

HITACHI

HEAT PUMPS

REMOTE CONTROLLER FUNCTIONS & OPERATIONS



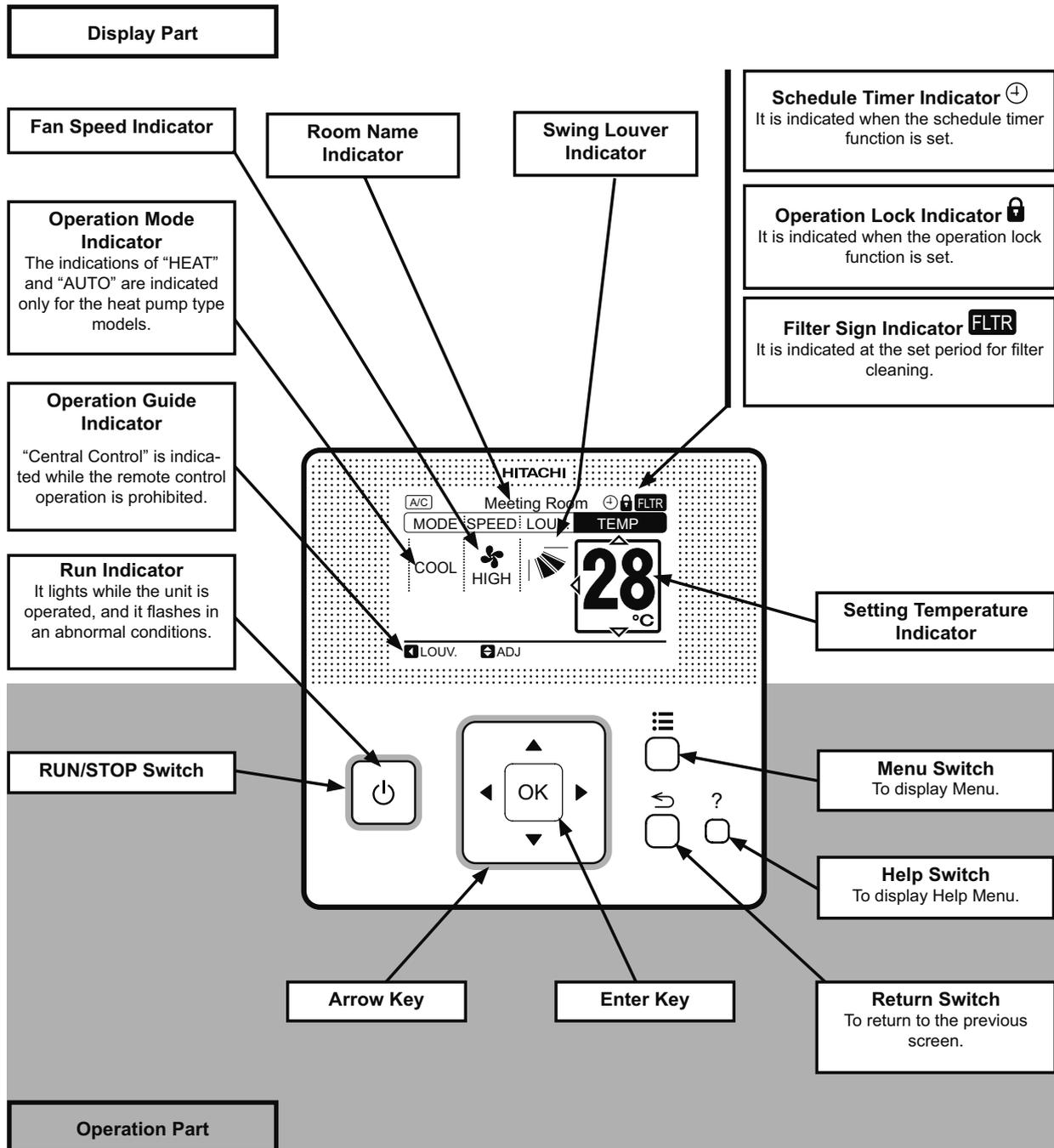
PC-ARF

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SWITCH NAMES AND FUNCTIONS

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



NOTE

Do NOT press the switches hard or press with sharply pointed material such as a ball point pen. The operation part of the remote control switch may be damaged.

Make sure that the switches are pressed softly with fingers.

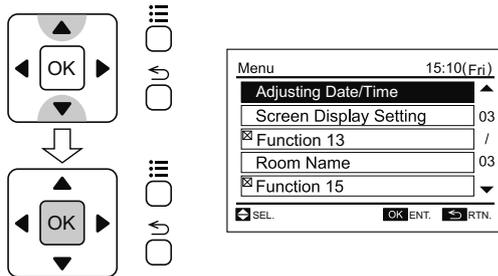
ADJUSTING DATE/TIME

This function is used to adjust the date and time.

Periodic time setting is recommended. (Clock accuracy: difference within ± 70 seconds by month).

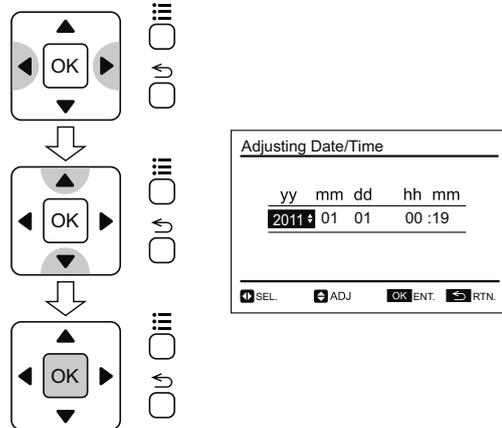
As for this remote control switch, the clock can work up to 72 hours when power failure occurs. Reset the date and time if the remote control switch remains without power supply for longer than 72 hours or main power supply is OFF for long time.

- 1 Select "Adjusting Date/Time" from the menu and press "OK".

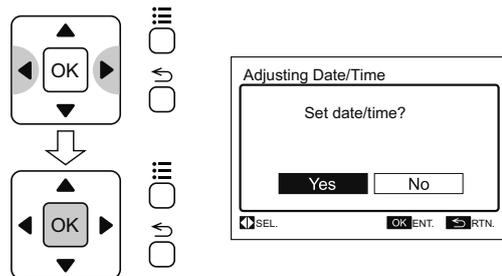


- 2 Press " \triangleleft " or " \triangleright " and select "yy/mm/dd/hh/mm".
- 3 Press " Δ " or " ∇ " to change the setting. Press or keep pressing " Δ " or " ∇ " to adjust numbers.

- 4 After the setting is completed, press "OK" and the confirmation screen will be displayed.



- 5 Select "Yes" by pressing " \triangleleft " or " \triangleright " and press "OK". The setting will be confirmed and the screen will return to the normal mode.

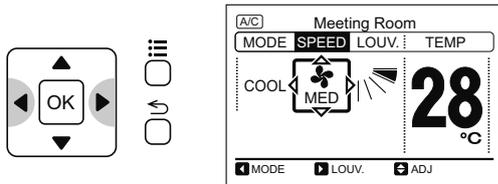


OPERATION METHOD

1 BASIC OPERATION

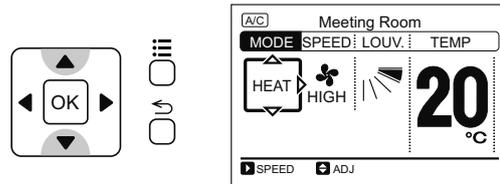
1 Item Selection.

By pressing “◀” or “▶”, the icon “” will move to the next item in order of the indications “MODE”, “SPEED”, “LOUV.” and “TEMP”.



2 Change of Settings

With the item (“MODE”, “SPEED”, “LOUV.” or “TEMP”) selected, press “Δ” or “∇”. The setting will be changed.



2 OPERATION MODE (COOLING, HEATING, DRY, COOLING/HEATING AUTOMATIC AND AIR FLOW OPERATION)

◆ Function

- Cooling Operation (COOL):

To decrease the room temperature.

- Heating Operation (HEAT):

To increase the room temperature.

- Dry Operation (DRY):

To decrease the humidity in the room.

- Cooling/Heating Automatic Operation (AUTO):

To cooling and heating automatic changeover.

- Air Flow Operation (FAN):

To circulate the air in the room.

NOTE

The available set temperature is as follows:

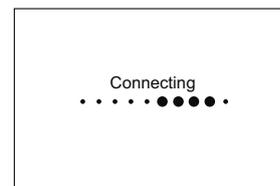
- Cooling Operation: 19 to 30°C
- Heating Operation: 17 to 30°C
- Dry Operation: 19 to 30°C

◆ Before Operation

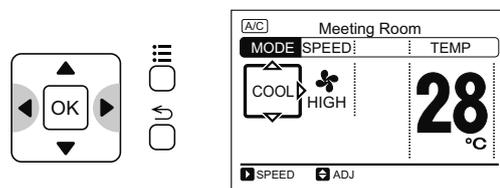
CAUTION

- Supply the electrical power to the system for approximately 12 hours before start-up after long shutdown. Do not start the system immediately after the power supply, it may cause a compressor failure, because the compressor is not heated well. Do NOT turn OFF the power supply during the seasons.
- Make sure that the outdoor unit is not covered with snow or ice. If covered, remove it by using hot water (less than 50°C).
- If the water temperature is higher than 50°C, it will cause damage to plastic parts.

