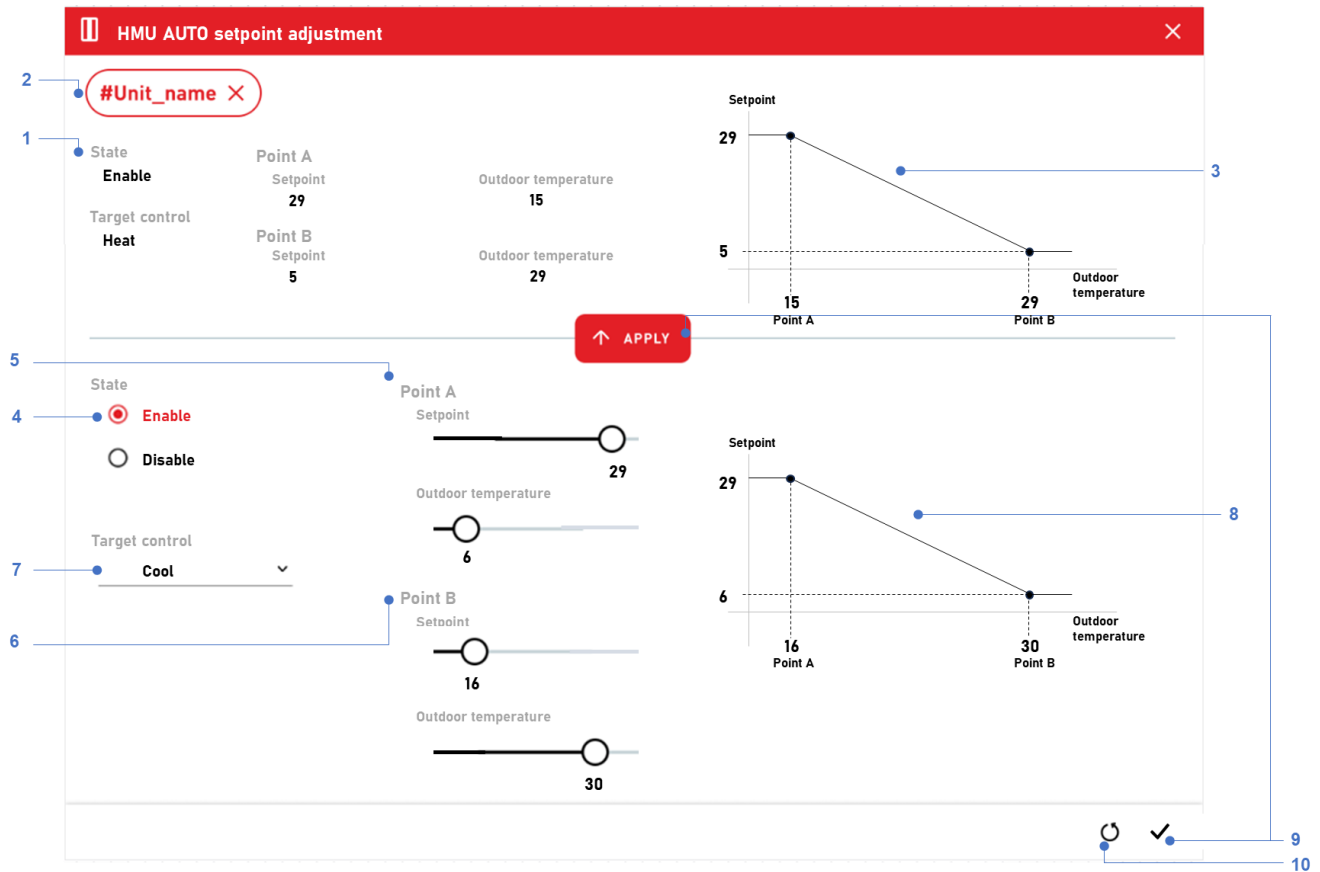
1. Explanation of this functionality

This part shows an overview of this functionality.

2. List of HMU units in this system

This part shows a list of HMU units. The list shows the current settings for the HMU AUTO set temperature adjustment of each unit.

You can choose the unit for which you want to edit this setting by tapping the tick box located to the left-hand side of each unit name. If you touch a tick box, the selected unit is highlighted in red and the edit button on the bottom bar is activated. If the edit button is touched, the screen goes to the setting screen described in the next page.



1. Current setting state

This part shows the current state of the HUM AUTO set temperature adjustment for the selected unit.

2. Selected HMU unit name

The unit name of the selected HMU unit in the previous screen is shown in this part.

3. Current setting of HMU AUTO set temperature adjustment

This part shows the current setting and the diagram located on the right-hand side shows the heating curve of the current setting.

4. Settings for HMU AUTO set temperature adjustment

You can change between Enable/Disable for this setting with this button

5. Setting of point A

You can change the set temperature and outdoor temperature for point A.

6. Setting of point B

You can change the set temperature and outdoor temperature for point B.

7. Setting for target mode

You can change the target mode for this functionality.

8. Diagram for changed setting

This diagram is for a heating curve based on a changed setting.

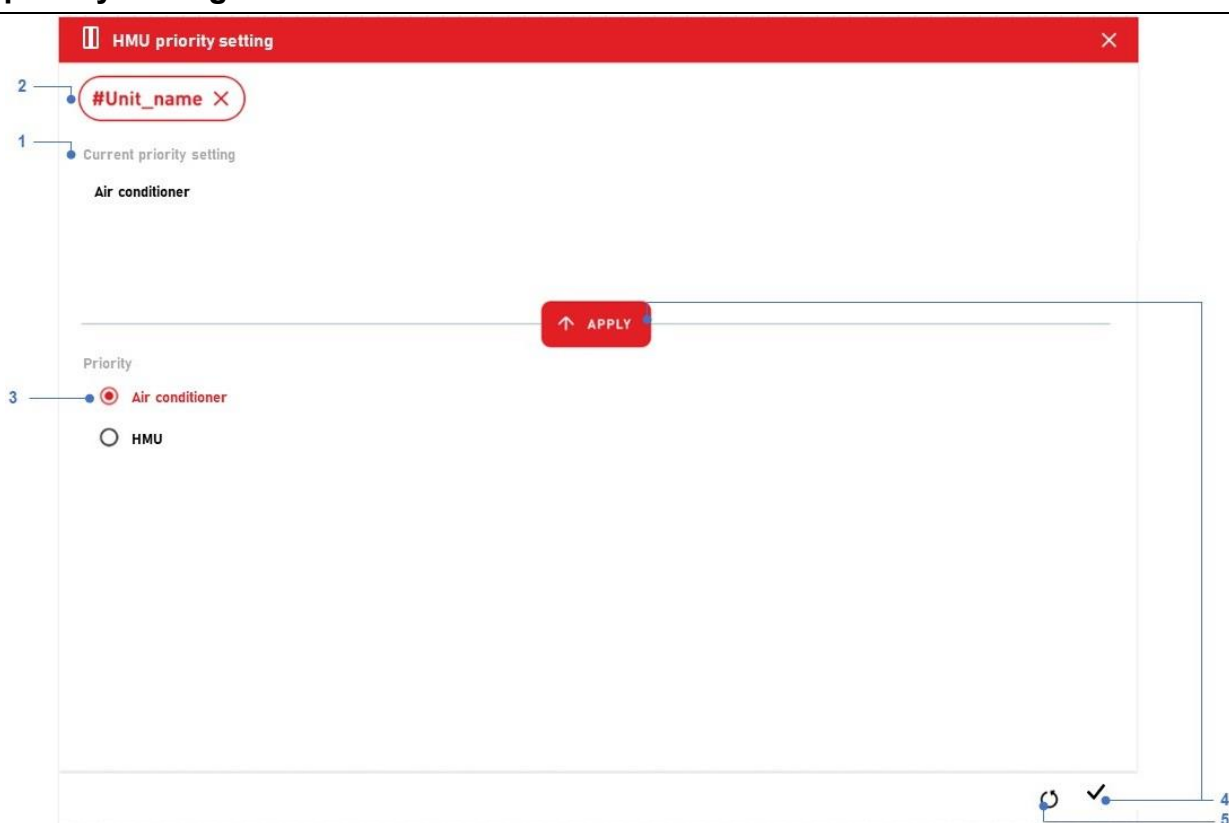
9. Apply button

This button is activated if you change the setting of this screen. The changed setting is applied to the system by touching this button.

10. Undo button

This button is activated if you change the setting of this screen. The changed setting is reverted to by touching this button.

HMU priority setting



1. Current setting of HMU priority setting

This part shows the current HMU priority setting.

2. Selected unit

This part shows the unit name selected in the previous screen.

3. Setting for HMU priority setting

You can change the HMU priority with this button.

4. This button is activated if you change the setting of this screen. The changed setting is applied to the system

by touching this button.

5. Undo button

This button is activated if you change the setting of this screen. The changed setting is reverted to by touching this button.

Q-ton settings

You can set the limit water temperature and tank type with this screen.

09:41 Monday June 6th Admin

Settings

Q-ton setting

Unit name	Unit ID	Limit water temperature	Tank type
☒ Q-ton name	0001	90C	Unvented
☐ Q-ton name	0002	90C	Vented
☐ Q-ton name	0003	90C	Unvented
☐ Q-ton name	0004	90C	Vented
☐ Q-ton name	0005	90C	Unvented
☐ Q-ton name	0006	90C	Vented
☐ Q-ton name	0007	90C	Vented

← 1 - 20 21 - 40 →

☒ ☐

1. List of water heater units

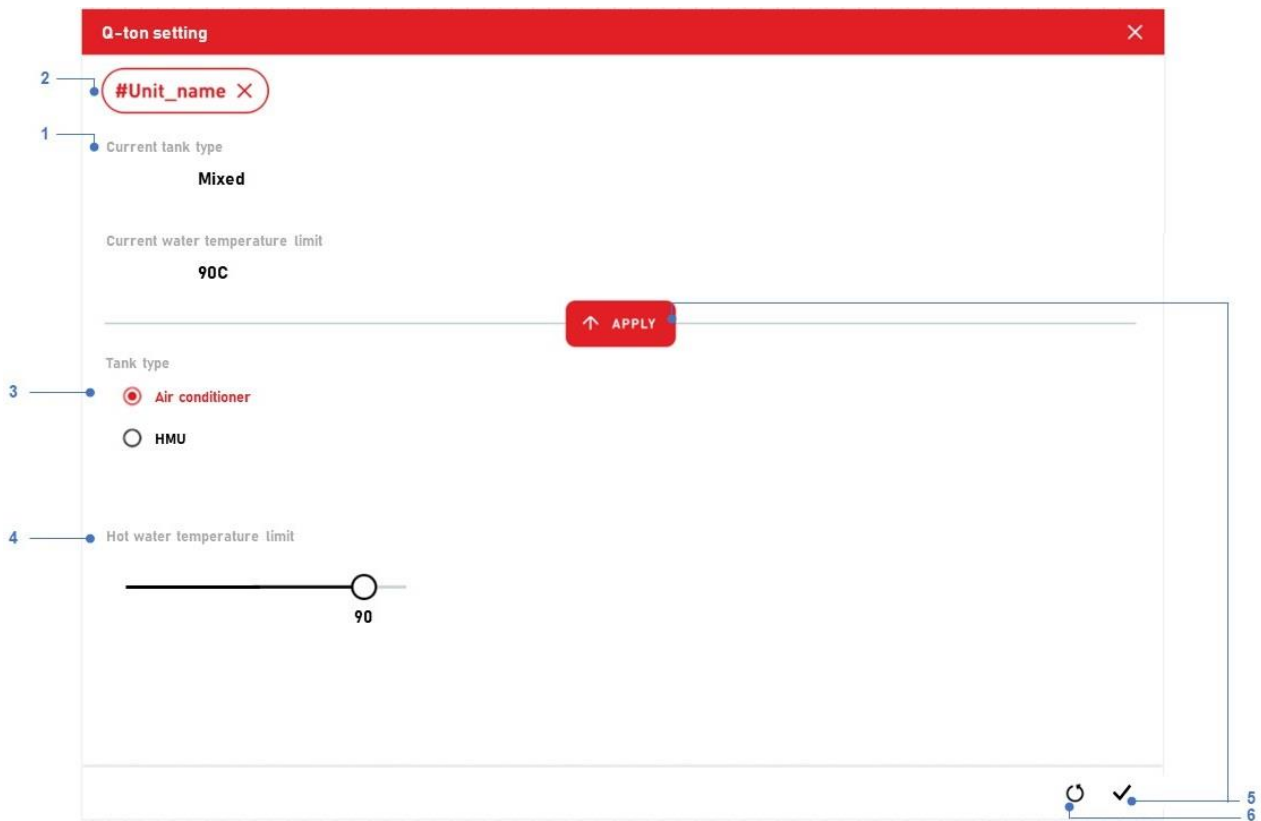
The water heater unit is listed in this part. You can select the unit by tapping the tick box.

