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HITACHI

OPERATION MANUAL

Advanced Color Wired Remote Controller

MODELS

PC-ARFG1-A
PC-ARFG1-M
PC-ARFG1-U



Cooling & Heating

air

A11766820A

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1. Safety Summary

Signal Words

WARNING	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
CAUTION	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates information considered important, but not hazard-related (for example, messages relating to property damage).

For the operation of the product, please read and follow this safety summary strictly. Otherwise, improper operation may cause injury or death.

General Precautions

WARNING	To reduce the risk of serious injury or death, read these instructions thoroughly and follow all warnings or cautions included in all manuals that accompanied the product and are attached to the unit. Refer back to these safety instructions as needed.
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- This system, including this controller, should be installed by personnel certified by Johnson Controls-Hitachi Air Conditioning. Personnel must be qualified according to local, state, and national building and safety codes and regulations. Incorrect installation could cause leaks, electric shock, fire, or an explosion. In areas where Seismic Performance requirements are specified, the appropriate measures should be taken during installation to guard against possible damage or injury that might occur in an earthquake. If the unit is not installed appropriately correctly, injuries may occur because of a falling unit.
- Use appropriate Personal Protective Equipment (PPE), such as gloves, protective goggles, and electrical protection equipment and tools suited for electrical operation purposes.
- When transporting, be careful when picking up, moving and mounting these units. Although the controller may be packed using plastic straps, do not use them for transporting from one location to another. Do not stand on or put any material on the controller.
- When installing the controller cabling to the units, do not touch or adjust any safety devices inside the indoor or outdoor units. All safety features, disengagement, and interlocks must be in place and functioning correctly before the equipment is put into operation. If these devices are improperly adjusted or tampered with in any way, a serious accident can occur. Never bypass, wire around, or jump-out any safety device or switch.
- Use only Johnson Controls-Hitachi Air Conditioning recommended, provided as standardized, or replacement parts.
- Johnson Controls-Hitachi Air Conditioning will not assume any liability for injuries or damage caused by not following steps outlined or described in this manual. Unauthorized modifications to Johnson Controls-Hitachi Air Conditioning products are prohibited as they...
 - May create hazards that could result in death, serious injury or equipment damage;
 - Will void product warranties;
 - May invalidate product regulatory certifications.

1. Safety Summary

NOTICE	Take the following precautions to reduce the risk of property damage.
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- Do not touch the main circuit board or electronic components in the controller or remote devices. Make sure that dust and/or steam does not accumulate on the circuit board.
- When installing the unit in a hospital or other facility where electromagnetic waves are generated from nearby medical and/or electronic devices, be prepared for noise and Electromagnetic Interference (EMI). Do not install where the waves can directly radiate into the electrical box, controller cable, or controller. Inverters, appliances, high-frequency medical equipment, and radio communications equipment. EMI may cause the unit to malfunction. The operation of the unit may also adversely affect these same devices. Install the unit at least 10 ft. (approximately 3m) away from such devices.
- Locate the controller at a distance of at least 3 ft. (approximately 1m) between the indoor unit and electric lighting. Otherwise, the receiver part of the unit may have difficulty receiving operation commands.
- If the wired controller is installed in a location where electromagnetic energy is generated, make sure that the wired controller is shielded and cables are sleeved inside conduit tubing.
- If there is a source of electrical interference near the power source, install noise suppression equipment (filter).
- During the test run, check the unit's operation temperature. If the unit is used in an environment where the temperature exceeds the operation boundary, it may cause severe damage. Check the operation temperature boundary in the manual. If there is no specified temperature, use the unit within the operation temperature boundary of 32°F to 104°F (0°C to 40°C).
- Perform properly electrical wiring work. The details of the electrical wiring connection are described in the "Electrical Wiring" of corresponding Installation and Maintenance Manual.
- The advanced color wired remote controller has near field communication (NFC), which can improve service and installation. If the wired remote controller may be accessible to unauthorized third-party, please set the NFC to "Disable" by referring to the installation manual.

Installation Precautions

WARNING	Take the following precautions to reduce the risk of electric shock, fire, or explosion resulting in serious injury or death:
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- If the remote sensors are not used with this controller, then do not install this controller...
 - In a room where there is no thermostat.
 - Where the unit is exposed to direct sunshine or direct light.
 - Where the unit is in close proximity to a heat source.
 - Where hot/cold air from the outdoors, or a draft from elsewhere (such as air vents, diffusers, or grilles) can affect air circulation.
 - In areas with poor air circulation and ventilation.
- Perform a test run using the controller to ensure normal operation. Safety guards, shields, barriers, covers, and protective devices must be in place while the compressor/unit is operating. During the test run, keep fingers and clothing away from any moving parts.

After installation work for the system has been completed, explain the "Safety Precautions," use, and maintenance of the unit to the customer according to the information in all manuals that accompanied the system. All manuals and warranty information must be given to the user or left near the Indoor Unit.

Electrical Precautions

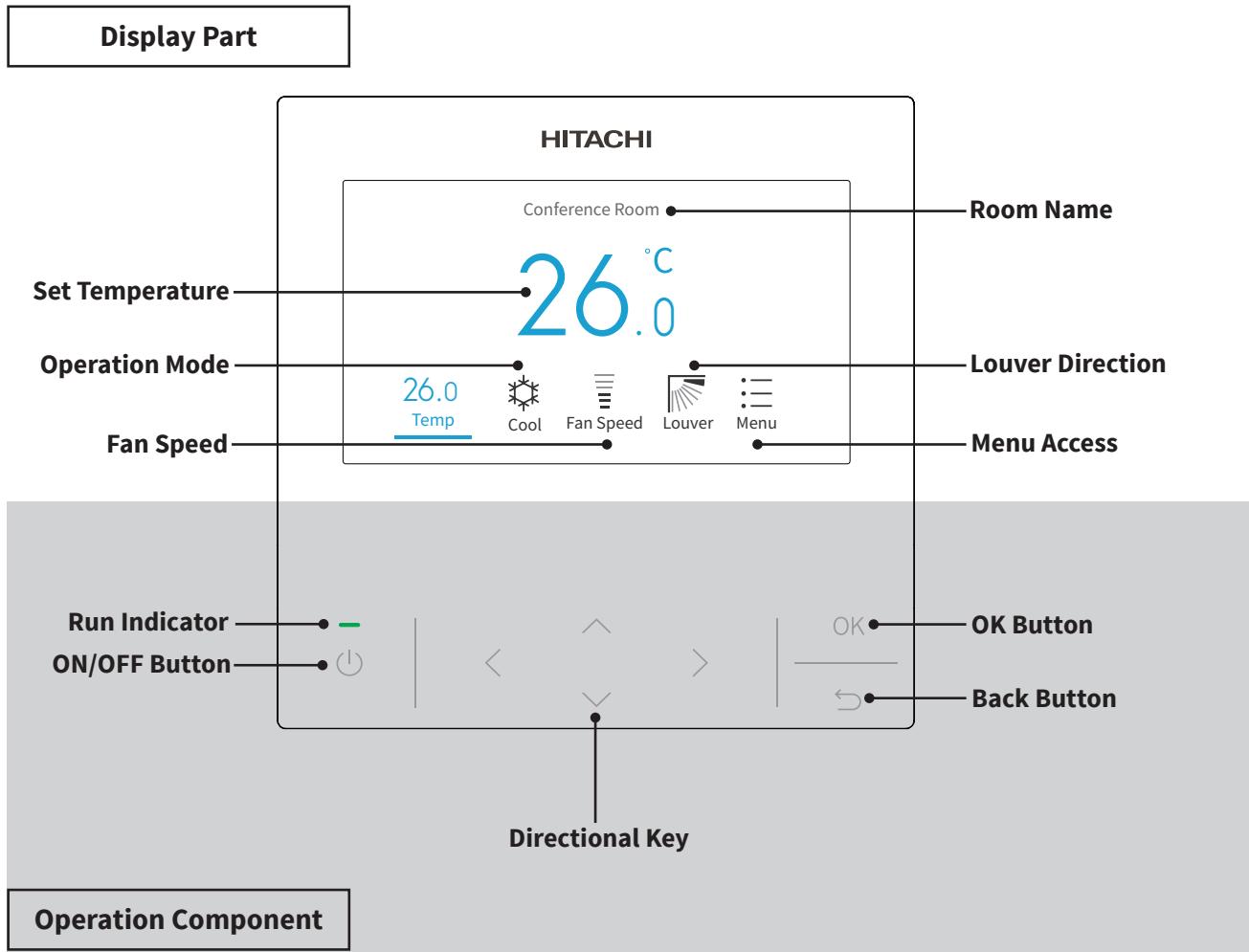


Take the following precautions to reduce the risk of electric shock, fire, or explosion resulting in serious injury or death:

- Only use electrical protection equipment and tools suited for this installation.
- Insulate the wired controller against moisture and temperature extremes.
- Use specified cables between units and the controller.
- Communication cabling must be a minimum of 18-Gauge, 2-Conductor, Stranded Copper. Shielded cable must be considered for applications and routing in areas of high EMI and other sources of potentially excessive electrical noise to reduce the potential for communication errors. When shielded cabling is applied, proper bonding and termination of the cable shield is required as per Johnson Controls-Hitachi Air Conditioning guidelines. Plenum and riser ratings for communication cables must be considered per application and local code requirements.
- The polarity of the input terminals is important, so be sure to match the polarity when using contacts that have polarity.
- Highly dangerous electrical voltages may be used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause serious injury or death.
- Before installing the controller or remote devices, ensure that the indoor and outdoor unit operation has been stopped. Further, be sure to wait at least five minutes before turning off the main power switch to the indoor or outdoor units. Otherwise, water leakage or electrical breakdown may result.
- Do not open the service cover or access panel to the indoor or outdoor units without turning OFF the main power supply. Before connecting or servicing the controller or cables to indoor or outdoor units, open and tag all disconnect switches. Never assume electrical power is disconnected. Verify with a meter and equipment.
- Use an exclusive power supply at the controller's rated voltage.
- Be sure to install circuit breakers (ground fault interrupter, isolating switch, molded case circuit breaker, and so forth) with the specified capacity. Ensure that the wiring terminals are tightened securely to recommended torque specifications.
- Clamp electrical wires securely with a cord clamp after all wiring is connected to the terminal block. In addition, run wires securely through the wiring access channel.
- When installing the power lines, do not apply tension to the cables. Secure the suspended cables at regular intervals, but not too tightly.
- Make sure that the terminals do not come into contact with the surface of the electrical box. If the terminals are too close to the surface, it may lead to failures at the terminal connection.
- Do not pour water on the controller as it could cause electric shock and/or damage the unit. Do not use strong detergent such as a solvent. Clean with a soft cloth.
- Check that the ground wire is securely connected. Do not connect ground wiring to gas piping, water piping, lighting conductor, or telephone ground wiring.

2. Setting Names and Functions

The figure below shows all the functions for reference. The actual display during operation is different.



NOTES:

- When the backlight turns off, user can press any button to turn on the backlight. (The button pressed to turn on the backlight is not functional.)
- Make sure to press the buttons lightly with your fingertips.
- Do NOT press the buttons or anything with sharp points, such as a ball point pen. The operational functionality of the controller may become damaged.

3. Operation Method

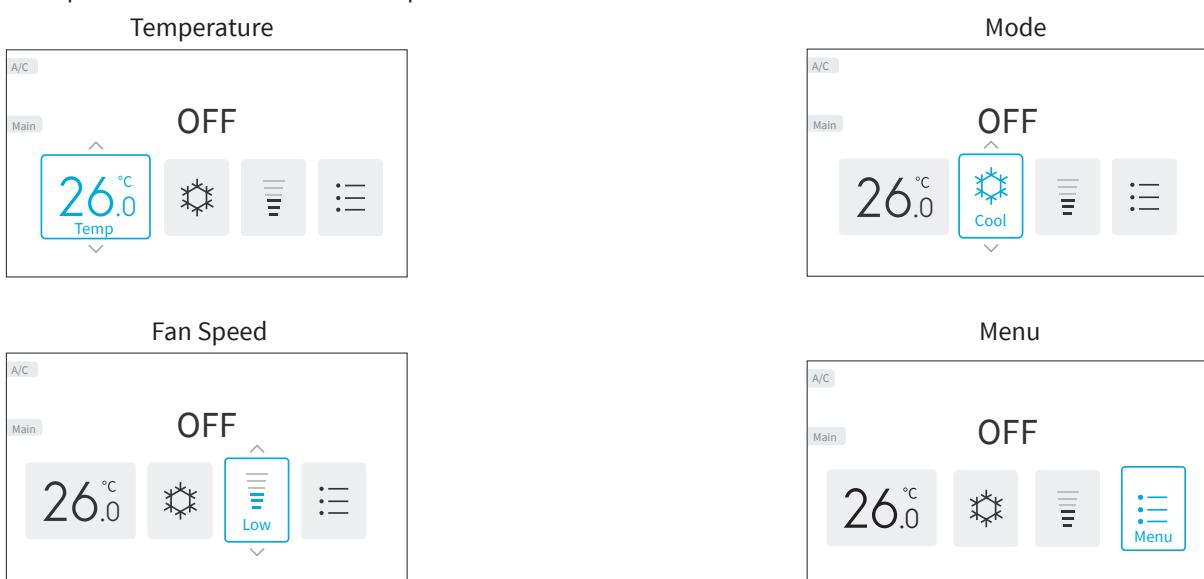
3.1 Basic Procedures

- Air Conditioner ON.



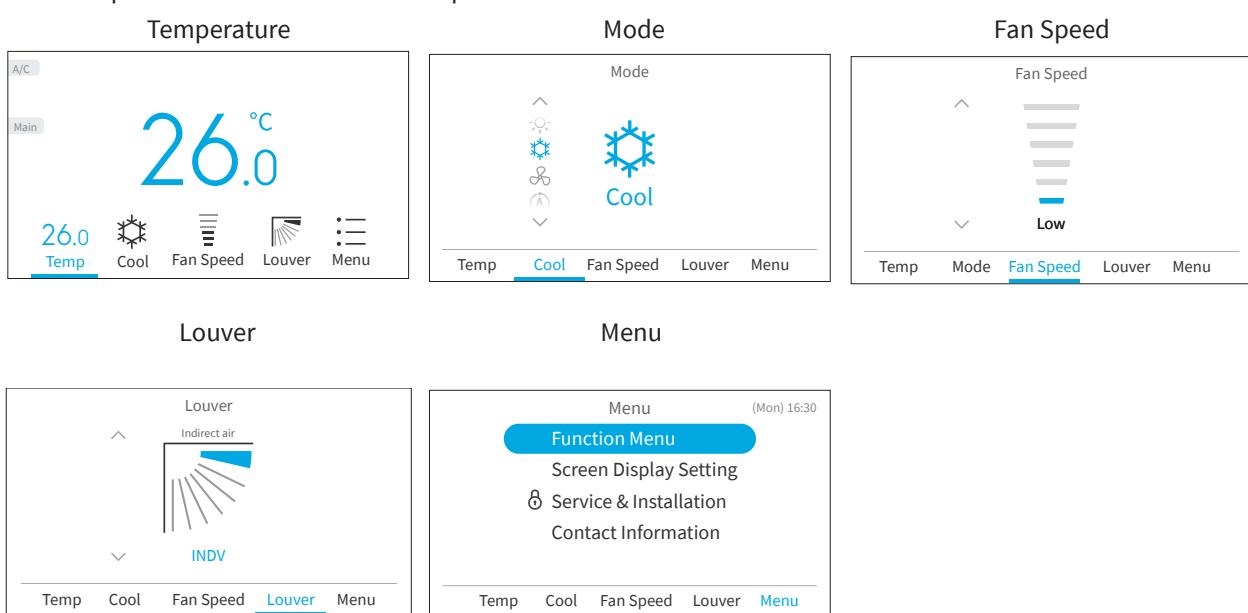
- Air Conditioner OFF

When air conditioner is off, press "<" or ">" to switch below items:
"Temperature" ↔ "Mode" ↔ "Fan Speed" ↔ "Menu".