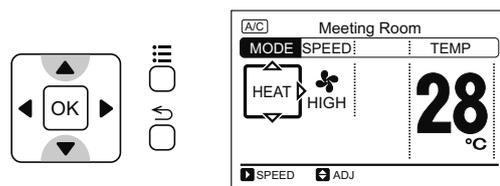
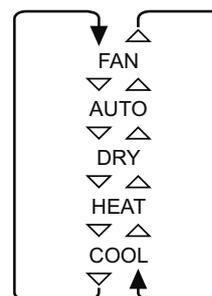
1 Turn ON the power supply.



2 Press “◀” or “▶” and select “MODE”.



3 By pressing “Δ” or “∇”, the operation mode will be changed as follows.



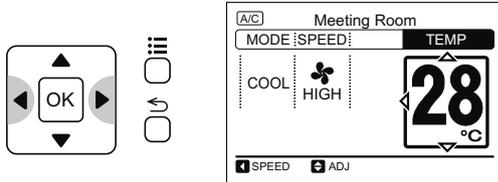
NOTE

The advanced setting is required for the “AUTO” operation. Contact your distributor or dealer of HITACHI for detailed information.

SETTING METHOD

1 TEMPERATURE SETTING

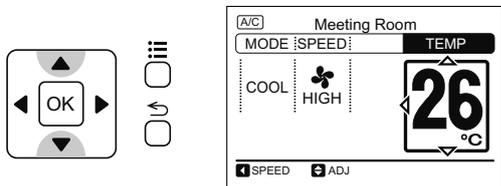
1.1 Press " " and select "TEMP".



NOTE

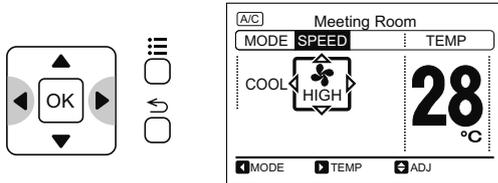
The max/min temperature is available to change by setting the cooling lower limit for setting temperature (or heating upper limit for setting temperature) from the function selection.

1.2 By pressing " , the temperature is increased by 1°C. (Max. 30°C). By pressing " , the temperature is decreased by 1°C. (Cooling, Dry, Air Flow operation: Min. 19°C) (Heating operation: Min. 17°C).



2 FAN SPEED

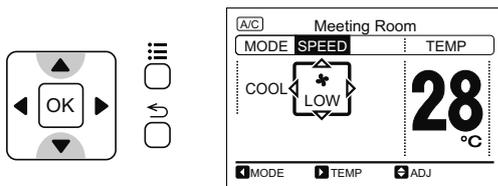
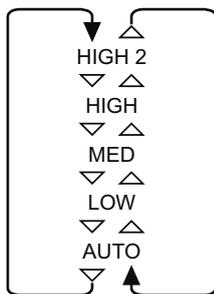
2.1 Press " " and select "SPEED".



NOTE

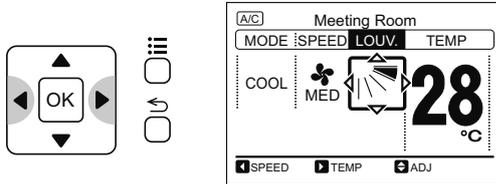
- During the dry operation, the fan speed is automatically changed to "LOW" and cannot be changed to other fan speed. ("LOW" will NOT be displayed on LCD (liquid crystal display) at this time. The present setting condition will be displayed on LCD).
- The fan speed settings "HIGH 2" and (or) "AUTO" may not be available depending on the indoor unit type.

2.2 By pressing " or " , the fan speed will be changed as follows.

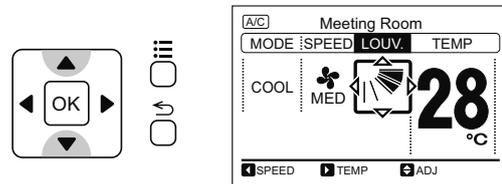


3 SWING LOUVER DIRECTION

- 1 Press "⏻" (run/stop). Make sure that the operation is started. Press "◀" or "▶" and select "LOUV".



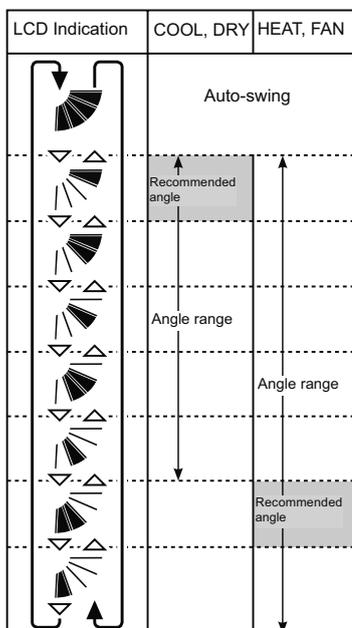
: Auto swing operation will be started. At this time, the louver will swing repeatedly on LCD.



i NOTE

For the indoor unit without the auto louver mechanism, the indication of "LOUV." will NOT be displayed on LCD.

- 2 By pressing "▲" or "▼", the louver direction will be changed as follows.



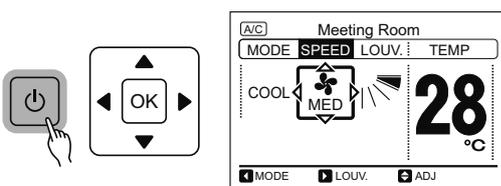
i NOTE

- The air flow angle is different for each indoor unit type. Check Installation & Operation Manual for Indoor Unit to be used for the detailed information.
- Louver position on LCD and the actual louver position may not match during the auto swing operation. To fix the louver positions, set the angle after checking the position on LCD.
- The louver may NOT stop immediately right after the switch is pressed.

OPERATION

1 OPERATION START

Press "⏻" (run/stop). The run indicator will be turned on and the operation will be started.



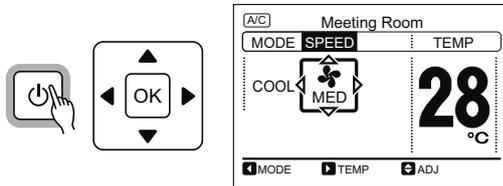
i NOTE

Temperature/Air Flow Setting

The setting condition will be memorized once after the setting is confirmed, therefore the daily setting is not required. In case that the setting change is required, refer to the Operation Method and Setting Method chapters.

2 OPERATION STOP

Press “” (run/stop) again. The run indicator will be turned off and the operation will be stopped.

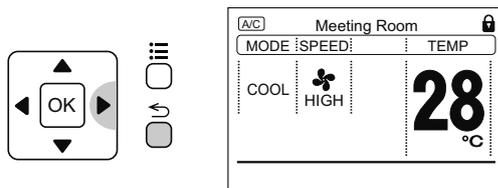


NOTE

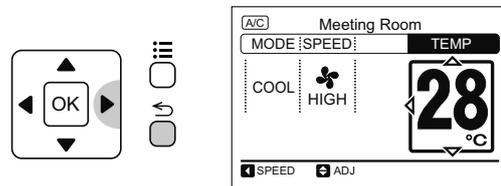
After the heating operation is stopped, the air flow operation may be activated for approximately 2 minutes.

3 OPERATION LOCK

- This function is used to lock the setting from the remote control switch.
 - The following functions are applicable.
 - a. Operation Mode (MODE)
 - b. Temperature Setting (TEMP)
 - c. Fan Speed (SPEED)
 - d. Swing Louver Direction (LOUV)
- 1 Setting of the operation lock, press “” and “” (return) simultaneously for 3 seconds. The icon of “” will be turned ON. Even when “” or “” is pressed, locked setting items will be skipped.



- 2 Cancellation of the operation lock, press “” and “” (return) simultaneously for 3 seconds. “” will be turned OFF, and operation lock will be canceled.



NOTE

- Every time pressing “” and “” (return) simultaneously for 3 seconds, the operation lock state will be switched alternately to locked/unlocked.
- Select the functions to lock at the function selection setting. Contact your distributor or dealer of HITACHI for detailed information.

MENU OPERATION

1 MENU

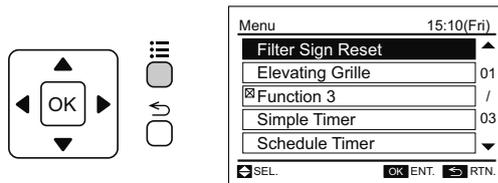
Every setting function is displayed in the menu. Refer to the following sections for each function.

NOTE

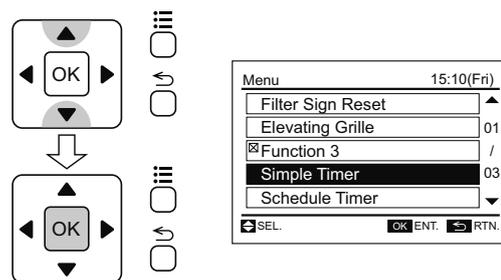
: Unable to set.

If the function with “” is selected from the menu, “No Function” or “Setting Disabled” will be displayed on the lower screen.