2. Edit button

If one or more units are selected from the list, this button is activated. If you touch this button, the screen goes to the setting screen described in the next page.

3. Select all button

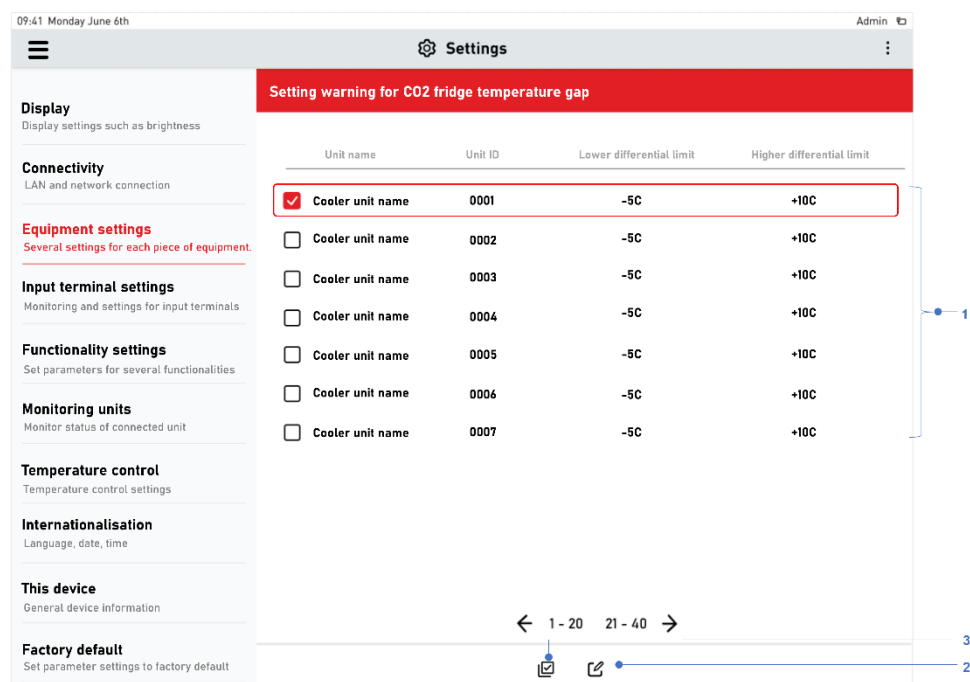
If you touch this button, all units in the list are selected.



1. Current tank type
This part shows the current tank type setting.
2. Current limit for hot water temperature
This part shows the current hot water temperature limit
3. Button to change tank type
You can change the tank type with this button.
4. Slide bar for setting hot water temperature limit
You can change the hot water temperature limit with this slide.

Setting warning for CO2 fridge temperature gap

You can set the threshold for the warning functionality of the CO2 fridge temperature gap.



1. List of water heater units

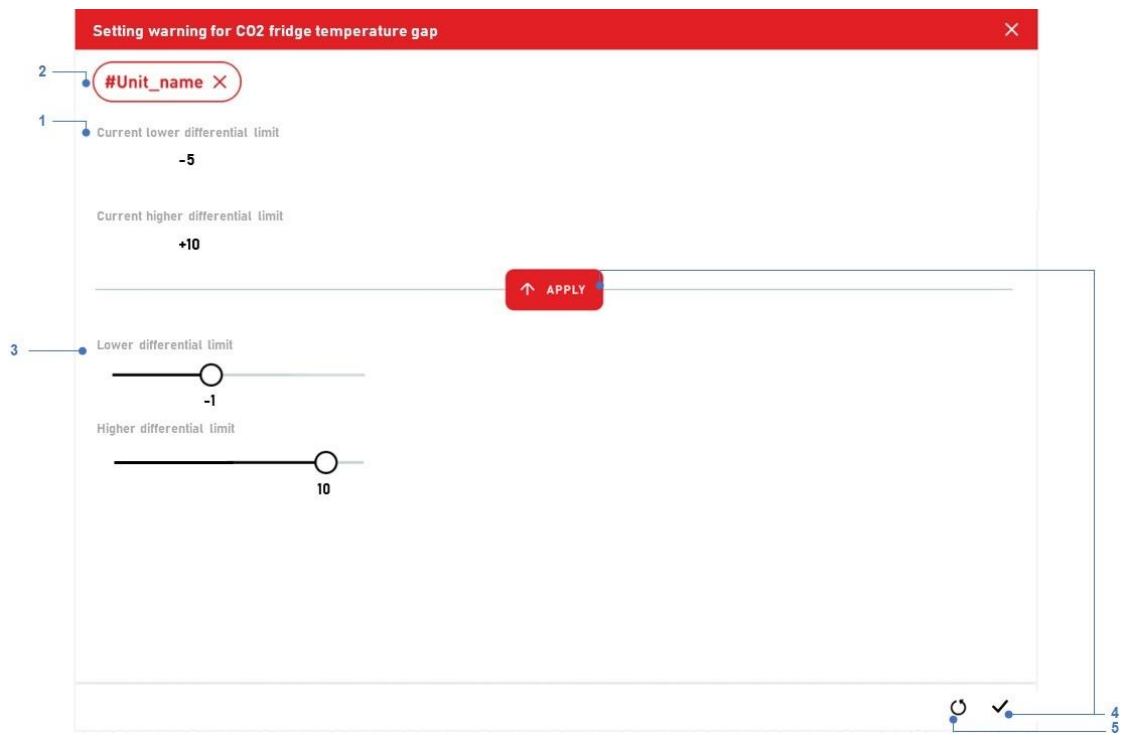
The CO2 fridge unit is listed this part. You can select the unit by tapping the tick box.

2. Edit button

If one or more units are selected from the list, this button is activated. If you touch this button, the screen goes to the setting screen described in the next page.

3. Select all button

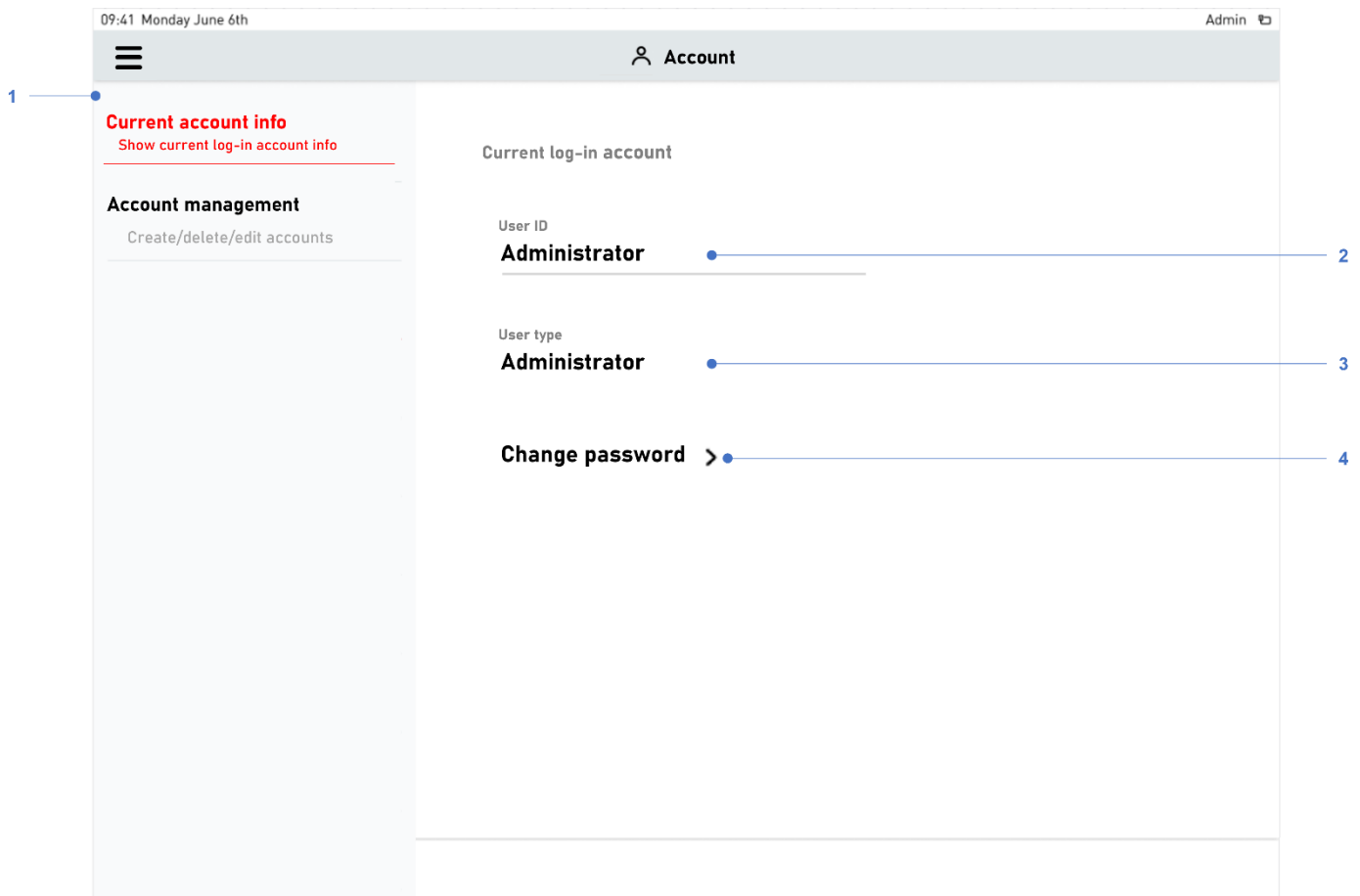
If you touch this button, all units in the list are selected.



1. Current setting of differential limit
This part shows the current limit value
2. Selected unit name
This part shows the unit name selected in the previous screen.
3. Setting of differential limit
You can set the lower limit and upper limit to warn of a CO2 fridge temperature gap.
4. Apply button
This button is activated if you change the setting of this screen. The changed setting is applied to the system by touching this button.
5. Undo button
This button is activated if you change the setting of this screen. The changed setting is reverted to by touching this button.

User account (for installer)

The account screen is displayed when the user touches the “Account” icon on the menu bar in the home screen.



1. Account setting menu bar

This menu bar has the following two items.

- Current account info

You can see current information on the current log-in account described in 2 to 4 below.

- Account management

This button is displayed when the current log-in user is the administrator or installer. When this button is touched, the screen described in page 133 will be displayed.

2. Current log-in account ID

You can see the log-in ID of the current login account.

3. Current log-in account user type

You can see the log-in ID of the current login account.

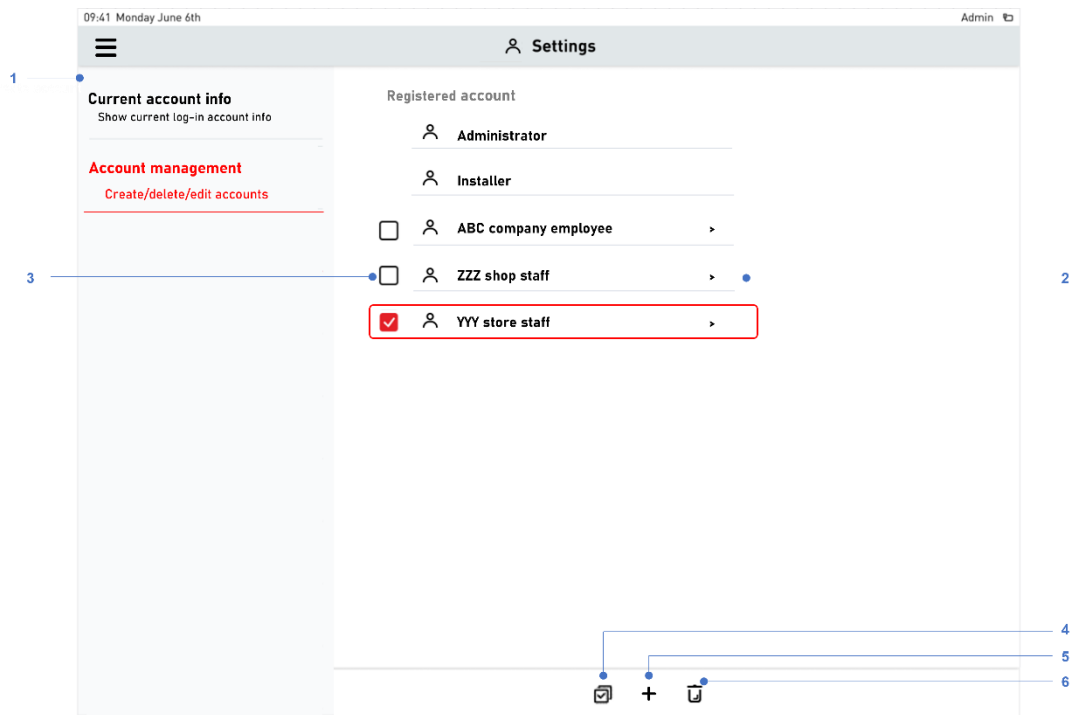
4. Change password button

The change password pop-up described below is displayed.