- Air Conditioner ON

When air conditioner is on, press "<" or ">" to switch below items:
"Temperature" ↔ "Mode" ↔ "Fan Speed" ↔ "Louver" ↔ "Menu".



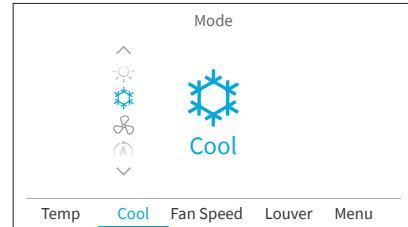
3. Operation Method

3.2 Operation Mode (Cool, Heat, Dry, Cool/Heat Auto and Fan Operation)

Heat mode is only available when the indoor unit supports cooling and heating. Cooling only machine cannot support heating.

1. Operation mode setting

Step1. Press "<" or ">" to select "Mode".



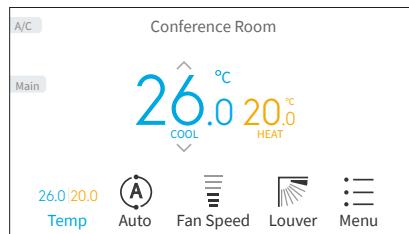
Step2. Set the operation mode with "˄" or "˅". The operation mode is switched in the following order:

→ "Cool" ↔ "Heat" ↔ "Dry" ↔ "Auto" ↔ "Fan" ←

If dual setpoint is selected in auto mode, both cooling setpoint and heating setpoint can be selected.

By default, temperature is as follows when cool/heat mode changes:

- Temperature switch from cool mode to heat mode:
Room temperature = Heating set temperature -2°F (-1°C)
- Temperature switch from heat mode to cool mode:
Room temperature = Cooling set temperature +2°F (+1°C)



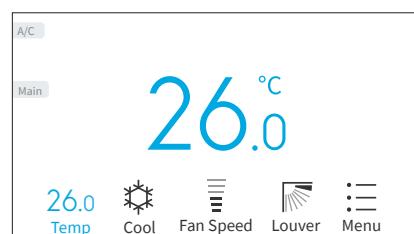
NOTES:

- The function selection setting is required for "Auto" operation. Please contact your distributor for details.
- "Dry" mode may not be available depending on the type of indoor unit.

3.3 Temperature Setting

1. Temperature setting

Step1. Press "<" or ">" to select "Temp".



Step2. By pressing "˄", the temperature is increased by 1°F (0.5°C) to a maximum of 86°F (30°C).

By pressing "˅", the temperature is decreased by 1°F (0.5°C).

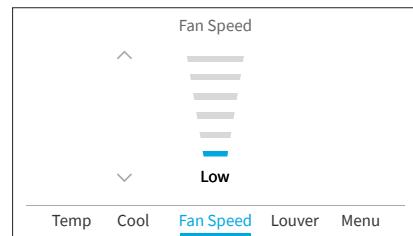
- Cool, Dry, Fan operation: A minimum of 66°F (19°C), 68°F (20°C) in United Arab Emirates (UAE).
- Heat operation: A minimum of 62°F (17°C)

NOTES:

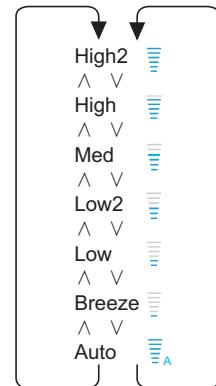
- Depending on the type and setting of the indoor unit, it may not be possible to set the temperature by 0.5°C.
- The max./ min. temperature may differ depending on the type of indoor unit.
- Minimum and maximum temperature can be set by selecting a heating upper limit (or cooling upper limit) and heating lower limit (or cooling lower limit) in the "Function Selection" mode. Minimum and maximum temperature can also be changed through "Temperature Range Restriction" setting in Service Menu.
- When the "Automatic Reset of Setting Temperature" function is selected, the temperature is automatically returned to the preset temperature after the temperature set-point change.
- Contact your distributor for detailed information about "Automatic Reset of Setting Temperature" and "Temperature Range Restriction" functions.

3.4 Fan Speed Setting

- This function is used to set fan speed.
- Step1. Press "<" or ">" and select "Fan Speed".



Step2. By pressing "˄" or "˅", the fan speed changes as follows.



NOTES:

- During dry operation, the fan speed is automatically changed to "Low" and cannot be changed to another fan speed. ("Low" is NOT displayed on the liquid crystal display (LCD) at this time. The present setting status is displayed on the LCD.)
- Some of the fan speed settings as "High2" or "Auto" may not be available depending on the indoor unit type.

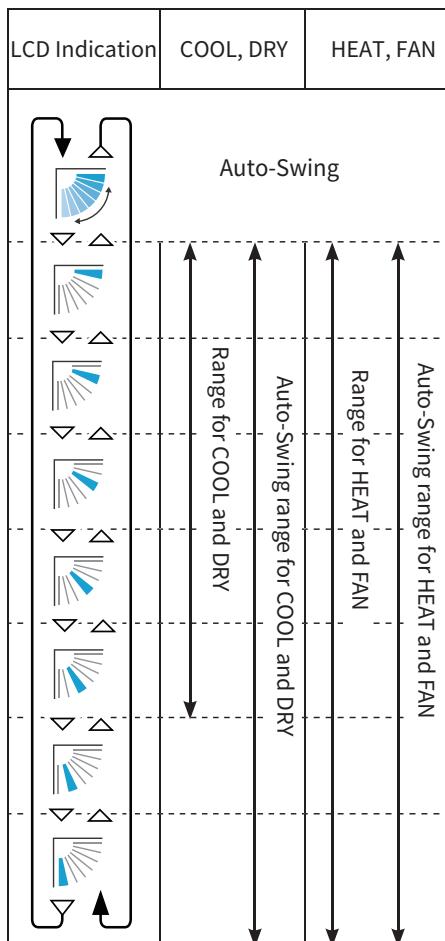
3. Operation Method

3.5 Louver Swing Direction

1. This function is used to set the louver direction.

Step1. Press "O" (On/Off). Make sure that the air conditioner is ON. Press "<" or ">" and select "Louver".

Step2. By pressing "^" or "v", the louver direction changes as below diagram , and the direction of different types of louver is displayed differently.



3.6 Operation

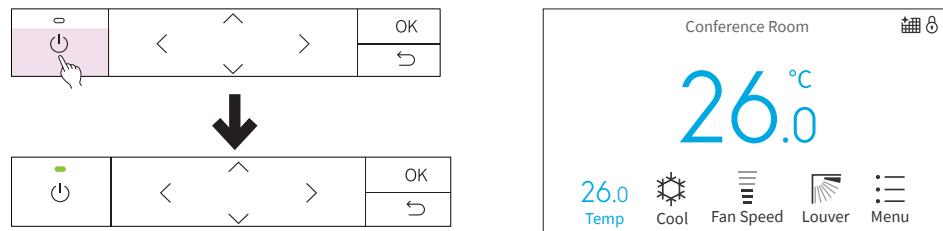
NOTES:

- Once the temperature and Fan speed settings are set, the setting status is stored and does not need to be reset.
- To change the settings, refer to Page 6 and Page 7.

3.6.1 Operation Start

- Operation starts.

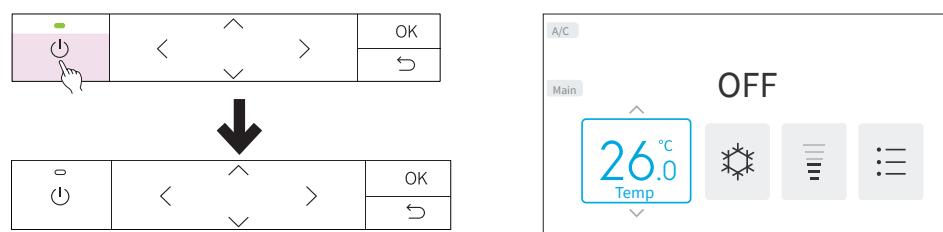
Step1. Press "○" (On/Off).
→ The run indicator turns on and the operation starts.



3.6.2 Operation Stop

- Operation stops.

Step1. Press "○" (On/Off).
→ The run indicator turns off and the operation stops.



NOTE:

- After the heating operation is stopped, it may continue to FAN operation for about 2 minutes.

3. Operation Method

3.7 Icon Description

The status of the remote controller is displayed on the operation screen.

NOTES:

- It may not be displayed depending on the type of outdoor unit or indoor unit you are using.
- If there are multiple status, the high priority icon is displayed first.

No.	Icon	Description
1		A schedule timer is set.
2		Set the current time. Schedule timer operation is not possible.
3		The off timer is set.
4		The operation lock is set.
5		Displayed when using the central controller. Remote control operation is restricted.
6		It is time to frostWash the heat exchanger.
7		It is time to clean the air filter.
8	A/C	Air-conditioning operation is performed.
9	Vent. THEX Vent. Auto Vent. Norm. Vent.	Ventilation, automatic ventilation, total heat ventilation, and normal ventilation are operating.
10		Displays the room temperature. (*1)
11	SAG	Elevating grille is not stored correctly.
12	Temporary	Emergency operation is in progress.
13	Setback	When setback operation is enabled and the card key is removed (when no one is present). (*2)
14	Purging	In night purge progress.
15	Setback aborted	Setback is aborted.
16	24 hour ventilation	24 hour ventilation is in progress.
17	Humidifier is run	The humidifier is in operation.
18	Motion Sensor ON	Indicates capacity savings by motion sensor control during operation or stop.
19	Radiant Sensor	In order to efficiently heat the room when the radiant temperature is low, the wind direction and air volume are automatically controlled.
20	Cold draft restrained	In order to prevent indoor temperature from being too low.
21	Noise reduction	The operation noise reduction control of the outdoor unit is set.
22	FrostWash is complete	Indicates the frostWash is performed.
23	IU temp. over range FrostWash stopped	If the indoor temperature is out of the range of 59°F(15°C) to 86°F(30°C), no frostWash is performed and the cancellation is displayed.
24	OU temp. over range FrostWash stopped	If the outdoor temperature is out of the range of 34°F(1°C) to 110°F(43°C), no frostWash is performed and the cancellation is displayed.
25	Sav Sav: Low Sav: Med Sav: High	Either the outdoor capacity control, indoor rotation control, or intermittent operation control is set.
26	Ext.Sav	Outdoor capacity control is set on the central controller or outdoor unit. It does not light when the indoor rotation control or intermittent operation control of the remote controller is set.
27	Main	This is the main remote controller setting. Use the main remote controller to set the main power savings setting. In the case of a single unit, the main does not light up.
28	Sub	Sub remote controller is set. Except for some power savings functions, the sub remote controller cannot be set to save power.
29	! Sub	There is no main remote controller. Controls related to power savings and operation noise reduction may not operate normally.

No.	Icon	Description
30	Quick	The operation is in quick mode.
31	Other remote are in ** setting	<p>When the operation mode set from the remote controller and the operation mode of the outdoor unit is different, the indicator blinks.</p> <p>Indicator blinks When "Cool" is set from the remote controller and when the operation mode of the outdoor unit is "Heat".</p>
32	Emergency Heating → Alarm Code: **	Emergency Heating Control is in progress. ** indicates the alarm code.
33	⌘ Auto Clean Unit ⌘ Mechanic error ⌘ Check the unit	Indicates an error related to the automatic filter cleaning unit.
34	⌘ Cleaning Filter	The filter is being automatically cleaned.
35	Check	Indicates an abnormality in the heat storage unit.
36	Preheating	The compressor cannot be operated because it is preheating.
37	HOT-START	Preparing for heating operation.
38	Defrost	<p>During the defrosting operation, the defrosting light turns on and the indoor fan stops.</p> <p>When the operation is stopped during the defrosting operation, the operation light or the run indicator goes out, but the operation continues and stops after the defrosting is completed.</p>
39	Heat Storage	It cannot be operated due to the heat storage operation time.
40	Dust collection **_**	It is time to collect dust in the dust box of the automatic filter cleaning unit. **_** indicates the unit to be collected.
41	Central control	Displayed when using the central controller. Remote controller operation is restricted.
42	Time to OFF(hour)	The remaining time of the off timer when the hotel mode is displayed.
43	Priority	Displayed on the main remote controller only in the operation mode or when there is a setting priority for the operation mode and the set temperature. At this time, the operation limit lights up on the sub remote controller, and the operation mode and temperature setting change on the sub remote controller are restricted.
44	Restrict	Displayed on the sub remote controller only when the operation mode or the operation mode and set temperature setting priority is given.

(*1): It depends on the settings of the remote controller.

(*2): The default setting is cooling: set temperature +4°F (+2.5°C), heating: set temperature -4°F (-2.5°C).

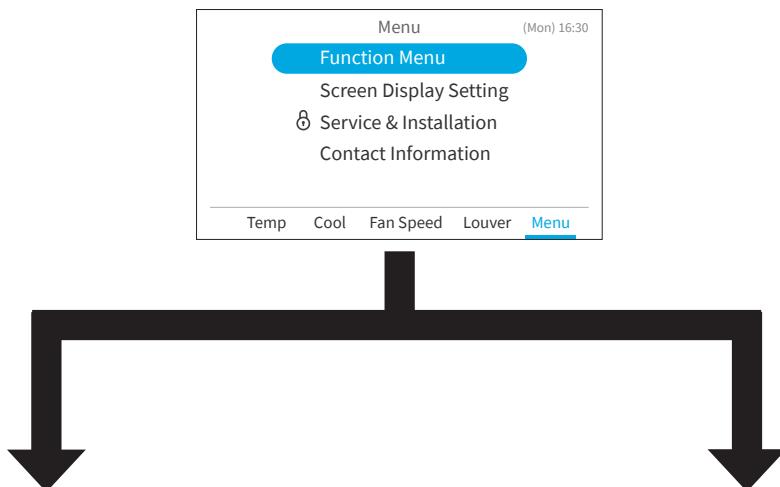
If you want to change the correction value for this setback operation, please contact the distributor for more detailed information.

4. Menu Operation

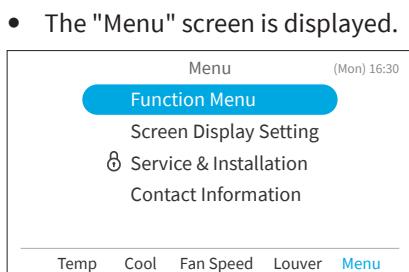
NOTE:

- The settings for the function with "⊖" displayed is not available.

Press "<" or ">" at home screen to select "Menu".

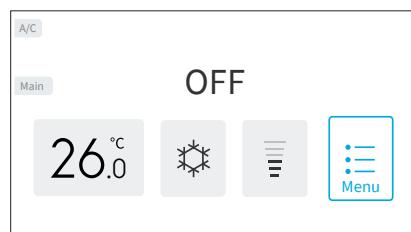


When the air conditioner is ON:

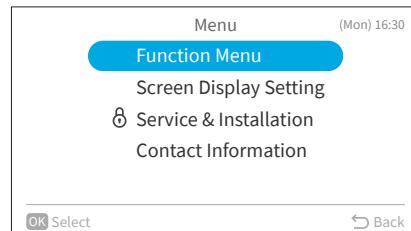


- The "Menu" screen is displayed.

When the air conditioner is OFF:



- Select "Menu" and press "OK".
- The "Menu" screen is displayed.



- About the Function Menu, please refer to "**5. Function Menu Screen Display**".
- About the Display Settings, please refer to "**6. Screen Display Setting**".

