

HITACHI

INSTRUCTION MANUAL

ADVANCED COLOR WIRED REMOTE CONTROLLER

MODELS

PC-ARFG-E



EN INSTRUCTION MANUAL

ES MANUAL DE INSTRUCCIONES

DE BEDIENUNGSANLEITUNG

FR MANUEL D'INSTRUCTIONS

IT MANUALE DI ISTRUZIONI

PT MANUAL DE INSTRUÇÕES

DA BRUGSANVISNING

NL HANDLEIDING

SV INSTRUKTIONSHANDBOK

EL ΕΓΧΕΙΡΙΔΙΟ ΕΓΚΑΤΑΣΤΑΣΗΣ

BG РЪКОВОДСТВО С УКАЗАНИЯ

HR PRIRUČNIK S UPUTAMA

CS NÁVOD K POUŽITÍ

FI KÄYTTÖOPAS

HU HASZNÁLATI ÚTMUTATÓ

PL INSTRUKCJA OBSŁUGI

RO MANUAL DE INSTRUCTIUNI

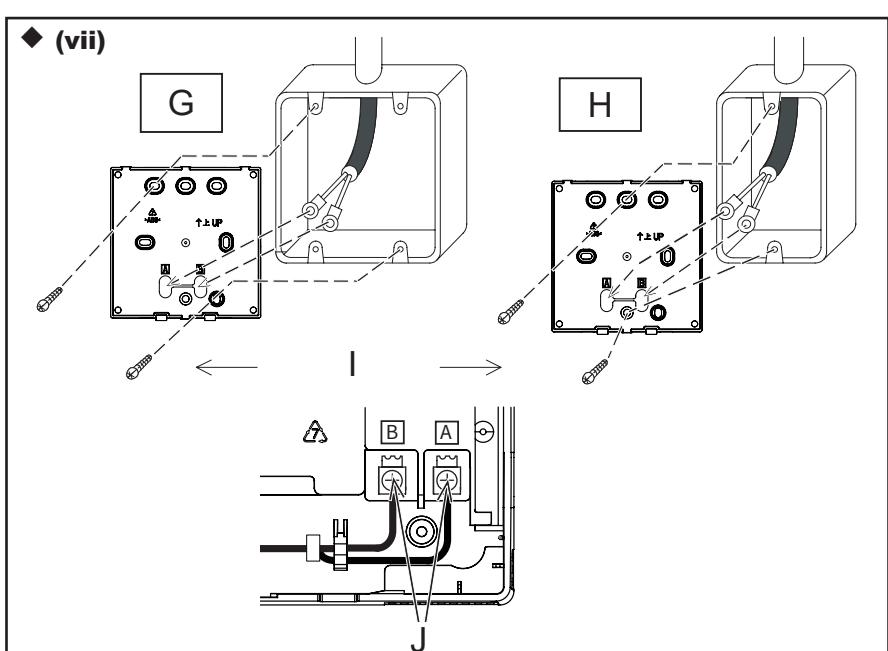
