

REMOTE CONTROL INSTALLATION MANUAL

This installation manual describes the installation method and cautions related to the remote controller. Refer to the manual together with manuals attached to the indoor unit, outdoor unit and other. Be sure to read this manual before work in order to work correctly.



1. Safety precautions

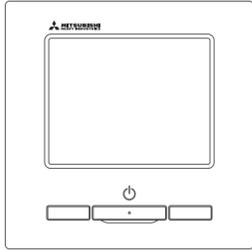
- Please read this manual carefully before starting installation work to install the unit properly. Every one of the followings is important information to be observed strictly.
- WARNING** Failure to follow these instructions properly may result in serious consequences such as death, severe injury, etc.
- CAUTION** Failure to follow these instructions properly may cause injury or property damage.

It could have serious consequences depending on the circumstances.

- The following pictograms are used in the text.

	Never do.		Always follow the instructions given.
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- Keep this manual at a safe place where you can consult with whenever necessary. Show this manual to installers when moving or repairing the unit. When the ownership of the unit is transferred, this manual should be given to a new owner.

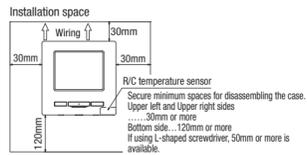


WARNING

- Consult your dealer or a professional contractor to install the unit.** Improper installation made on your own may cause electric shocks, fire or dropping of the unit.
- Installation work should be performed properly according to this installation manual.** Improper installation work may result in electric shocks, fire or break-down.
- Be sure to use accessories and specified parts for installation work.** Use of unspecified parts may result in drop, fire or electric shocks.
- Install the unit properly to a place with sufficient strength to hold the weight.** If the place is not strong enough, the unit may drop and cause injury.
- Be sure to have the electrical wiring work done by qualified electrical installer, and use exclusive circuit.** Power source with insufficient and improper work can cause electric shock and fire.
- Shut OFF the main power supply before starting electrical work.** Otherwise, it could result in electric shocks, break-down or malfunction.
- Do not modify the unit.** It could cause electric shocks, fire, or break-down.
- Be sure to turn OFF the power circuit breaker before repairing/inspecting the unit.** Repairing/inspecting the unit with the power circuit breaker turned ON could cause electric shocks or injury.
- Do not install the unit in appropriate environment or where inflammable gas could generate, flow in, accumulate or leak.** If the unit is used at places where air contains dense oil mist, steam, organic solvent vapor, corrosive gas (ammonium, sulfuric compound, acid, etc) or where acidic or alkaline solution, special spray, etc. are used, it could cause electric shocks, break-down, smoke or fire as a result of significant deterioration of its performance or corrosion.
- Do not install the unit where water vapor is generated excessively or condensation occurs.** It could cause electric shocks, fire, or break-down.
- Do not use the unit in a place where it gets wet, such as laundry room.** It could cause electric shocks, fire, or break-down.
- Do not operate the unit with wet hands.** It could cause electric shocks.

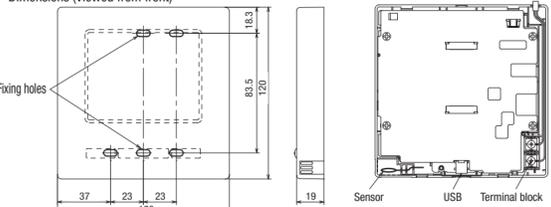
3. Installation place

Secure the installation space shown in the figure. For the installation method, "embedding wiring" or "exposing wiring" can be selected. For the wiring direction, "Backward", "Upper center" or "Upper left" can be selected. Determine the installation place in consideration of the installation method and wiring direction.

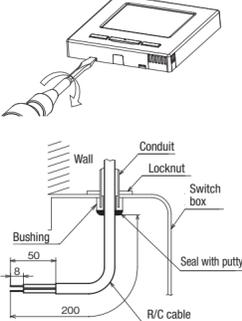


4. Installation procedure

Perform installation and wiring work for the remote controller according to the following procedure. Dimensions (Viewed from front)

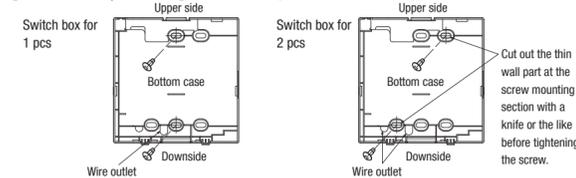


To disassemble the R/C case into the upper and lower pieces after assembling them once. Insert the tip of flat head screwdriver or the like in the recess at the lower part of R/C and twist it lightly to remove. It is recommended that the tip of the screwdriver be wrapped with tape to avoid damaging the case. Take care to protect the removed upper case from moisture or dust.



In case of embedding wiring (When the wiring is retrieved "Backward")

- Embed the switch box and the R/C wires beforehand. Seal the inlet hole for the R/C wiring with putty.
- When wires are passed through the bottom case, fix the bottom case at 2 places on the switch box.



- Connect wires from X and Y terminals of R/C to X and Y terminals of indoor unit. R/C wires (X, Y) have no polarity. Fix wires such that the wires will run around the terminal screws on the top case of R/C.
- Install the upper case with care not to pinch wires of R/C.

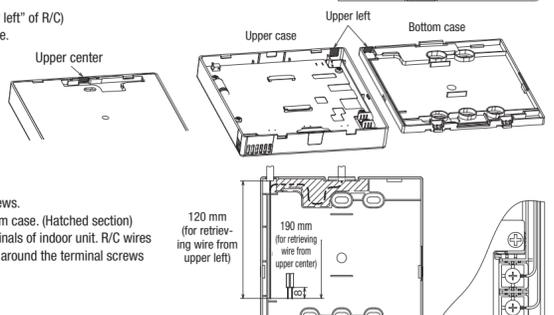
Cautions for wire connection
Use wires of no larger than 0.5 mm² for wiring running through the remote control case. Take care not to pinch the sheath. Tighten by hand (0.7 N·m or less) the wire connection. If the wire is connected using an electric driver, it may cause failure or deformation.

In case of exposing wiring

- Cut out the thin wall sections on the cases for the size of wire.

When taking the wiring out from the upper center, open a hole before separating the upper and bottom cases. This will reduce risk of damaging the PCB and facilitate subsequent work. When taking the wiring out from the upper left, take care not to damage the PCB and not to leave any chips of cut thin wall inside.

- Fix the bottom R/C case on a flat surface with two wood screws.
- In case of the upper center, pass the wiring behind the bottom case. (Hatched section)
- Connect wires from X and Y terminals of R/C to X and Y terminals of indoor unit. R/C wires (X, Y) have no polarity. Fix wires such that the wires will run around the terminal screws on the top case of R/C.
- Install the top case with care not to pinch wires of R/C.
- Seal the area cut in ① with putty.