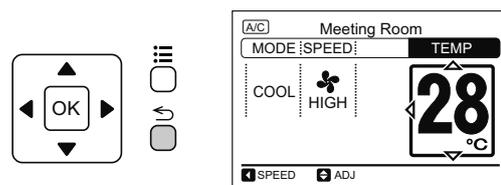
- 1 Press “” (menu). The menu will be displayed.



- 2 Select the function by pressing “” or “” and press “OK”. (“”) will be displayed if the function is not available).



- 3 Press “” (return) to return to the normal mode (Operation Mode Indication).



NOTE

If the menu screen remains unchanged for approximately 10 minutes, the screen will automatically return to the normal mode.

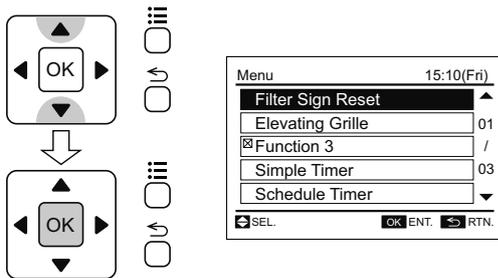
2 FILTER SIGN RESET

This function is used to turn off the filter sign indication.

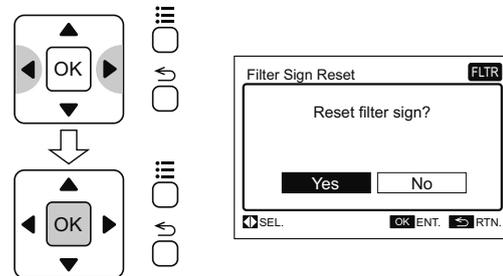
i NOTE

If the function with the indication of "☒" is selected from the menu, "Setting Disabled" will be displayed because the setting accumulated time by function b4 is insufficient.

- 1 Select "Filter Sign Reset" from the menu and press "OK". The confirmation screen will be displayed.



- 2 Select "Yes" by pressing "<" or ">" and press "OK". The indication of "FLTR" will be turned OFF and the screen will return to the normal mode.

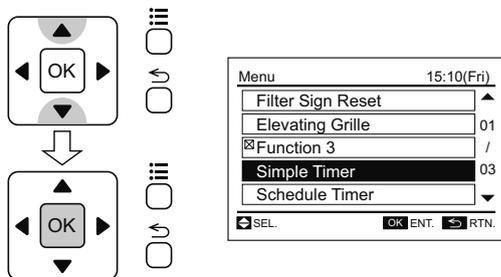


3 SIMPLE TIMER OPERATION

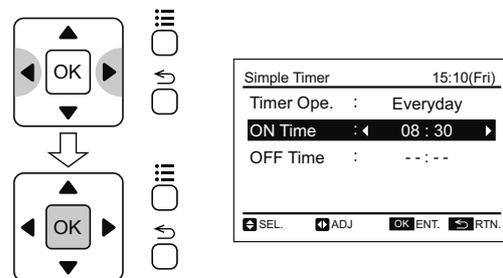
This function is used to start or stop the unit operation at the setting time.

The timer operation contents can be set from "Once" or "Everyday".

- 1 Select "Simple Timer" from the menu and press "OK". The simple timer setting will be displayed.



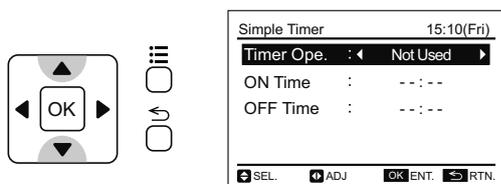
- 3 Press "<" or ">" to set each setting content for the selected item. When "Timer Ope." is selected, the setting contents are switched in order of "Not Used" ↔ "Once" ↔ "Everyday" by repeatedly pressing "<" or ">". When "ON Time" or "OFF Time" is selected, the setting time can be set every 30 minutes by pressing "<" or ">". Press and hold "<" or ">", the setting time can be continuously indicated.



i NOTE

If the present time has not been set yet, automatically "Set Date/Time" will be displayed. Refer to Adjusting Date/Time section.

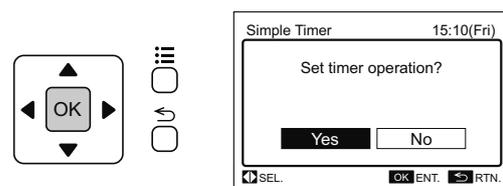
- 2 Press "Δ" or "∇" to select the setting items. The setting items are displayed "Timer Ope.", "ON Time" and "OFF Time".



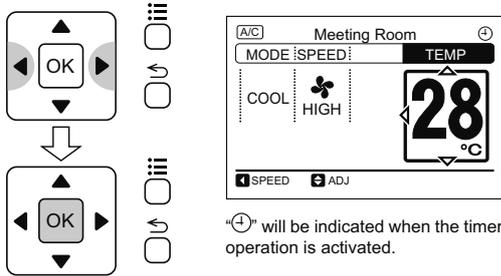
i NOTE

If "Once" of the timer operation setting is selected, the setting content will be automatically changed to "Not Used" after "Once" timer operation.

- 4 Press "OK" to finish the simple timer setting. The confirmation screen will be displayed.



- 5 Select "Yes" by pressing "<" or ">" and press "OK". The setting will be confirmed and the screen will return to the normal mode.



NOTE

In the case of the following condition, the simple timer operation is NOT available:

- When the prohibiting operation by remote control switch is set from the central controller.
- When “⊗” is indicated on LCD, the timer operation cannot perform. Set the date and time according to Adjusting Date/Time section.

4 SCHEDULED OPERATION

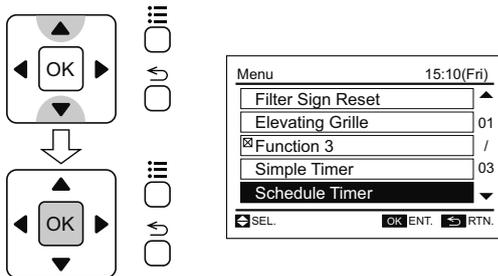
4.1 Schedule Setting

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

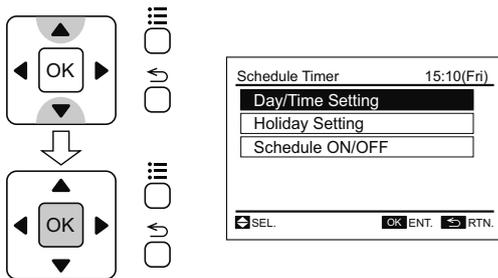
Temperature can be also set when the unit is operated.

Five different schedule timers (max.) can be set for each day of the week.

- 1 Select "Schedule Timer" from the menu and press "OK".



- 2 Select "Day/Time Setting" by pressing "Δ" or "∇" and press "OK".



NOTE

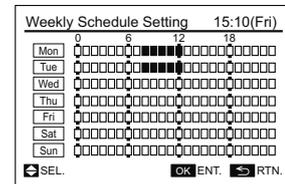
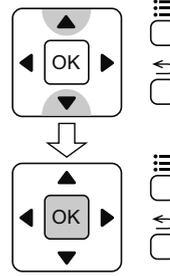
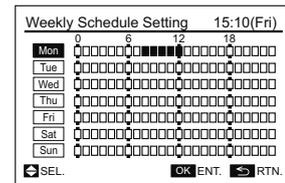
If the present time has not been set yet, automatically "Set Date/Time" will be displayed. Refer to Adjusting Date/Time.

- 3 Select the day of the week (from Monday to Sunday) by pressing "Δ" or "∇". Press "OK".
- “■” (run) and “□” (stop) will be displayed on LCD.
 - To copy the setting contents of the previous day, press "<" and "OK" simultaneously.

Example:

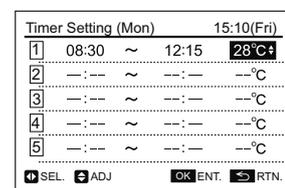
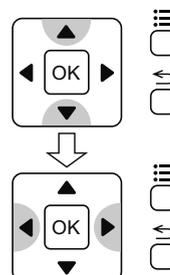
The setting contents of Monday are copied in Tuesday.

- Select "Tue".
- Press "<" and "OK" simultaneously.
- The setting contents of Monday are copied in Tuesday.



- 4 Select the schedule No (from 1 to 5) by pressing "Δ" or "∇". Select "ON Time", "OFF Time" or "Setting Temperature" by pressing "<" or ">". Set the ON/OFF timer and temperature by pressing "Δ" or "∇".

- Press or keep pressing "Δ" or "∇" to adjust numbers.
- Five different schedule timers (max) can be set for each day of the week.



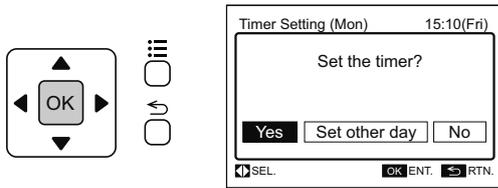
The figure shows that following timers are set for Monday;

ON Timer: 8:30

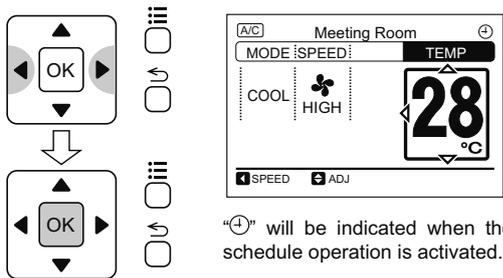
OFF Timer: 12:15

Setting Temperature: 28°C

5 Press "OK". The confirmation screen will be displayed.



6 Select "Yes" by pressing "<" or ">" and press "OK". The setting will be confirmed and the screen will return to the normal mode. To set other days of the week, select "Set other day" and press "OK".