A screenshot of a 'Change your password' pop-up window. The title bar is red with the text 'Change your password' in white. The form has three input fields: 'User ID *' with the value 'Administrator', 'New password' with masked characters '*****', and 'New password confirmation' with masked characters '*****'. At the bottom right, there are two buttons: 'CANCEL' and 'CHANGE'.

You can change the password for the current log-in account using this button. The following rules apply to passwords.

- Only 1 byte character is available
- Must be 8 characters or more
- One or more capital letters must be included.
- One or more lowercase letters must be included.
- One or more numeric characters must be included.
- One or more the following symbol characters must be included.
! # % * , - . / ; < = > ? @ ^ _ |
- Previous passwords (last two) are not allowed.



1. Account setting menu bar

This menu bar has the following two items.

- Current account info

You can see current information on the current log-in account described in 2 to 4 below.

- Account management

This button is displayed when the current log-in user is the administrator or installer. When this button is touched, the screen described in page 133 will be displayed.

2. Account list in the system

All accounts are listed in this part. You can touch each account and then the screen goes to the “apply area” screen.

3. Tick box for each account

You can choose for the general user to delete information.

4. Select all button

You can choose “all users” by touching this button.

5. Create account button

The Create account pop-up screen will be displayed.

6. Delete button

This button is activated only when one or more accounts are selected. You can delete an account by touching this button.

“Apply area” screen

09:41 Monday June 6th Standard user

 **Apply area to user account** ×

User ID
ABC company employee

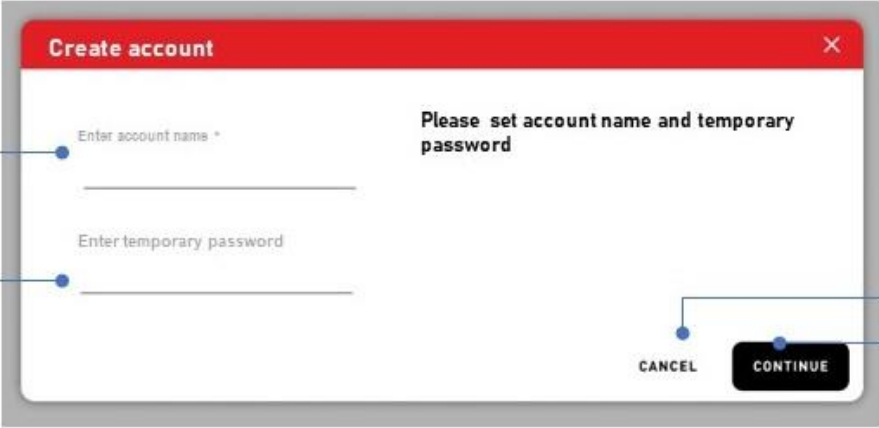
☐	Area name	Area type	Unit type
☐	Hallway	Group	Air conditioner
☐	Floor 1	Floor	Air conditioner
☐	Floor 2	Floor	Air conditioner
☐	Boiler	Group	Water heater

↺ ✓

Each account has area access rights set by this screen.

If you touch the tick box located in each area in this screen and touch the “apply” button, access rights to the ticked area are given to the target account.

Create account pop-up

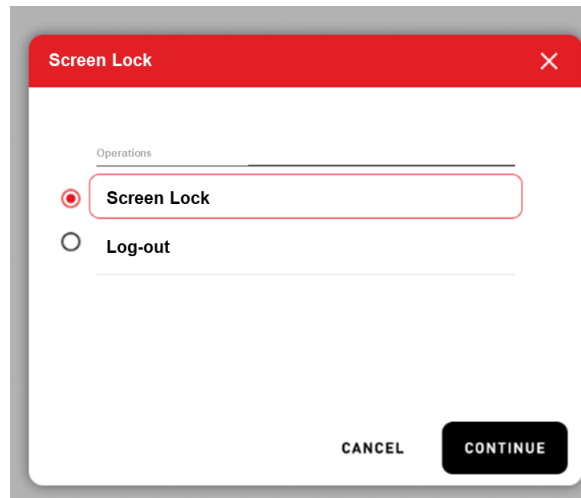


The image shows a 'Create account' pop-up window. It has a red header with the title 'Create account' and a close button. The main content area contains two input fields: 'Enter account name *' and 'Enter temporary password'. To the right of these fields is the instruction 'Please set account name and temporary password'. At the bottom right, there are two buttons: 'CANCEL' and 'CONTINUE'. Numbered callouts point to specific elements: 1 points to the account name input field, 2 points to the temporary password input field, 3 points to the 'CANCEL' button, 4 points to the 'CONTINUE' button, and 5 points to the 'CONTINUE' button.

1. New account name
2. Temporary password for new account
3. Cancel button
4. Continue button

Screen lock

If the screen lock button appears in the menu bar on the HOME screen, the following pop-up screen is displayed and the user can use the following information.



a) Screen lock

The latest log-in user account stays logged in and the screen is locked. Once the password for the log-in user is entered on the screen, the Home screen is displayed.

b) Note: The web interface will be displayed the screen just before the screen lock. Log-out

A logged in user is logged out. All users will be able to log in by inputting their user ID and password in the log-in screen. Please refer to the [“Log-in”](#) screen for more details.

Automatic Logout Function

If there is no operation on either the main screen or the web screen for 15 minutes, you will be automatically logged out. You will need to log in again the next time you perform an operation.

Power off

Once this button is touched on the SL5 main unit screen, SL5 enters a state that enables power to be turned off safely.

Failure history

If the user touches the failure history button in the menu bar on the HOME screen, the following screen is displayed.

All failure records and maintenance records are listed in this screen.

The maximum number of records is 300. If it is over 300, the oldest record is deleted automatically.

Each record can be deleted using the delete button in the bottom bar. The target record for deletion can be chosen by the tick box located on the left-hand side of each record.

The screenshot shows a mobile application interface for 'Failure history'. At the top, there's a status bar with '09:41 Monday June 6th' and an 'Admin' profile icon. Below is a header bar with a menu icon, a back arrow, and the title 'Failure history' with a warning triangle icon. The main area contains a table with 7 columns: Date, Time, Error code, State, Unit name, and Unit ID. Each row starts with a tick box. A blue line with the number '1' points to the first tick box. At the bottom, there's a bar with two icons: a checkmark in a box (labeled '2') and a trash can (labeled '3').

☐	Date	Time	Error code	State	Unit name	Unit ID
☐	21 April 2025	12:45	E01	Recover	Floor 1 entrance	0001
☐	20 March 2025	05:45	E01	Failure	Floor 1 entrance	0001
☐	1 February 2025	11:11	E03	Recover	Floor 1 entrance	0001
☐	5 December 2024	21:33	E03	Failure	Floor 1 entrance	0001
☐	4 December 2024	20:54	E08	Recover	Floor 2 hallway	0007
☐	4 November 2024	07:34	E08	Failure	Floor 2 hallway	0007
☐	10 October 2024	10:30	E30	Recover	Floor 2 hallway	0007
☐	10 July 2024	15:39	M01	Maintenance	Floor 2 hallway	0007

1. Tick box for each failure history

You can choose for the failure history to delete information.

2. Select all button

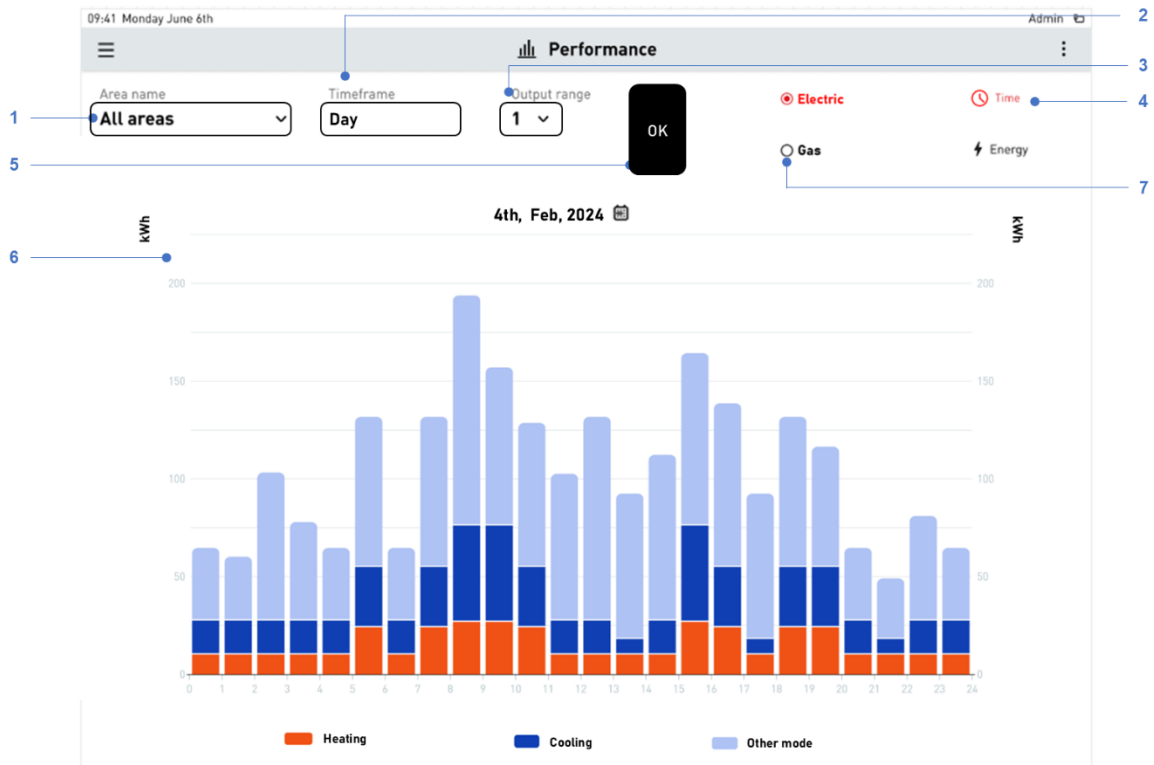
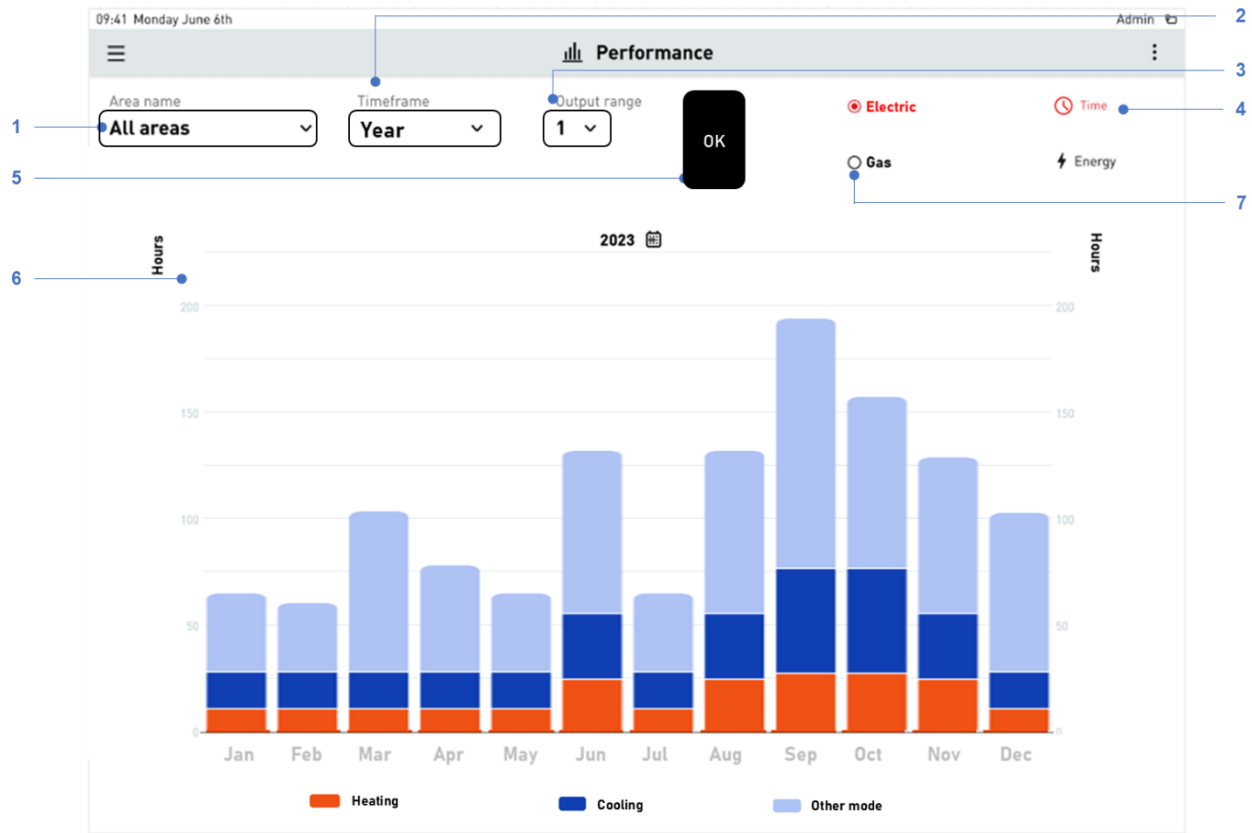
You can choose “all failure history” by touching this button.