- ## WARNING
- Do not wash the unit with water.** It could cause electric shocks, fire, or break-down.
 - Use the specified cables for wiring, and connect them securely with care to protect electronic parts from external forces.** Improper connections or fixing could cause heat generation, fire, etc.
 - Seal the inlet hole for remote control cable with putty.** If dew, water, insect, etc. enters through the hole, it could cause electric shocks, fire or break-down. If dew or water enters the unit, it may cause screen display anomalies.
 - When installing the unit at a hospital, telecommunication facility, etc., take measures to suppress electric noises.** It could cause malfunction or break-down due to hazardous effects on the inverter, private power generator, high frequency medical equipment, radio communication equipment, etc. The influences transmitted from the remote control to medical or communication equipment could disrupt medical activities, video broadcasting or cause noise interference.
 - Do not leave the remote control with its upper case removed.** If dew, water, insect, etc. enters through the hole, it could cause electric shocks, fire or break-down.

CAUTION

- Do not install the remote control at following places.**
 - It could cause break-down or deformation of remote control.
 - Where it is exposed to direct sunlight
 - Where the ambient temperature becomes 0 °C or below, or 40 °C or above
 - Where the surface is not flat
 - Where the strength of installation area is insufficient
 - Moisture may be attached to internal parts of the remote controller, resulting in a display failure.
 - Place with high humidity where condensation occurs on the remote controller
 - Where the remote controller gets wet
 - Accurate room temperature may not be detected using the temperature sensor of the remote controller.
 - Where the average room temperature cannot be detected
 - Place near the equipment to generate heat
 - Place affected by outside air in opening/closing the door
 - Place exposed to direct sunlight or wind from air conditioner
 - Where the difference between wall and room temperature is large
- To connect to a personal computer via USB, use the dedicated software.** Do not connect other USB devices and the remote controller at the same time. It could cause malfunction or break-down of the remote controller/personal computer.

2. Accessories & Prepare on site

Following parts are provided.

Accessories	R/C main unit, wood screw (ø3.5 x 16) 2 pcs, Quick reference
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Following parts are arranged at site. Prepare them according to the respective installation procedures.

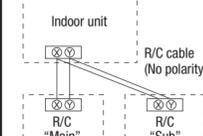
Item name	Q'ty	Remark
Switch box For 1 piece or 2 pieces (JIS C8340 or equivalent)	1	These are not required when installing directly on a wall.
Thin wall steel pipe for electric appliance directly on a wall. (JIS C8305 or equivalent)	As required	
Lock nut, bushing (JIS C8330 or equivalent)	As required	
Lacing (JIS C8425 or equivalent)	As required	Necessary to run R/C cable on the wall.
Putty	Suitably	For sealing gaps
Molly anchor	As required	
R/C cable (0.3 mm ² x 2 pcs)	As required	See right table when longer than 100 m

When the cable length is longer than 100 m, the max size for wires used in the R/C case is 0.5 mm². Connect them to wires of larger size near the outside of R/C. When wires are connected, take measures to prevent water, etc. from entering inside.

≤ 200 m	0.5 mm ² x 2-core
≤ 300m	0.75 mm ² x 2-core
≤ 400m	1.25 mm ² x 2-core
≤ 600m	2.0 mm ² x 2-core

5. Main/Sub setting when more than one remote controls are used

Up to two units of R/C can be used at the maximum for 1 indoor unit or 1 group. One is main R/C and the other is sub R/C. Operating range is different depending on the main or sub R/C.

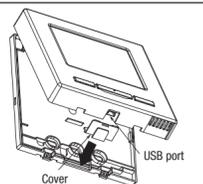


Set the "Main" and "Sub" as described at Section 8.

R/C operations	Main	Sub	R/C operations	Main	Sub
Run/Stop, Change set temp, Change flap direction, Auto swing, Change fan speed	○	○	Service setting		
Anti draft	○	×	Installation settings		
High power operation, Energy-saving operation	○	○	IU back-up function	○	×
Silent mode control	○	×	Motion sensor setting	○	×
Useful functions			Remote controller alarm sound setting	○	×
Individual flap control	○	×	Auto anti draft control setting	○	×
Anti draft setting	○	×	UV-C drain setting	○	×
Auto anti draft cut	○	×	Main/Sub of R/C	○	○
Timer	○	○	Return air temp	○	×
Weekly timer	○	×	R/C sensor	○	×
Favorite setting	○	○	R/C sensor adjustment	○	×
Home leave mode	○	×	Operation mode	○	×
External ventilation	○	○	°C / °F	○	×
Select the language	○	○	Fan speed	○	×
Silent mode control	○	×	External input	○	×
Wireless interface setting	○	×	Upper/lower flap control	○	×
Control mode & Eco level	○	×	Left/right flap control	○	×
Energy-saving setting			Ventilation setting	○	×
Filter	○	○	Auto-restart	○	×
User setting			Auto temp setting	○	×
Initial settings	○	○	Auto fan speed	○	×
Administrator settings			IU settings		
Permission/Prohibition setting	○	×	IU address	○	○
Outdoor unit silent mode timer	○	×	Next service date	○	×
Setting temp range	○	×	Operation date	○	×
Temp increment setting	○	×	Error display		
Set temp display	○	○	Error history	○	○
R/C display setting	○	○	Display/erase anomaly data	○	×
Change administrator password	○	○	Reset periodical check	○	○
F1/F2 function setting	○	○	Saving IU settings		
Refrigerant leak detector setting	○	×	Erase IU address	○	×
Service setting			CPU reset	○	○
Installation settings			Restore of default setting	○	×
Installation date	○	×	Touch panel calibration	○	○
Company information	○	○	Indoor unit capacity display	○	×
Test run	○	×	Safety system maintenance	○	×
Static pressure adjustment	○	×	UV-C drain service setting	○	×
Change auto-address	○	×			
Address setting of main IU	○	×			

Advice: Connection to personal computer

It can be set from a personal computer via the USB port (mini-B). Connect after removing the cover for USB port of upper case. Replace the cover after use. Special software is necessary for the connection. For details, view the web site or refer to the engineering data.



Advice: Initializing of password

- Administrator password (for daily setting items) and service password (for installation, test run and maintenance) are used.
- The administrator password at factory default is "0000". This setting can be changed (Refer to User's Manual).
- If the administrator password is forgotten, it can be initialized by holding down the [F1] and [F2] switches together for five seconds on the administrator password input screen.
- Service password is "9999", which cannot be changed.
- When the administrator password is input, the service password is also accepted.



Advice

When connecting two or more FDT/FDTC to one R/C, unify the panel type either to a panel with anti draft function or a standard panel.

6. Power on and initial setting

Set the main and sub R/C units according to the display at the power on.