"+" will be indicated when the schedule operation is activated.

NOTE

In the case of the following condition, the schedule operation is NOT available;

- When the prohibiting operation by remote control switch is set from the central controller.
- When "⊗" is indicated on LCD, the schedule operation cannot perform. Set the date and time according to Adjusting Date/Time section.

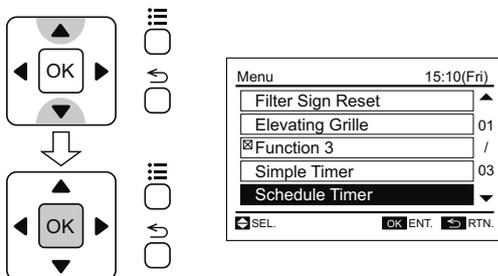
4.2 Holiday Setting

This function is used to deactivate the schedule operation temporarily.

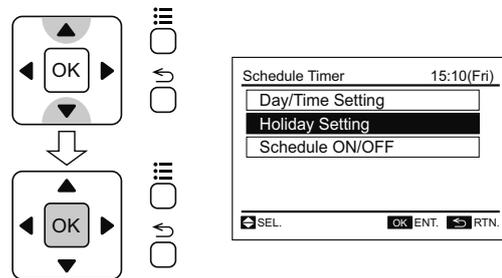
This function is used to deactivate the schedule operation just for one day. After that, the schedule operation will recover automatically.

This function is used to set irregular schedules such as national holidays.

1 Select "Schedule Timer" from the menu and press "OK". The schedule timer setting will be displayed.

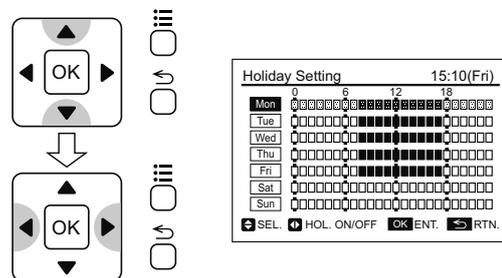


2 Select "Holiday Setting" by pressing "Δ" or "∇" and press "OK".

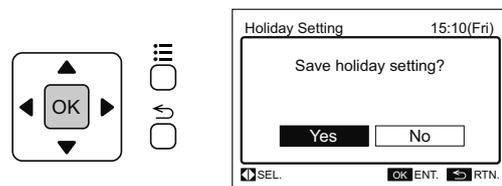


3 Select the day of the week to stop the operation by pressing "Δ" or "∇". Select "HOL. ON/OFF" by pressing "<" or ">".

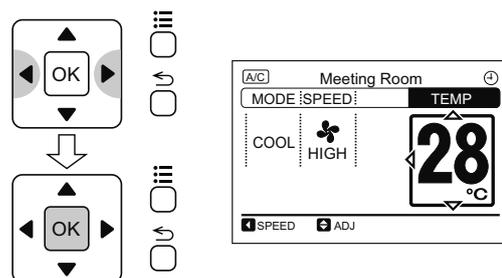
"⊗" and "⊕" will be changed to "⊗" and "⊕" on LCD.



4 Press "OK" after the setting is completed. The confirmation screen will be displayed.



5 Select "Yes" by pressing "<" or ">" and press "OK". The holiday setting will be confirmed and the screen will return to the normal mode.



NOTE

"⊕" will be turned off when the holiday setting is activated.

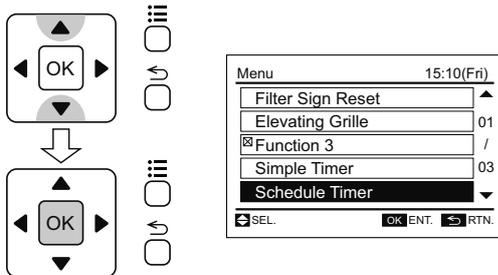
4.3 Schedule ON/OFF Setting

This function is used to deactivate the schedule operation temporarily.

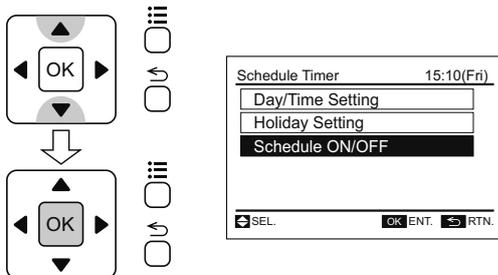
The schedule operation will not be carried out when "OFF" is set in this function.

This function is used to apply for long period of holidays.

1 Select "Schedule Timer" from the menu and press "OK".



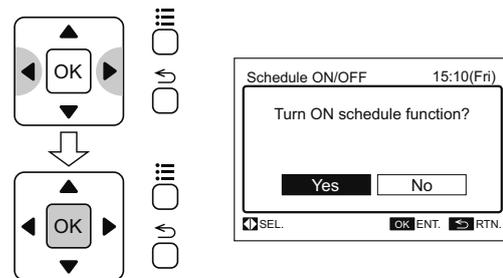
2 Select "Schedule ON/OFF" by pressing "Δ" or "∇" and press "OK". The confirmation screen will be displayed.



3 Select "Yes" by pressing "◀" or "▶" and press "OK". The schedule ON/OFF setting will be confirmed and the screen will return to the normal mode.

"⊕" will be turned on when the setting of schedule operation is valid.

"⊕" will be turned off when the setting of schedule operation is invalid.



i NOTE

Even if the setting of schedule operation is invalid, the schedule operation will be activated.

5 INDIVIDUAL LOUVER SETTING

5.1 Setting

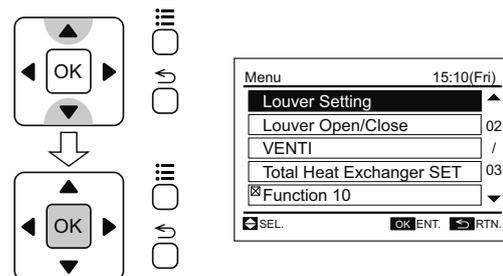
This setting is available only for the indoor unit adopting the individual louver. The each louver angle can be set individually.

i NOTE

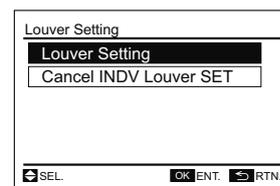
- This function is available only when the indoor unit corresponds to the individual louver.
- This function cannot be set when the unit is stopped.
- The fan speed will be changed to "LOW" while this function is being set. (After the setting is completed, the unit operation will be back to normal).
- As for "Start-up of Heating Operation", "During Defrost Operation" and "Activation of Thermo-Controller", all the louver angles will be fixed at horizontal position automatically even when this function is activated.
- This function will not be available if 2 (two) remote control switches (including multifunctional remote control switch + wireless remote control switch) are used.
- With one multifunctional remote control switch, the maximum of 4 (four) indoor units can be set for this function.

1 Select "Louver Setting" from the menu and press "OK".

The individual louver setting menu will be displayed.



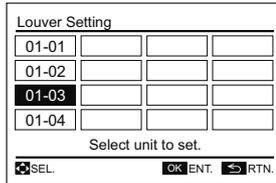
2 Select "Louver Setting" from the individual louver setting menu and press "OK".



i NOTE

If the number of indoor unit connected with the remote control switch is 1 (one), (4) will be displayed after the procedure (2).

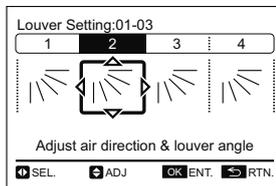
- Select the indoor unit to change the louver direction by pressing “Δ”, “∇”, “◀” or “▶”. Press “OK”.



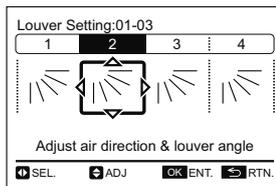
i NOTE

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

- Press “◀” or “▶” and select the louver from 1 to 4. The selected louver is opened and the other louvers are closed.



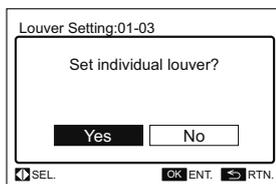
- Select the louver angle by pressing “Δ” or “∇” and press “OK”. The confirmation screen will be displayed.



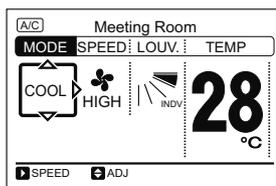
The louver angle will be changed as follows.



- Select “Yes” by pressing “◀” or “▶” and press “OK”. The setting is confirmed and the screen will return to the normal mode.

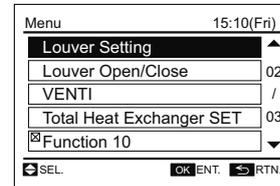


- Ensure that “INDV” is turned on at the air flow section on the normal mode.