3. Delete button

This button is activated only when one or more failure histories are selected. You can delete a failure history by touching this button.

Performance screen

The performance screen displays the bar graph that shows equipment runtime and energy consumption in this system.



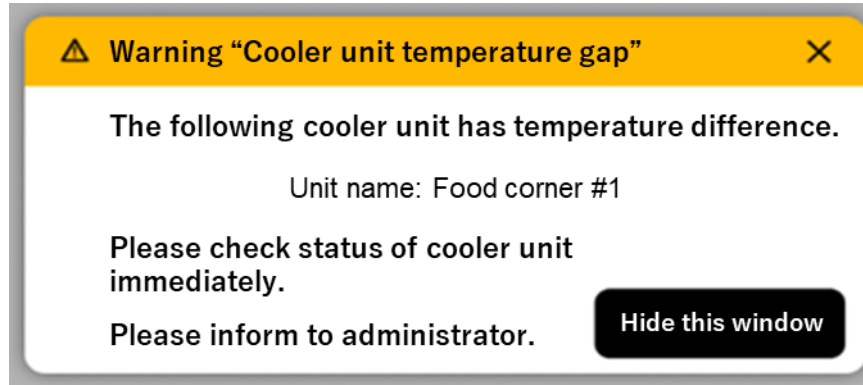


1. You can choose the target area where you would like to see energy consumption. If no area is selected, the graph will not be displayed.
2. You can choose whether the graph timeframe includes year, month or day.
3. The output range can be set from 1 to 3 if the timeframe is set to 'day' or 'month'. If the timeframe is set to 'year', the output range can be set from 1 to 2.
4. You can change the runtime graph or energy consumption graph by touching this button.
5. After selecting the target area, press the "OK" button to display the graph.
6. Graph area.
7. If the energy consumption graph is displayed, the energy source of equipment can be switched with this button and a graph displayed.
8. You can download energy consumption data file from this screen if you access to the web interface.

Warning screen

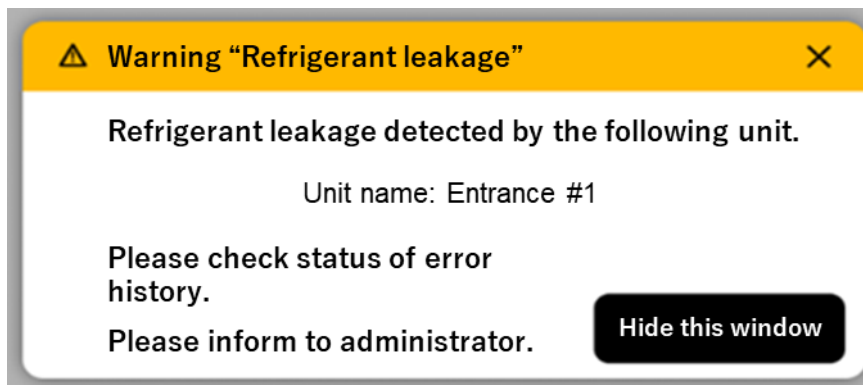
Freezer temperature gap

If you set [“Warning setting for CO2 fridge temperature gap”](#), the following warning screen is displayed if the SL5 detected temperature gap between target temperature and actual temperature is bigger than the pre-set value.



Refrigerant leakage detection

If equipment (indoor unit or outdoor unit) detects a refrigerant leakage, a detection signal will be sent to SL5. If SL5 receives that signal, the following warning screen is displayed.



Functions

Account

SL5 has three types of account. The following table explains these accounts

#	ID	Type	Explanation
1	Administrator	Administrator	This account is provided in the system from the beginning. This account can access all functionalities and has permission to create a general user account. Please see "User account" for more details on screen operation. The default password is "Administrator". When logging in for the first time, a password change is required for information security.
2	Installer	Installer	Same functionality as above. The default password is "Installer".
3	(Administrator defined)	General	The general user is created by an administrator account or installer account. When it is created, an ID and temporary password is specified from the "User account" screen. When the created account is logged in for the first time, a password change is required for information security.

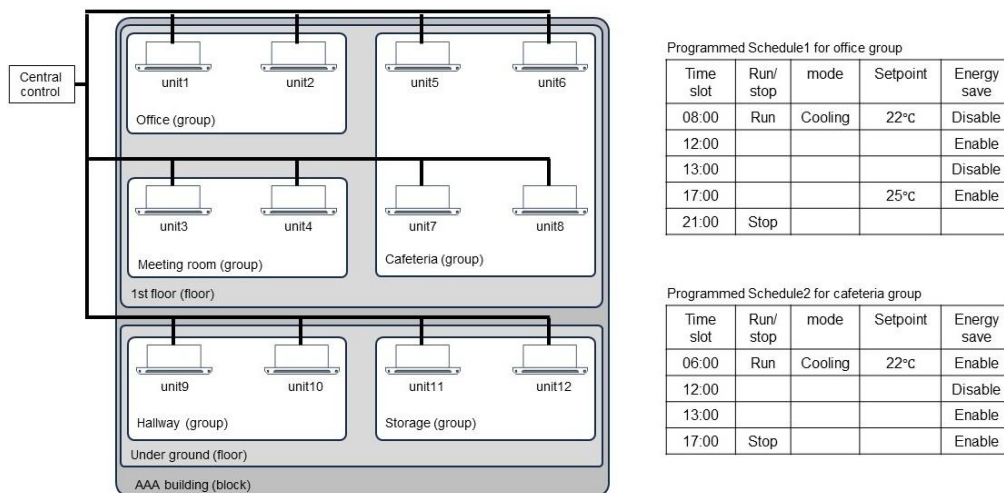
Programmed schedule

SC-SL5-E has programmed schedule functionality. The programmed schedule automatically operates according to the schedule that you programmed in the “create/edit schedule” screen. This section explains what a programmed schedule is.

Overview of the programmed schedule.

You can apply settings (run/stop, mode, set temperature, etc.) to a specified time slot as a programmed schedule. You can make several program schedules and, once you make the program schedule, you can apply the schedule to any areas.

The following is a typical use case. If a programmed schedule is created as shown in the table below and schedule 1 is applied to the office area and schedule 2 is applied to the cafeteria, the below sequence will be executed.



At 06:00:

ACs in the cafeteria start turning on for cafeteria staff. The mode will also be set as “Cooling” under 22°C and energy save will also be enabled according to programmed schedule 2.

At 08:00:

ACs in office mode are switched on for employees. The mode will be set as “Cooling” under 22°C and energy save will also be disabled according to schedule 1.

At 12:00:

Energy save in office mode is turned ON automatically and energy save for cafeteria mode is turned OFF.

At 13:00:

Energy save in office mode is turned OFF automatically and energy save for cafeteria mode is turned ON.

At 17:00:

ACs in cafeteria mode are stopped and the set temperature and energy save mode for AC in office mode are changed.

At 21:00:

ACs in office mode are stopped.

Since the underground area does not have a programmed schedule, all operations are done manually.

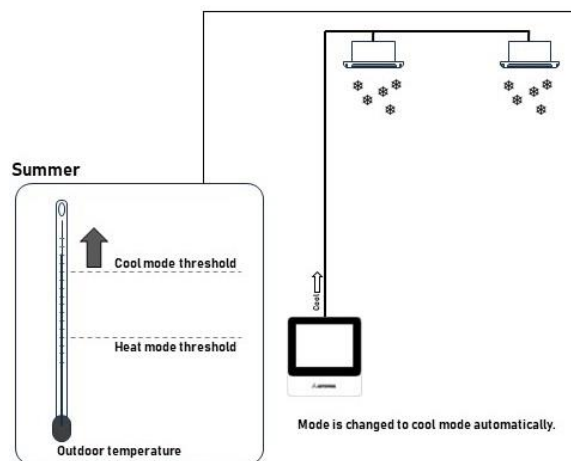
Seasonal AUTO change over

You can set the seasonal AUTO change over mode in the programmed schedule. The seasonal AUTO change

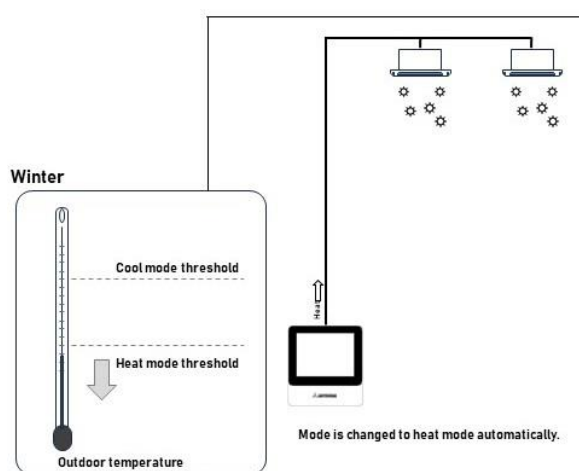
over functionality enables you to change from cooling to heating or heating to cooling automatically, according to the current outdoor temperature.

You can set two outdoor temperature thresholds in the setting screen. One of them is to start cooling and the other is to start heating.

Each indoor unit is controlled according to outdoor temperatures which are measured by connected the outdoor unit. Connected units can be specified in the [unit setting screen](#).



For example, in summer, if the outdoor temperature exceeds the cool start threshold, the programmed schedule changes to cool mode automatically.



For example, in summer, if the outdoor temperature goes below the cool heat threshold, the programmed schedule changes to cool mode automatically.

The following screen has a setting for this functionality.

[Seasonal AUTO change](#)

Operation from remote controller

The central control has the functionality to limit remote controller operations for air the conditioner and HMU. If the administrator would like to stop operation from the remote controller, they can apply settings from the SL5. Please set "Controls available from remote control" setting in the setting screen to "Enable" if you want to use this function. Then you can set the stop operation from the remote controller by touching the button on the "[Setting change screen](#)".

Additionally, the limit can be set to the following functionality individually for individual functions.

- Run/stop operation
- Set temperature operation
- Mode change.

If you would like to use this functionality, please set "Individual functional control available from remote control" in the setting screen as "Enable". Then button on "[Setting change screen](#)" will be changed and you can stop operation individually.

This limit can be controlled by the programmed schedule as well. Please set remote controller availability from the "[Create/edit program schedule](#)" screen.

The following screen has a setting for this functionality.

[Functionality screen](#)

Away mode

The “Away” mode functionality is to control the room temperature if the room is not occupied, to ensure that the room temperature does not get too hot or too cold. You can set the following parameters in the setting screen to use the “Away” mode. Then if you set the “Away” mode as enable on the “[Setting change screen](#)” the functionality is started.