- Main/Sub setting not performed => (1)
- Main/Sub setting performed => (2)

(1) When the main and sub are not yet set,

①=>② Main/sub input screen is displayed.

When tapping the [Main] or [Sub] button, initial setting starts.

If any wrong button has been tapped by mistake, the setting can be changed after the end of the initializing operation. (10. R/C function setting (4))

When using two remote controllers for one IU or one group, if the first one is set for the [Main], the second is set for the [Sub] automatically.

① Start screen

② Main/sub set input

Caution

When only one unit of R/C is used, tap the [Main] button. In the state of initial setting, if either one of buttons ([Main]/[Sub]) is not tapped, it keeps the screen unchanged.

Main The screen changes to ③=>④=>⑤.
Sub The screen changes to ①=>⑧=>⑤.

③ IU search on

④ IU info acquisition on

⑤ TOP screen

The red LED will blink if communication is not established in ten minutes.

(2) When the main and sub are set

⑥ Set continue acknowledge

⑦ Initialize acknowledge

⑧ Initialize set on

Yes The screen changes to ⑧=>⑤.
No The screen changes to ⑥.

If the screen is not tapped for more than 15 seconds, the [Yes] (Continue) is selected and the display changes to the screen of ⑤.

Yes The screen changes to ①=>②.
No The screen changes to ⑥.

After the initializing, it returns to the default state.

7. Installation settings and test run (Continued)

⑩ Change auto-address

⑪ Change auto-address

⑫ Address setting of main IU

In case of Multi series (KX) models, the IU addresses registered with the auto-address setting method can be changed with this function. This function changes the OU address for each IU. Select an IU and, I When an indoor unit is selected and the [Change] button is tapped, the display changes to the Change auto-address screen (10). II Tap the [Set] button to return to the screen (10) and display the new address. III Tap the [Finish] button to register the new address.

Select the device to set.

⑬ PFD-Box

⑭ Address setting of main IU

Set this when sharing a Shut-off valve/ Refrigerator leak detector among two or more IUs.
 Set the address of the Main IU to the Sub IUs. For installation conditions required to be set, refer to the installation manual of each device or the safety measure manual.

In case of Multi Series (KX) models, it is possible to let indoor units (Sub IUs) follow the operation mode (Heating, cooling) of the indoor unit (Main IU). Set the address of the Main IU to the Sub IUs. The Sub IUs to which the Main IU address is set follow the Main IU settings.

(Figure shows the Shut-off valve)

In case of 2 sets of indoor units (2 groups) connected to one R/C, it is available to perform back-up operation with them.

⑯ IU Back-up function

1. IU rotation: Operate 2 sets of indoor units alternately at every set time of operation interval.
 2. IU capacity back-up: When the temp difference between the set temp and the actual room temp is higher than the set temp diff., 2 sets of indoor units operate.
 3. IU fault back-up: If one of the IU has a fault and stops, the other one starts operation. Since all IU stop operation, if a refrigerant leak is detected (E23 is displayed), the IU fault back-up is invalidated.
 Select [Enable] / [Disable] (tapping [Disable] changes to [Enable]) and tap the [Enter] button to confirm the settings.

7. Installation settings and test run

TOP screen Menu => Service setting => Installation settings => Service password

① Installation settings menu

② Installation settings

③ Installation settings

The selected screen is displayed.

② Installation date

③ Company information

④ Enter the Company

Select the date with [▲] [▼] buttons, and tap the [Set] button.

Enter the company information.

Enter the company name using up to 26 one-byte characters and then tap the [Set] button. You can enter alphanumeric, Cyrillic, or characters.

⑤ Enter the Phone No.

⑥ Test run

⑦ Cooling test run

Enter the phone number of the company using up to 13 characters and then tap the [Set] button.

The selected screen is displayed.

This can be operated while cooling is stopped. When the room temperature is too low to start the cooling test run, it operates for 30 minutes by decreasing the set temperature to 5°C.

⑧ Drain pump test run

⑨ Static pressure adjustment

This is operable in case of connecting duct type IU equipped with the external static pressure adjustment function. Select the external static pressure and tap the [Set] button.

Drain pump can be operated independently.

7. Installation settings and test run (Continued)

⑩ Change auto-address

⑪ Change auto-address

⑫ Address setting of main IU

In case of Multi series (KX) models, the IU addresses registered with the auto-address setting method can be changed with this function. This function changes the OU address for each IU. Select an IU and, I When an indoor unit is selected and the [Change] button is tapped, the display changes to the Change auto-address screen (10). II Tap the [Set] button to return to the screen (10) and display the new address. III Tap the [Finish] button to register the new address.

Select the device to set.

⑬ PFD-Box

⑭ Address setting of main IU

Set this when sharing a Shut-off valve/ Refrigerator leak detector among two or more IUs.
 Set the address of the Main IU to the Sub IUs. For installation conditions required to be set, refer to the installation manual of each device or the safety measure manual.

In case of Multi Series (KX) models, it is possible to let indoor units (Sub IUs) follow the operation mode (Heating, cooling) of the indoor unit (Main IU). Set the address of the Main IU to the Sub IUs. The Sub IUs to which the Main IU address is set follow the Main IU settings.

(Figure shows the Shut-off valve)

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 3. IU fault back-up: If one of the IU has a fault and stops, the other one starts operation. Since all IU stop operation, if a refrigerant leak is detected (E23 is displayed), the IU fault back-up is invalidated.
 Select [Enable] / [Disable] (tapping [Disable] changes to [Enable]) and tap the [Enter] button to confirm the settings.

7. Installation settings and test run (Continued)

⑰ Rotation details

⑱ Capacity back-up details

In IU rotation function, the timer to changeover the operation of 2 indoor units is set. The timer can be set within the range of 1 to 999 hours in increments of ten hours. After the time is changed, tap [Set] for temporary setting. After temporary setting, return to the IU Back-up function screen and tap [Enter].

The difference between the setting temperature for a change between one unit and two units for capacity back-up and room temperature is set. The temperature can be set within the range of 2 to 5 °C in increments of 1 °C. After the temperature is changed, tap [Set] for temporary setting. After temporary setting, return to the IU Back-up function screen and tap [Enter].

- Back-up control restrictions**
- The back-up control is unavailable when the operation mode is "Auto". When the back-up control is set for the air conditioner that specifies "Auto" for the operation mode, the operation mode changes to "Cooling" automatically.
 - When the rotation control is set, the fault back-up control will be enabled automatically. In this case, the fault back-up control cannot be disabled alone. When the rotation operation is disabled, the fault back-up control will also be disabled.
 - When the capacity back-up control is set, the fault back-up control will be enabled automatically. In this case, the fault back-up control cannot be disabled alone. When the capacity back-up control is disabled, the fault back-up control will also be disabled.
 - It is also possible to enable the fault back-up control alone.
 - The home leave mode, warming up and external input cannot be set together with the back-up control.
 - While the rotation or fault back-up control is set, either of the two target indoor units (two groups) will operate. Both units will not operate at the same time.
 - An indoor unit having younger address will start the operation first in each control.