5. Function Menu Screen Display

Various function settings are shown in this chapter.

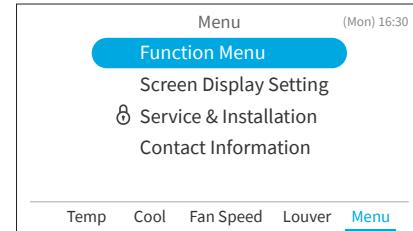
For how to enter the Menu screen, please refer to "**4. Menu Operation**".

NOTES:

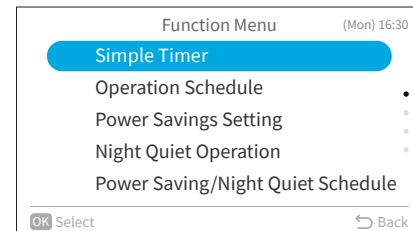
- Some functions cannot be set depending on the type, configuration, and usage status of the indoor unit.
- If a function with "⊖" is displayed, it means the function is not supported and the setting is disabled.
- For the "Filter Cleaning", "Motion Sensor Setting", "Total Heat Exchanger SET" and "Humidity Setting" function menu display, please refer to the Operation Manual of the indoor unit.

1. Display the function menu

- Step1. Select the "Function Menu" and press "OK".
→ The "Function Menu" screen is displayed.



- Step2. Press "↖" or "↙" to select the item to set and press "OK".
Press "↶" to return to the "Menu" screen.
- If the "Menu screen" remains unchanged for approximately 10 minutes, the screen returns to the home screen.
 - Various settings are retained even when the power is turned off.



5. Function Menu Screen Display

5.1 Simple Timer Setting

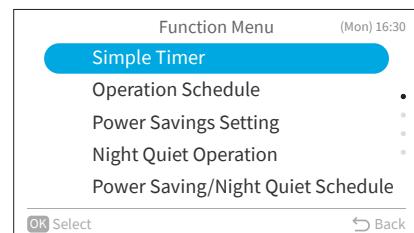
This function is used to start or stop the unit operation at the set time.
The timer operation contents can be set from "Not Used", "Once", or "Everyday".

NOTES:

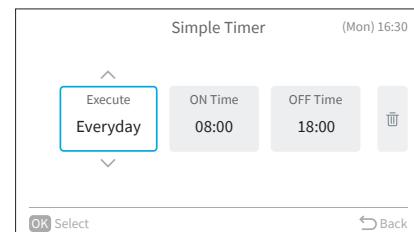
- If "Once" on the timer operation setting is selected, the setting content changes automatically to "Not Used" after one timer operation.
- Do not set the same time for both ON/OFF timers.
- Scheduled operation (stop) is not possible while the remote control is prohibited.
- When  is displayed, scheduled operation (stop) is not available.
- Refer to "**6.1 Adjusting Date/Time**" to set the date and time.

1. Set the simple timer.

- Step1. Select "Simple Timer" on the "Function Menu" screen and press "OK".
When the current time has not been set yet, the "Adjusting Date/Time" setting screen is displayed.



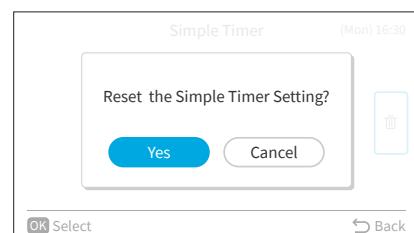
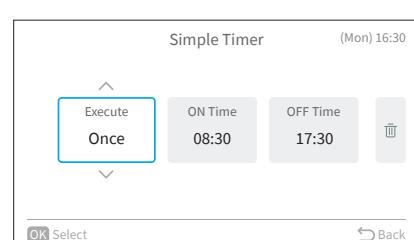
- Step2. Press "<" or ">" to select the setting item:
"Execute" ↔ "ON Time" ↔ "OFF Time" ↔ "".



- Step3. Press "˄" or "˅" to set each setting data for the selected items.

After setting, press "↲" to confirm the settings and the screen returns to the "Function Menu" screen.

- When "Execute" is selected,
press "˄" or "˅" to switch the setting items as follows:
"Not Used" ↔ "Once" ↔ "Everyday".
- When "ON Time" or "OFF Time" is selected, the setting time can be adjusted in 30-minute increments by
pressing "˄" or "˅".
- When "" is selected,
if you select "OK", the confirmation screen is displayed.
Select "Yes" and press "OK" to reset the "Simple Timer"
setting and the screen returns to Step2.
If you select "Cancel", the screen still returns to Step2.

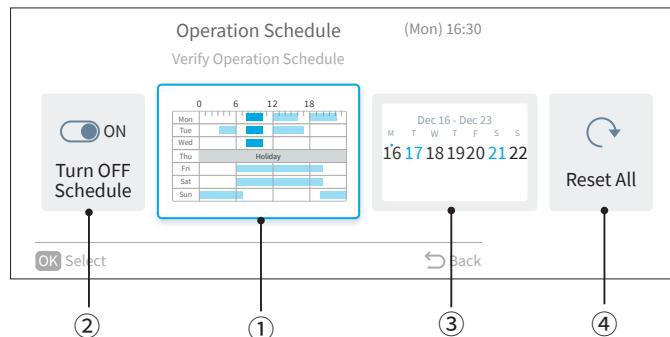


5.2 Operation Schedule Setting

This function is used to start or stop the unit operation at the set time.

The temperature can be set during operation.

The operation schedule can be set up to 5 times a day on each day of the week.



① Schedule day and time setting (Page 16)

The desired time and temperature can be set.
Set up to 5 times a day on each day.

② Schedule turn ON / OFF setting (Page 17)

This function temporarily prevents the schedule from running.
Schedule operation is not performed while the schedule is disabled.
This setting is normally applied during long vacation.

③ Schedule holiday setting (Page 18)

Holidays can be set six days in advance.
On the days set as holidays, scheduled operation is not performed for only one day.
It is used when there are irregular off days such as holidays.

④ Reset setting (Page 19)

The schedule day / time setting and holiday setting are deleted.

5. Function Menu Screen Display

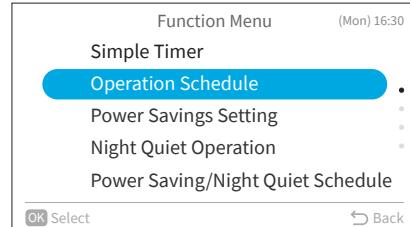
5.2.1 Schedule Day and Time Setting

NOTES:

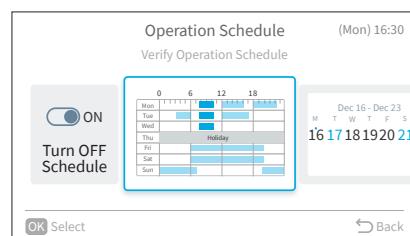
- Scheduled operation (stop) is not possible when the remote control is prohibited.
- When  is displayed, scheduled operation (stop) is not available.
- Refer to "6.1 Adjusting Date/Time" to set the date and time.

1. Set schedule day and time

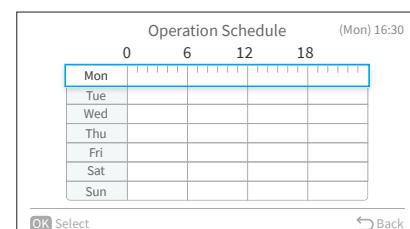
- Step1. Select "Operation Schedule" on the "Function Menu" screen and press "OK".
- If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.
 - If no schedule or holiday has been set, Step3 is displayed.



- Step2. Press "<" or ">" to select "Verify Operation Schedule", and then press "OK".

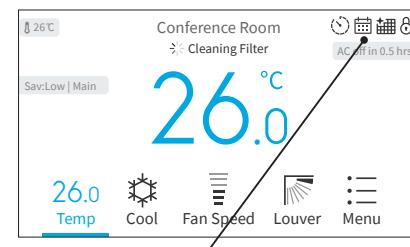
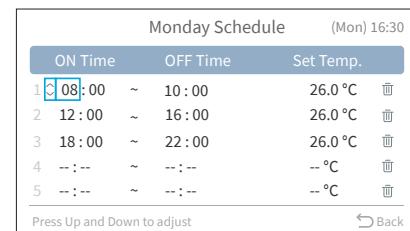


- Step3. Select the day of the week (from Mon. to Sun.) to be set with "↖" or "↙", and press "OK".
-  (run) and  (stop) is displayed on the LCD.
 - To copy the setting contents of the previous day, press "↖" and "OK" simultaneously.



- Step4. Press "↖" or "↙" to select schedule timer No.1 to No.5, and press "<" or ">" to select "ON Time" ↔ "OFF Time" ↔ "Set Temp." ↔ . By pressing "↖" or "↙", "ON / OFF Time" and "Set Temp." can be set.
- 5 different schedule timers (maximum) can be set for each day of the week.
 - Press "OK" to display the schedule time setting screen for the next day of the week.
 - Select  and press "OK" to delete the settings of "ON / OFF Time" and "Set Temp".

Press "↶" to return to Step3.



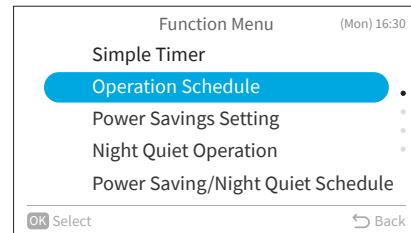
The icon displayed indicates that the schedule control is set and activated.

5.2.2 Schedule Turn ON/OFF Setting

1. Set schedule ON / OFF

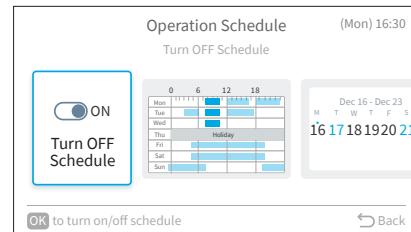
Step1. Select "Operation Schedule" on the "Function Menu" screen and press "OK".

- If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.
- If no schedule or holiday has been set, Step3 is displayed.



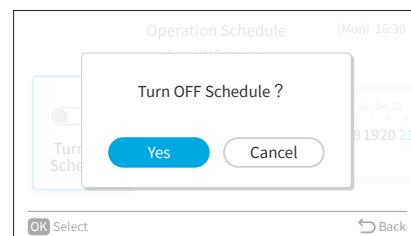
Step2. Press "<" or ">" to select "Turn ON/OFF Schedule", and then press "OK".

- When the schedule is ON, "Turn OFF Schedule" confirmation screen is displayed. When schedule is OFF, "Turn ON Schedule" confirmation screen is displayed.



Step3. Select "Yes" by pressing "<" or ">" and then press "OK".
→ Confirm the schedule enable/disable setting and return to Step2.

- The display turns on when the schedule is ON.
- The display turns off when the schedule is OFF.



5. Function Menu Screen Display

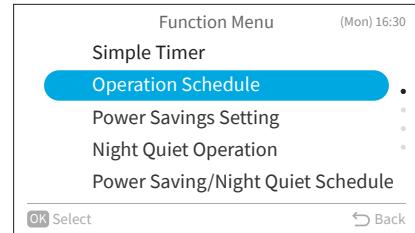
5.2.3 Schedule Holiday Setting

NOTE:

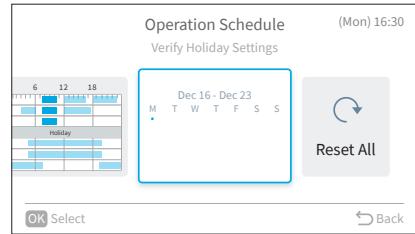
- For holiday setting, the schedule setting indicator  turns off.

1. Set schedule holiday

- Step1. Select "Operation Schedule" on the "Function Menu" screen and press "OK".
- If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.
 - If no schedule or holiday has been set, Step3 is displayed.



- Step2. Press "<" or ">" to select "Verify Holiday Settings", and then press "OK".



- Step3. Select the day of the week (from Mon. to Sun.) to set as a holiday by pressing "˄" "˅" "<" or ">".

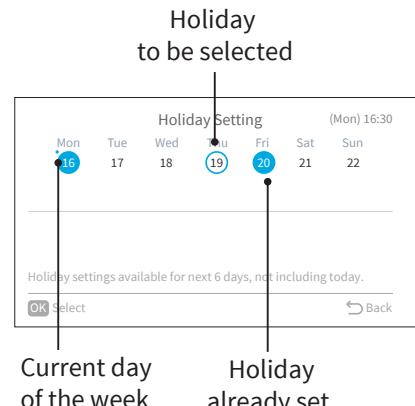
Press "OK" to select "Holiday setting" or "Cancel".

"●" indicates the current day of the week.

"○" indicates the holiday to be selected.

"●" indicates the holiday already set.

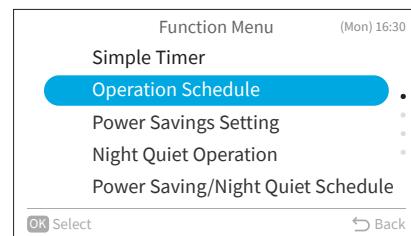
Press "↶" to confirm the setting and return to Step2.



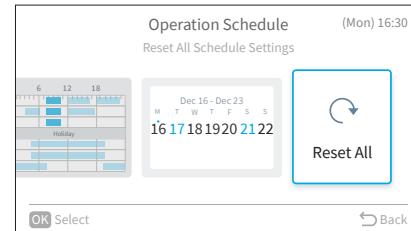
5.2.4 Reset the Setting

1. Reset the setting

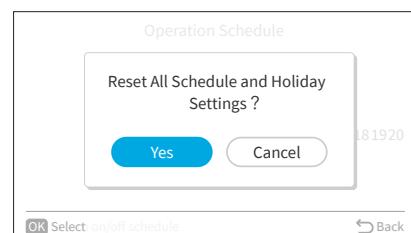
- Step1. Select "Operation Schedule" on the "Function Menu" screen and press "OK".
- If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.
 - If no schedule or holiday has been set, Step3 of "**5.2.1 Schedule Day and Time Setting**" is displayed.



Step2. Press "<" or ">" to select "Reset All" and then press "OK".



Step3. Select "Yes" by pressing "<" or ">" and then press "OK". All schedule and holiday settings are reset and the screen returns to the Step3 of "**5.2.1 Schedule Day and Time Setting**".



5. Function Menu Screen Display

5.3 Power Savings Setting

No.	Item	Description
①	Capacity Control	Suppress the heating and cooling capacity of the indoor unit. Set control mode and power savings level with its corresponding value.
②	Rotation Control	Interlock with indoor units of the same outdoor unit system and switch to FAN operation in sequence. Set control mode and fan mode time.
③	Intermittent Control	Cooling/heating mode and fan mode are repeated at regular intervals. Set power savings level.
④	No Setting	Power savings operation is not performed.

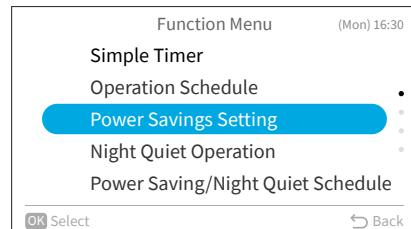
NOTES:

- The power savings mode that can be switched differs depending on the type of the outdoor unit or indoor unit.
- The power savings modes that can be switched according to the "Main / Sub" display are as follows.
 - Main — the power savings mode can be switched from ① to ④.
 - Sub — the power savings mode cannot be switched. The power savings mode of the sub synchronizes with that of the main remote controller of the same outdoor unit system.
- When the power savings mode is "Indoor rotation control", the power savings level cannot be changed.
- When the power savings mode is "No Setting", the power savings ON / OFF and power savings level cannot be changed.
- When the power savings mode is "Outdoor capacity control" and sub, the power savings ON / OFF and power savings level cannot be changed.
- When the power savings mode is switched, power savings ON / OFF is set to OFF.
- When using the power savings function, the cooling and heating capacity may decrease.
- Detailed settings can be changed from the power saving details setting. Please also refer to "15. Power Saving Details Setting" of the Installation Manual.