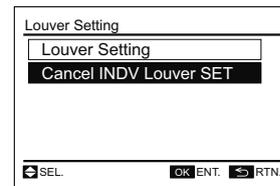


5.2 Cancellation of Louver Setting

- Select “Louver Setting” from the menu and press “OK”.



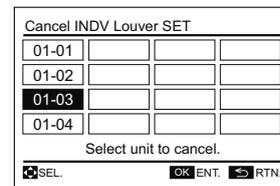
- Select “Cancel INDV Louver SET” from the individual louver set and press “OK”.



i NOTE

If the number of indoor unit connected with the remote control switch is 1 (one), (4) will be displayed after the procedure (2).

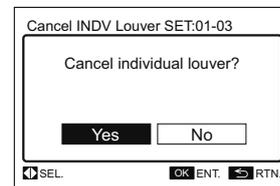
- Select the indoor unit to cancel by pressing “Δ”, “∇”, “◀” or “▶”. Press “OK”. The confirmation screen will be displayed.



i NOTE

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

- Select “Yes” by pressing “◀” or “▶” and press “OK”. The individual louver setting will be cancelled and the screen will return to the normal mode.



i NOTE

All the individual louver setting will be cancelled.

6 SCREEN DISPLAY SETTING

Display Adjustment

◆ Function

- Time Format:

To change the time form to 12 hour or 24 hour.

- Brightness:

To adjust the brightness of backlight.

- Back light:

To change the time (5, 15 or 30 seconds) between ON and OFF of backlight.

- Contrast:

To adjust the degree of difference between light and dark parts of LCD.

- On/Off lamp (Run Indicator Lamp Brightness):

To adjust the brightness of run indicator.

- 4 Press “<” or “>” and set the display.

- Time Format:

The time form is changed as follows; 12 Hour ↔ 24 Hour

- Brightness:

Press “<” or “>” and the brightness of backlight is changed.

- Back light:

The display backlight is OFF after the specified time interval of inactivity (no input from touch screen). The backlight off time interval can be selected as follows;

5 Seconds ↔ 15 Seconds ↔ 30 Seconds

- Contrast:

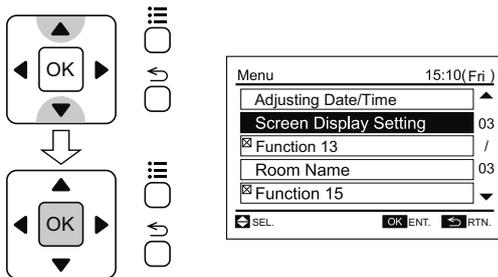
Press “<” or “>” and the degree of difference between light and dark parts of LCD is changed.

- On/Off lamp:

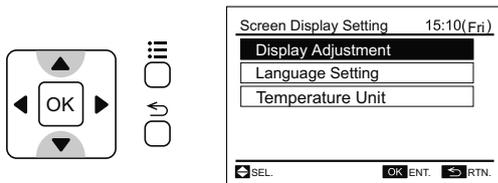
Press “<” or “>” and the brightness of run indicator is changed.

After the setting is completed, press “OK”. The confirmation screen will be displayed.

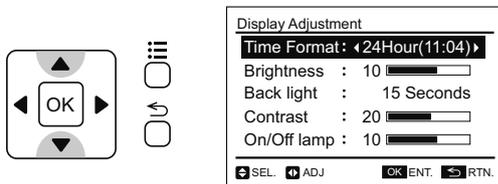
- 1 Select “Screen Display Setting” from the menu and press “OK”.



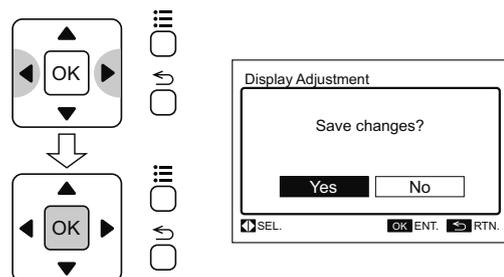
- 2 Select “Display Adjustment” by pressing “△” or “▽”.



- 3 Select the setting item by pressing “△” or “▽”. The indication is changed in order of “Time Format”, “Brightness”, “Back light”, “Contrast” and “On/Off lamp”



- 5 Select “Yes” by pressing “<” or “>” and press “OK”. The setting will be confirmed and the screen will return to the normal mode.

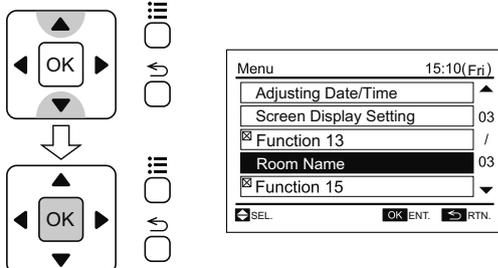


7 ROOM NAME REGISTRATION

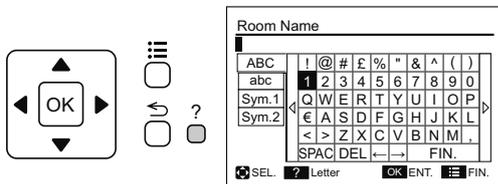
This function is used to register the name of the room (installation location of remote control switch)

- 1 Select "Room Name" from the menu and press "OK".

The room name will be displayed.



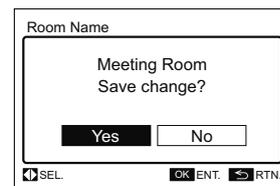
- 2 By pressing "?" (help), the letter type is changed.



- 3 Press "Δ", "∇", "◀" or "▶" and select the letter. Press "OK" to confirm the selected letter. (Max. 12 letters)

- 4 Select "FIN." by pressing "Δ", "∇", "◀" or "▶" and press "OK". (or simply press "≡" (menu)). The confirmation screen will be displayed.

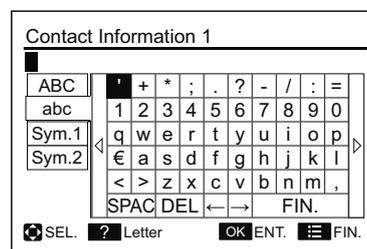
- 5 Select "Yes" by pressing "◀" or "▶" and press "OK". The setting will be confirmed and the screen will return to the normal mode.



CONTACT INFORMATION REGISTRATION

Contact information can be registered from "Contact Information".

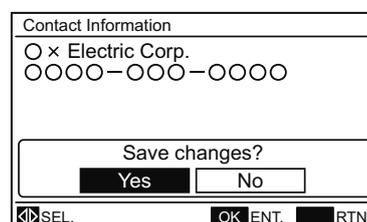
- (1) Press and hold "≡" (menu) and "↵" (return) simultaneously for at least 3 seconds during the normal mode (when unit is not operated). The test run menu will be displayed.
- (2) Select "Contact Information" from the test run menu and press "OK". The contact information 1 will be displayed.
- (3) Press "?" (help) to change font type.
- (4) Press "Δ ∇ ◀ ▶" to select letter.
- (5) Press "OK" to confirm the letter. (Max.: 28 letters)
- (6) Select "FIN." and press "OK" (or simply press "≡" (menu)), (7) will be displayed.



- (7) Repeat (3)~(5) to register contact information 2.

Select "FIN." and press "OK", the confirmation screen will be displayed. (Also, press "≡" (menu) and the confirmation screen will be displayed).

- (8) Select "Yes" and press "OK". The test run menu will be displayed after the setting is confirmed. If "No" is pressed, the screen will return to (3).



HELP MENU

1 HELP MENU

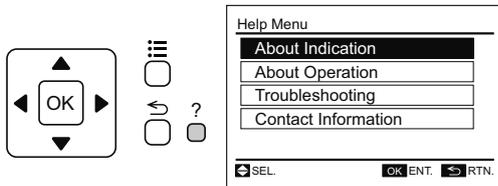
The explanation of indicators on LCD and operations can be found in the help menu.

The purpose of this function is to support manual operation.

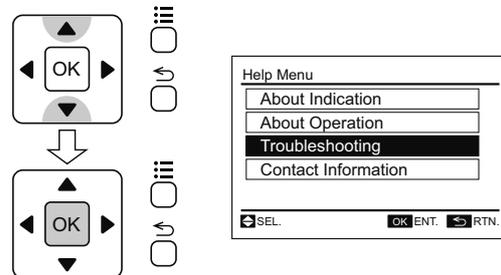
Refer to the following sections for more details.

1 Press “?” (help).

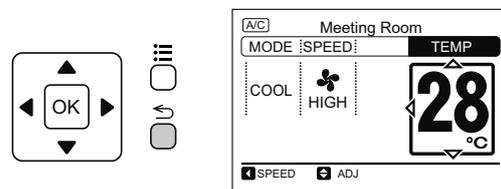
The help menu will be displayed.