⑲ Motion sensor setting

Caution

- For customers who adapt a motion sensor, please proceed the setting shown on the left and enable the indoor unit to be used to detect the activity amounts of persons. When the motion sensor is disabled, activity amounts of persons will not be detected and thus the motion sensor control (power saving and auto-off) will not be performed.
- For indoor units without a motion sensor, tap the Motion sensor setting to display "Invalid request".

Select [Enable] / [Disable] for the motion sensor of the indoor unit connected to the R/C.

⑳ Remote controller alarm sound setting

Select [Enable] / [Disable] for R/C alarm sound.
Enable Sounds the alarm if a refrigerant leak is detected or the Refrigerant leak detector gets into trouble. Sound volume of alarm is about 60dB at 1 m from the R/C.
Disable The alarm does not sound even if a refrigerant leak is detected or the Refrigerant leak detector gets into trouble.

7. Installation settings and test run (Continued)

② Auto anti draft control setting

Auto anti draft control setting

Enable

Disable

Back

Select the item.

Select Enable / Disable for the auto anti draft of the indoor unit connected to the R/C.

Caution

- For customers who adapt an auto anti draft control. Please proceed the setting shown on the left.
- Unless Enable is selected, auto anti draft control does not operate.
- For indoor units without an auto anti draft control, tap the Auto anti draft control setting to display "Invalid request".

② UV-C drain setting

UV-C drain setting

Enable

Disable

Back

Select the item.

Select Enable / Disable for the UV-C drain of the indoor unit connected to the R/C.

Caution

- For customers who adapt an UV-C drain. Please proceed the setting shown on the left.
- Unless Enable is selected, UV-C drain does not operate.
- For indoor units without an UV-C drain, tap the UV-C drain setting to display "Invalid request".

8. R/C function settings **Advice: It is valid when unit stops.**

TOP screen ⇒ ⇒ ⇒

① R/C function settings menu

R/C function settings

Main/Sub of R/C	②
Return air temp	③
R/C sensor	④
R/C sensor adjustment	⑦
Operation mode	⑧

Next Back

Select the item.

R/C function settings

°C / °F	⑨
Fan speed	⑩
External input	⑪
Upper/lower flap control	⑫
Left/right flap control	⑬

Previous Next Back

Select the item.

R/C function settings

Ventilation setting	⑭
Auto-restart	⑮
Auto temp setting	⑯
Auto fan speed	⑰

Previous Back

Select the item.

The selected screen is displayed.

② Main/Sub of R/C

Main/Sub of R/C

Main

Sub

Back

Select the item.

Use this when changing the Main/Sub setting of R/C.

8. R/C function settings (Continued)

⑨ °C/°F

°C / °F

°C

°F

Back

Select the item.

Select the unit of temperature displayed on the R/C.

⑩ Fan speed

Fan speed

4-speed

3-speed

2-speed (Hi-Lo)

2-speed (Hi-Me)

1-speed

Back

Select the item.

Fan speed can be changed to the selected one.
It may not be available to select some of fan speeds depending on indoor unit models.

⑪ External input

External input

Individual

All units

Back

Select the item.

Set the range to apply the external input received through CNT of either one IU to plural indoor units connected in one system.
 Individual This is applied only to the IU receiving CNT input.
 All units This is applied to all indoor units connected.

⑫ Upper/lower flap control

Upper/lower flap control

Stop at fixed position

Stop at any position

Back

Select the item.

Stop at fixed position The upper/lower flap can be set to stop at one of four positions.
 Stop at any position The flap can be set to stop at any position immediately after operating the R/C switch.

⑬ Left/right flap control

Left/right flap control

Fixed position stop

Stop at any position

Back

Select the item.

Fixed position stop The left/right flap can be set to stop in eight different patterns.
 Stop at any position The flap can be set to stop at any position immediately after operating the R/C switch.

⑭ Ventilation setting

Ventilation setting

Disable

Interlocking

Independent

Back

Select the item.

Set this when a ventilation device is connected.
 Disable No ventilation device is connected.
 Interlocking Ventilation is interlocked with the Run/Stop of air conditioner and operate the Ventilation output.
 Independent If the ventilation is selected from the menu, only the ventilation device is operated or stopped independently.

⑮⑯ (Enable/Disable setting)

Auto-restart

Enable

Disable

Back

Select the item.

⑮ Auto-restart
If the unit stops during operation,
 Enable It returns to the state before the power failure as soon as the power supply is restored (After the end of the primary control at the power on).
 Disable It stops after the restoration of power supply.

⑯ Auto temp setting
 Enable Auto can be selected on the room temperature setting screen.
 Disable Auto selection switch will not be displayed on the room temperature setting screen.

⑰ Auto fan speed
 Enable Auto can be selected on the fan speed setting screen.
 Disable Auto selection switch will not be displayed on the fan speed setting screen.

(Figure shows the Auto-restart)

8. R/C function settings (Continued)

③ Return air temp

Return air temp

Individual

Master IU

Averaged temp

Back

Select the item.

- Individual : Thermo. rule is applied based on the return air temp of each IU. When plural units are connected to one R/C, it is based on the return air temp of the main unit.
- Master IU : Thermo. rule is applied based on the return air temp of IU having the youngest address out of IUs connected.
If there are several sets of plural units each of which is connected to one R/C, it is based on the IU having the youngest address out of the main units of each plural units.
- Averaged temp : Thermo. rule is applied based on the average of return air temperatures of IUs connected.

Thermo. rule is applied based on the temperature detected with the return air temp sensor of IU.
When plural indoor units are connected to one R/C, the return air temp applied to the thermo. rule can be selected.

④ R/C sensor

R/C sensor

Disable

Enable

Enable(Heating only)

Enable(Cooling only)

Back

Select the item.

- You can change IU main unit return air temperature sensor to the R/C side.
- Disable The Indoor temp display changes to the temperature measured by the sensor at the main unit.
- Enable The Indoor temp display changes to the temperature measured by the R/C side sensor.
- Enable(Heating only) The Indoor temp display changes to the temperature measured by the R/C side sensor during heating only.
- Enable(Cooling only) The Indoor temp display changes to the temperature measured by the R/C side sensor during cooling only.

Set temp

23.0 °C

Room 22°C

When the R/C sensor is disable, the TOP screen displays "Room ○ °C"

Set temp

23.0 °C

Room (R/C) 22°C

When the R/C sensor is enable, the TOP screen displays "Room (R/C) ○ °C"

⑥ Select RC sensor

Select RC sensor

Main RC

Sub RC a

Sub RC b

Sub RC c

Set Back

Select a R/C sensor to use.
Connected R/C is displayed.