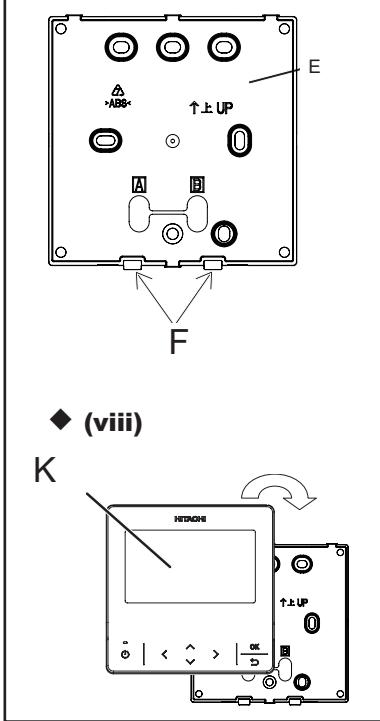
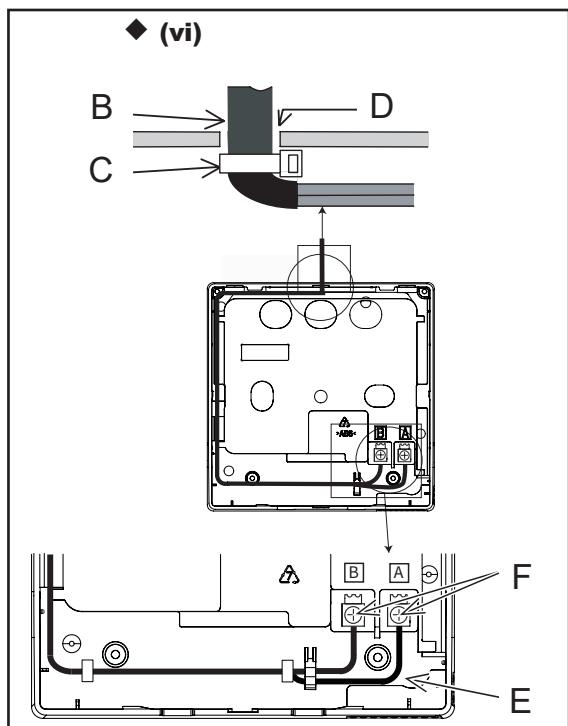
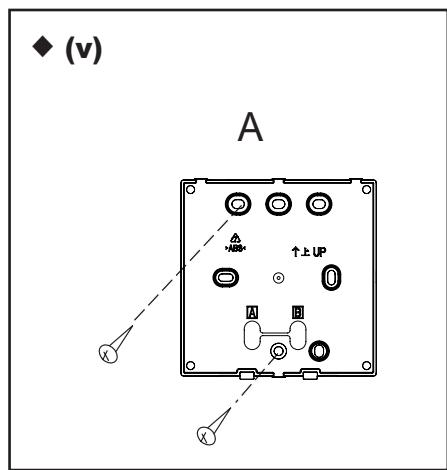
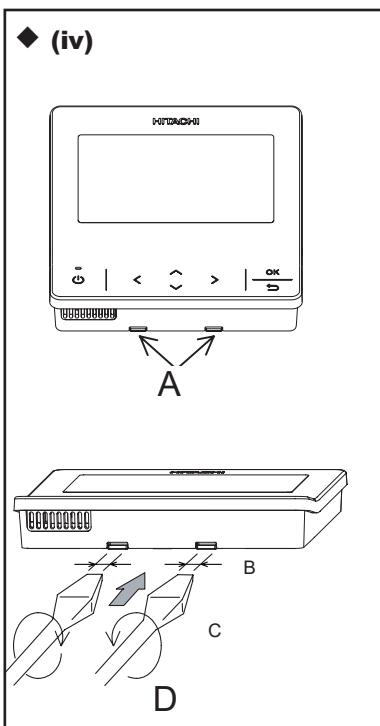
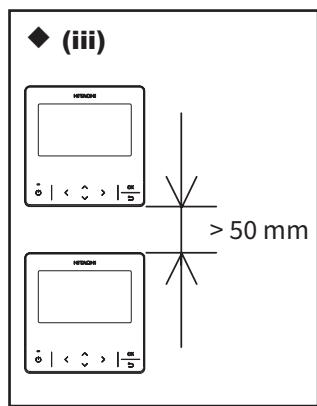
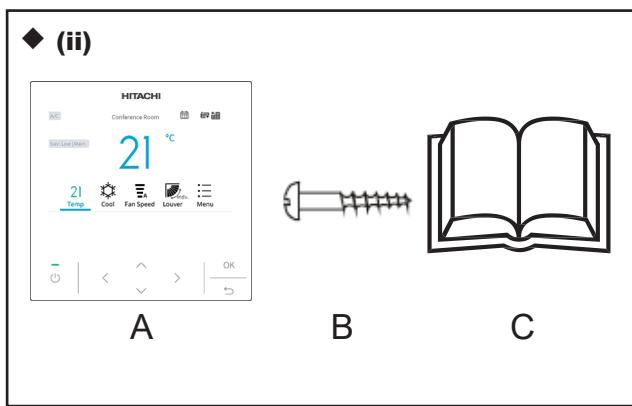
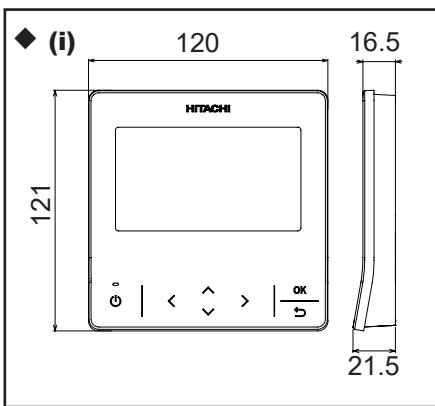
RU РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

SK NÁVOD NA POUŽITIE

SL PRIROČNIK ZA UPORABO

UK ПОСІБНИК З ЕКСПЛУАТАЦІЇ

Cooling & Heating



1 SAFETY SUMMARY

Hitachi cannot anticipate every possible circumstance that might involve a potential hazard.