2 Select the item from the help menu by pressing “Δ” or “∇” and press “OK”.



3 To return to the normal mode, press “↵” (return).



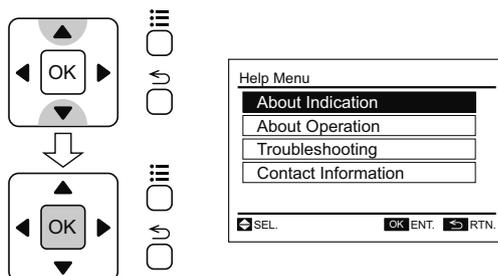
i NOTE

If the menu screen remains unchanged for approximately 10 minutes, the screen will automatically return to the normal mode.

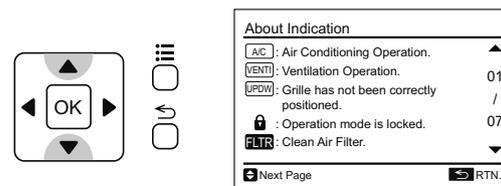
2 INDICATORS ON LCD

This function is used when the explanation of each icon on LCD is required.

1 Select “About Indication” from the help menu and press “OK”. The explanation of indicators on LCD will be displayed.

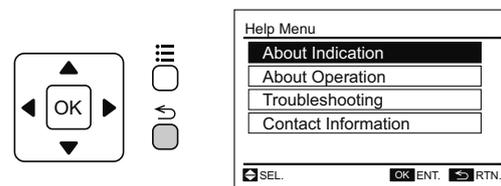


2 Press “Δ” or “∇” to scroll the text up and down.



3 Press “↵” (return). The screen will return to the help menu.

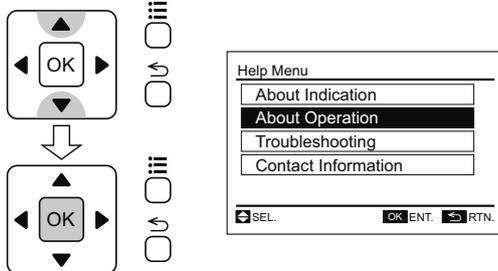
To return to the normal mode, press “↵” (return) again.



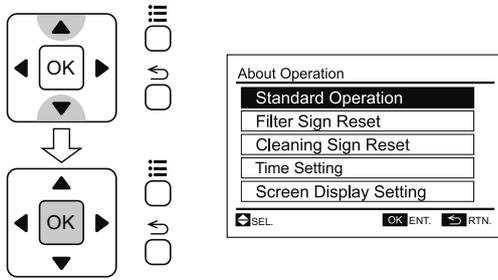
3 ABOUT OPERATION

This function is used when the explanation of operations and operation methods is required.

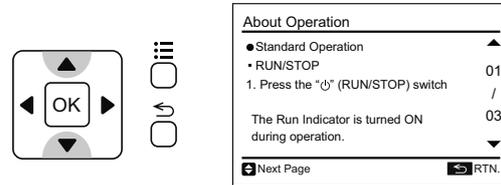
- 1 Select "About Operation" from the help menu and press "OK".
The explanation of operation list will be displayed.



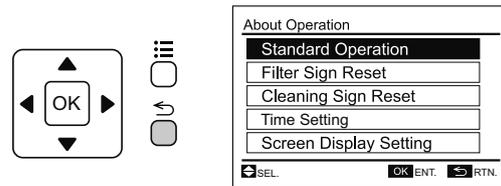
- 2 Select the operation from the list by pressing "Δ" or "∇" and press "OK". The explanation of the selected operation will be displayed.



- 3 Press "Δ" or "∇" to scroll the text up and down.

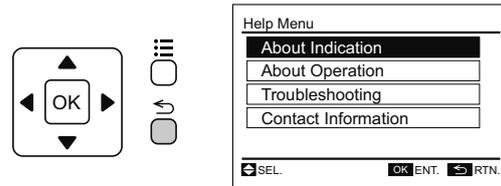


- 4 Press "↵" (return). The screen will return to the operation item.



- 5 Press "↵" (return). The screen will return to the help menu.

To return to the normal mode, press "↵" (return) again.

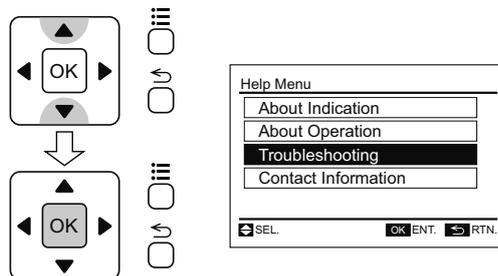


4 TROUBLESHOOTING

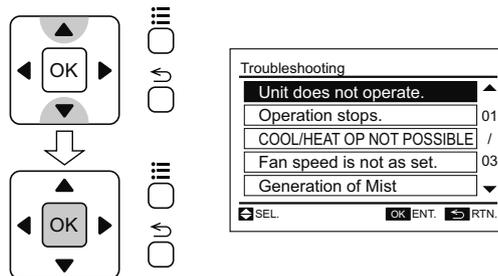
This function is used to troubleshoot.

Make sure that the troubleshooting is read carefully before requesting for repairs.

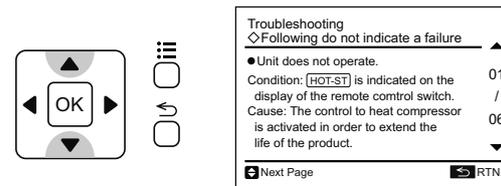
- 1 Select "Troubleshooting" from the help menu and press "OK".
The list of troubleshooting will be displayed.



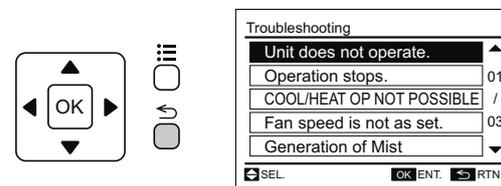
- 2 Select a problem from the list by pressing "Δ" or "∇" and press "OK". The details of the selected problem will be displayed.



- 3 Press "Δ" or "∇" to scroll the text up and down.

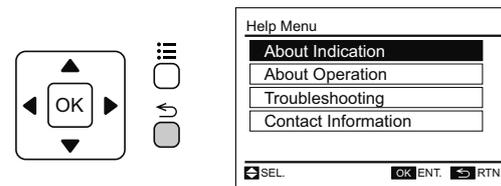


- 4 Press "↵" (return). The screen will return to the list of troubleshooting.



- 5 Press "↵" (return). The screen will return to the help menu.

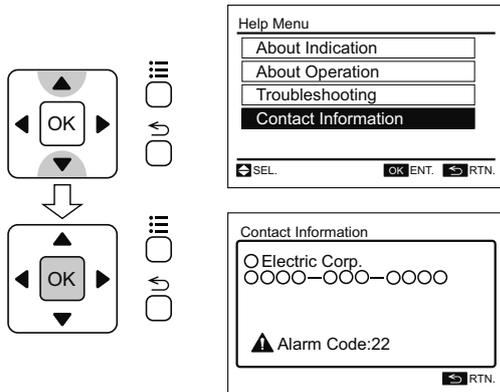
To return to the normal mode, press "↵" (return) again.



5 CONTACT INFORMATION

The screen will display contact information and the latest alarm code.

- 1 Select "Contact Information" from the help menu and press "OK". The contact information and the latest alarm code will be displayed.



- 2 Press "↵" (return). The screen will return to the help menu.

To return to the normal mode, press "↵" (return) again.



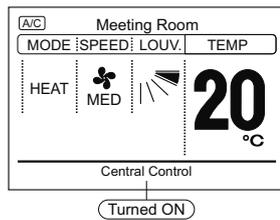
OTHER INDICATIONS

1 IN NORMAL CONDITION

1.1 Central Control

“Central Control” is turned ON.

In case that the prohibiting operation by remote control switch is set from the central controller, operation, temperature setting, fan speed and direction setting are not available from the remote control switch.



1.2 Thermo-controller

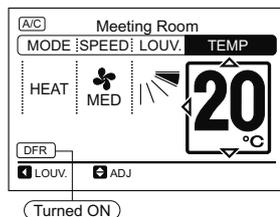
The fan speed is changed to “LOW” at the thermo-controller actuation. However, the indication is not changed. (Only in the heating operation mode)

1.3 Defrost

- Defrost Operation

“DFR” is turned ON during the defrosting.

The indoor fan is stopped though the indication is not changed. The louver is fixed at the horizontal position. However, the louver indication of LCD continues to activate.



- Operation Stoppage during Defrosting Operation

The RUN indicator (Green) is turned OFF when the operation is stopped during the defrosting.

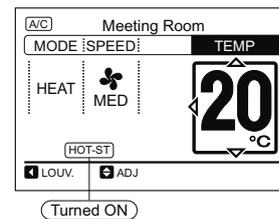
However, the operation continues with “DFR” indication, and the unit is stopped after the defrost operation is finished.

1.4 Operation Control

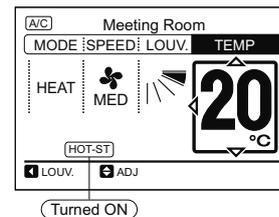
- Supplying Electrical Power

“HOT-ST” is turned ON when the electrical power is turned ON.

In this case, the compressor is under preheating. The operation may not be available for max 4 hours. Do not turn off the outdoor unit electrical power during the high season for Cooling/Heating operation.



- During Hot Start (Heating Operation Only) “HOT-ST” is turned ON.