⑦ R/C sensor adjustment

R/C sensor adjustment

Adjustment in cooling

Adjustment in heating

Tap ▲▼ to set offset value.

+1 °C

Set

Back

You can adjust the R/C sensor detection temperature.

The R/C sensor detection temperature during cooling operation can be corrected. Set the value within the range of -3 to +3.

⑧ Operation mode

Operation mode

Auto Disable Enable

Cooling Disable Enable

Heating Disable Enable

Dry Disable Enable

Set Back

Select the item.

Enable or Disable can be set for each operation mode.
If the cooling or heating is disabled, the auto is also disabled.

9. IU settings **Advice: It is valid when unit stops.**

TOP screen ⇒ ⇒ ⇒

① IU select

IU select

000 001 002 003

004 005 006 007

All units Next Back

Select an IU address.

When plural indoor units are connected, they are displayed on the screen.
 000 to 015 Individual settings are performed for indoor units.
 All units The same setting applies to all units.

② Loading

Loading. Wait a while.

The display changes to ④ after receiving data from the IU.

③ IU setting menu

IU settings

Fan speed setting ④

Filter sign ⑤

External input 1 ⑥

External input 1 signal ⑦

External input 2 ⑧

Next Back

Select the item.

The selected screen is displayed.

IU settings

External input 2 signal ⑦

Heating thermo-OFF temp adjustment ⑧

Return temperature adjustment ⑨

Fan control in cooling thermo-OFF ⑩

Fan control in heating thermo-OFF ⑪

Previous Next Back

Select the item.

IU settings

Auto fan speed control ⑳

IU overload alarm ㉑

External output setting ㉒

Previous Back

Select the item.

IU settings

Anti-frost temp ㉓

Anti-frost control ㉔

Drain pump operation ㉕

Keep fan operating after cooling is stopped ㉖

Keep fan operating after heating is stopped ㉗

Previous Next Back

Select the item.

IU settings

Intermittent fan operation in heating ㉘

Fan circulator operation ㉙

Control pressure adjust ㉚

Auto operation mode ㉛

Thermo. rule setting ㉜

Previous Next Back

Select the item.

④ Fan speed setting

Fan speed setting

Standard

Setting 1

Setting 2

Back

Select the item.

Set the fan speed tap for the IU. Refer to the engineering data for details.

⑤ Filter sign

Filter sign

No display

Setting 1

Setting 2

Setting 3

Setting 4

Back

Select the item.

Set the time to display the filter sign.

	Standard
No display	None
Setting 1	180Hr
Setting 2	600Hr
Setting 3	1,000Hr
Setting 4	1,000Hr Operation stop

9. IU settings (Continued)

⑥ External input 1

External input 1

Run/Stop

Permission/Prohibition

Cooling/Heating

Emergency stop

Setting temperature shift

Select the item.

Set the control at the time when the signal is input to the external input 1 (CNT) of IU. Refer to the engineering data for details.

⑦ External input 1 signal

External input 1 signal

Level input

Pulse input

Select the item.

Set the signal type to input to the external input 1 (CNT) of IU. Refer to the engineering data for details.

This is operable when the IU equipped with the external input 2 is connected. Refer to the engineering data for details.

⑧⑨ (Temperature adjustment)

Heating thermo-OFF temp adjustment

Tap ▲▼ to set offset value.

+2.0 °C

Set

Back

- ⑧ Heating thermo-OFF temp adjustment
Adjust the temperature for judging to make thermostat ON or OFF during heating operation.
Adjustable range is 0°C / +1°C / +2°C / +3°C.
- ⑨ Return temperature adjustment
Adjust the main return air temperature sensor detection temperature.
Adjustable range is -2°C / -1.5°C / -1°C / 0°C / +1°C / +1.5°C / +2°C.

(Figure shows the heating room temperature correction.)

⑩⑪ (Fan control)

Fan control in heating thermo-OFF

Low

Set fan speed

Intermittent

Stop

Select the item.

- ⑩ Fan control in cooling thermo-OFF ⑪ Fan control in heating thermo-OFF
Set the fan speed at the cooling/heating thermo-OFF.
 The fan runs at the low speed.
 The fan runs at the same speed as that during the thermo-ON operation.
 Cycles of Lo fan operation for 2 minutes and stop for 5 minutes are repeated.
 The fan is stopped.

(Figure shows the cooling fan control.)

⑫ Anti-frost temp

Anti-frost temp

Temp Low

Temp High

Select the item.

Select the anti-frost control temperature.

⑬ Anti-frost control

Anti-frost control

Enable

Disable

Select the item.

- Set the fan control during the anti-frost control.
 The fan speed increases during the anti-frost control.
 The fan speed does not change during the anti-frost control.

9. IU settings (Continued)

⑭ Drain pump operation

Drain pump operation

Standard (in cooling & dry)

Operate in standard & heating

Operate in heating & fan

Operate in standard & fan

Select the item.

- Operates in cooling and dry modes.
 Operates in cooling, dry and heating modes.
 Operates in all modes.
 Operates in cooling, dry and fan modes.

⑮⑯ (Keep fan operating)

Keep fan operating after cooling is stopped

No setting

Setting 1

Setting 2

Setting 3

Select the item.

- ⑮ Keep fan operating after cooling is stopped
⑯ Keep fan operating after heating is stopped
Select the residual fan operation time period after stopping and the thermo-OFF in cooling/heating mode.
 Residual fan operation not performed.
 0.5 hours
 2 hours
 6 hours
*Residual time may vary.

⑰ Intermittent fan operation in heating

Intermittent fan operation in heating

Stop

Stop for 20 min & run for 5 min

Stop for 5 min & run for 5 min

Select the item.

- Select the fan control after the residual fan operation following stop and thermo-OFF in heating mode.
 Intermittent fan operation is not done.
 Check the operating conditions at every 25 min and run the fan for 5 min.
 Check the operating conditions at every 10 min and run the fan for 5 min.

⑱ Fan circulator operation

Fan circulator operation

Disable

Enable

Select the item.

Set this when operating the fan as a circulator.
 During the fan operation, the fan runs continuously.
 During the fan operation, the fan runs and stops based on the difference between temperatures detected with the R/C sensor and the return air sensor.

⑲ Control pressure adjust

Control pressure adjust

Standard

Type1

Select the item.

Set the control pressure when connecting the outdoor air conditioning unit to the Multi (KX) System.
 Normal
 When all operating IUs are in this mode, the control pressure value is changed.

9. IU settings (Continued)

⑳ Auto operation mode

Auto operation mode

Auto rule selection <21>

Auto 1 details <22>

Auto 2 details <23>

Auto 3 details <24>

Select the item.

㉑ Auto rule selection

Auto rule selection

Auto 1

Auto 2

Auto 3

Select the item.