DANGER

Perform electrical work according to the Installation Manual. As for the electrical wiring work and check, turn OFF the main power supply before opening/closing the service cover of indoor unit. If service cover is opened with main power supply left on, it may result in an electrical shock.

CAUTION

- DO NOT pour water into the remote controller. This product is equipped with electrical parts. If poured, it will cause a serious electrical shock.
- DO NOT perform installation work and electrical wiring connection by yourself. Contact your Hitachi distributor or dealer and ask them for installation work and electrical wiring by a service person.
- DO NOT install the product in places where oil vapour or oil are dispersed, in the vicinity of hot springs (in a sulfuric environment), where the generation, flow, accumulation or leakage of flammable gas is detected, or in salty, acid or alkaline environments.

2 INSTALLATION

Select a suitable place for operation and determine the installation place of the controller with the customer's acceptance.

Do not install the controller in a place where it is at the reach of children.

The controller has a built-in thermistor; do not install it in places where it may become excessively affected by other equipment, such as indoor units, water pipes, radiators, etc. Select an installation place where the average room temperature can be detected, where the remote control is not directly exposed to the sun or heat sources, and where it is not affected by outdoor air currents from opening and closing doors.

- DO NOT install the controller and its cables within approximately 3 meters from strong electromagnetic wave radiators such as medical equipment. In case that the controller is installed in a place where there is electromagnetic wave radiation, shield the controller and cables by covering them with a steel box and running the cable through a metal conduit tube.

NOTE

- The installer and system specialist shall comply with local regulations or standards for safety. The following standards may be applicable, if local regulations are not in force: International Organization for Standardization, ISO5149 or European Standard, EN378 or Japan Standard, KHKS0010.
- This appliance must be used only by adult and capable people, having received the technical information or instructions to handle it properly and safely.
- Children should be supervised to ensure that they do not play with the appliance.
- Important: Please read and understand this manual before using this remote controller.

If you have any questions, contact your Hitachi distributor or dealer.

Prior to the installation work, ensure that surface is flat and sufficiently strong and then fix the unit securely.

Check the contents and the quantity of the accessories in the packing.

- (ii) A - Remote control switch for operation control
- B - 2 M4x16 screws for fixation of the holding bracket onto the wall
- C - 1 Instruction Manual

When arranging the advanced color wired remote controller and other controllers vertically, place them at least 2 inches (50mm) apart. (iii).

2.1 INSTALLATION PROCEDURE

1 Insert the edge of the slotted screwdriver into the groove at the bottom of the holding bracket, push and turn the slotted screwdriver to separate and remove the controller from the holding bracket.

(iv) *A - Groove part*

B - Approx. 6mm

C - Slotted screwdriver

D - View from the bottom side

E - Wall mount

F - Tabs for attachment of the controller

• When Using Junction Box

- Prepare the optional field-supplied Implanted Junction Box.
- Feed the cable through the conduit tubing in the wall.

(vii) G - Optional M size Junction box with 4 fixing tabs

H - Optional S size Junction box with 2 fixing tabs

I - M4 screws (field-supplied)

- Cut away the insulation at the end of the cable and clamp the M3 solderless terminals (field-supplied). Connect the terminals (J)

3 Attach the controller body to the mounted holding bracket. Be careful not to pinch the cable when attaching it.

4 After installation, peel away the protective film from the LCD screen. *(viii)*

NOTE

Do not insert the slotted screwdriver into the tab part beside the groove. The tab may be damaged and the advanced color wired remote controller cannot be installed.

2 Attach the controller to the holding bracket and connect the cable as follows:

- In Case of Exposing the Controller Cable

Fix the holding bracket onto the wall with screws (accessory). *(v)*

Attach the stopper (plastic band) to the cable at the inner side of the draw-out hole.