Setting items	Range	Step	Default
Cool start temperature	26~35°C	1°C	35°C
Cool set temperature for “Away” mode	26~33°C	1°C	33°C
Cool fan speed	4th, 3rd, 2nd, 1st	-	1st
Heat start temperature	0~15°C	1°C	0°C
Heat set temperature for “Away” mode	10~18°C	1°C	10°C
Heat fan speed	4th, 3rd, 2nd, 1st	-	1st

These parameters are common for the entire Air conditioner and HMU unit in the system.

These parameters can be set on the following screen.

[Away mode](#)

Demand control

SL5 has Demand control functionality. If you use this functionality, it is possible to reduce power consumption during the summer, etc.

To use Demand control, it is necessary to input a demand signal. Please contact your contractor or retailer.

*This Demand control does not guarantee effectiveness.

SL5 has two types of Demand control.

One is temperature shift control and the other is peak cut control.

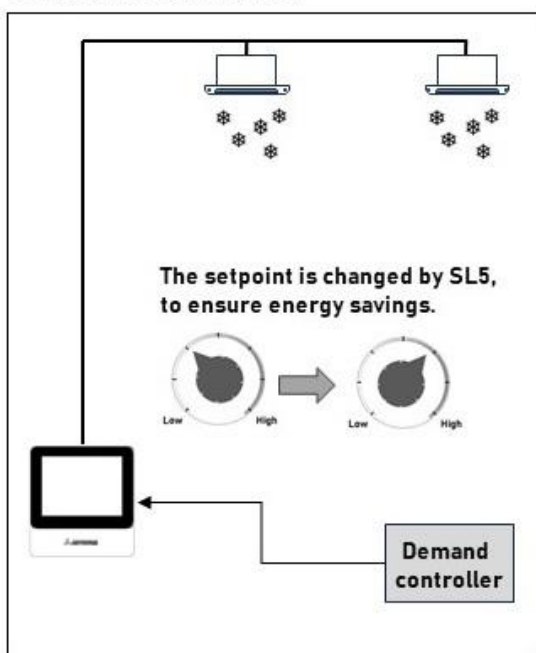
- Temperature shift control

If the demand controller output demand starts a signal, the set temperature is changed to energy save by SL5. The temperature shift value can be set in the setting screen.

- Peak cut control

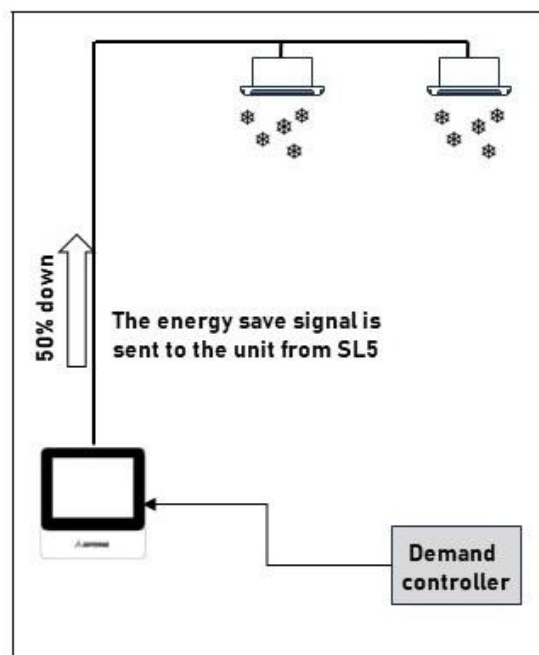
If demand controller output demand starts a signal, SL5 sends signal to the unit to limit work capacity. How limit work capacity can be set in the setting screen.

Temperature shift control



In case of demand controller output signal,

Peak cut control



In case of demand controller output signal,

If you set two DI terminal functionalities as Demand control, you can set the demand to level 3 as shown in the below table. Please set the demand level higher to increase the demand effect.

<Setting example 1>

Demand definition	Level 1	Level 2	Level 3
Temperature shift control or blower control	Temperature shift control (1°C)	Temperature shift control (2°C)	Fan mode
Peak cut control	Disable	Disable	Disable

Demand definition	Level 1	Level 2	Level 3
Unit specified as D1	Temperature shift control (1°C)	Temperature shift control (2°C)	Fan mode
Unit specified as D2	-	Temperature shift control (2°C)	Fan mode
Unit specified as D3	-	-	Fan mode
Unit which is not specified	-	-	-

<Setting example 1>

Demand definition	Level 1	Level 2	Level 3
Temperature shift control or blower control	None	None	None
Peak cut control	80%	60%	40%

Demand definition	Level 1	Level 2	Level 3
Unit specified as D1	Peak cut control (80%)	Peak cut control (60%)	Peak cut control (40%)
Unit specified as D2	-	Peak cut control (60%)	Peak cut control (40%)
Unit specified as D3	-	-	Peak cut control (40%)
Unit which is not specified	-	-	-

The following are demand control settings.

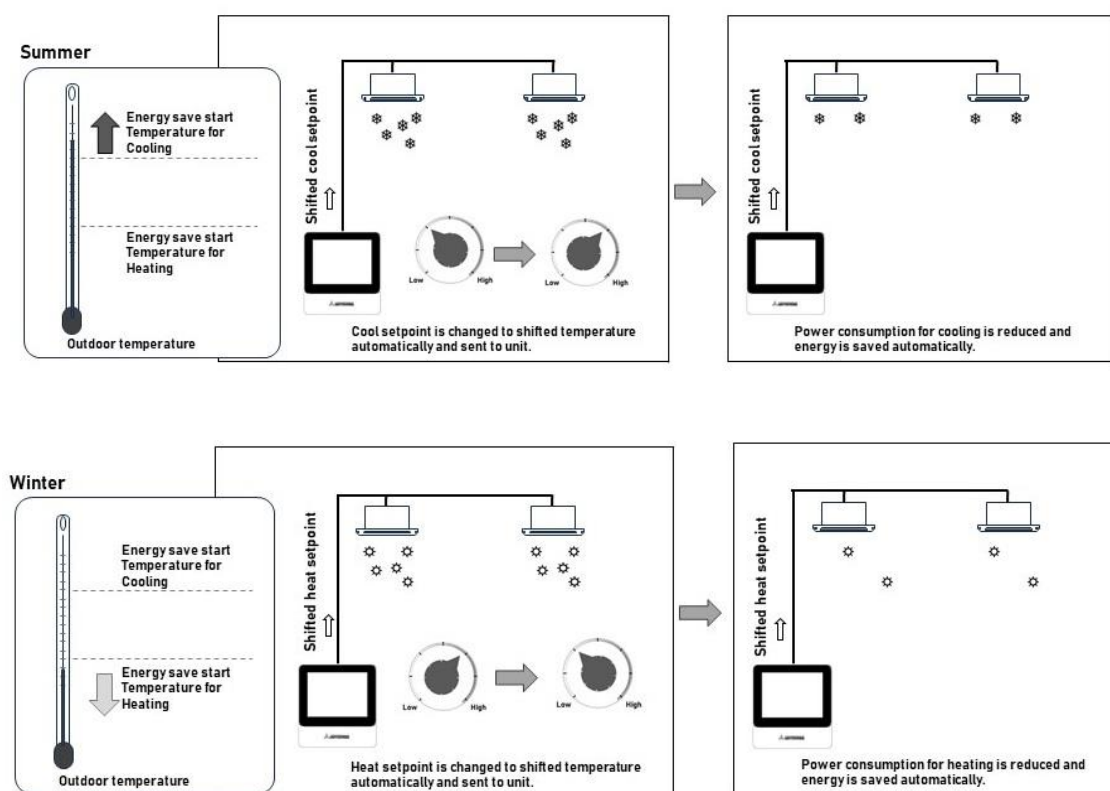
- [DI setting](#)
- [Unit card](#)
- [Demand](#)

Energy save

SL5 has an energy save control functionality that controls the set temperature so that it automatically changes according to the outdoor temperature. You can set the following parameters in the setting screen.

#	Setting items	Range	Step	Default
1	Energy save start outdoor temperature for cooling	26~35°C	1°C	30°C
2	Energy save end outdoor temperature for cooling	20~30°C and it should be -5°C or less than #1	1°C	2°C
3	Temperature shift for cooling energy save control	+1 to +3°C (+2, +4 or +5degF)	1°C	25°C
4	Energy save start outdoor temperature for heating	0~10°C	1°C	5°C
5	Energy save end outdoor temperature for heating	5~16°C and it should be +5°C or more than #4	1°C	2°C
6	Temperature shift for heating energy save save control	-1 to -3°C (-2, -4 or -5degF)	1°C	10°C

Note: Once energy save control is started, operations from the remote controller become unavailable should operations from the remote controller be available.



<related setting>

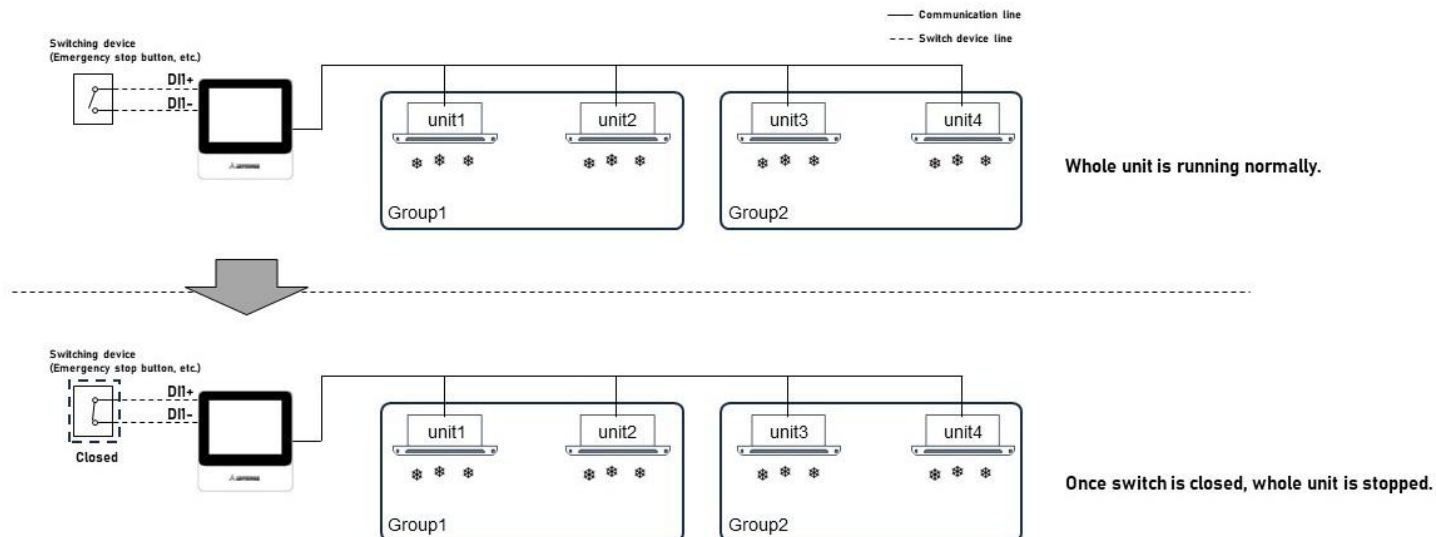
- [Energy save](#)

Emergency stop

SL5 has a digital input terminal (DI) and has the functionality to stop according to the DI1 state. The DI1 terminal should be connected to a switch to open/close the terminal. The logic (open/close) for an emergency stop can be set in the “[Functionality settings](#)” screen.