- Auto 1 The temp difference between the set temp and the actual room temp switch cooling and heating.
Auto 2 The temp difference between the set temp and the actual room temp/outdoor temp switch cooling and heating.
Auto 3 The actual room temp and outdoor temp switch cooling and heating.

The method of switching between cooling and heating in the auto operation mode can be selected from three options. Set the condition for each method.

㉒ Auto 1 details

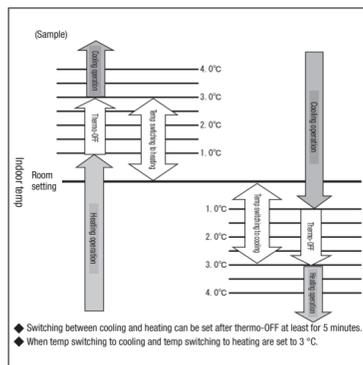
Auto 1 details

Temp switching to cooling <25>

Temp switching to heating <26>

Select the item.

- [Set temp - Temp switching to cooling] < [Indoor return air temp]
⇒ Operation mode: Cooling
- [Set temp + Temp switching to heating] > [Indoor return air temp]
⇒ Operation mode: Heating



Set the temperatures switching to cooling and heating. Switching temperatures can be set within the range of 1°C to 4°C.

㉓ Auto 2 details

Auto 2 details

Temp switching to cooling <25>

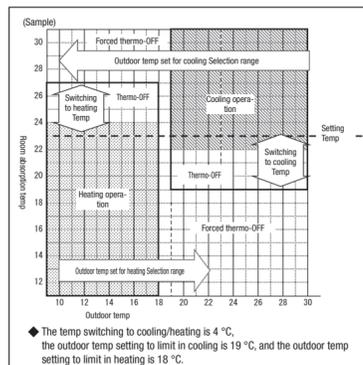
Temp switching to heating <26>

Outdoor temp setting to limit in cooling <27>

Outdoor temp setting to limit in heating <28>

Select the item.

- "[Set temp - Temp switching to cooling] < [Indoor return air temp]" and "[Outdoor temp, cooling] < [Outdoor air temp]"
⇒ Operation mode: Cooling
- "[Set temp - Temp switching to cooling] > [Indoor return air temp]" and "[Outdoor temp, cooling] > [Outdoor air temp]"
⇒ Operation mode: Heating



Set the temperatures switching to cooling and heating and the outdoor temp settings to limit in cooling and heating.

9. IU settings (Continued)

㉔ Auto 3 details

Auto 3 details

Outdoor temp setting to limit in cooling <27>

Outdoor temp setting to limit in heating <28>

Indoor temp switching to cooling <29>

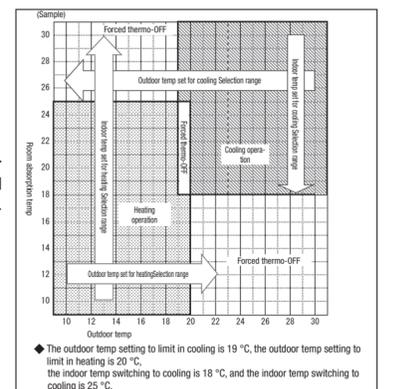
Indoor temp switching to heating <30>

Select the item.

Set the outdoor temp settings to limit in cooling and heating and the indoor temp settings to limit in cooling and heating.

"[Indoor temp, cooling] < [Indoor return air temp]" and "[Outdoor temp, cooling] < [Outdoor air temp]"
⇒ Operation mode: Cooling

"[Indoor temp, heating] > [Indoor return air temp]" and "[Outdoor temp, heating] > [Outdoor air temp]"
⇒ Operation mode: Heating



㉕ Temperature setting regarding auto operation mode

Temp switching to cooling

Tap ▲▼ to set offset value.

3.0 °C

Set

Back

(Figure shows the Temp switching to cooling)

- ㉕ Temp switching to cooling ㉖ Temp switching to heating
Set the temperature switching to cooling/heating with Auto 1 and Auto 2.
Cooling :1 to 4 °C
Heating :1 to 4 °C
- ㉗ Outdoor temp set for cooling ㉘ Outdoor temp set for heating
Set the outdoor temperature for cooling/heating with Auto 2 and Auto 3.
Cooling :10 to 30 °C
Heating :10 to 22 °C
- ㉙ Indoor temp set for cooling ㉚ Indoor temp set for heating
Set the indoor temperature for cooling/heating with Auto 3.
Cooling :18 to 30 °C
Heating :10 to 30 °C

㉛ Thermo. rule setting

Thermo. rule setting

Standard/Outdoor temp basis <32>

Cooling offset <33>

Heating offset <34>

Select the item.

Set the room temperature control, thermostat ON/OFF switching method and condition.
 The thermostat judges based on the indoor temperature and set temperature.
 The thermostat judges based on the outdoor temperature and the cooling and heating offset values.
The room temperature setting will be disabled.

㉜ Standard/Outdoor temp basis

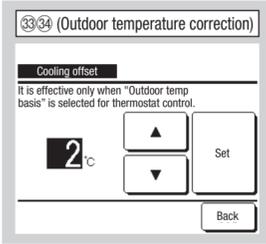
Standard/Outdoor temp basis

Standard

Outdoor temp basis

Select the item.

9. IU settings (Continued)



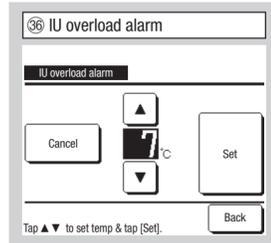
③ Outdoor temperature cooling correction ④ Outdoor temperature heating correction
Set the correction value to judge cooling/heating with the thermostat within the following range.

Cooling: 0 - 10°C Indoor temperature > (Outdoor temperature - Cooling correction value)
Heating: 0 - 5°C Indoor temperature < (Outdoor temperature - Heating correction value)

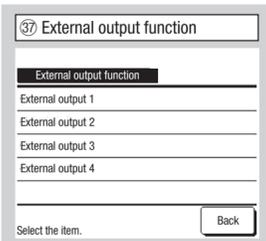


Set the switching range of the fan tap at the auto fan speed setting.

Auto 1 The fan tap is changed in the range of High ⇒ Medium ⇒ Low.
Auto 2 The fan tap is changed in the range of Powerful high ⇒ High ⇒ Medium ⇒ Low.



When the room temperature differs to some extent from the setting temperature at 30 minutes after the start of operation, the overload alarm signal is transmitted from the external output (CNT-5).



Select the output destination to change and then select the function to be allocated to the selected output.

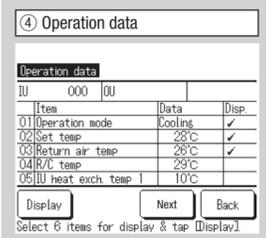
The following shows output connectors and defaults.