(vi) B - Cable

C - Band stopper (Field-supplied)

D - Draw-out hole

E - Lead the cable with its sheath peeled through the groove

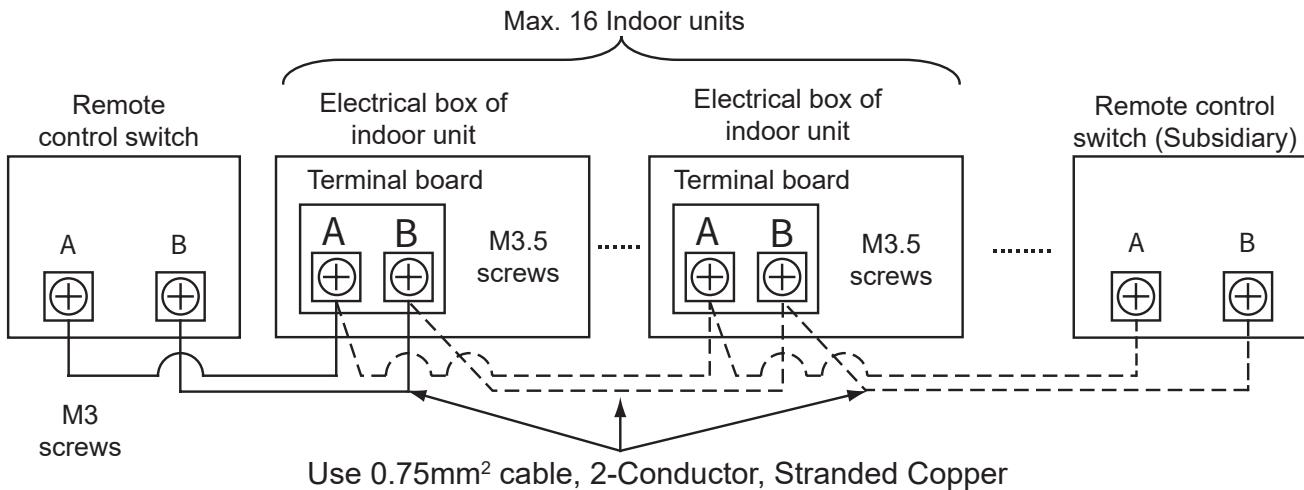
F - Peel the insulation at the end of the cable and clamp the M3 solderless terminals (field-supplied)

3 ELECTRICAL WIRING

DANGER

Always make sure to turn off the power of the indoor unit when performing electrical wiring work. Performing electrical wiring work with the power turned on can damage the circuit boards of the indoor unit and the remote control switch.

Wiring Example:



NOTE

- Communication cabling must be a minimum 0.75 mm², 2-Conductor, Stranded Copper. Shielded cable must be considered for applications and routing in areas of high electronic interference (EMI) and other sources of potentially excessive electrical noise to reduce the potential for communication errors. When shielded cabling is applied, proper bonding and termination of the cable shield is required as per Johnson Controls-Hitachi Air Conditioning guidelines. Plenum and riser ratings for communication cables must be considered per application and local code requirements. The use of any other grade of cable other than that specified above can result in damage from EMI.
- Keep a clearance of more than 30 cm between the transmission line (remote control switch cable and transmission wires) and the power source of indoor units. Otherwise, the air-conditioner may not operate properly or malfunction may occur due to the effect of power source noise.
- Refer to the documentation provided with each unit when performing electrical wiring work between the remote control switch and indoor units, for the proper setting of refrigerant cycle number and indoor unit address.
- No gap shall exist between the remote control switch cable and the hole of the remote control switch case. If there is a gap, cover the gap with vinyl tape. Otherwise, malfunction may occur due to the entrance of water droplets or insects.
- In case of operating with two remote control switches (Main and Sub), set the main and sub remote control switches by selecting the appropriate function with the remote control switches following the contents of Function selection and setting chapter. Upon completion of settings, turn off the power supply of all the indoor unit connected to the remote control switches.