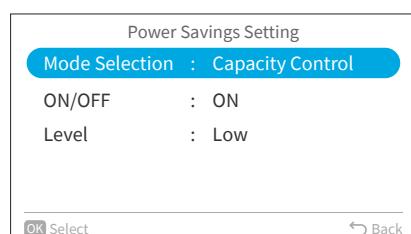
5.3.1 Power Savings Mode Setting

1. Set the power savings mode

Step1. Select "Power Savings Setting" on the "Function Menu" screen and press "OK".



Step2. Press "↖" or "↙" to select the "Mode Selection" and press "OK".

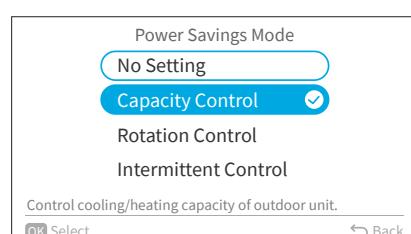


Step3. Press "↖" or "↙", the item changes as follows:

"No Setting" ↔ "Capacity Control" ↔ "Rotation Control" ↔ "Intermittent Control".

Select the power savings mode and press "OK" to confirm the setting.

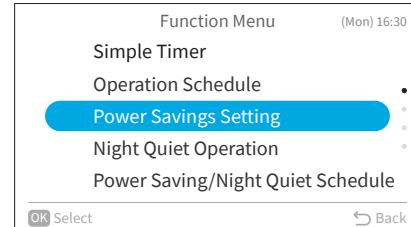
Press "↶", the screen returns to the "Power Savings Setting" screen.



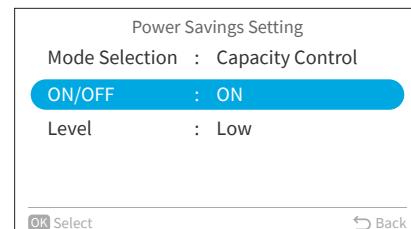
5.3.2 Power Savings ON/OFF Setting

- Set the power savings ON/OFF

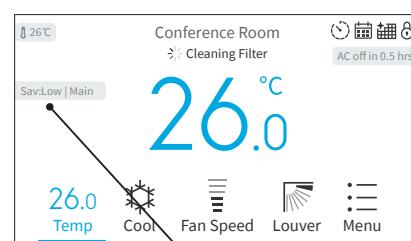
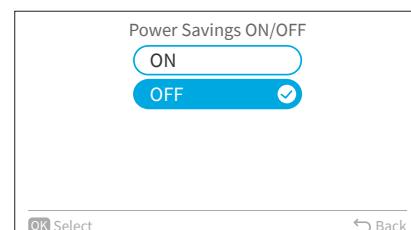
Step1. Select "Power Savings Setting" on the "Function Menu" screen and press "OK".



Step2. Press "↖" or "↙" to select the "ON/OFF" and press "OK".



Step3. Press "↖" or "↙" to select the "ON" and press "OK".
Press "↶", the screen returns to the "Power Savings Setting" screen.



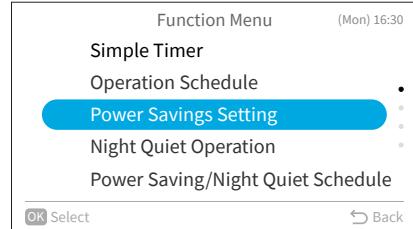
When power savings is ON, power savings level is displayed to indicate the power savings setting.

5. Function Menu Screen Display

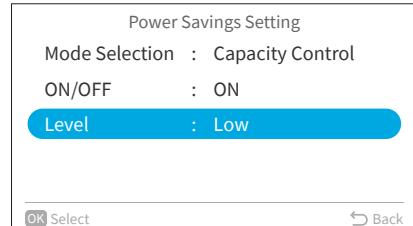
5.3.3 Power Savings Level Setting

- Set the power savings level

Step1. Select "Power Savings Setting" on the "Function Menu" screen and press "OK".



Step2. Press "↖" or "↙" to select the "Level" and press "OK".

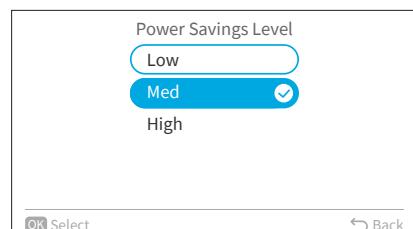


Step3. Press "↖" or "↙", the power savings level changes as follows: "Low" ↔ "Med" ↔ "High".

Select the level and press "OK".

Press "↶", the screen returns to the "Power Savings Setting" screen.

You may not be able to select from the settings in the power saving details setting.



5.4 Night Quiet Operation

This function restricts the operation noise of the outdoor unit.

NOTES:

- This cannot be set if the sub remote controller or outdoor unit does not support power savings.
- It is possible to change the operation noise reduction function setting of the outdoor unit by making the following operation noise reduction settings.

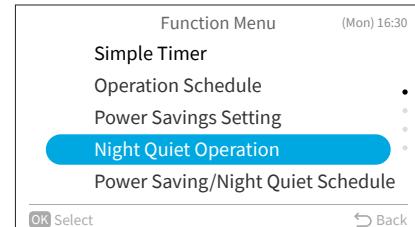
Remote Controller Setting	Outdoor Unit Setting Name
Not Set	No Setting
Low	Setting 1
Med	Setting 2
High	Setting 3

"Low", "Med" and "High" represents the amount of noise reduction. For the amount of reduction, please contact related local distributor.

- When using the operation noise reduction setting, the cooling / heating capacity can be decreased.

1. Set the night quiet operation

Step1. Select "Night Quiet Operation" on the "Function Menu" screen and press "OK".



Step2. Press "↖" or "↙", the level changes as follows:

"Not Set" ↔ "Low" ↔ "Med" ↔ "High".

Select the level and press "OK".

Press "↶", the screen returns to the "Function Menu" screen.



5.5 Power Saving/Night Quiet Schedule Setting

This function starts and stops power savings control and operation noise reduction control at the desired time. Power saving/night quiet schedule settings can be set up to five times a day on each day of the week. The power savings schedule controls the schedule set in the power savings mode setting.

NOTES:

- When managing multiple patterns of schedules on the same day as in below examples, don't set overlapped times zone.
- If the schedule times zones overlap as in below example 2, the schedule will be canceled at the first off time (14:00 in the case of the example 2).

Example of Power Saving Operation and Schedule Setting

Example of Power Saving Schedule Operation

Monday Schedule (Mon) 16:30		
ON Time	OFF Time	Level
1 08:00	~ 10:00	LOW
2 10:00	~ 12:00	MED
3 12:00	~ 14:00	HIGH
4 14:00	~ 16:00	MED
5 16:00	~ 18:00	LOW

Example 1 O Example 2 X

Monday Schedule (Mon) 16:30		
ON Time	OFF Time	Noise Reduction level
1 08:00	~ 18:00	LOW
2 10:00	~ 16:00	MED
3 12:00	~ 14:00	HIGH
4 --:--	--:--	
5 --:--	--:--	

Press Up and Down to adjust ⌂ Back

Press Up and Down to adjust ⌂ Back

Intermittent Control (Mon) 16:30

Turn OFF Schedule

OK to turn on/off schedule ⌂ Back

② ①

① Schedule day and time setting (Page 25)
You can set the desired time and level.
You can set up to five times a day on each day.

② Schedule turn ON / OFF setting (Page 26)
Schedule operation is not performed while the schedule is disabled.
This is a function that temporarily prevents the schedule from running.
It is used when there is a long vacation.

5.5.1 Schedule Day and Time Setting

NOTE:

-  indicates that schedule control is not possible.
Refer to "**6.1 Adjusting Date/Time**" to set the date and time.

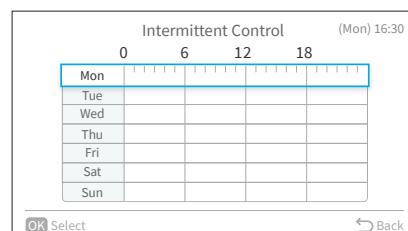
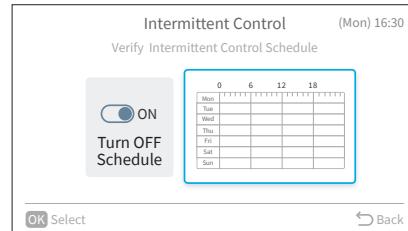
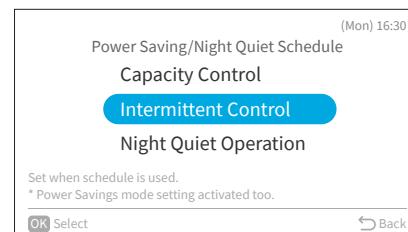
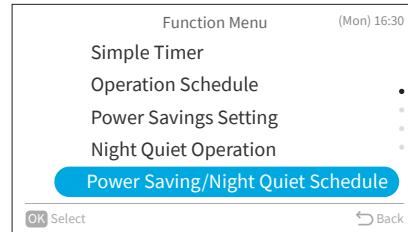
1. Set the schedule day and time

- Step1. Select "Power Saving/Night Quiet Schedule" on the "Function Menu" screen and press "OK".
- If the sub remote controller or indoor unit does not support power savings, the power saving schedule setting screen for intermittent control (Step3) is displayed.

- Step2. Press "↖" or "↙" to select the setting items, and then press "OK". The items are changed as follows:
"Capacity Control" ↔ "Intermittent" ↔ "Night Quiet Operation".

- If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.
- If no schedule or holiday has been set, Step4 is displayed.

- Step3. Press "<" or ">" to select the schedule day and time settings, and then press "OK".

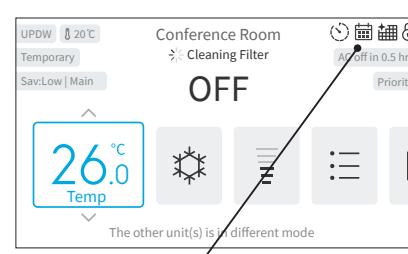


- Step4. Select the day of the week (from Mon. to Sun.) to be set with "↖" or "↙", and press "OK".

- ■(run) and □(stop) is displayed on the LCD.
- To copy the setting contents of the previous day, press "<" and "OK" simultaneously.

Monday Schedule			(Mon) 16:30
ON Time	OFF Time	Level	
1 08:00 ~	10:00	LOW	
2 10:00 ~	12:00	MED	
3 12:00 ~	14:00	HIGH	
4 14:00 ~	16:00	MED	
5 16:00 ~	18:00	LOW	

Press Up and Down to adjust



- Step5. Press "↖" or "↙" to select schedule timer No. 1 to No.5, and press "<" or ">" to select "ON Time" ↔ "OFF Time" ↔ "Level" ↔ "■". By pressing "↖" or "↙", "ON / OFF Time" and "Level" can be set.

- Five different schedule timers (maximum) can be set for each day of the week.
- Press "OK" to display the schedule time setting screen for the next day of the week.
- Select "■" and press "OK" to delete the setting of "ON / OFF Time" and "Level".

Press "↶" to return to Step4.

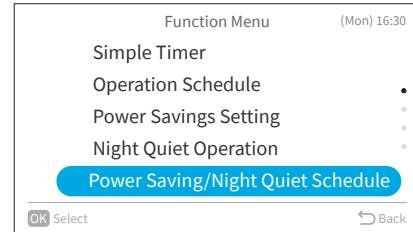
Indicates that schedule control is in operation.

5. Function Menu Screen Display

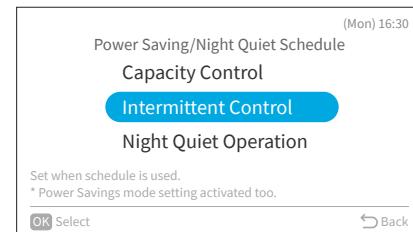
5.5.2 Schedule Turn ON/OFF Setting

1. Turn ON / OFF the schedule

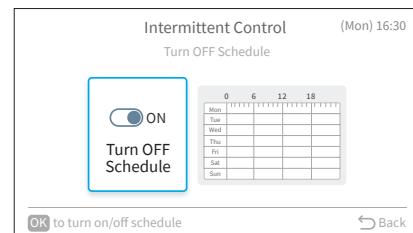
- Step1. Select "Power Saving/Night Quiet Schedule" on the "Function Menu" screen and press "OK".
- If the sub remote controller or indoor unit does not support power savings, the power saving schedule setting screen for intermittent operation control (Step3) is displayed.



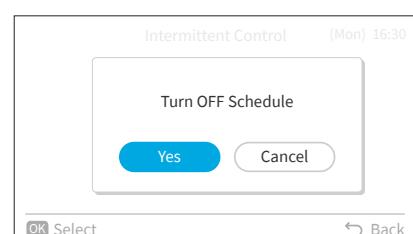
- Step2. Press "↖" or "↙" to select the setting items, and then press "OK", the items are changed as follows:
"Capacity Control" ↔ "Intermittent Control" ↔ "Night Quiet Operation".
- If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.
 - If no schedule or holiday has been set, Step4 of "**5.5.1 Schedule Day and Time Setting**" is displayed.



- Step3. Press "<" or ">" to select "Turn ON/OFF Schedule, and then press "OK".
- When the schedule is ON, "Turn OFF Schedule" confirmation screen is displayed. When schedule is OFF, "Turn ON Schedule" confirmation screen is displayed.



- Step4. Press "<" or ">" to select "Yes" and then Press "OK". Confirm the schedule ON/OFF, and the screen returns to Step3.



5.6 Power Consumption Display

This function displays the power consumption of the outdoor unit compressor.

The value of each displayed in Graph/List format is 1 day (24h (- every 2 hrs.)), 1 week (7 days), and 1 year (12 months).

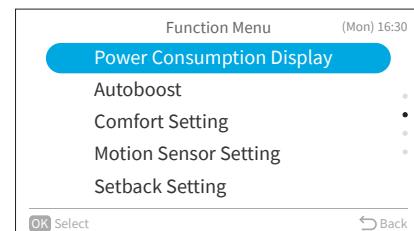
NOTES:

- The numerical value is a reference. Do not use this unit for the following: calculation of power rates, examination of the power contract, or calculation of greenhouse gas emissions.
- This cannot be set if the power savings function is not supported.
- In following instances, the calculated value may be a deficit or may be changed.
 - Power Failure (outdoor unit, indoor unit, wired controller)
 - Communication Failure (outdoor unit ↔ indoor unit ↔ wired controller)
 - Modification of time
- indicates that schedule control is not possible. Refer to "**6.1 Adjusting Date/Time**" to set the date and time.

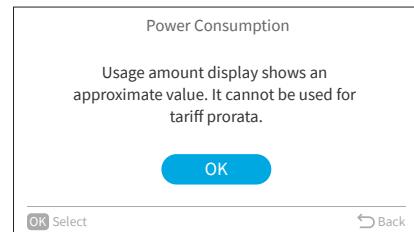
1. Set power consumption display

Step1. Select "Power Consumption Display" on the "Function Menu" screen and press "OK".

- If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.