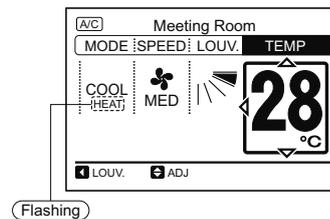


- Different Operation Mode

The operation mode set by the remote control switch is different with the outdoor unit operation mode.

(Except for the heat recovery system models.)

The indication of the actual operation mode flashes.



Indication when “COOL” operation is set by the remote control switch at the outdoor unit “HEAT” operation.

2 IN ABNORMAL CONDITION

2.1 Abnormality

The RUN indicator (Red) is flashing.

The indoor unit number, the alarm code, the model code and the connected number of indoor units are displayed on LCD.

In case that the plural indoor units are connected, the above items for each indoor unit are displayed one by one.

2.2 Power Failure

All the indications are OFF.

Once the unit is stopped by the power failure, the unit will not be started again although the power recovers. Perform the starting procedures again.

In case of instantaneous power failure within 2 seconds, the unit will be started again automatically.

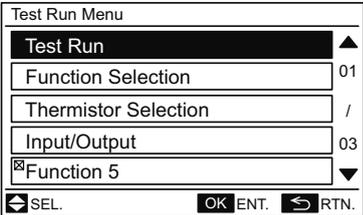
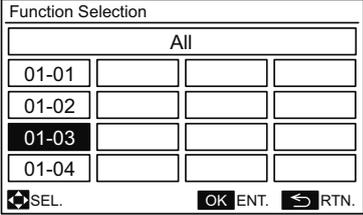
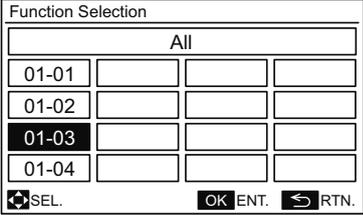
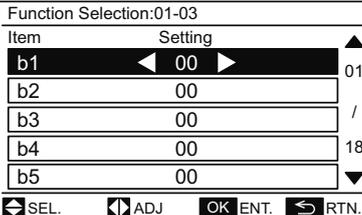
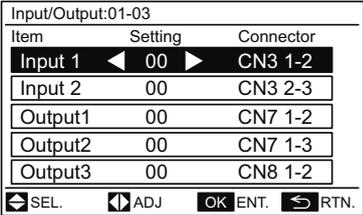
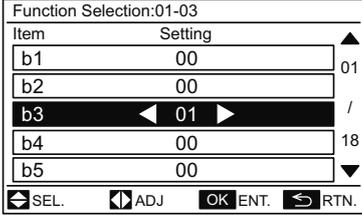
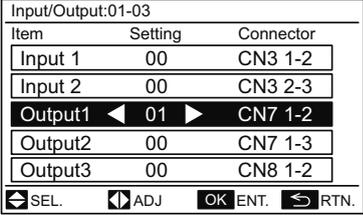
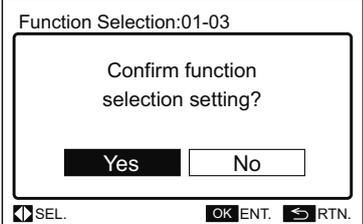
2.3 Electric Noise

There could be a case that all the indications are OFF and the unit is stopped. This is occurred by the activation of the micro computer for the unit protection from the electric noise.

Perform the starting procedures again.

FUNCTION SELECTION AND SETTING

◆ Setting from Test Run Menu

<p>(1) Press and hold "☰" (menu) and "↵" (return) simultaneously for at least 3 seconds during the normal mode (when unit is not operated). The test run menu will be displayed.</p>	
<p>(2) Select "Function Selection" or "Input/Output" from the test run menu and press "OK".</p>	
<p>(3) Select the indoor unit by pressing "△ ▽ <▷" and press "OK". (This screen is NOT displayed when the number of indoor unit connected with the remote control switch is 1 (one). In this case, (4) will be displayed.)</p>	
<p>(4) Press "△ ▽" and select the item.</p> 	<p>(4) Press "△ ▽" and select the item.</p> 
<p>(5) Press "<▷" and change the setting.</p> 	<p>(5) Press "<▷" and change the setting.</p> 
<p>(6) Press "OK" so that the confirmation screen will be displayed. (7) Select "Yes" and press "OK". The test run menu will be displayed after the setting is confirmed. If "No" is pressed, the screen will return to (4). (8) Press "↵" (return) on the test run menu to return to the normal mode.</p>	 <p>(Figure for Function Selection)</p>

To set other units, press "↵" (return) at (4)(5) so that the screen will return to (3). (If the number of indoor unit connected with the remote control switch is 1 (one), the screen will return to (1).)

◆ Table A Optional Setting Items for Function Selection

Items	Optional Function	Individual setting	Setting condition	Contents
b1	Cancellation of heating temperature compensation due to uneven heat load	○	00 01 02	Standard Removal Set temperature +2°C (*1)
b2	Circulator function at heating Thermo-OFF	○	00 01	Not available Available
b3	Enforced 3 Minutes minimum operation time of compressor	○	00 01	Not available Available
b4	Change of filter cleaning time	○	00 01 02 03 04	Standard 100 hrs 1,200 hrs 2,500 hrs No indication
b5	Fixing of operation mode	×	00 01	Standard Fixed
b6	Fixing of setting temperature	×	00 01	Standard Fixed
b7	Fixing of operation as exclusive cooling unit	×	00 01	Standard Fixed
b8	Automatic COOL/HEAT operation	×	00 01	Not available Available
b9	Fixing of fan speed	×	00 01	Standard Fixed
bA	Not prepared	×	-	Not used
bb	Cooling temperature compensation due to uneven heat load	×	00 01 02	Standard (No Compensation) Set Temp. -1°C Set Temp. -2°C
bC	Not prepared	-	-	Not used (Use as 00 conditions)
bd	Not prepared	-	-	Not used (Use as 00 conditions)
bE	Not prepared	-	-	Not used (Use as 00 conditions)
C1	Not prepared	-	-	Not used (Use as 00 conditions)
C2	Not prepared	-	-	Not used
C3	HA function (only for Japanese market)	○	00 01	Not available Available
C4	Drain Pump Operation at Heating	○	00 01	Not available Available
C5	Hi speed (Except for Hi Speed at Heating Thermo-OFF)	○	00 01 02	Not available Hi Speed 1 (*2) Hi Speed 2
C6	Hi speed at heating Thermo-OFF	○	00 01	Not available Available
C7	Canceling of enforced 3 minutes minimum operation time of compressor	○	00 01	Standard Cancellation
C8	Thermistor of remote control switch	○	00 01 02	Not available Control by thermistor of remote control switch Control by average value of indoor suction thermistor and thermistor of remote control switch
C9	Not prepared	-	-	Not used
CA	Not prepared	-	-	Not used
Cb	Selection of forced stoppage logic	×	00 01	Forced stoppage input: A Contact Forced stoppage input: B Contact
CC	Not prepared	×	-	Not used (Use as 00 conditions)
Cd	Not prepared	-	-	Not used (Use as 00 conditions)
CE	Not prepared	-	-	Not used (Use as 00 conditions)
CF	Change of louver swing angle	○	00 01 02	Standard (7-Step Operation) Cold draft prevention (5 Steps: lower 2 steps cut off) High ceiling (5 Steps: upper 2 steps cut off)

Items	Optional Function	Individual setting	Setting condition	Contents
d1	Power supply ON/OFF 1	○	00 01	Not available Available
d2	Not prepared	-	-	Not used
d3	Power supply ON/OFF 2	○	00 01	Not available Available
d4	Prevention for cooling discharge air temperature decrease	○	00 01	Not available Available
d5	Prevention for heating discharge air temperature decrease	○	00 01	Not available Available
d6	Room temperature control for energy saving	○	00 01	Not available Available
d7	Fall distance of elevating panel	○	00 01 02 03 04 05 06 07	200 cm (Standard) 100 cm 150 cm 200 cm 250 cm 300 cm 350 cm 400 cm
E1	Ventilation mode (*3)	○	00 01 02	Automatic ventilation Ventilation by total heat exchanger Bypass ventilation (No total heat exchanging)
E2	Increasing supply air volume (*3)	○	00 01	Not available Available
E3	Not prepared	○	-	Not Used (Use as 00 conditions)
E4	Precooling / Preheating period (*3)	○	00 01 02	None 30 min. 60 min.
E5	Not prepared	×	-	Not used (Use as 00 conditions)
E6	Indoor fan operation time after cooling operation stoppage	○	00 01 02	Not available 60 min. 120 min.
E7	Not prepared	○	-	Not used (Use as 00 conditions)
E8	Fan operation control at heating Thermo-OFF	○	00 01	Not available SLOW
E9	Not prepared	-	-	Not used (Use as 00 conditions)
EA	Not prepared	-	-	Not used (Use as 00 conditions)
Eb	Fan operation control at cooling Thermo-OFF	○	00 01 02	Not available LOW SLOW
EC	Forced Thermo-ON stoppage at cooling	○	00 01	Not available Available
Ed	Not prepared	-	-	Not used (Use as 00 conditions)
EE	Automatic fan speed control	○	00 01	Not available Available
F0	Not prepared	-	-	Not used
F1	Automatic OFF timer setting * Do not set the functions "0C"~"0F" when 2 (two) remote control switches are used in the same remote control group.	×	00 01 02 • • 23 24 0A 0B 0C 0D 0E 0F	No function OFF Timer by 1 hr OFF Timer by 2 hrs • • OFF Timer by 23 hrs OFF Timer by 24 hrs OFF Timer by 30 min. OFF Timer by 90 min. OFF Timer by 40 min. OFF Timer by 45 min. OFF Timer by 50 min. OFF Timer by 55 min.
F2	Remote control main-sub setting	×	00 01	Main Sub