4 OPERATION

4.1 OPERATION START/STOP

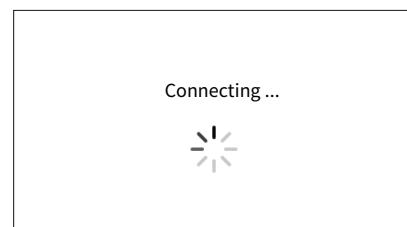
Press “

NOTE

- Once the temperature and air volume settings are set, the setting status is stored and does not need to be reset.
- After the heating operation is stopped, it may continue to FAN operation for about 2 minutes.

4.2 BASIC OPERATION

1 Wired controller Power ON.

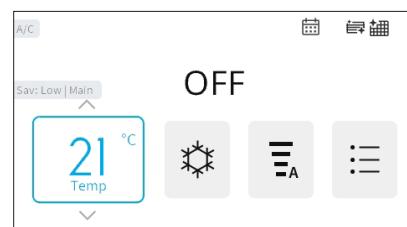


2 Air Conditioner OFF

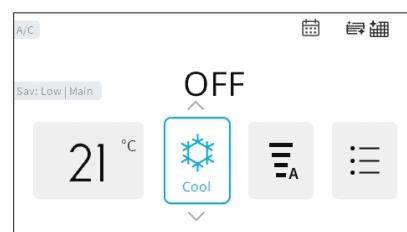
When air conditioner is off, press “<” or “>” to switch below items:

"Temperature" ↔ "Mode" ↔ "Fan Speed" ↔ "Menu".

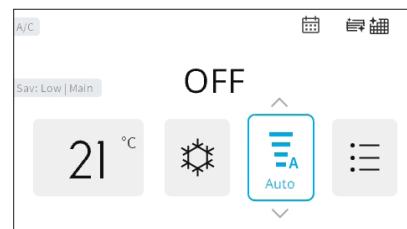
- Temperature



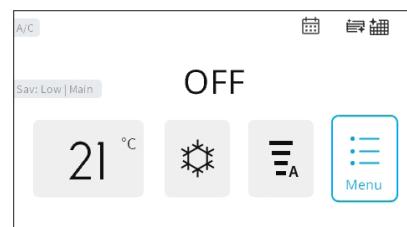
- Mode



- Fan Speed



- Menu



3 Air Conditioner ON

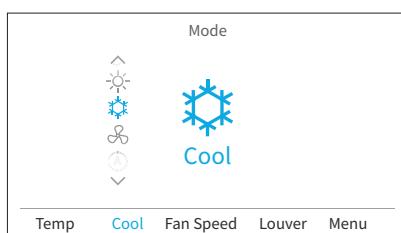
When air conditioner is on, press “<” or “>” to switch below items:

“Temperature” ↔ “Mode” ↔ “Fan Speed”
↔ “Louver” ↔ “Menu”.

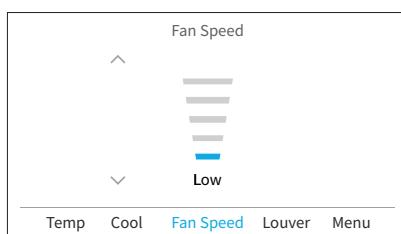
- Temperature



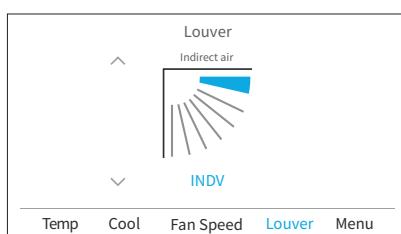
- Mode



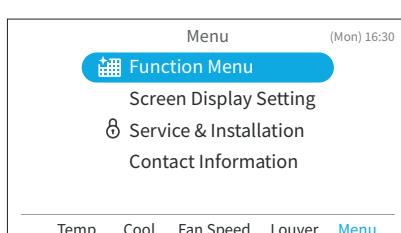
- Fan Speed



- Louver



- Menu

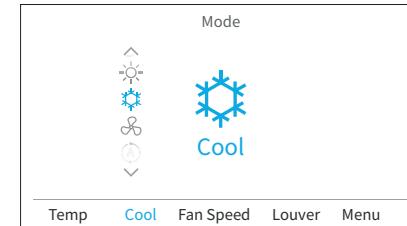


4.3 OPERATION MODE

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

Operation mode setting

- 1 Press “<” or “>” to select “Mode”.



