

## Operation Buttons



1) Press this button if the temperature is too cold



2) Press this button if the temperature is too hot



3) On / Off Button



4) Mode Button. Please select as follows:

FAN	-	Fan Only
COOL	-	Cooling Mode
HEAT	-	Heating Mode
DRY	-	Do not use
AUTO	-	AUTO (the unit will cool or heat automatically depending on the surrounding temperature)



5) Adjusts the fan speed. Leave on low.



6) Adjusts air direction.



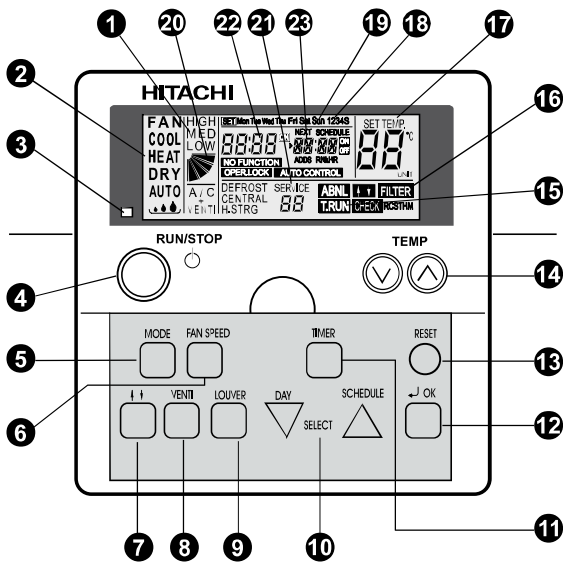
7) Do not use.



8) Timer buttons. Do not use.

10.1.PC-P2HTE - Wall-mounted Remote Control with Timer

Liquid crystal display (LCD)



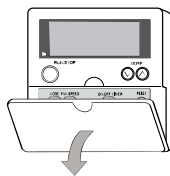
Model: PC-P2HTE

◆ Features:

This device allows you to control the unit's basic operations such as temperature and humidity. It also includes daily ON/OFF control operations throughout the week. It also includes other additional functions which are explained below in this section. This device can control up to 16 indoor units in the same operation mode.

**i** NOTE:

- If the LOW fan speed is selected and the outdoor temperature is higher than 21°C, the compressor is subjected to an excessive load when operating in heating mode. Therefore, the fan speed should be set to HIGH or MEDIUM to avoid activating the safety devices.
- When the system is restarted after a shutdown of more than approximately 3 months, the system should be checked by your service provider.
- Turn off the main switch when the system is to be inoperative for a long period of time. Otherwise the system consumes electricity as the oil heater remains active even though the compressor is stopped.



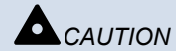
To open the cover, pull in the direction of the arrow.

- 1** Fan speed indicator  
Ventilation indicator  
Indicates the ventilation speed selected:  
(high/medium/low)  
Indicates if the total heat exchanger has been selected.  
A/C                      only air conditioning  
VENTI                    only ventilation  
A/C + VENTI          if both are selected
- 2** Operation mode indicator  
Indicates the operation mode selected: fan, cool, heat, dry, auto (cool/heat)
- 3** Run indicator (red lamp)
- 4** RUN/STOP switch
- 5** MODE (operation mode selection) switch
- 6** FAN SPEED (fan speed selection) switch
- 7** Up & down panel operation switch
- 8** VENTI (ventilator operation) switch
- 9** LOUVER (deflector panel) switch
- 10** SELECT (time setting) switches.  
Increases and decreases the set time for timer operation.
- 11** ON/OFF TIMER switch  
Used to activate or deactivate the timer operation.
- 12** OK switch
- 13** RESET (Filter Reset Switch)  
After cleaning the air filter, press the "RESET" button. FILTER indication will disappear and the next filter cleaning time is reset. It also stops the run procedure.
- 14** TEMP (temperature setting) switch
- 15** T.RUN (test run indication)  
Check (check indication)  
These tests appear when TEST RUN or CHECK are being performed.
- 16** ABNML (alarm) indicator
- 17** SET TEMP (set temperature) indicator
- 18** 1234S indicator (setting schedule number)
- 19** Mon Tue ... Sun indicator (day of the week indicator). Indicates that central station or CSNet control is operating.
- 20** Swing louver indicator  
DEFROST indicator
- 21** SERVICE mode indicator. (indicates the change to special operations)
- 22** Time indicator.
- 23** Time indicator. (indicates the programmed time).

**10.1.1. Operation Procedure for Cooling, Heating, Dry and Fan Operations**

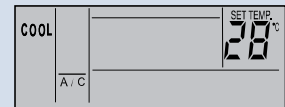
Before operation:

Turn on the electrical power supply to the system approximately 12 hours before start-up after a long shutdown. Do not start the system immediately after connecting the power supply, because the compressor may be damaged if it is not sufficiently heated.  
 Make sure the outdoor unit is not covered with ice or snow. If it is, remove the ice or snow with warm water (no hotter than 50°C).  
 If the water temperature is over 50°C, the plastic parts may be damaged.



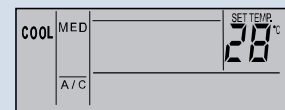
◆ Turn on the power supply.  
 Three vertical lines will appear on the liquid crystal display, with the indication A/C or VENTI.

◆ Press the MODE switch.  
 By repeatedly pressing the MODE switch, the indication changes from COOL, through HEAT, DRY to FAN, in that order (in the case of cooling-only models, COOL, DRY and FAN). (The figure shows when the “COOL” mode setting is selected).