Items	Optional Function	Individual setting	Setting condition	Contents
F3	Automatic reset of setting temperature (*4)	x	00 01	Not available Available
F4	Automatic reset time	x	00 01 02 03	30 min. 15 min. 60 min. 90 min.
F5	Automatic reset temperature for cooling (*5)	x	19 20 • • 25 • • 29 30	19°C 20°C • • 25°C (Factory setting) • • 29°C 30°C
F6	Automatic reset temperature for heating (*6)	x	17 18 • • 21 • • 29 30	17°C 18°C • • 21°C (Factory setting) • • 29°C 30°C
F7	Operation stoppage prevention by remote control switch operational error (*7)	x	00 01	Not available Available
F8	Lock function for operation mode selection	x	00 01	Not available Available (Factory setting)
F9	Lock function for temperature setting	x	00 01	Not available Available (Factory setting)
FA	Lock function for fan speed selection	x	00 01	Not available Available (Factory setting)
Fb	Lock function for swing louver operation	x	00 01	Not available Available (Factory setting)
FC	Cooling lower limit for setting temperature (*5)	x	00 01 02 • • 09 10	Standard Lower limit +1°C Lower limit +2°C • • Lower Limit +9°C Lower Limit +10°C
Fd	Heating upper limit for setting temperature (*6)	x	00 01 02 • • 11 12	Standard Upper limit -1°C Upper limit -2°C • • Upper limit -11°C Upper limit -12°C
FE	Not prepared	-	-	Not used (Use as 00 conditions)
FF	Not prepared	-	-	Not used (Use as 00 conditions)
H1	Not prepared	-	-	Not used (Use as 00 conditions)
H2	Indication of hot start	x	00 01	Indication No indication
H3	Not prepared	-	-	Not used (Use as 00 conditions)
H4	Not prepared	-	-	Not used (Use as 00 conditions)
J1	Temperature indication (*8)	x	00 01	Not available Available
J2	Not prepared	-	-	Not Used
J3	Run indicator color	x	00 01	Green Red
J4	Not prepared	-	-	Not used (Use as 00 conditions)
J5	Not prepared	x	-	Not used (Use as 00 conditions)

Items	Optional Function	Individual setting	Setting condition	Contents
J6	Error sound	×	00 01	Once Sequence
J7	Not prepared	-	-	Not Used
J8	Eco-operation (*9)	×	00 01	Not available Available
J9	Not prepared	-	-	Not used (Use as 00 conditions)
JA	Not prepared	-	-	Not used (Use as 00 conditions)
Jb	Not prepared	-	-	Not used (Use as 00 conditions)
K1	Not prepared	×	-	Not used (Use as 00 conditions)
K2	Not prepared	×	-	Not used (Use as 00 conditions)
K3	Not prepared	×	-	Not used (Use as 00 conditions)
K4	Not prepared	-	-	Not used (Use as 00 conditions)
K5	Human sensor detection level	-	00 01 02	Standard High Low

*1: The "02" setting may not be available according to the type of indoor unit.

*2: In case of RPI models, 00: Increasing fan speed 1 (standard), 01: Increasing fan speed 2 (high static pressure), 02: Standard (low static pressure)

*3: E1 to E4: Setting for the total heat exchanger.

*4: In case that the set temperature is changed and kept within the set time at "F4", the temperature is automatically changed to "F5" and "F6". (In case that the set temperature is out of range at "F5" and "F6", it is applied within upper and lower limit for the set temperature.)

*5: Applicable to fan, cooling and dry operation modes.

*6: Applicable to heating operation mode.

*7: Operation is stopped by pressing the "⏻" (run/stop) switch for 3 seconds.

*8: The sensor value at "C8" will be indicated. When the thermistor for remote control switch is used, the average value of the thermistor for remote control switch and the thermistor for indoor inlet will be indicated.

*9: When the unit is restarted by the remote control switch, the temperature automatically changes to the setting temperature of "F5" or "F6".

NOTE

- **After at least 3 minutes from the power ON, change the optional setting.**
- **When changing "CF" setting (change of louver swing range), restore the power supply or allow the louver to make one complete swing fully in the auto swing mode to apply the optional setting.**
- **The optional settings are different according to the indoor and outdoor unit models. Check to ensure that the unit has the optional setting or not.**
- **Record the setting conditions for each optional setting in the "Setting" column of the table.**

◆ Table B Input and Output Number Display and Connectors

Input number display Input/Output indication	Port	Factory setting	
		Setting item	Indication
Input 1	CN3 1-2	Remote ON/OFF 1 (Level)	03
Input 2	CN3 2-3	Prohibiting Remote Control after Manual Stoppage	06
Output 1	CN7 1-2	Operation	01
Output 2	CN7 1-3	Alarm	02
Output 3	CN8 1-2	Thermo-ON for Heating	06

◆ Table C Input and Output Settings and Display Codes

Indication	Input	Output
00	Not set	Not set
01	Room Thermostat (for Cooling)	Operation
02	Room Thermostat (for Heating)	Alarm
03	Remote ON/OFF 1 (Level)	Cooling
04	Remote ON/OFF 2 (Operation)	Thermo-ON for Cooling
05	Remote ON/OFF 2 (Stoppage)	Heating
06	Forbidding Remote Control after Manual Stoppage	Thermo-ON for Heating
07	Remote Cooling / Heating Change	Total Heat Exchanger
08	Elevating Grille Input	Elevating Grille Output

 **NOTE**

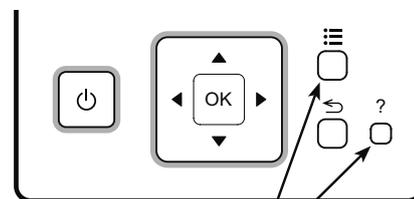
- *After at least 3 minutes from the power ON, change the optional setting.*
- *The elevating grille input can be set to "Input 2" only.*
- *The elevating grille cannot be set to "Input 1".*
- *The elevating grille output can be set to "Output 1" or "Output 2" only.*
- *The elevating grille output cannot be set to "Output 3".*
- *Do not set the elevating grille for the total heat exchanger.*
- *Record the setting conditions for each input and output in the "Setting" column of the table.*

CHECK MENU

Each "Check Menu" item and its function are explained in the following table.

Check menu item	Function
Check 1	Sensor condition of air conditioner will be monitored and indicated.
Check 2	Sensor data of air conditioner prior to alarm occurrence will be indicated.
Alarm history display ^T	Previous alarm record (date, time, alarm code) will be indicated.
Model display	Model name and manufacturing number will be indicated.
IU/OU PCB check	The result of PCB check will be indicated.
Self checking	Checking of remote control switch will be carried out.

Indication of Check Menu



Press and hold "≡" (menu) and "?" (help) simultaneously for 3 seconds during the normal mode.

T: To Erase Alarm History.

Press "OK" when the abnormality record is indicated. After that, the confirmation screen will be displayed.

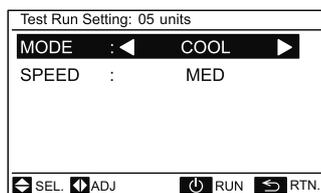
Select "Yes" and press "OK" so that the alarm record will be deleted.

TEST RUN

- 1 Turn ON the power supply for all the indoor units.
- 2 For the models with the auto-address function, wait for 3 minutes approximately. The addressing is automatically performed. (There is a case that 5 minutes is required according to the setting condition.) After that, select using language from "Menu". Refer to the operation manual for details.
- 3 Press and hold "≡" (menu) and "↵" (return) simultaneously for at least 3 seconds. The test run menu will be displayed.
- 4 Select "Test Run" by pressing "△ ▽" and press "OK". The test run screen will be displayed.
- 5 Test Run.

◆ The test run screen is displayed.

The total number of the indoor units connected is indicated on the LCD (liquid crystal display).



If the indicated number is not equal to the actual connected number of indoor unit, the auto-address function is not performed correctly due to incorrect wiring, the electric noise or etc. Turn OFF the power supply and correct the wiring after checking the following points; (Do not repeat turning ON and OFF within 10 seconds.)

- 1 Power Supply for Indoor Unit is Not Turned ON or Incorrect Wiring.
- 2 Incorrect Connection of Connecting Cable between Indoor Units or Incorrect Connection of Controller Cable.
- 3 Incorrect Setting of Rotary Switch and Dip Switch (The setting is overlapped.) on the Indoor Units PCB.

NOTE

When "00" is indicated, the auto-address function may be performing. Cancel "Test Run" mode and set it again.

- Press "⏻" (run/stop) to start the test run.
- Press "△ ▽ < ▷" and set each item.

HITACHI

HEAT PUMPS