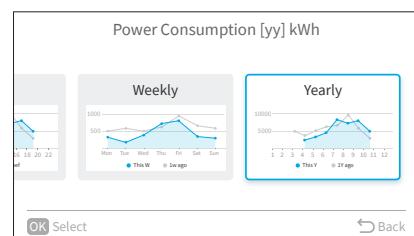
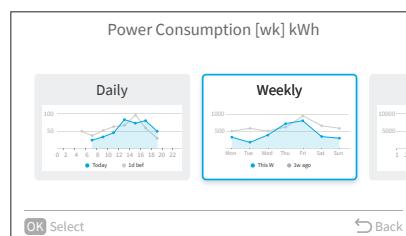
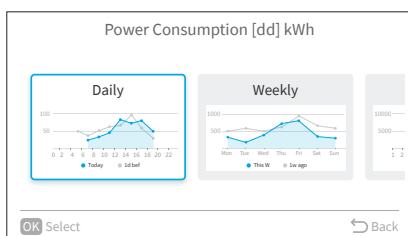


Step2. Press "OK".



Step3. Press "<" or ">" to select the display period, and then press "OK".

It switches in the order of 1 day (24 hours) ↔ 1 week (7 days) ↔ 1 year (12 months).



- Comparison
Press "<" or ">" to switch the comparison target for the display period.

2 days before / 1 day before ↔ 1 day before / Today
2 week ago / 1 week ago ↔ 1 week ago / This week
2 years ago / 1 year ago ↔ 1 year ago / This year

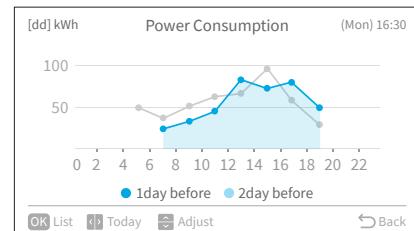
- Display scale

Press "˄" or "˅" to switch the display scale.

- Graph ↔ List display

Press "OK" to switch between the graph and list display of the power consumption display.

Press "↶" to return to the display period selection screen.



Period	[dd] kWh	Power Consumption	(Mon) 16:30
Period	1d bef	2d bef	
0 ~ 2	0.0	25.5	•
2 ~ 4	0.0	10.1	•
4 ~ 6	20.5	0.0	•
6 ~ 8	10.2	0.5	•
8 ~ 10	8.5	5.2	•

At the bottom are 'OK Graph' and 'Back' buttons.

5. Function Menu Screen Display

5.7 Autoboost Setting

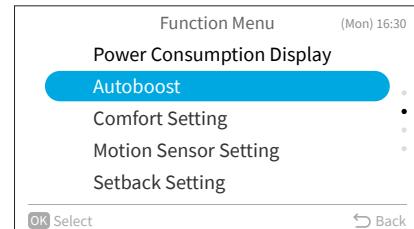
The function is used to increase the cooling and heating capacity in 30 minutes once the operation starts. This function is only available when the operation mode is Cool or Heat. The unit starts each time in quick mode until the setting is canceled.

NOTES:

- Autoboost cannot be set when the outdoor unit does not support this function.
- Autoboost cannot be used if Power Savings is not supported.
- When this function is activated while mode is "Cool", fan speed changes and is locked as "Auto" for 30 minutes at the longest regardless of the current setting. While in this operation (fan speed "Auto"), fan level may drop as low as "Low" when the room temperature gets close to the setting temperature. The operation starts regardless of the fan speed.

1. Set the autoboost

Step1. Select "Autoboost" on the "Function Menu" screen and press "OK".

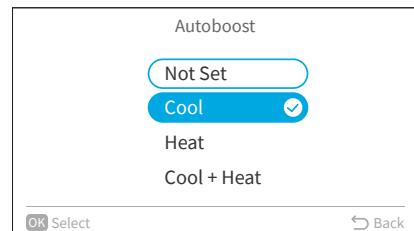


Step2. Press "↖" or "↙", the selected items changes as follows:

"Not Set" ↔ "Cool" ↔ "Heat" ↔ "Cool + Heat".

Select the Autoboost mode and press "OK" to confirm the settings.

Press "↶" to return to the "Function Menu" screen.



5.8 Comfort Setting

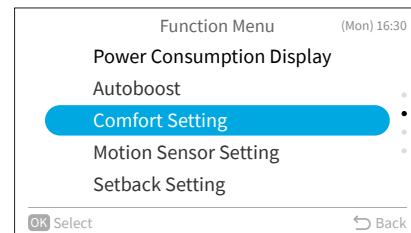
This function is used to control discharge or supply air temperature when in the cooling mode.

NOTES:

- This function cannot be set when the indoor unit does not support this function.
- The cool air level order is as follows: "High" > "Med" > "Low" and the temperature of the discharged air is high.
- The effect may not be sufficient if two or more units are operating in the room, which the air may be "cold".
- When this function is set, it may take time for the entire room to cool down.

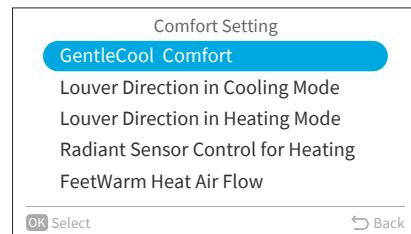
1. Set the comfort

Step1. Select "Comfort Setting" on the "Function Menu" screen and press "OK".



Step2. Press "↖" or "↙" to select "GentleCool Comfort", and then press "OK".

- For other settings, please refer to the Operation Manual of the indoor unit.



Step3. Press "↖" or "↙", the selected comfort level changes as follows:

"Not Set" ↔ "Low" ↔ "Med" ↔ "High".

Select the "GentleCool Comfort" during cooling and press "OK".

Press "↶" to return to the "Function Menu" screen.



5. Function Menu Screen Display

5.9 Setback Setting

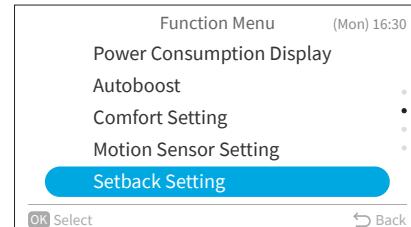
1. Setback schedule setting

This function is used to start/stop setback mode at desired time. It is available only when setback mode is set as Schedule mode.

To change the setback mode, select another mode at the function selection setting. Contact your distributor for detailed information. The items cannot be set/modified if indoor unit does not support this function.

Step1. Select "Setback Setting" on the "Function Menu" screen and press "OK".

If the current time is not set, the "Adjusting Date/Time" setting screen is displayed.

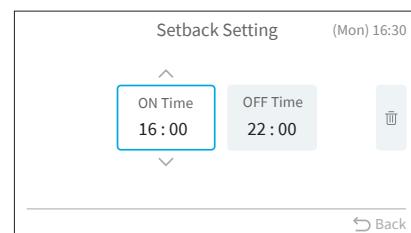


Step2. Press "<" or ">" to select the settings, and the selected item changes as follows:

"ON Time" ↔ "OFF Time" ↔ "⌚".

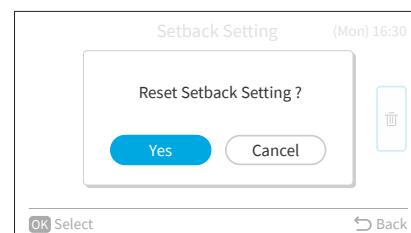
Step3. Press "^" or "⌄" to select the setting. After setting, press "⌞" to confirm the settings and then the screen returns to the "Function Menu" screen.

- When ON Time / OFF Time is selected,
The time changes every 30 minutes.
- Do not set the same time for ON Time and OFF Time.
It's unavailable if ON time or OFF time is not set.
- When "⌚" is selected,
the confirmation screen is displayed.
Select "Yes" and press "OK" to delete the settings and
the screen returns to Step2.
If select "Cancel", the screen returns to the "Setback
Setting" screen.



NOTES:

- In the following instances, the schedule operation is NOT available.
 - When the operation is prohibited by the controller and is set from the central controller.
 - If the icon "⌚" is displayed, the schedule control is NOT activated because the Date/Time is not specified yet. To specify the Date/Time setting, refer to "**6.1 Adjusting Date/Time**" for details.

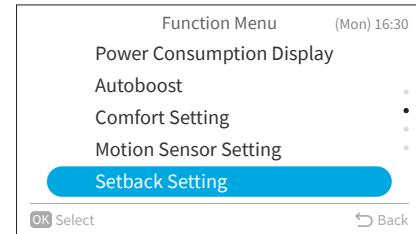


2. Setback manual setting

This function is used to temporarily activate Setback operation. It is available only when Setback mode is set as Manual mode; this function is normally used to set a long vacation.

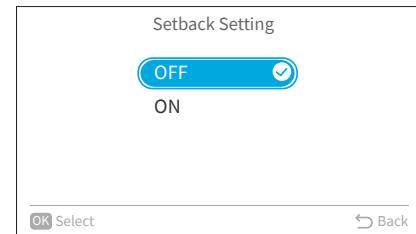
The items cannot be set/modified if indoor unit does not support this function.

- Step1. Select "Setback Setting" on the "Function Menu" screen and press "OK".



- Step2. Press "↖" or "↙" to select "ON". Press "OK" and the screen returns to the "Function Menu" screen.

- The indicator turns on when schedule operation is ON.
- The indicator turns off when schedule operation is OFF.



NOTE:

- Setback operation cannot be ON/OFF while wired controller operation is prohibited.

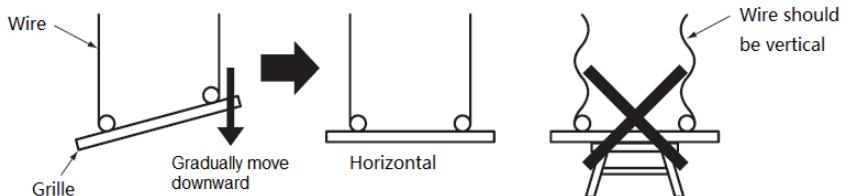
5. Function Menu Screen Display

5.10 Elevating Grille Setting

This function is used to raise and lower grille when the air filter and grille need to be cleaned. It is available only when the elevating grille is equipped with the air panel.

WARNING

When the air inlet grille is set inside the air panel, ensure that the air inlet grille is horizontal and the wire is suspended tightly without loosening. After the above is ensured, set the air inlet grille. If the air inlet grille is inclined and the wire is loosened, they may be caught in the pulley. It may lead to a failure of the pulley or pulley block. If the worst happens, it may cause personal injury if the air panel falls open.

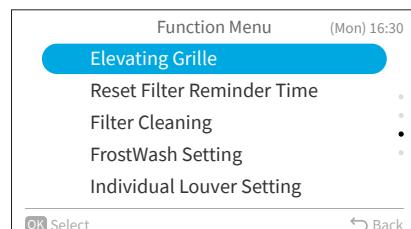


NOTES:

- This function is available only for indoor unit elevating grille.
- Make sure that the unit operation is stopped before using the elevating grille.
- The elevating grille function is not available when the unit is operating.

1. Set the elevating grille

- Step1. Select "Elevating Grille" on the "Function Menu" screen and press "OK".
- If there is only one indoor unit, the elevating grille operation screen in Step3 is displayed.



- Step2. Press "↖", "↙", "↖", or "↗" to select the indoor unit of which indoor unit grille needs to be raised or lowered. Press "OK".

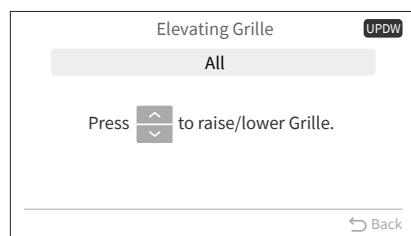


- Step3. Press "↙" to lower the grille until it's lowered to the set distance.

- If need to lower the distance further than the set distance, press "↙" again.
- Each press lowers the grille by 20in (50cm).
- Pressing "↖" can stop it at any position in lowering process.

- Step4. After cleaning the air filter, install the air filter and press "↖" to raise the grille. Once the grille is stored inside the unit, it will stop after approximately 3 seconds.

- If the grille is tilted when stored, press "↖" again until the tilt is corrected.
- Pressing "↙" can stop it at any position in the raising process.



- Step5. Press "↶" to return to the indoor unit selection screen.

To operate other indoor units, perform the operations of above Step2.

To end the operation, press "↶" again to return to the "Function Menu" screen.

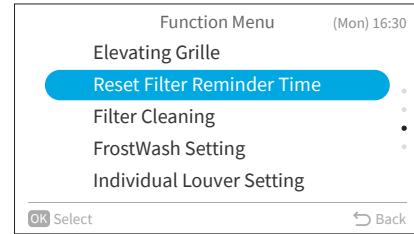
- If there is only one indoor unit, the screen returns to the "Function Menu" screen.

5.11 Filter Reminder Reset Setting

This function is used to turn off the filter reminder indication and to reset the time of use for the filter.

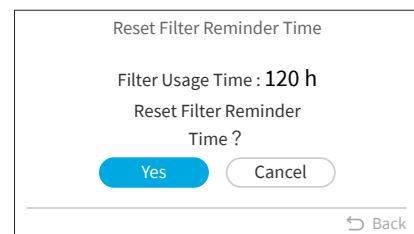
1. Reset the filter reminder time

- Step1. Select "Reset Filter Reminder Time" on the "Function Menu" screen and press "OK".

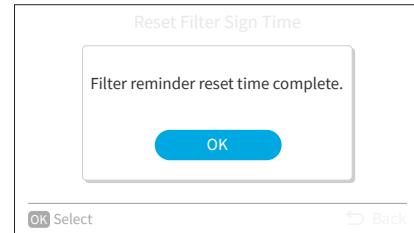


- Step2. Press "<" or ">" to select "Yes", and then press "OK".

- The screen returns to the "Function Menu" screen depending on the type of indoor unit.



- Step3. Press "OK" and the screen returns to the "Function Menu" screen.



5. Function Menu Screen Display

5.12 FrostWash

This function suppresses a clog on the heat exchanger.

First, freeze the indoor unit heat exchanger when whole system is under stoppage. Then defrost it to remove the dust with drain water. Auto-FrostWash and Manual FrostWash are selectable.

NOTES:

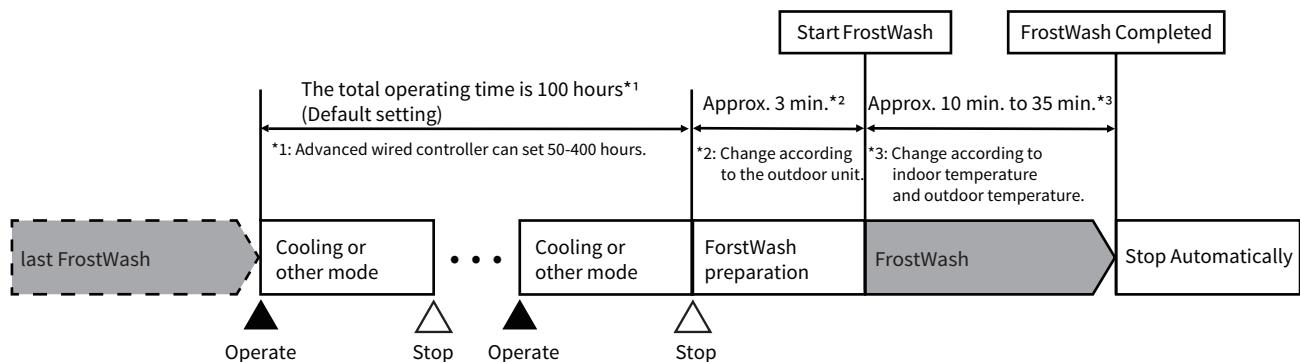
- This function cannot be set when the indoor unit and the outdoor unit do not support this function.
- Depending on the outdoor unit, the settings on the outdoor unit may be required.
- Cracking noise may be heard during freezing or defrosting phase due to temperature change. Refrigerant flow noise may also be heard. The noise may be heard relatively louder in a quiet environment. It is recommended to set "Auto-FrostWash Schedule" when room is not occupied.
- Ice fog may come out from air outlet during FrostWash operation. Ice fog could happen in a humid environment such as the room humidifier is used in a small room.
- This function is not available to operate where the outside temperature is lower than 34°F(1°C) or higher than 110°F(43°C).
- This function is not available to operate where the room temperature is lower than 59°F(15°C) or higher than 86°F(30°C).
- The level of dust removed is depend on usage environment.
- Limitations and settings are required when using this feature in a VRF system. For more information, please refer to the outdoor unit service manual for FrostWash function.