<Example of run/stop control by digital input terminal>

“Close = emergency stop” is set in the below case



<Related setting>

- [DI setting](#)

Run/stop by digital input terminal

SL5 has a digital input terminal (DI) and has the functionality to control the run/stop function according to the DI state. The DI terminal should be connected to the switch to open/close the terminal state and needs to be configured correctly. Please refer to "[Digital input terminal](#)" for more details on terminal settings. (The related screen is explained in "[Input terminal](#)" and "[Functionality settings](#)")

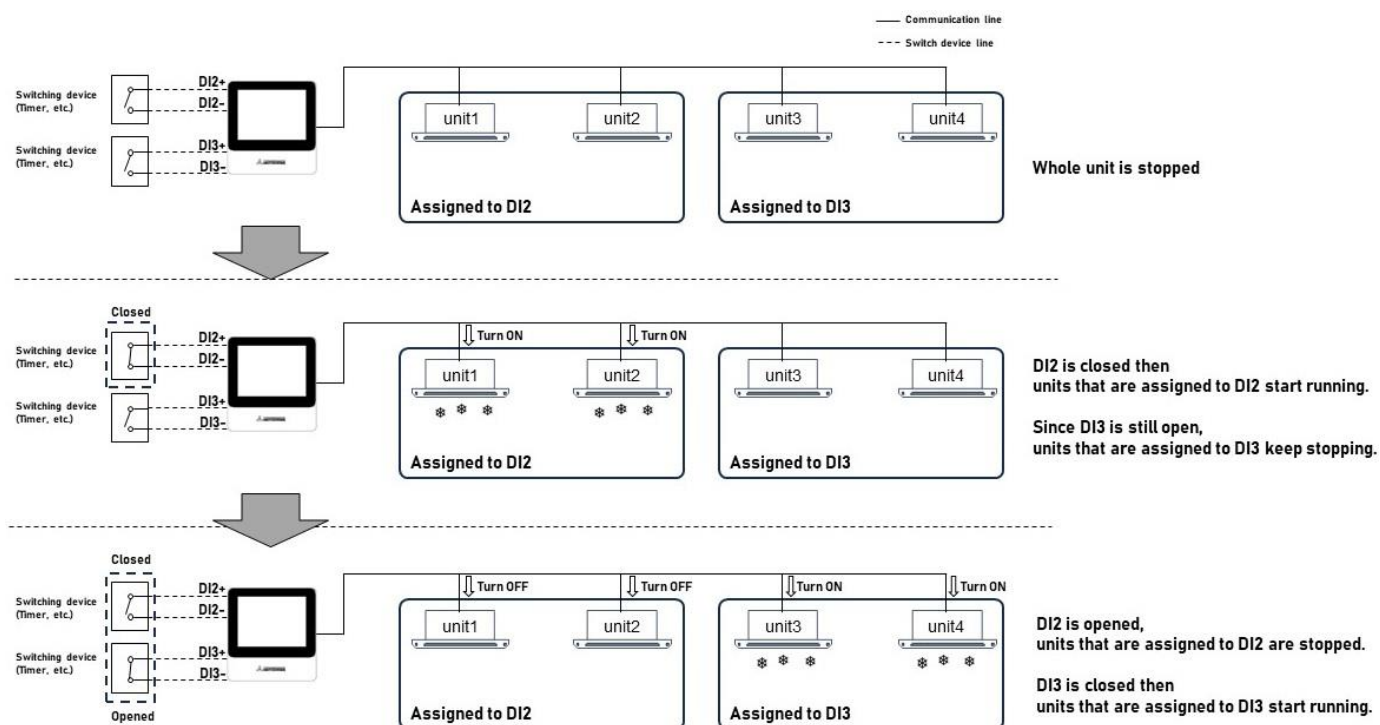
Once you can specify one or more DIs as "Run/stop by DI", you can use this functionality.

You can assign any units that turn on/off (run/stop) according to the DI state.

The logic (open/close) to start control can be changed in the "[Functionality settings](#)" screen.

<Example of run/stop control by digital input terminal>

"Close = running" is set in the below case



Note: Since the SL5 has only three DI ports, the functions that use the following DI ports have limited function assignments and may not be available simultaneously.

- Demand control
- Run/stop by DI
- Accounting time

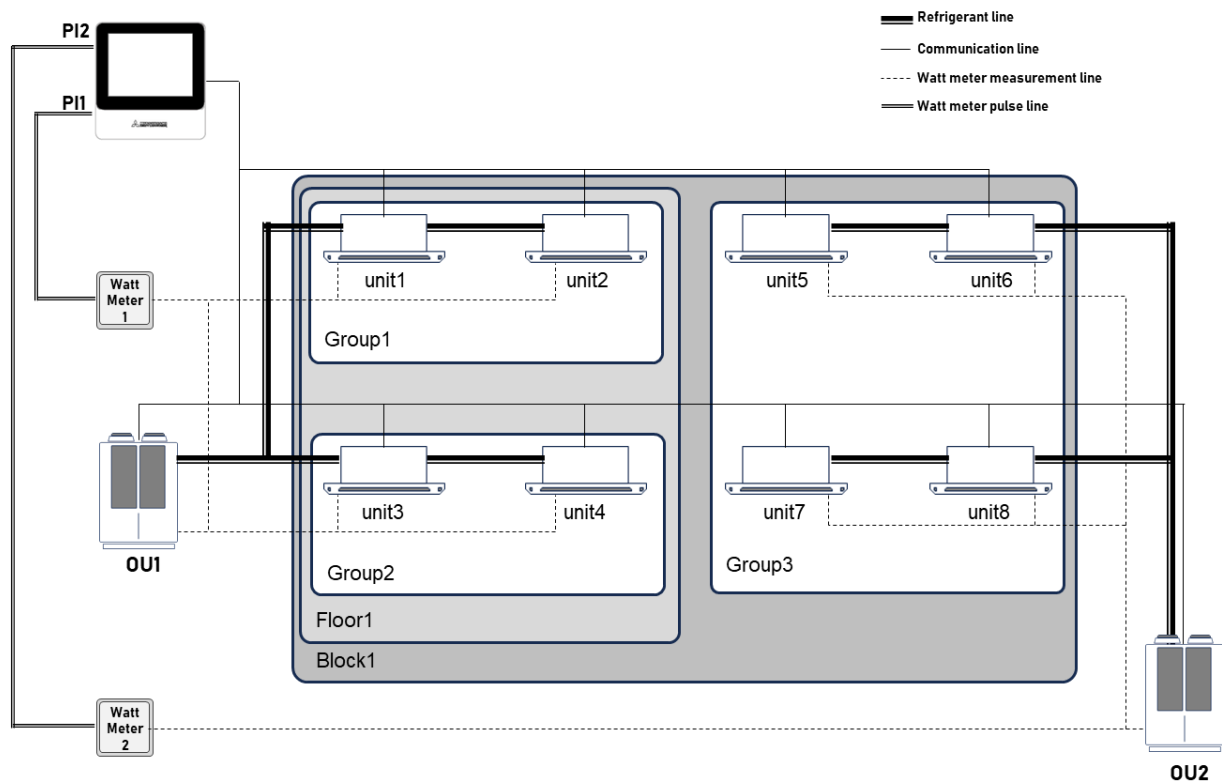
Input terminal

SL5 has eight pulse input terminals (PI terminals) and three digital input terminals (DI terminals). The PI terminal is used for accounting by connecting the pulse watt meter. The DI terminal is multipurpose and the administrator can be assigned appropriate functionalities from the setting screen.

Accounting function

The accounting function calculates electricity charges by allocating a unit to the PI port connected to the pulse watt meter and distributing the measured power consumption from that pulse power meter to the assigned unit. The accounting result is saved in an accounting file and you will be able to download using a PC connected to SL5.

<Example1 of watt meter connection>

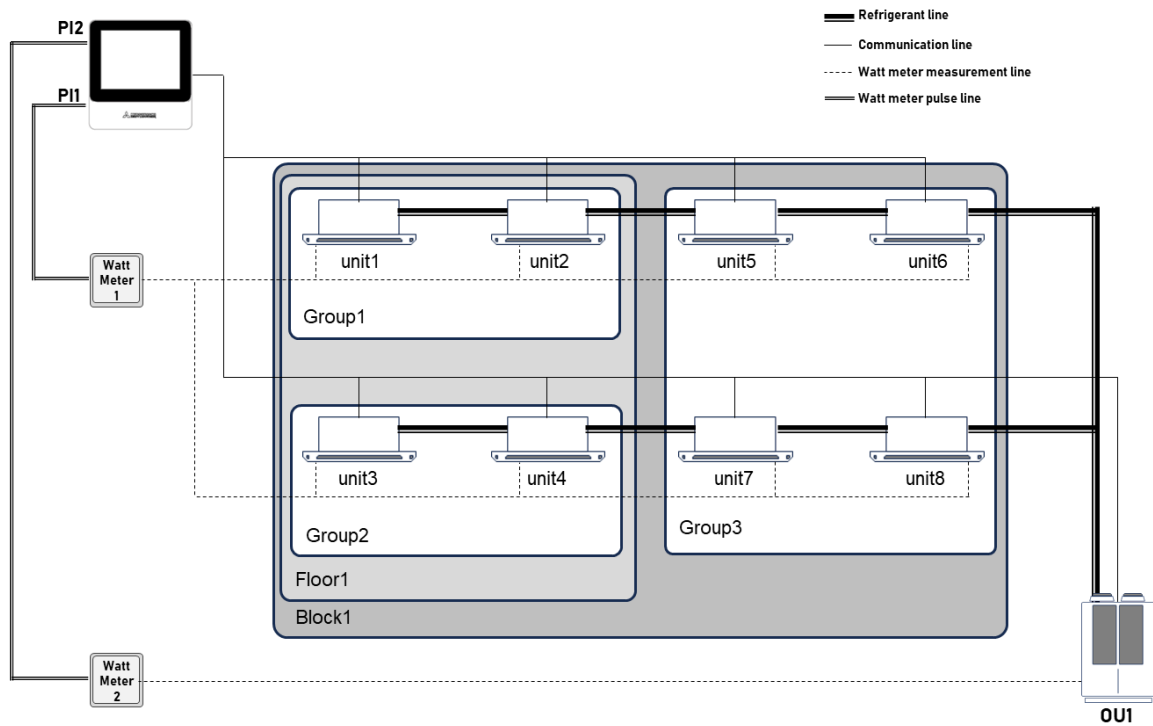


The above diagram shows the watt meter power consumption of unit1, unit2, unit3, unit4 and OU1 for one monitor. It also shows the watt meter power consumption of unit5, unit6, unit7, unit8 and OU2 for two monitors. In other words, all equipment in the same refrigerant line is connected to the same watt meter.

In this case, please register unit1 to unit4 to PI1 and register unit 5 to unit 8 to PI2 in the [PI setting](#) screen.

Once these settings are configured, SL5 calculates the energy consumption cost for each unit according to their runtime and pulse input value.

<Example2 of connection of watt meter>



The above diagram shows that watt meter 1 is monitoring the entire indoor unit (unit 1 to 8) and watt meter 2 is monitoring OU1. In other words, this applies even though indoor units and OU1 are in the same refrigerant line but the indoor unit is connected to watt meter 1 and OU1 is connected to watt meter 2. In this case, unit 1 to unit 8 should be assigned to both PI1 and PI2.

<Related setting for accounting function>

The following settings need to be configured correctly before you start using the accounting function.

- [PI setting](#)
- [Accounting time setting](#)
- [DI setting \(in case that you want to use the external timer to define the accounting time\)](#)
- [Accounting type setting \(unit settings\)](#)

Digital input terminal

SL5 has three digital input terminals. Their role can be specified from the screen and you can choose the role assignment from the following six patterns.

Pattern#	Terminal DI1	Terminal DI2	Terminal DI3
1	Emergency stop	Accounting time 1	Accounting time 2
2	Emergency stop	Demand	Accounting
3	Emergency stop	Demand 1	Demand 2
4	Emergency stop	Accounting time	Run/stop control by DI
5	Emergency stop	Demand	Run/stop control by DI
6	Emergency stop	Run/stop control1 by DI	Run/stop control2 by DI

Details of each functionality are described in the below link.

- [Emergency stop](#)
- [Accounting](#)
- [Demand](#)
- [Run/stop control by digital input terminal](#)

Output terminal

SL5 has four digital output terminals and each terminal can have the following functionalities.

Functionality name	Explanation
Run/stop signal	Output is changed according to status of equipment.
Refrigerant leakage detection	If SL5 receives the refrigerant leakage signal from equipment, the output state has changed.
Failure signal	If SL5 receives the refrigerant failure signal from equipment, the output state has changed.

WEB functionality (for installer or administrator)

Connection to PC

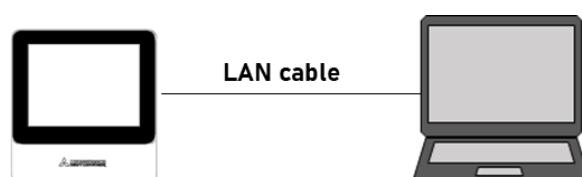
SL5 has the functionality to display its screen content on a PC's web browser by connecting to the PC. Only professional installers are permitted to connect LAN cables to PCs and SL5. Please contact your contractor or dealer if you would like to connect a LAN cable. The connector location for the LAN cable is described in the installation manual. The following description explains the setting to connect to a PC and SL5.