External output 1 CNT -2 Operation output
External output 2 CNT -3 Heating output
External output 3 CNT -4 Compressor ON output
External output 4 CNT -5 Inspection (Error) output
Refer to the engineering data for details.

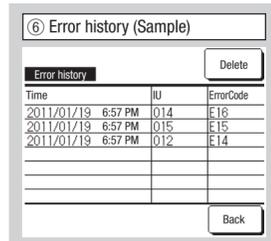
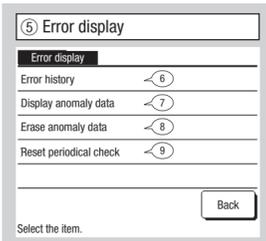
Functions that can be set

Operation output
Heating output
Compressor ON output
Inspection (Error) output
Cooling output
Fan operation output 1
Fan operation output 2
Fan operation output 3
Defrost/oil return output
Ventilation output
Heater output
Free cooling output
Indoor unit overload alarm output
Refrigerant leakage output
Shut off valve output

10. Service & Maintenance (Continued)



Displays operation data. Data on the screen is updated automatically.
Tapping the **Display** button after selecting six items changes the display.
Items of operation data to be displayed are as shown by the table at right.



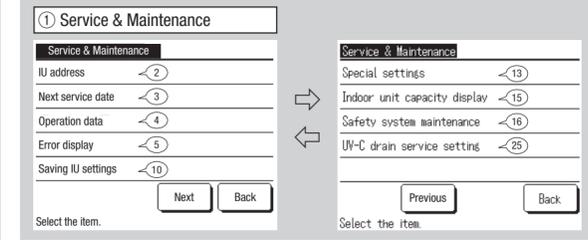
Date and time when error occurred, IU address and Error Code are displayed.
Tap the **Delete** button to delete the error history.

Operation data to be displayed

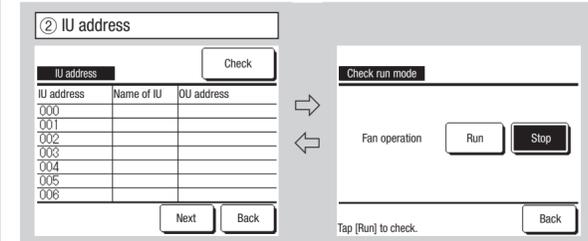
No.	Item
01	Operation mode
02	Set temp
03	Return air temp
04	R/C temp
05	IU heat exch. Temp 1
06	IU heat exch. Temp 2
07	IU heat exch. Temp 3
08	IU fan speed
09	Required Hz
10	Answer Hz
11	IU EEV opening
12	Supply air temp
13	Relative humidity
14	IU operation Hrs.
15	Cool operation Hrs.
16	Heat operation Hrs.
21	Outdoor air temp
22	OU heat exch. Temp 1
23	OU heat exch. Temp 2
24	OU heat exch. Temp 3
25	OU heat exch. Temp 4
26	Compressor Hz
27	Compressor Hz 2
28	High pressure
29	Low pressure
30	Discharge pipe temp
31	Discharge pipe temp 2
32	Comp bottom temp
33	Comp bottom temp 2
34	THO-SC temp
35	THO-S temp
36	THO-H temp
37	Current
38	Current 2
39	SH control
40	SH
41	TDSH
42	TDSH 2
43	OU EEV1 opening
44	OU EEV2 opening
45	OU EEV3 opening
46	OU EEV1 opening
47	OU EEV2 opening
48	Protection control
49	OU fan speed
50	63H1
51	Defrost
52	OU operation Hrs.
53	Comp. running Hrs
54	Comp. running Hrs 2
55	OU fan ope. Hrs. 1
56	OU fan ope. Hrs. 2
57	52C On/Off times
58	Control mode in OU
59	Eco level in Ou

10. Service & Maintenance

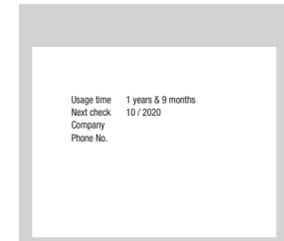
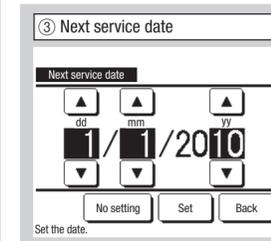
TOP screen Menu ⇒ Service setting ⇒ Service & Maintenance ⇒ Service password



The selected screen is displayed.



When 8 or more units are connected, further data are displayed on the next page. When the **Check** button is tapped after selecting an IU address, the fan of the selected IU can be operated.

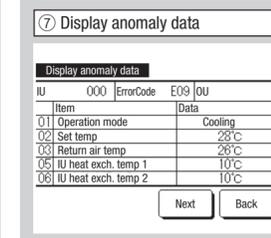


When next service date is entered, messages are displayed at the start/stop of operation on the service month.

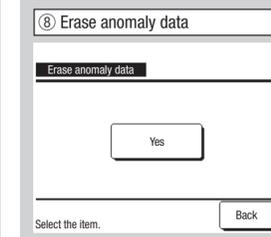
Contents are reset if the next service date is updated.

If the **No setting** button is tapped, messages are not displayed.

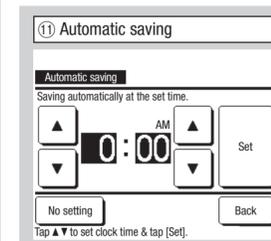
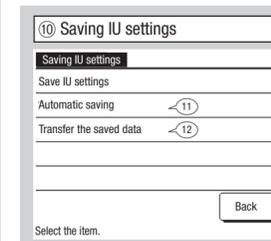
10. Service & Maintenance (Continued)



The operation data obtained just before the occurrence of an error are displayed. Operation data to be displayed are as shown by the table at right.



The anomaly data is erased.

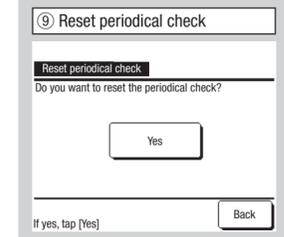


Set the time when the automatic saving is performed everyday.

If the **No setting** button is tapped, the automatic saving is not performed.

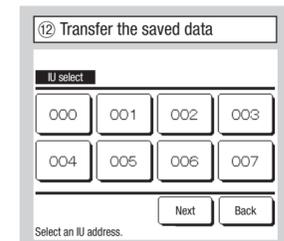
Operation data to be displayed

No.	Item	No.	Item
01	Operation mode	21	Outdoor air temp
02	Set temp	22	OU heat exch. Temp 1
03	Return air temp	23	OU heat exch. Temp 2
05	IU heat exch. Temp 1	24	Compressor HZ
06	IU heat exch. Temp 2	25	High pressure
07	IU heat exch. Temp 3	26	Low pressure
08	IU fan speed	27	Discharge pipe temp
09	Required Hz	28	Comp bottom temp
10	Answer Hz	29	Current
11	IU EEV opening	30	SH control
12	IU operation Hrs.	31	SH
13	Supply air temp	32	TDSH
		33	Protection control
		34	OU fan speed
		35	63H1
		36	Defrost
		37	Comp. running Hrs
		38	OU EEV1 opening
		39	OU EEV2 opening



The time count is reset by resetting the periodical check.