5.12.1 Function

(1) [Function 1] Auto-FrostWash

It is a function that automatically starts FrostWash when the operation is stopped after the total time that the indoor unit has been operated.

Auto-FrostWash Flow



- If the Auto-FrostWash is stopped, the total operating time will be reset.

(2) [Function 2] Manual FrostWash

This function is to perform FrostWash at your favorite timing, allows you to perform FrostWash as your preferred time, such as when you have not used Cooling or another mode for a while.

5.12.2 Advanced Wired Remote Controller Setting Item

- Start FrostWash (Page 35)
This item is selected when performing [Function 2] Manual FrostWash.
Manual FrostWash can be performed even if Auto-FrostWash is enabled.
- Enable/Disable Auto-FrostWash (Page 36)
[Function 1] This is a setting to enable or disable Auto-FrostWash.
 - "Enable": FrostWash is performed automatically.
 - "Disable": The function does not work (the default setting).

- FrostWash Intervals (Page 36)

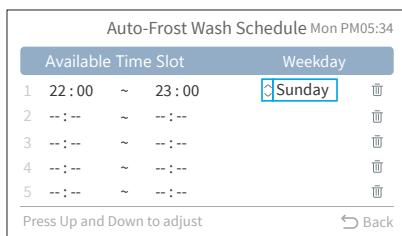
You can set the total operating time of the indoor unit as below.

Function 1	Auto-FrostWash	When the total operating time reaches the set value, FrostWash is performed while the operation is stopped.
Function 2	Manual FrostWash	When Auto-FrostWash is disabled, the total operating time reaches the set value, the icon  is displayed on the operation screen, so use it as a guide for manual FrostWash.

NOTES:

- The icon  disappears when performing Manual FrostWash or you enable the Auto-FrostWash.
- Manual FrostWash may not be performed when in continuous fan mode with the icon .
- After operating "cooling", "heating", and "dry" mode, Manual FrostWash can be performed.
- Set Auto-FrostWash Schedule(Page 37)

When the indoor unit is OFF or stopped operation after a certain period of time, FrostWash is automatically performed in the available time slot.



Condition ①

from 22:00 to 23:00 on Sunday.

Condition ②

The total operation time of the indoor unit has reached the FrostWash interval (The default time is 100 hours).

Condition ③

When the indoor unit is OFF or stopped operation.

Set the schedule for Auto-FrostWash as the following.

- "Available time slot": Up to five time slots can be set.
- "Weekday": "Monday to Sunday" and "Everyday" can be selected.
- FrostWash Operation History (Page 39)

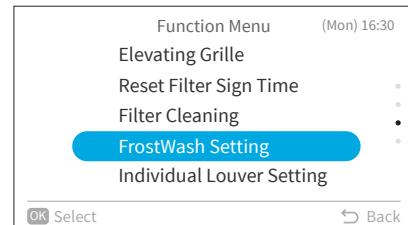
This function is used to check and delete the FrostWash record.

5.12.3 Set FrostWash

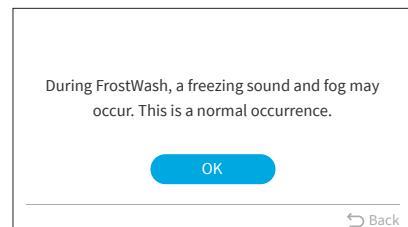
NOTE:

- In the case of 2 remote controllers, FrostWash can be set only on the primary wired remote controller.
- Set FrostWash

Step1. Select "FrostWash Setting" in Function Menu, and press "OK".



Step2. Press "OK".



5. Function Menu Screen Display

Step3. Press "↖" or "↙" to select the setting item and press "OK".

The item changes as follows:

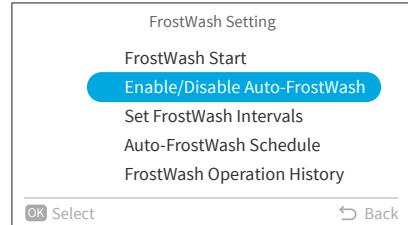
"FrostWash Start" ↔ "Enable/Disable Auto-FrostWash"
↔ "Set FrostWash Intervals" ↔ "Auto-FrostWash Schedule" ↔ "FrostWash Operation History".



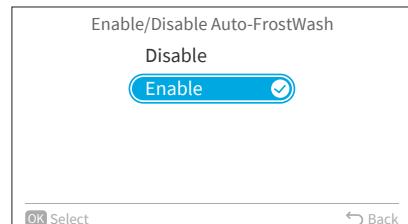
(1) [Function 1] Auto-FrostWash

① Enable/Disable Auto-FrostWash

Step1. Press "↖" or "↙" to select "Enable/Disable Auto-FrostWash" and press "OK".

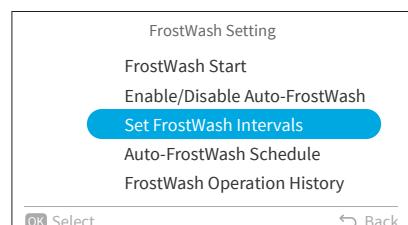


Step2. Press "↖" or "↙" to select "ON" and press "OK". Press "↶" to return to Step1.



② Set FrostWash Intervals

Step1. Press "↖" or "↙" to select "Set FrostWash Intervals" and press "OK".

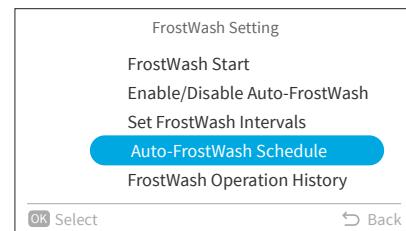


Step2. Press "↖", "↙", "<", or ">" to select interval time and press "OK".



(3) Set Auto-FrostWash Schedule

- Step1. Press "↖" or "↙" to select "Auto-FrostWash Schedule" and press "OK".
- If the current time is not set, the time setting screen (Page 43) is automatically displayed.



- Step2. Press "↖" or "↙" to select from schedule "1" to "5".

Press "<" or ">" to select "Start time", "End time", "Weekday". Then press "↖" or "↙" to adjust.

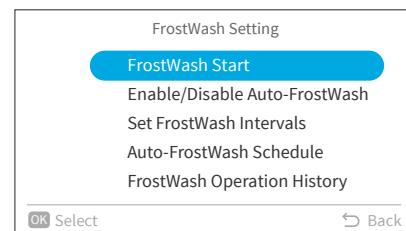
- Select "Delete" and press "OK" to delete the schedule.

Select schedule "1" to "5" and press "OK" to confirm the Auto-FrostWash schedule.



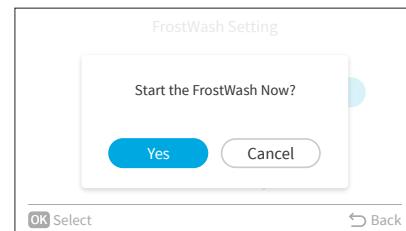
(2) [Function 2] Manual FrostWash

- Step1. Press "↖" or "↙" to select "FrostWash Start" and press "OK".



- Step2. Press "<", or ">" to select "Yes" and press "OK".

→ Manual FrostWash is started.



5. Function Menu Screen Display

5.12.4 Display in FrostWash

In FrostWash, the following is usually displayed in order.

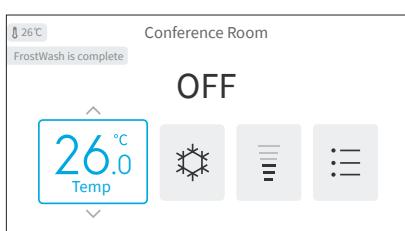
① FrostWash in preparation



② FrostWash in progress



③ Complete FrostWash



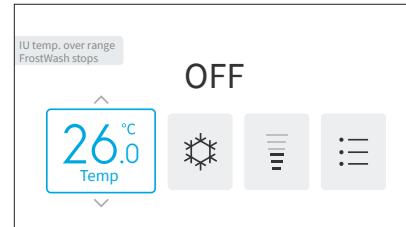
The display of completed FrostWash will disappear when one of the remote controllers is operated after the backlight is turned on.

NOTE:

- In each screen display, the backlight turns off after a certain period of time (The default setting is 15 seconds.) after operation, so it may be difficult to see the screen display.

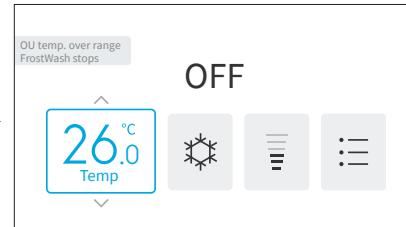
If the indoor or outdoor temperature does not meet the conditions for FrostWash, the following is displayed.

① - 1 When the indoor unit is out of the temperature range



If the room temperature is outside the range of 59°F to 86°F(15°C to 30°C), FrostWash will not be performed and paused is displayed. The display will disappear when one of the remote controllers is operated after the backlight is turned on.

① - 2 When the outdoor unit is out of the temperature range



If the room temperature is outside the range of 34°F to 110°F(1°C to 43°C), FrostWash will not be performed and paused is displayed. The display will disappear when one of the remote controllers is operated after the backlight is turned on.

If FrostWash is paused, the following is displayed.

①② - 1 Press "OK" (Turn off the FrostWash)



①② - 2 FrostWash off screen



The above display will continue for about 8 minutes. Please note that no operation can be done at that time.

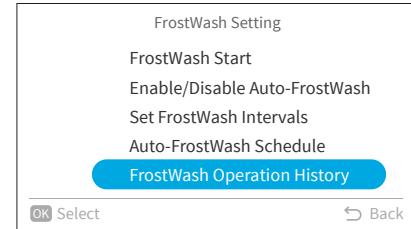
5.12.5 FrostWash Operation History

NOTES:

- If the current time is not set, the date will be " - -".
- The start time is the time when FrostWash is being prepared.

1. FrostWash operation history

Step1. Press "↖" or "↙" to select "FrostWash Operation History" and press "OK".



Step2. Press the "↖" or "↙" to show the FrostWash history.

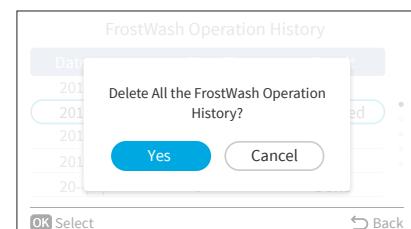
- "Done" or "Paused" is displayed as the result.
- Up to 15 records can be saved.

FrostWash Operation History		
Date	Start Time	Result
2019/11/30	23:56	Done
2019/07/31	23:33	Paused
2019/01/22	00:30	Done
2018/10/22	00:30	Done
2018/08/28	00:30	Done

Step3. To delete the FrostWash history, press "OK" to display the confirmation screen.

Select "Yes" and press "OK" to clear the FrostWash history and return to Step2.

Select "Cancel", the screen returns to Step2.



5. Function Menu Screen Display

5.13 Individual Louver Setting

This function is to individually set the air direction of multiple air outlets.

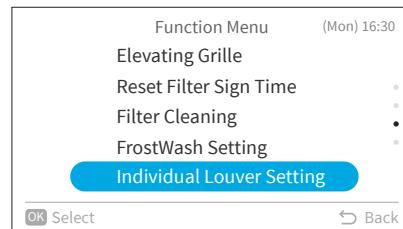
NOTES:

- This function is available when the indoor unit supports individual louvers.
- It cannot be set while the air conditioner is stopped.
- The fan speed changes to "Low" while this function is being set. (After the setting is completed, the unit operation is back to normal.)
- As for "Start-up of Heating Operation", "During Defrost Operation" and "Activation of Thermo-Controller", all the louver angles are automatically secured horizontally when this function is activated.
- This function is not available if two remote controllers (including a combination of wired controller + wireless controller) are used.

5.13.1 Individual Louver Setting

1. Individual louver setting

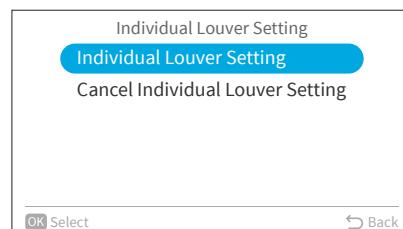
- Step1. Select "Individual Louver Setting" on the "Function Menu" and press "OK".



- Step2. Select "Individual Louver Setting" and press "OK".

NOTE:

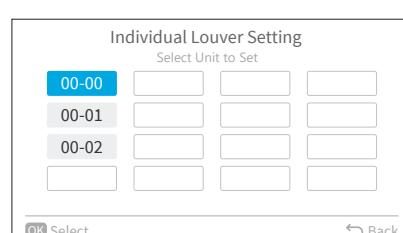
- If there is one indoor unit connected with the controller, Step4 is displayed.



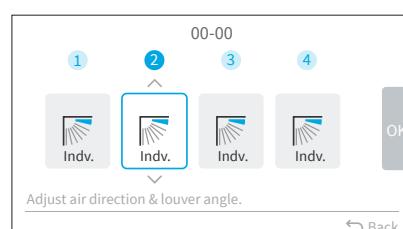
- Step3. Press "↖", "↙", "↖", or "↗" to select the indoor unit to change the louver direction, and press "OK".

NOTE:

- The indoor unit displayed on the screen flashes if an individual louver is set.

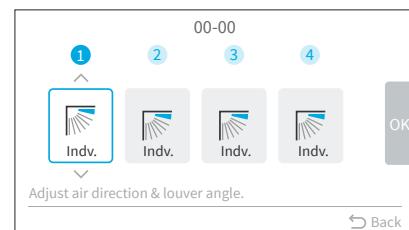


- Step4. Press "↖" or "↗" and select the louver from 1 to 4.
→The selected louver is opened while the unselected louvers are closed.

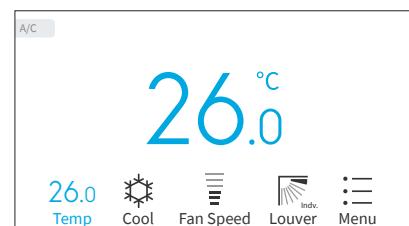


- Step5. Press "↑" or "↓" to select the louver angle and press "OK".
→Return to Step3.

The louver angle is changed as follows.



- Step6. Ensure that individual "Indv." is turned on at the Louver on the home screen.



5.13.2 Cancel Individual Louver Setting

1. Cancel individual louver setting

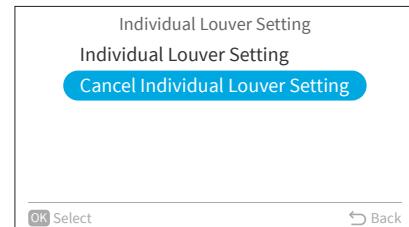
- Step1. Select "Individual Louver Setting" on the "Function Menu" and press "OK".



- Step2. Select "Cancel Individual Louver Setting" and press "OK".

NOTE:

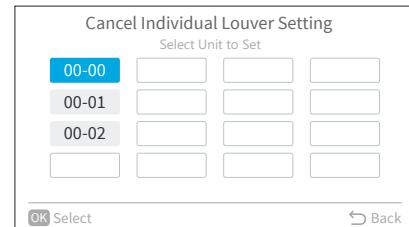
- If there is one indoor unit connected with the controller, Step4 is displayed.



- Step3. Press "↑", "↓", "<", or ">" to select the indoor unit to cancel the louver direction, and press "OK".