- When connecting to the building intranet:

If you want to connect the SL5 to the building intranet, consult the network (LAN) administrator of the building. You must set a static IP address and subnet mask.

(For information sharing security, connecting to an ordinary line is not recommended.) When connecting the SL5 to the building intranet via the Internet, use a VPN (Virtual Private Network) to secure a dedicated line.

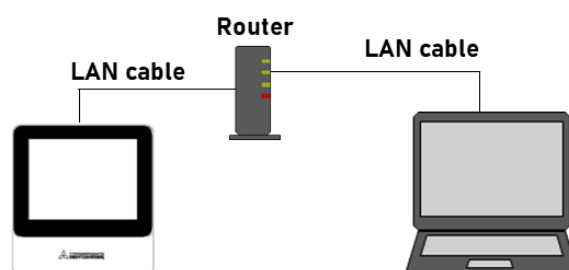
If a fixed IP address is used (connecting a LAN cable directly)



Please set the IP address in the SL5 LAN SETTING screen. You need to choose the “Fixed” setting and set the IP address to set as it is same part of the PC network setting. Please see [“Initial setting to PC”](#) if you want to know the IP address setting for PC for the default setting.

Please input the IP address set out above into the WEB browser on your PC. You will be able to see the log-in screen on your browser.

If a dynamic IP address (DHCP) is used (use router)



Please set the IP address in the SL5 LAN SETTING screen. You need to choose the “DHCP” setting. Then restart SL5 before the router gives a dynamic IP address to SL5 and the PC. The IP address given by the router can check the log-in screen.

Please input the IP address displayed on the log-in screen into the web browser on your PC. You will be able to

see the log-in screen on your browser.

Supported browser	
Browser name	Version
Google Chrome	141.0.7390.108
Microsoft Edge	141.0.3537.71
Safari	26.0.1(19622.1.22.118.4)

Note

- Cable:
Directly connect this product to your PC using a 10BASE-T or 100BASE-TX ethernet cable.
If you are using a hub or router, do not connect other devices to them.
- Connecting to the internet or via intranet in the building:
If you want to connect this product to the internet or via intranet (office LAN) within the building, contact your dealer. This is a charged service.

Initial PC settings

Communication settings (TCP/IP settings) must be configured for the monitoring and operation PC. Refer to the PC user manual for details.

To use this product with the factory default IP address, configure the following settings in the PC.

Setting item	Configuration
IP address	Between 192.168.0.1 and 192.168.0.254 (excluding 192.168.0.120 as the address is used by the SL4 central control)
Subnet mask	255.255.255.0
Default gateway	Not applicable
Primary DNS server	Not applicable
Secondary DNS server	Not applicable

Note

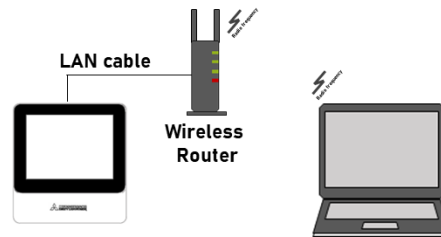
- Settings for the internet or intranet in the building:
Contact your dealer. This is a charged service.
- Browser settings:
Using default settings is recommended. For information about connecting to the internet or intranet within the building, contact your dealer.

Download digital certificate file

Since this device uses HTTPS(SSL) communication to encrypt communication data, Please access to 192.168.0.120/public/sl5.crt to get digital certificate file.

(Note: above IP is showing in case of default IP setting. Please change the part of "192.168.0.120", to changed IP if you change IP of SL5.

Wireless router



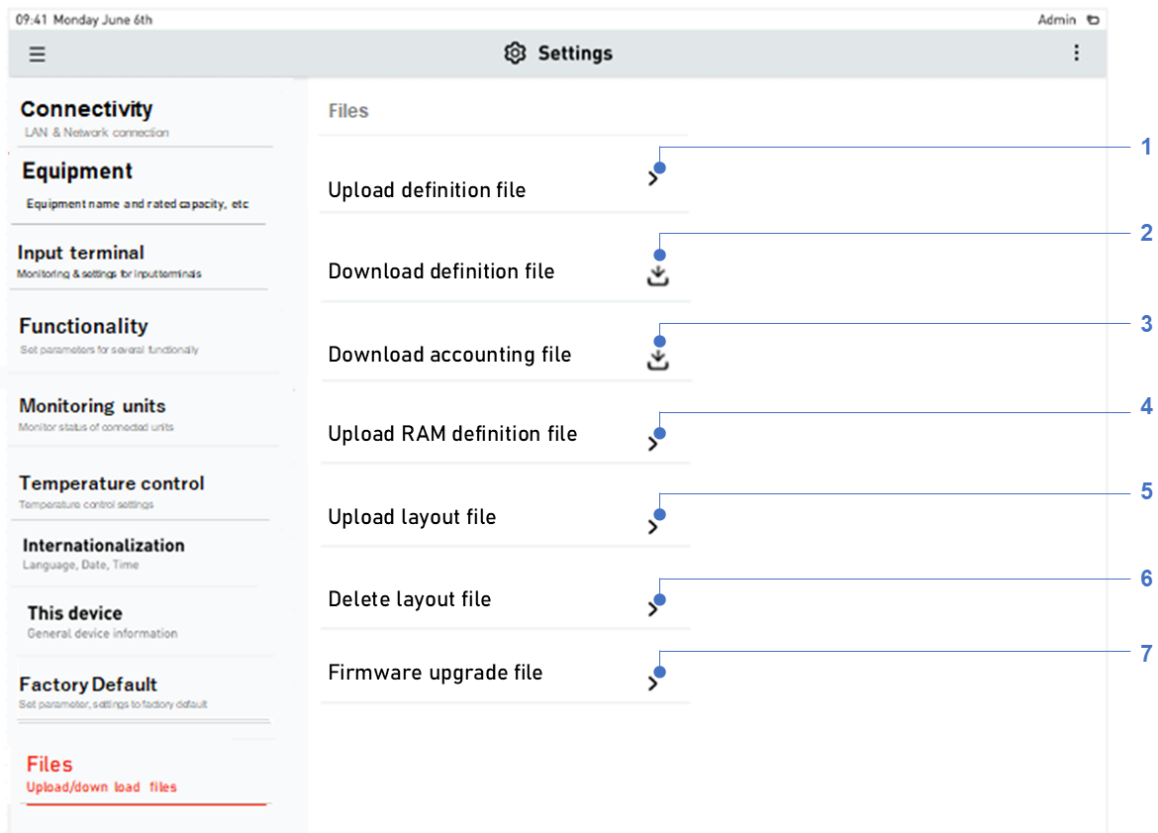
You can use a wireless router if it has a wired port and connect SL5 using a LAN cable to the router. Please contact your network administrator if you need to know the configuration of the router and PC setting.

WEB functionality overview

All functions described in the previous page can be used from the WEB browser. Additionally, functions described below are also supported by the WEB browser function.

This functionality can only be executed from a PC.

When logging in to SL5 from a PC, the following menu is displayed and “Files” can be used from the PC. “Files” have the capability to upload files related to SL5 settings or download files that have gathered/calculated data using SL5.



#	File name	Explanation
1	Upload definition file	A definition file has all settings that are configured by the installer/administrator. You can upload a definition file by clicking this button. Once an upload is complete, the SL5 setting is changed according to the uploaded definition file.
2	Download definition file	You can download a definition file that has current settings on your PC.
3	Download accounting file	You can download a file that shows accounting information. The file format is described in the appendix “Accounting file format” .
4	Upload RAM definition file	This file is for the CO2 fridge network setting. If the CO2 fridge supports new RT communication and if SL5 does not have new communication capabilities, if a user uploads a new RAM definition file for that new RT communication from a PC, that

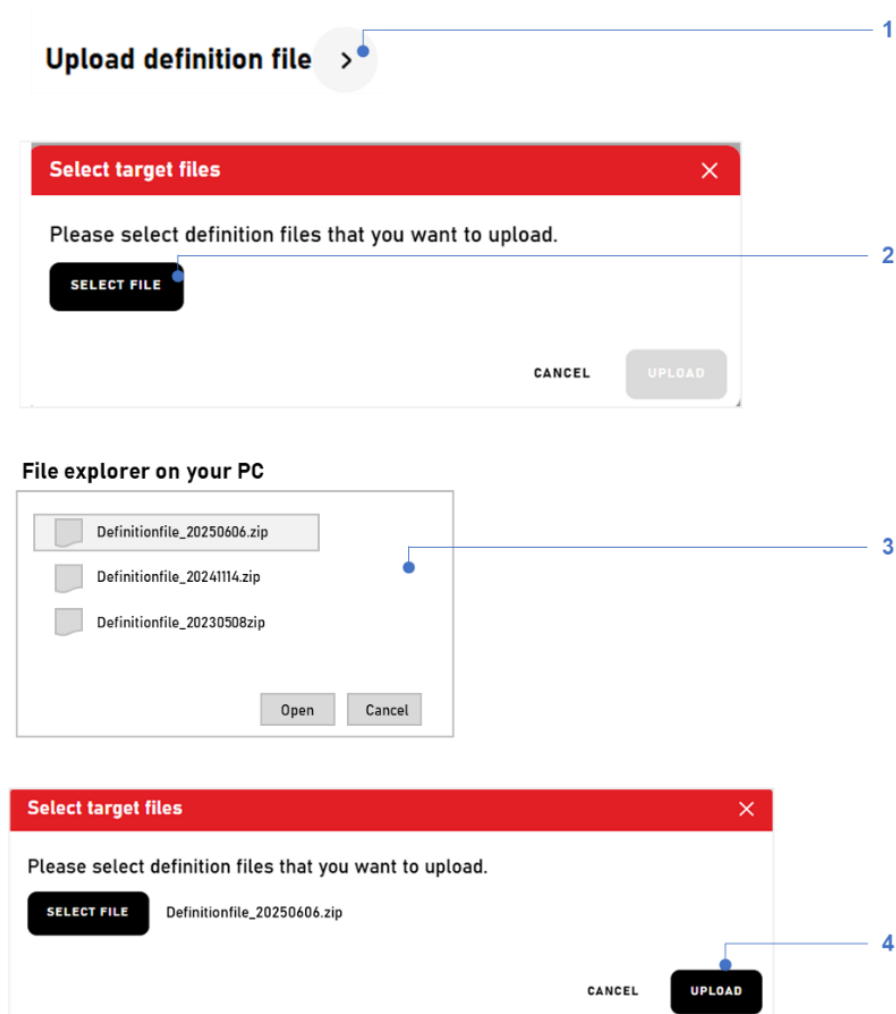
		user can set a new RAM definition file from the network setting screen.
5	Upload layout file	This file is used for the building management setting. The user can upload this file before settings are applied for the layout map. The file format should be jpg, png or bmp. If storage is full, a warning pop-up will be displayed and the upload will be stopped. The user can delete files from "Delete layout file".
6	Delete layout file	You can delete the layout file that was uploaded into SL5 by clicking this button.
7	Firmware upgrade file	Please ask installer when you use this functionality.

File operation

Upload file

Applicable for:

- Upload definition file
- Upload RAM definition file
- Upload layout file



1. Please click the target file that you want to upload (the above example shows a definition file being uploaded)
2. Please click select the file button.

3. File explorer will be opened on your PC; select the file that you want to upload.
4. The upload button is activated; please click it to upload the file.

Once the upload is complete, the following balloon is displayed.

✔ Operation is done correctly ✕

If the following balloon is displayed, the file upload has failed. Please check your network and try again.

❗ Operation is incomplete. Please try it again. ✕

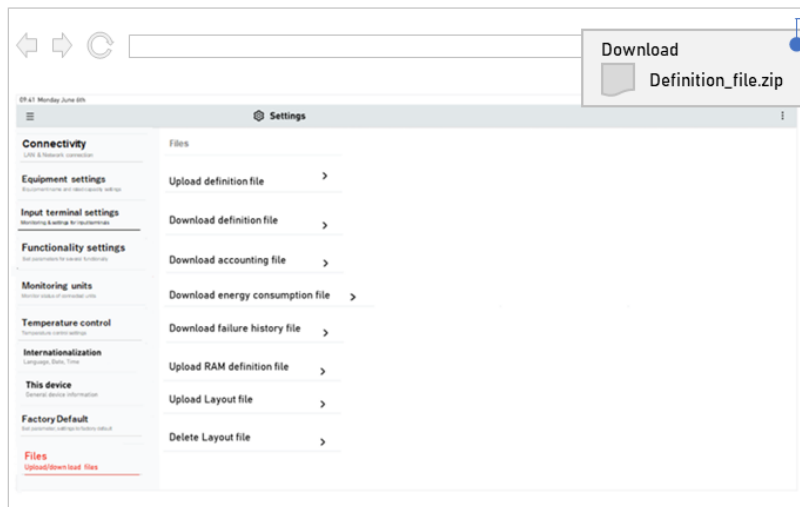
Download file

Applicable for:

- Download definition file
- Energy consumption file
- Failure history file

Download definition file >

Web browser access to SL5 on your PC



1. Please click the target file that you want to download (the above example shows a definition file being downloaded)
2. The web browser will start downloading automatically and you can use the file browser.