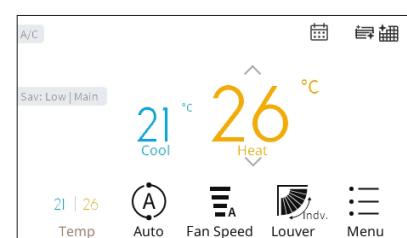
- 2 Set the operation mode with “^” or “_”. The operation mode is switched in the following order:

→“Cool”↔“Heat”↔“Dry”↔“Auto”↔“Fan”←

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

By default, temperature is as follows when the cooling/heating mode changes:

- Temperature switch from cooling mode to heating mode: Room temperature = Heating set temperature -1°C
- Temperature switch from heating mode to cooling mode: Room temperature = Cooling set temperature +1°C

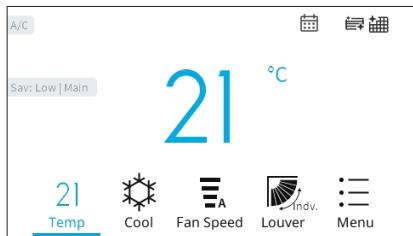


NOTE

The function selection setting is required for “Auto” operation. Contact your distributor for detailed information.

4.4 TEMPERATURE SETTING

1 Press “<” or “>” to select “Temp”.



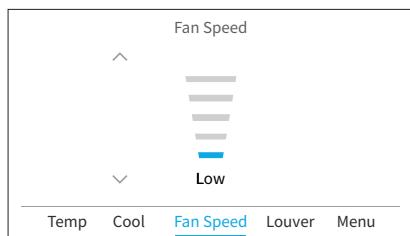
- 2 By pressing “ \wedge ”, the temperature is increased by 0.5°C to a maximum of 30°C . By pressing “ \vee ”, the temperature is decreased by 0.5°C .
- 3 Cooling, Dry, Fan operation: A minimum of 19°C .
- 4 Heating operation: A minimum of 17°C .

i NOTE

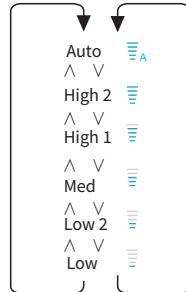
- Depending on the type and setting of the indoor unit, it may not be possible to set the temperature by 1°F (0.5°C).
- The max./min. temperature may differ depending on the type of indoor unit.
- Minimum and maximum temperature set-point limits can be configured by selecting a cooling lower limit and heating upper limit in the “Function Selection” mode.
- When the “Automatic Reset of Setting Temperature” function is selected, the temperature is automatically returned to the preset temperature after the temperature set-point change.
- Contact your distributor for detailed information about “Automatic Reset of Setting Temperature” and “Cooling Lower Limit Value and Heating Upper Limit Value for Setting Temperature” functions.

4.5 FAN SPEED

1 Press “<” or “>” to select “SPEED”.



2 By pressing “ \wedge ” or “ \vee ”, the fan speed changes as follows.

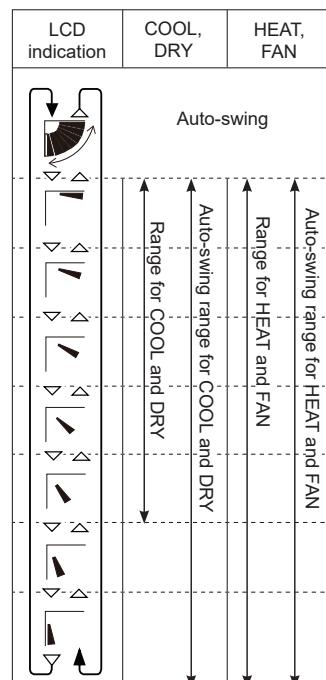


i NOTE

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

4.6 LOUVER SWING DIRECTION

- 1 Press “ \odot ” (On/Off). Make sure that the power is ON. Press “<” or “>” and select “Louver”.
- 2 By pressing “ \wedge ” or “ \vee ”, the louver direction changes as below diagram , and the direction of different types of louver is displayed differently.