NOTE:

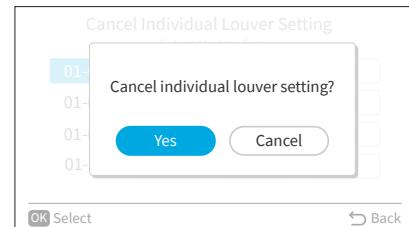
- The indoor unit displayed on the screen flashes if an individual louver is set.



- Step4. Press "<" or ">" to select "Yes" and press "OK". Cancel the individual louver setting and return to Step3.

NOTE:

- All the individual louver settings are canceled.



5. Function Menu Screen Display

5.14 Louver Open/Close

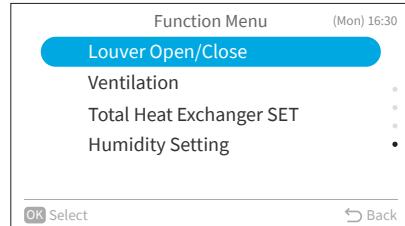
This function is used to fully open louver for adjusting the horizontal (left or right) direction of the air flow.

NOTES:

- This function cannot be set when the air conditioner is ON.
- This function is invalid depending on the indoor unit type. Refer to the user manual of indoor unit for details.

1. Louver Open/Close

Step1. Select "Louver Open/Close" on the "Function Menu" and press "OK".



Step2. Press "<" or ">" to select "Yes" and press "OK" to open/close air outlet of indoor units.



5.15 Ventilation

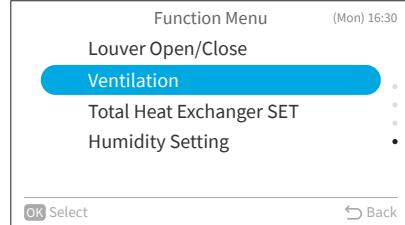
Operation Mode	Action
A/C	Operate the air conditioner individually.
Ventilation	Operate the EconoFresh individually.
A/C + Ventilation	Operate the air conditioner and the total heat exchanger together.

NOTE:

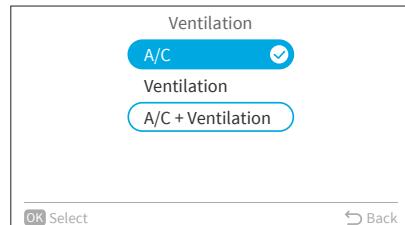
- A/C + Ventilation function is available only when the total heat exchanger is connected.

1. Ventilation

Step1. Select "Ventilation" on the "Function Menu" and press "OK".



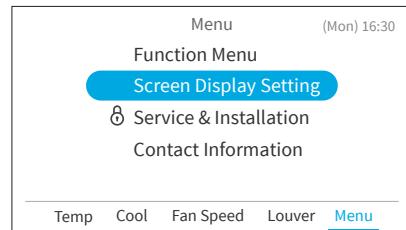
Step2. Press "˄" or "˅" to select the operation mode and press "OK" to confirm. The item changes as follows: "A/C" ↔ "Ventilation" ↔ "A/C + Ventilation". Press "↶" to return to Function Menu.



6. Screen Display Setting

1. Screen display setting

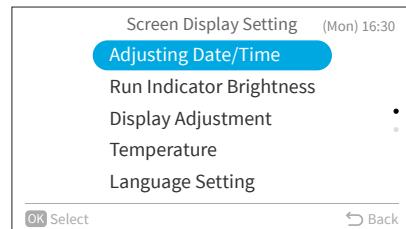
- Step1. Select "Screen Display Setting" on the "Menu" screen and press "OK".



- Step2. Press "↖" or "↙" to select setting item and press "OK".

Press "↶" to return to "Menu" screen.

- If there is no operation on the display setting screen for about 10 minutes, the screen automatically returns to the home screen.
- Various settings are saved even when the power supply is off.



6.1 Adjusting Date/Time

Function	Action
Adjust Date/Time	Set Year/Month/Day/Hour/Minute.
Time Format	Change the time format to 12 hour/24 hour.

6.1.1 Adjusting Date/Time

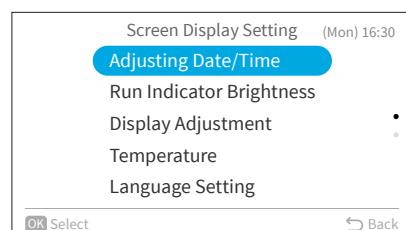
- Periodic time setting is recommended.(Clock accuracy: difference within ±70 seconds by a month)
- With this controller, the built-in capacitor will allow continued operation for 72 hours. Reset the date and time if the controller remains without power for longer than 72 hours or the main power supply is OFF for a long period of time.
- When adjusting time from the main controller, the sub controller of the same refrigerant cycle will be set at the same time.

NOTE:

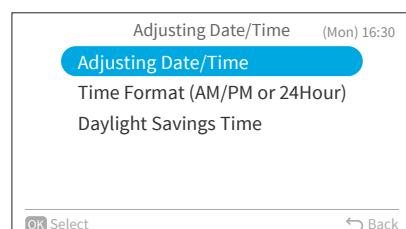
- It is possible to adjust time from the sub controller. If more than two minutes' modification is done, the main controller will be set at the same time.
(Please check the main and sub display on the home screen. If it is not displayed, check "8. Main Remote Setting" in the Installation and Maintenance Manual.)

1. Screen display setting

- Step1. Select "Adjusting Date/Time" on the "Screen Display Setting" screen and press "OK".

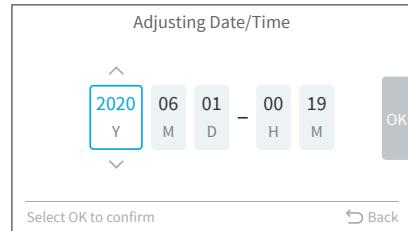


- Step2. Press "↖" or "↙" to select "Adjusting Date/Time" and press "OK".



6. Screen Display Setting

- Step3. Press "<" or ">" to select "yyyy/mm/dd/hh/mm".
Press "↖" or "↙" to change the setting.

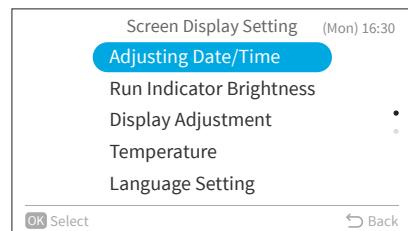


- Step4. After making all settings,
If select "OK" and press "OK", the screen returns to Step2.
If press "↶", the confirmation screen is displayed.
Select "Save" and press "OK" to confirm the setting and
the screen returns to Step2.
Select "Not Save", it returns to Step2 without any setting
changes.
If press "↶" again, it returns to Step3.

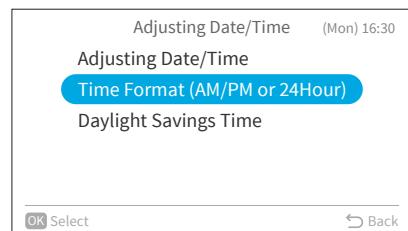
6.1.2 Time Format

1. Set time format

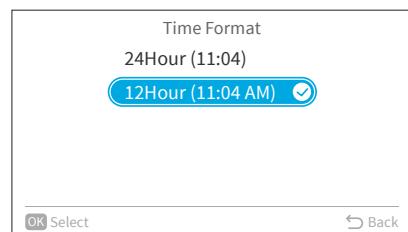
- Step1. Select "Adjusting Date/Time" on the "Screen Display Setting" screen and press "OK".



- Step2. Press "↖" or "↙" to select "Time Format" and press "OK".



- Step3. Press "↖" or "↙" to select 24 hour or 12 hour and press "OK".
Press "↶" to return to Step2.

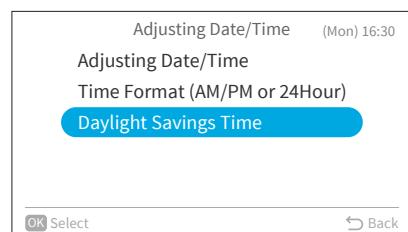


6.1.3 Daylight Savings Time

This function adjusts time forward or backward an hour when daylight savings time starts or ends.

1. Set daylight savings time

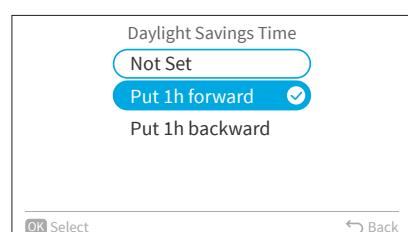
- Step1. Select "Daylight Savings Time" on the "Adjusting Date/Time" screen and press "OK".



- Step2. Press "↖" or "↙" to select the setting and press "OK".

NOTE:

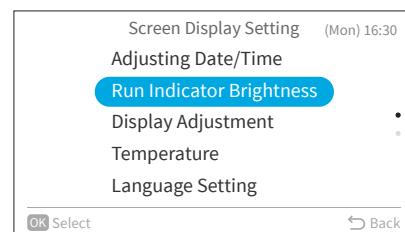
- In the same refrigerant system, this function can be set only on one wired controller. Once set, the function is automatically synchronized to the other wired controllers. Therefore, in the same refrigerant system, you do not need to set this function on multiple wired controllers simultaneously.



6.2 Run Indicator Brightness

1. Set run indicator brightness

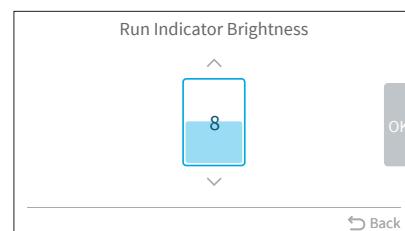
Step1. Select "Run Indicator Brightness" on the "Screen Display Setting" screen and press "OK".



Step2. Press "↑" or "↓" to change the brightness value. Select "OK" and press "OK", the screen returns to the "Screen Display Setting" screen.

NOTE:

- When the run indicator brightness is set to be 0, the backlight turns off after no operation for the set time. In this case, the current status is not indicated.



6.3 Display Adjustment

Function	Action
Backlight Brightness	Adjust the brightness of the backlight.
Backlight Dim Time	Change the time when the backlight turns dim after inactivity.
Backlight Off Time	Change the time when the backlight turns off after inactivity.
Screen Theme	Select the screen theme as light or dark.

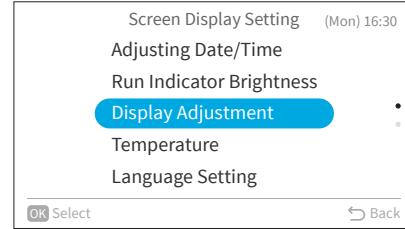
NOTE:

- When connecting with two remote controllers, the maximum backlight brightness is 8.

6.3.1 Backlight Brightness

1. Set backlight brightness

Step1. Select "Display Adjustment" on the "Screen Display Setting" screen and press "OK".

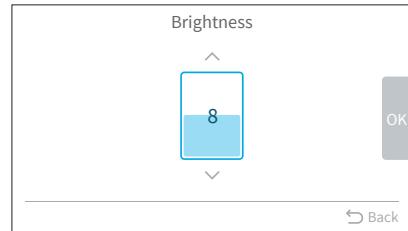


Step2. Select "Brightness" and press "OK".



6. Screen Display Setting

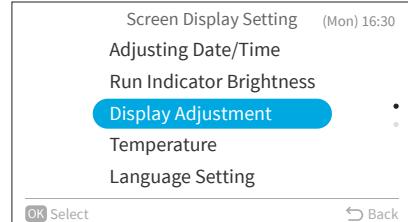
- Step3. Press "↖" or "↙" to change the brightness value.
Select "OK" and press "OK", the screen returns to Step2.



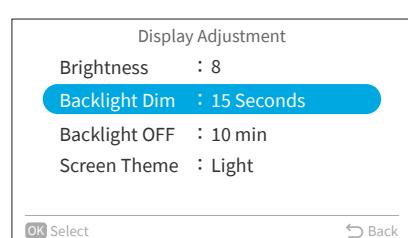
6.3.2 Backlight Dim Time

1. Set backlight dim time

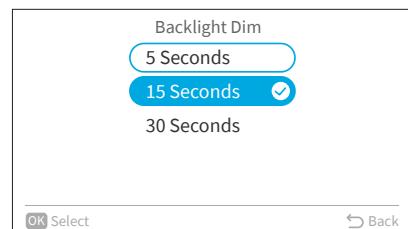
- Step1. Select "Display Adjustment" on the "Screen Display Setting" screen and press "OK".



- Step2. Select "Backlight Dim" and press "OK".



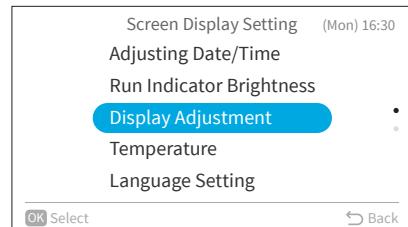
- Step3. Press "↖" or "↙" to select the dim time intervals and press "OK". The item changes as follows:
"5 seconds" ↔ "15 seconds" ↔ "30 seconds".



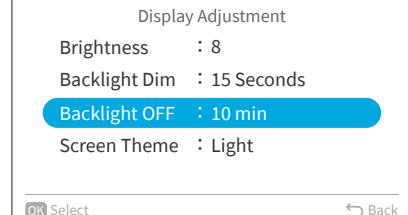
6.3.3 Backlight Off Time

1. Set backlight off time

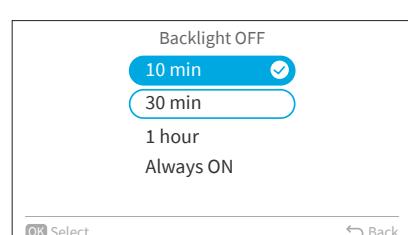
- Step1. Select "Display Adjustment" on the "Screen Display Setting" screen and press "OK".



- Step2. Select "Backlight OFF" and press "OK".



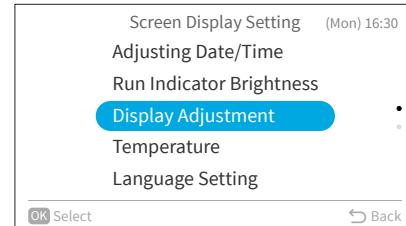
- Step3. Press "↖" or "↙" to select the off time intervals and press "OK".
Press "↶" to return to Step2.



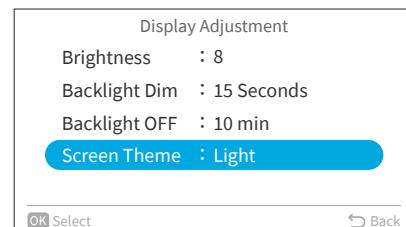
6.3.4 Screen Theme

- Set screen theme

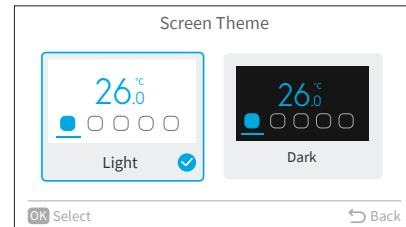
Step1. Select "Display Adjustment" on the "Screen Display Setting" screen and press "OK".



Step2. Select "Screen Theme" and press "OK".



Step3. Press "<" or ">" and "OK" to select the screen theme.
Press "↶" to return to Step2.



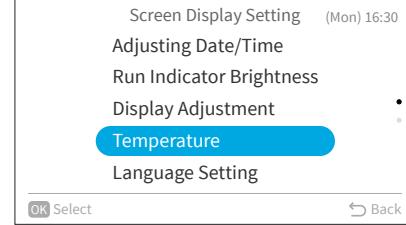
6.4 Temperature

Function	Action
Unit and Width	Change temperature unit and width.
Display of Thermistor Temperature	Show/hide the thermistor temperature display on the home screen.