Once the download is complete, the following balloon is displayed.

✔ Operation is done correctly ✕

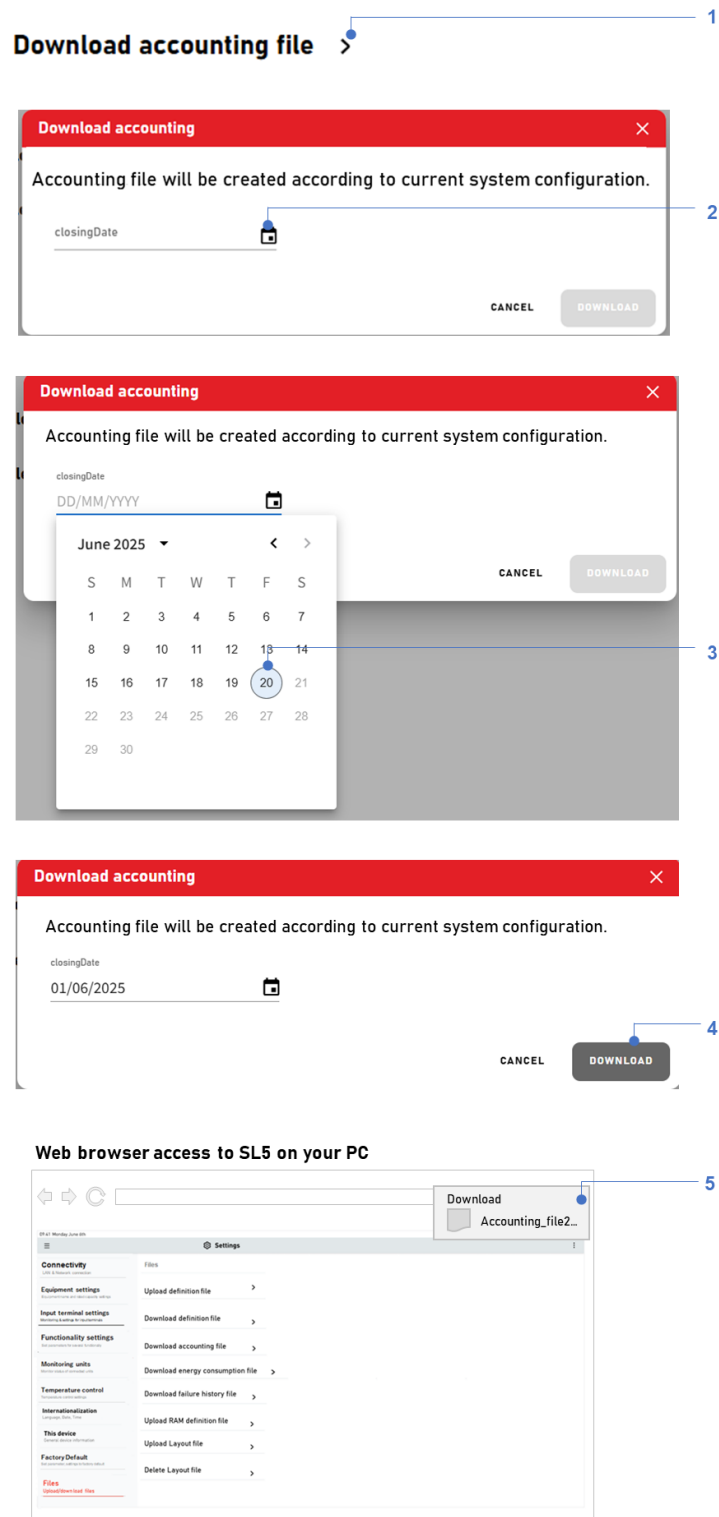
If the following balloon is displayed, the download has failed. Please check your network and try again.



Operation is incomplete. Please try it again.



Download accounting file



1. Click the “Download accounting file” button.
2. Please touch calendar button
3. Please select the closing date on which you want to access the accounting file. (Accounting file generates data for one month before the specified closing date.)
4. Please click the download button
5. The web browser starts downloading the accounting file automatically.

Setup procedure (for installer or administrator)

This section shows a typical setup procedure for use of the SC-SL5-E.

Wiring

Only qualified professionals are allowed to perform wiring operations. Please see the installation manual for SL5 and the units that you are installing.

Network settings

To start using this system, network settings must be configured.

LAN settings

If you connect the PC to use WEB functionality, please set up the LAN setting according to the [WEB functionality](#) section.

Network settings

You need to configure the RS485 communication setting first before using the system.

- 1 Please open the [menu bar](#) on the home screen.
- 2 Go to the [setting](#) screen.
- 3 Touch the [connectivity](#) button and “[network](#)” setting tab.
- 4 Please confirm what equipment you are using.
 - 4.1 If you use a SuperLink supported device (air conditioner, HMU, Q-ton), set it up according to the “[SuperLink setting](#)”.
 - 4.2 If you use the Modubs supported chiller, set it up according to the “[chiller](#)” setting.
 - 4.3 If you use the CO2 fridge, set it up according to the “[CO2 fridge](#)” setting.
- 5 After setup for the network setting is complete, touch the apply button (tick mark on the bottom bar). Then, a pop-up screen mentioning that a restart is required to apply the setting will be displayed. Touch the “proceed” button to restart the system.

Area settings

You need to configure the area (group/floor/block) setting to show information on them on home screen.

1. Please open the [menu bar](#) on the home screen.
2. Go to the [building management](#) screen.
3. Create the group/floor/block according to the [area addition](#) operation and [edit area](#) operation.
4. If you use the schedule functionality, set up the [programmed schedule](#) and [apply the schedule](#) to the target area.
5. You can make a general [user account](#) and can [assign an account](#) to each area.

Home screen operation

Once you create an area, the home screen starts showing the floor/group/block status according to your configuration.

Please operate the screen according to the [home screen](#) operation.

Troubleshooting (for maintenance)

Group/floor or block card has a red exclamation mark	A malfunction is affecting the air conditioning unit. Please contact the retailer where you purchased it regarding the "colour of the group status display", "appearance of the malfunction", "model name of the abnormal air conditioning unit" and "error no. E 00".
Group/floor or block card has yellow exclamation mark	Regular maintenance is required. Please contact the retailer where you purchased it regarding the "colour of the maintenance display" and "model name of the air conditioning unit".
Group/floor or block card has filter mark	Please clean the air filter. (For cleaning instructions, refer to the manual included with the air conditioning unit.) After cleaning, please press the filter reset button.
If the touch operation does not work	There may be a possible malfunction due to electrostatic discharge or similar issues. Please press the reset switch on the left-hand side of the product to restart it. If the startup screen does not appear, please turn off the power and then turn it back on (power reset). If it still does not operate normally after these steps, it may be considered a unit malfunction, so please contact the retailer regarding the "appearance of the malfunction".
If the screen is not turned on or is darker than usual	To protect the screen, the backlight will turn off after a certain period of inactivity. Please touch the screen (it may take some time to display again). there may be a possible malfunction due to electrostatic discharge or similar issues. Please press the reset switch at the bottom of the front cover to restart it. If the startup screen does not appear, please turn off the power and then turn it back on (power reset). If it still does not operate normally after these steps, it may be considered a unit malfunction, so please contact the retailer regarding the "appearance of the malfunction".
Equipment works unintentionally	Please check the schedule settings. The schedule settings are configured on a group basis.
If unit body is hot	The unit may become hot on occasion, but this is not abnormal. It is more likely to get hot if the room is warm. Please use it in an environment where the surrounding temperature is below 40°C.
Accounting result does not match	Even if the air conditioning unit is not used for a day, such as on holidays, power will still be consumed in standby mode. Since the cost allocation is based on the operating air conditioning units, the standby power used on holidays cannot be allocated, resulting in a discrepancy between the actual power consumption and the calculated total. If the allocation were made to non-operating air conditioning units, the total would match, but this could lead to issues if it is allocated to vacant tenants or units that are not operating at all, which is why this practice is not implemented. If there is a discrepancy from the measured values, please use the calculated results as a reference and reallocate using spreadsheet software.
Configured equipment information is not displayed	There may be an issue with the communication line or the settings of the centre console. Please contact the retailer where you purchased it.
Will not start up even if reset switch pressed	A malfunction may be affecting the unit or the power supply system. Please contact the retailer where you purchased it.
Cannot log in	If you forget the administrator ID or password, please contact the maintenance user. If the issue cannot be resolved, please contact the retailer where you purchased it.
Availability remote controller individual setting is not displayed	Individual permission and prohibition settings for SL5 will overwrite the remote control settings.

Appendix

Accounting file format

The following is an accounting file format. This file shows the runtime, energy consumption and price for each timeframe that you set in the [Accounting time](#) setting for the entire unit. A list shows the group name, floor name and block name for each unit by listing every unit. You can calculate prices for each group, each floor or each block by using spreadsheet software on your PC.

Unit ID	Unit name	Group name	Floor name	Block name	Run time for Time1	Run time for Time2	Run time for Time3	Run time for for other time	Energy consumption for electric bill Time1	Energy consumption for electric bill Time2	Energy consumption for electric bill Time3
1-001	Indoor unit1	Entrance	1st floor	AAA building	866	0	0	702	722	0	0
1-002	Indoor unit2	Entrance	1st floor	AAA building	968	0	0	968	740	0	0
1-003	Indoor unit3	Entrance	1st floor	AAA building	947	0	0	978	938	0	0
1-004	Indoor unit4	Entrance	1st floor	AAA building	872	0	0	851	815	0	0
1-005	Indoor unit5	Meeting room	2nd floor	AAA building	830	0	0	853	744	0	0
1-006	Indoor unit6	Meeting room	2nd floor	AAA building	734	0	0	871	964	0	0
1-007	Indoor unit7	Meeting room	2nd floor	AAA building	835	0	0	710	811	0	0
1-008	Indoor unit8	Meeting room	2nd floor	AAA building	966	0	0	729	766	0	0
1-009	Indoor unit9	Office	2nd floor	AAA building	952	0	0	962	731	0	0
1-010	Indoor unit10	Office	2nd floor	AAA building	997	0	0	921	867	0	0
1-011	Indoor unit11	Office	2nd floor	AAA building	818	0	0	763	743	0	0
1-012	Indoor unit12	Office	2nd floor	AAA building	976	0	0	774	899	0	0

Energy consumption for electric bill Time3	Energy consumption for electric bill other time	Energy consumption for gas bill Time1	Energy consumption for gas bill Time2	Energy consumption for gas bill Time3	Energy consumption for gas bill other time	Price for Time1	Price for Time2	Price for Time3	Price for other time	Total price	User name
0	0	712	0	0	0	294	0	0	384	678	Smith
0	0	858	0	0	0	223	0	0	335	558	Smith
0	0	746	0	0	0	497	0	0	296	793	Smith
0	0	978	0	0	0	253	0	0	482	735	Smith
0	0	790	0	0	0	420	0	0	350	770	Adam
0	0	893	0	0	0	455	0	0	240	695	Adam
0	0	749	0	0	0	338	0	0	421	759	Adam
0	0	727	0	0	0	422	0	0	464	886	Adam
0	0	918	0	0	0	256	0	0	355	611	Adam
0	0	734	0	0	0	279	0	0	381	660	Adam
0	0	901	0	0	0	476	0	0	312	788	Adam
0	0	710	0	0	0	370	0	0	359	729	Adam

After-sales service

- **Have the following information available when requesting repairs**

- Model name
- Installation date
- Problem status, with as much detail as possible
- Address, name, telephone number

- **Questions**

For any after-sales service, consult your dealer.

- **Relocation**

Since expert techniques are required, always contact your dealer.

In such cases, there will be a fee for relocation.



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