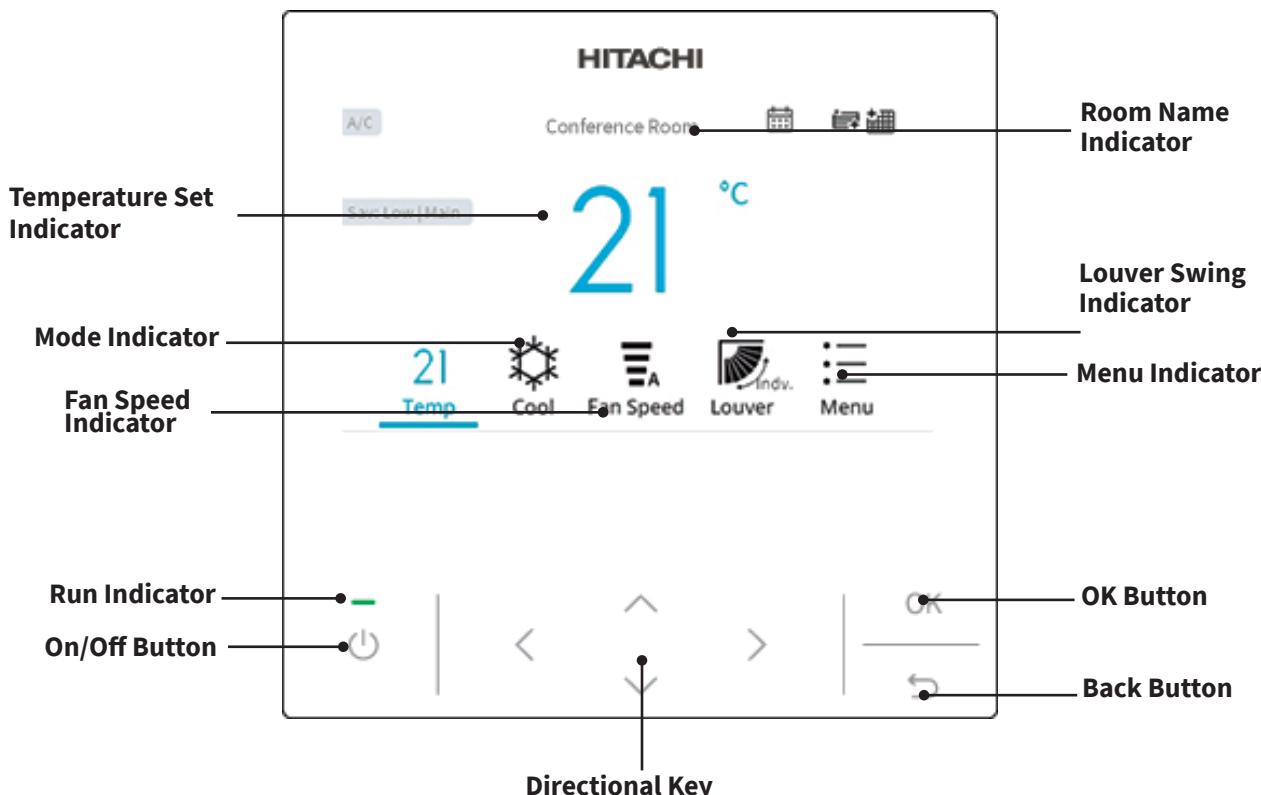
 : Auto swing operation will be started. At this time, the louver icon on the LCD will keep swinging repeatedly.

NOTE

- For the indoor unit without the auto louver mechanism, the indication of "Louver" is NOT displayed on the LCD.

- The air flow angle is different for each indoor unit type. Check for detailed information in each Operation Manual for indoor unit.
- The louver position on the LCD and the actual louver position may not match during the Auto-Swing. To set the louver positions, set the angle after checking the position on the LCD.
- The louver may NOT stop immediately after the switch is pressed.

5 SWITCH NAMES AND FUNCTIONS



NOTE

- The complete information about the purchased products is supplied in a CD-ROM, which can be found bundled with the outdoor unit. In case that the CD-ROM is missing or it is not readable, please contact your Hitachi dealer or distributor.
- The backlight turns off 10 minutes after the last operation. If you press any switch, the backlight is turned on. (The switch pressed to turn on the backlight is not functional.)
- Make sure to press the buttons lightly with your fingertips.
- Do NOT press the buttons or anything with sharp points, such as a ball point pen. The operational functionality of the controller may become damaged.

HITACHI

Cooling & Heating

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PMML0564 rev. 1 - 09/2021

Printed in Spain