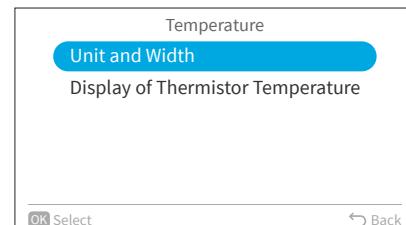
6.4.1 Temperature Unit and Width

- Set temperature unit and width

Step1. Select "Temperature" on the "Screen Display Setting" screen and press "OK".

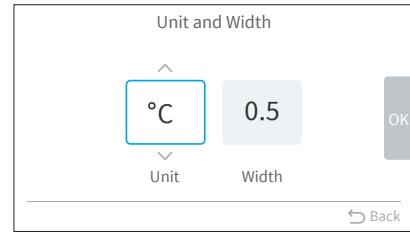


Step2. Press "↖" or "↙" to select "Unit and Width" and press "OK".



6. Screen Display Setting

- Step3. Press "<" or ">" to select unit or width. Press "˄" or "˅" to change the setting.
- When the unit is selected, it changes as below.
 $^{\circ}\text{F} \leftrightarrow ^{\circ}\text{C}$
 - When the width is selected, it changes as below.
0.5 ↔ 1
(The width can be set only when the unit is $^{\circ}\text{C}$.)

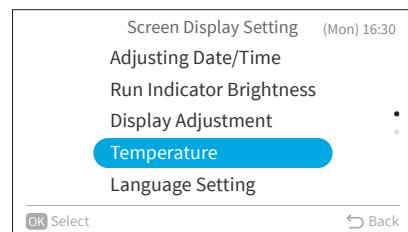


After making all settings, select "OK" and press "OK", the screen returns to Step2.

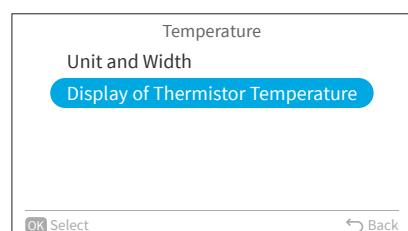
6.4.2 Display of Thermistor Temperature

- Set thermistor temperature display

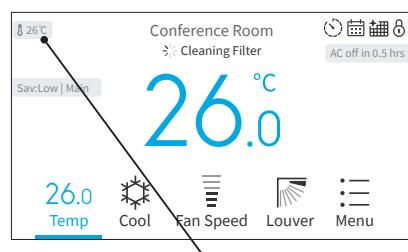
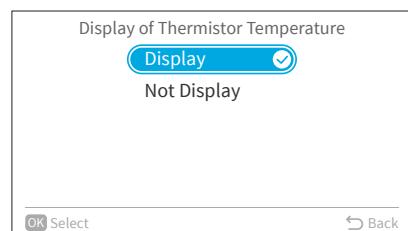
- Step1. Select "Temperature" on the "Screen Display Setting" screen and press "OK".



- Step2. Press "˄" or "˅" to select "Display of Thermistor Temperature" and press "OK".



- Step3. Press "˄" or "˅" to select the setting and press "OK".
Press "↶" to return to Step2.



The icon indicates that the thermistor temperature is set to be displayed.

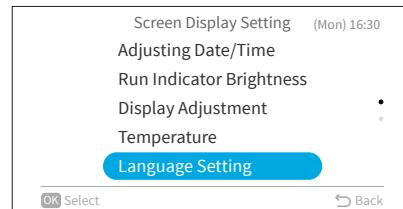
6.5 Language Setting

This function is to change the displayed language.

Selectable language: Japanese, English(°C), English(°F), Simplified Chinese, Traditional Chinese, French, Portuguese, or Spanish.

1. Set display language

- Step1. Select "Language Setting" on the "Screen Display Setting" screen and press "OK".



- Step2. Press "↖" or "↙" to select the language and press "OK".
Press "↶" to return to "Screen Display Setting" screen.

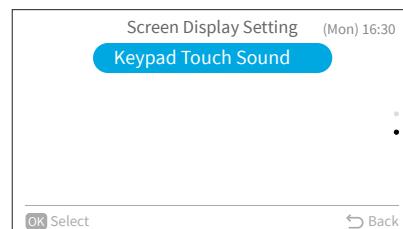


6.6 Keypad Touch Sound

This function is to change the touch sound on keypad.

1. Set keypad touch sound

- Step1. Select "Keypad Touch Sound" on the "Screen Display Setting" screen and press "OK".



- Step2. Press "↖" or "↙" to select the sound volume and press "OK".
Press "↶" to return to "Screen Display Setting" screen.

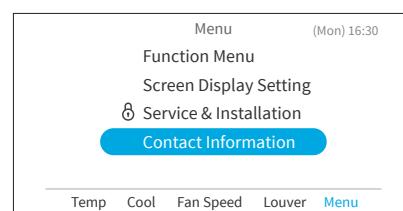


7. Contact Information

The screen displays service contact information and the latest alarm code.

1. Set contact information

- Step1. Select "Contact Information" from the "Menu" screen and press "OK".



→Display service contact information and the latest alarm code.

Press "↶" to return to the "Menu" screen.



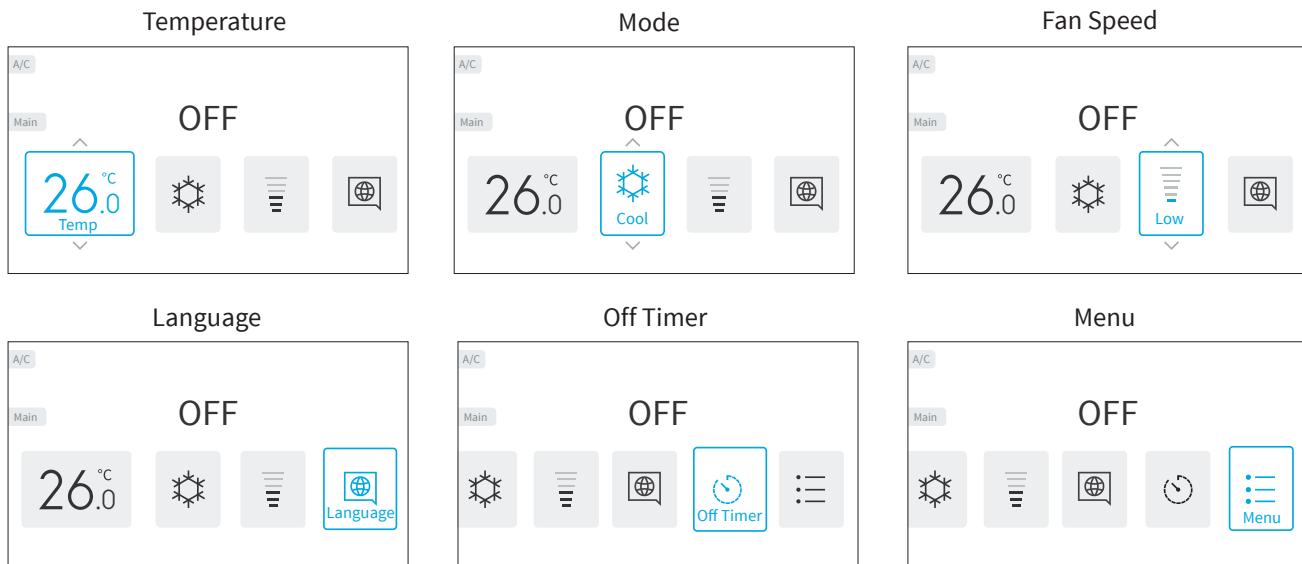
8. Hotel Mode Setting

When the advanced wired remote controller is set to hotel mode, the home screen and menu are changed. For how to set the hotel mode, refer to "**Hotel Mode Setting**" in the Installation Manual.

- When the air conditioner is OFF

Press "<" or ">" to select the setting item. The item changes as follows:

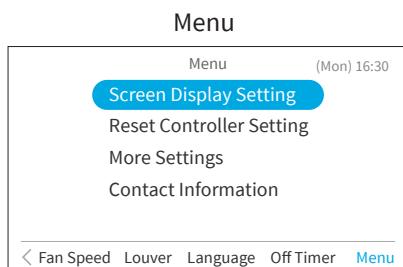
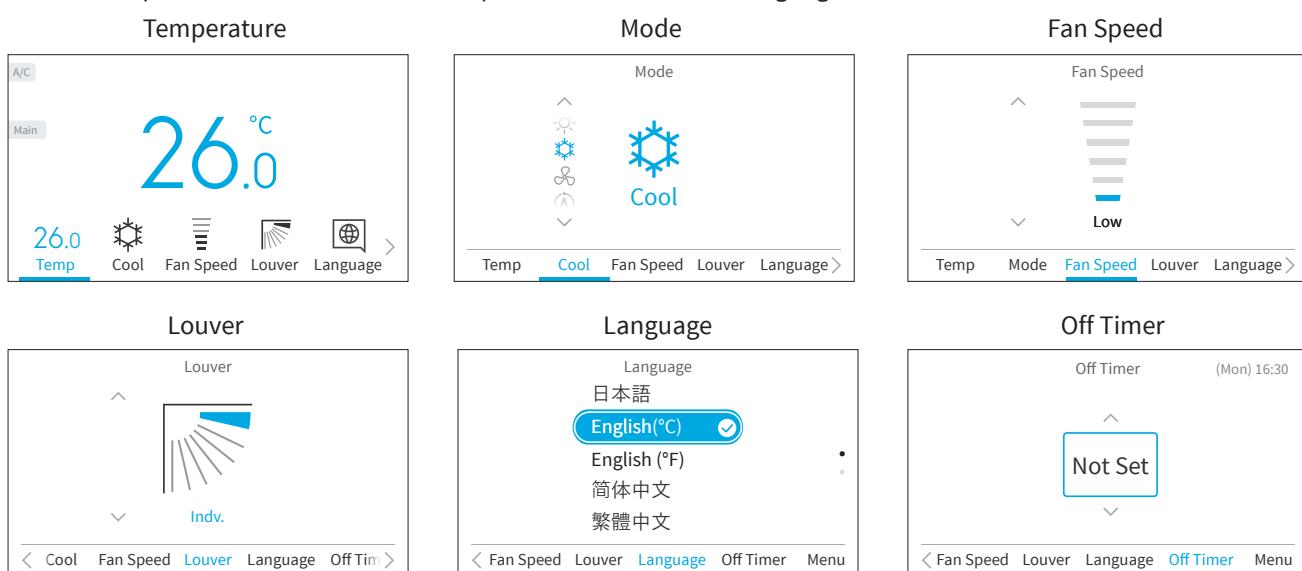
"Temperature" ↔ "Mode" ↔ "Fan Speed" ↔ "Language" ↔ "Off Timer" ↔ "Menu".

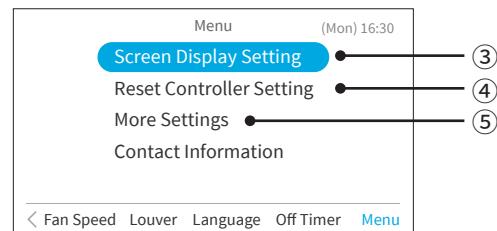
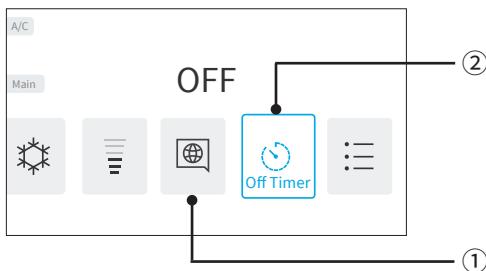


- When the air conditioner is ON

Press "<" or ">" to select the setting item. The item changes as follows:

"Temperature" ↔ "Mode" ↔ "Fan Speed" ↔ "Louver" ↔ "Language" ↔ "Off Timer" ↔ "Menu".





① Language

Change to the desired language.

② Off Timer

Turn off the air conditioner after the desired time.

③ Screen Display Setting

Make settings for screen display.

Please refer to "**6. Screen Display Setting**".

④ Reset Controller Setting

The off timer is reset to not set, the language setting is reset to English, and the temperature setting unit is reset to °C.

When the wired controller is used in a hotel, the settings are easily initialized after checking out.

⑤ More Settings

"More Settings" has same features with "Menu" when hotel mode is unavailable.

8.1 Language

1. Set language

Step1. Press "<" or ">" to select "Language" in the home screen.

Step2. Press "˄" or "˅" to select the language and press "OK".



8. Hotel Mode Setting

8.2 Off Timer

NOTES:

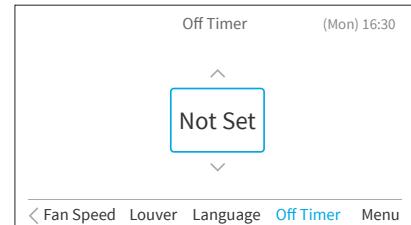
- "Off timer" can be set even when the air conditioner is stopped.
- If the set time is reached during stop, the off timer setting is canceled.
- While the wired remote controller is prohibited, "off timer" cannot stop the air conditioner operation.

1. Set off timer

Step1. Press "<" or ">" to select "Off Timer" in the home screen.

Step2. Press "^" or "v" to select the timer setting and press "OK".

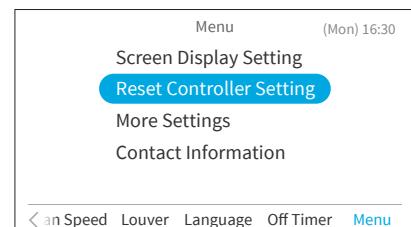
- The timer can be set from 0.5 to 23 hours.
- Press "^" to increase 30 minutes of each step for 0.5 to 9.5 hours, 1 hour of each step for 10 to 23 hours.



8.3 Reset Controller Setting

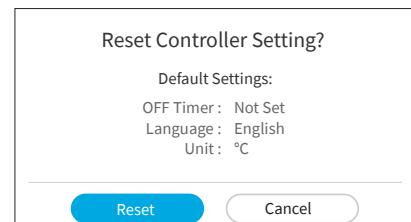
1. Reset controller setting

Step1. Press "^" or "v" to select "Reset Controller Setting" in the "Menu" screen and press "OK".



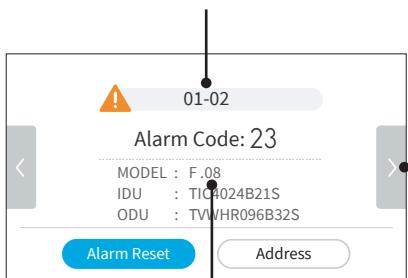
Step2. Press "<" or ">" to select "Reset" and press "OK", return to "Menu" screen. The default settings are as table below .

Off Timer	Not Set
Language	English
Unit	°C



9. In Alarm Condition

Indoor unit number
(Refrigerant system-address number)



When more than one indoor unit is connected,
press "<" or ">" to show other indoor units.

Installed unit number

- The RUN indicator flashes.
- The indoor unit number, alarm code, model code, and the connected number of indoor units are displayed on the screen.
- If two or more indoor units are connected, the above functions for each indoor unit are displayed one-by-one.

9.1 Power Failure

- All the indicators are OFF.
- Once the air conditioner is stopped by power failure for longer than 2 seconds, the air conditioner is not started again, although power recovers. Perform the starting procedures again.
- If the power recovers within 2 seconds, the air conditioner starts again automatically.

9.2 Electromagnetic Interference (EMI)

- There could be an instance where all the indications are OFF and the unit is stopped.
- This can occur through activation of the microcomputer for the air conditioner protection from the Electromagnetic Interference (EMI).
- Perform the starting procedures again.

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