Save IU settings All settings of the IUs connected to the R/C are saved in the R/C.
Automatic saving Set the time when the automatic saving is performed everyday.
Transfer the saved data The IU setting data saved in the R/C are transferred to an indoor unit.

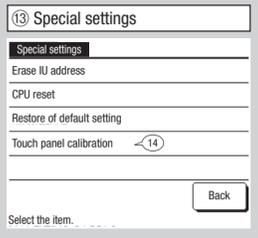


If an IU to which the saved data is transferred is selected, the Transfer the saved data acknowledge screen is displayed. Tap **Yes** to transfer the data.

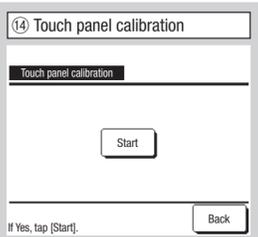
Advice

Have you ever lost setting contents after replacing an IU board?
When IU settings are saved in the R/C, the saved data can be written to IU using "Transfer the saved data".

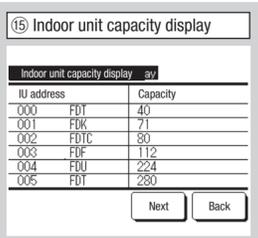
10. Service & Maintenance (Continued)



The selected screen is displayed.



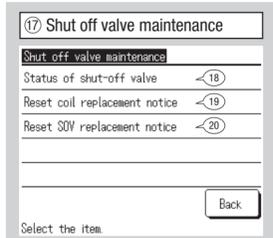
Use this when the display and the touch position are not matched. Tap the center of [+] and check the deviation from the display. **Finish** ⇒ Calibration is completed.



The types and capacities of IUs connected to the R/C are displayed. These items may not be displayed depending on the combination of IUs and OUs.



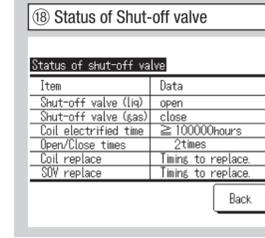
The selected screen is displayed.



The selected screen is displayed.

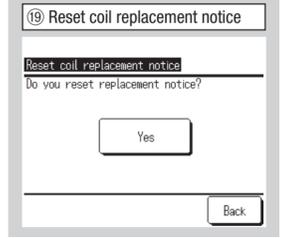
- Erase IU address** Memory of the IU address for multi (KX) unit is erased.
- CPU reset** Microcomputer of IU and OU, shut-off valve and refrigerant leak detector on connected are reset (State of restoration after power failure).
- Restore of default setting** Settings on R/C and IU connected are initialized (State of factory default).
- Touch panel calibration** Use this to correct when the display and the touch position are not matched.

10. Service & Maintenance (Continued)

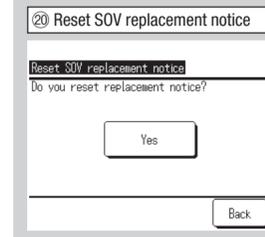


Displays the state of shut-off valve at screen shift. Items to be displayed are as shown by the table at down. To update the screen, shifts once more to the screen.

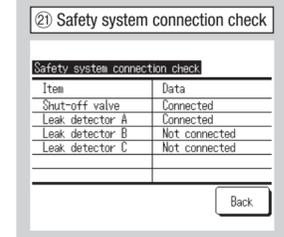
- Display items
- Shut-off valve (liq)
 - Shut-off valve (gas)
 - Coil electrified time
 - Open/Close times
 - Coil replace
 - SOV replace



Resets Coil replacement notice.



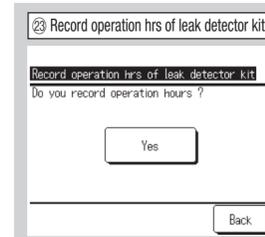
Resets Shut-off valve replacement notice.



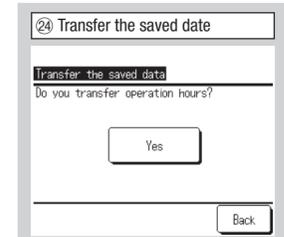
Displays the connection state of IU and devices at the screen shift. To update the screen, shift once more to the screen.



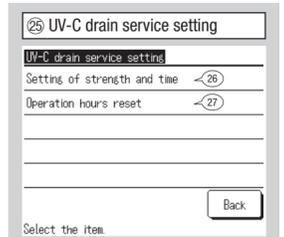
The selected screen is displayed.



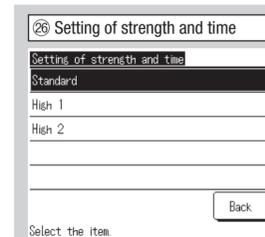
Saves operation hours of selected refrigerant leak detector in the R/C.



Transfers operation hours saved in the R/C to the refrigerant leak detector.



The selected screen is displayed.

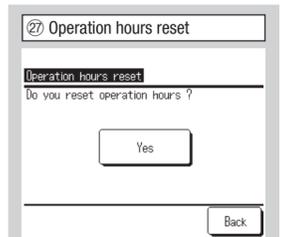


Set UV-C drain radiation time.

- Standard** Repeats 15-minute radiation /60-minute stop.
- High 1** Repeats 30-minute radiation /60-minute stop.
- High 2** Operates the drain pump for 1 minute (about once per hour) after repeating 30-minute radiation/60-minute stop + operation stop.

UV-C drain operates when:

- During cooling or dry operation
- When cooling or dry operation is stopped.



Resets the UV-C drain operation hours.

11. Select the language

[Selecting the language with the button]



Tap the button on the TOP screen while the air conditioner is stopped.

Depending on how the Permission/Prohibition setting (Refer to user's manual) is set, the administrator password input screen may be displayed.



The menu for select the language is displayed. Select the language to be displayed on the R/C and tap the **Set** button. You can select from the following languages: English/German/French/Spanish/Italian/Dutch/Turkish/Portuguese/Polish

[Selecting the language with the **Menu** button]

TOP screen **Menu** ⇒ Useful functions ⇒ **Select the language**



The menu for select the language is displayed. Select the language to be displayed on the R/C and tap the **Set** button. You can select from the following languages: English/German/French/Spanish/Italian/Dutch/Turkish/Portuguese/Polish