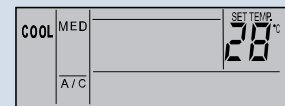
◆ Press the RUN/STOP switch.  
 The RUN indicator (red) lights up. The system starts automatically.

**i** NOTE:  
 Setting temperature, fan speed and air louver direction.  
 The setting is memorized after the first time and does not require resetting every day. When the setting needs be changed, refer to the section “Setting the Temperature, Fan Speed and Air Louver Direction”.



◆ Turn off (STOP)  
 Press the RUN/STOP switch again. The RUN indicator (red) goes out. The system stops automatically.

**i** NOTE:  
 The fan may continue operating for approximately 2 minutes after the heating operation is stopped.

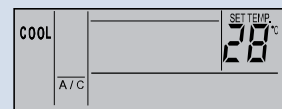


**10.1.2 Setting the Temperature, Fan Speed and Air Louver Direction**

◆ DO NOT touch the CHECK switch.  
 The CHECK switch is used only for servicing.  
 If the CHECK switch is pressed by mistake and the mode is changed from operation to check mode, press the CHECK switch again for approximately 3 seconds, wait 10 seconds and then press again: the mode will change back to normal.

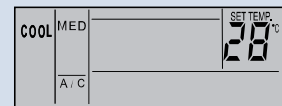


◆ Setting the temperature  
 Set the temperature by pressing the TEMP ▲ or ▼ switch.  
 The temperature increases 1°C when the ▲ switch is pressed (max 30°C).  
 The temperature decreases 1°C when the ▼ switch is pressed (min. 19°C for COOL, DRY and FAN modes; min. 17°C for HEAT mode). (The figure shows the temperature set to 28°C).



◆ Setting fan speed  
 Press the FAN SPEED switch.  
 When the FAN SPEED switch is pressed repeatedly, the indication changes from HIGH to MEDIUM to LOW, in that order.  
 For normal operation, set the fan speed to HIGH.  
 (The figure shows the fan speed set to MED.)

**i** NOTE:  
 In the DRY mode, the fan speed automatically changes to LOW, and cannot be altered (however, the indication shows the current setting).



◆ Setting the swing louver direction

Press the SWING LOUVER switch: the louver begins to swing. Pressing the switch again fixes the position of the swing louver.

Pressing the switch repeatedly stops and swings the louver successively.

◆ Fixed position

The indication shows the air flow direction.

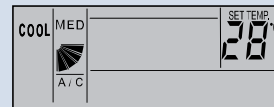
◆ Automatic swing position

The indications move continuously corresponding to the louver swing.



**NOTE:**

*In the heating operation, the louver angle changes automatically.*



**10.1.3. Operation Procedure for Ventilation**

This function is available only when the total heat exchanger is connected.

If the procedures below are performed when the total heat exchanger is not connected, the NO FUNCTION indication blinks for 5 seconds.

◆ Ventilation

Press the VENTI switch

By repeatedly pressing the VENTI switch, the indication changes from A/C through VENTI and A/C+VENTI, in that order.

(The figure shows the A/C + VENTI setting).



**NOTE:**

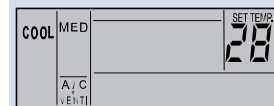
*Contact your distributor or HITACHI dealer for detailed information.*

*If the mode is changed to VENTI during individual operation of the air conditioner, the air conditioner will stop.*

*If the mode is changed to A/C during individual operation of the total heat exchanger, the total heat exchanger will stop.*



**ATTENTION**



**10.1.4. Operation Procedure for Automatic Cooling/Heating Operation**

The automatic cooling/heating operation must be set using the optional function. Contact your distributor or HITACHI dealer for more detailed information.

This function enables the operation mode (cooling or heating) to be changed automatically according to the temperature difference between the set temperature and the suction air temperature.

If the suction air temperature exceeds the set temperature by 3°, the operation changes to COOL mode. If it is 3°C lower than the set temperature, the operation changes to HEAT mode.

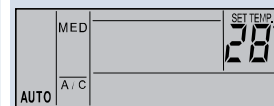


**NOTE:**

*If the heating operation is set at the LOW fan speed, the protective devices will often cause the system to stop. In this case, set the fan speed to HIGH or MED.*

*If the outside temperature is over approximately 21°C, the heating operation is not available.*

*The temperature difference between the cooling and heating operations is quite considerable when this function is used. This function cannot therefore be used for air conditioning a room where accurate control of temperature and humidity is required.*



**10.1.5. Procedure for Setting the Swing Louver**

**Setting the swing louver**

1. When the SWING LOUVER switch is pressed, the swing louver starts its operation. The range of the angle of swing is approximately 70° from the horizontal to the vertical position. When the "▶" symbol is moving, this indicates the continuous operation of the louver.
2. When the swinging operation of the louver is not required, press the SWING LOUVER switch again. The louver stops at the angle indicated by the direction of the "▶" symbol.
3. The discharge air angle is fixed at 20° for the RCI series and 40° for RCD series during the start-up of the heating and defrosting operation when the thermostat is on. When the outlet air temperature exceeds approximately 30 °C, the louvers start to swing.

**Fixing the louver**

1. For COOL and DRY modes, the discharge air angle can be changed to 5 different positions. For the heating operation, it can be changed to 7 positions.
2. To fix the louver position, first press the SWING LOUVER switch to start the louver swinging, and then press again when the louver reaches the required position.
3. The discharge air angle is fixed at 20° for the RCI series and 40° for the RCD series during the start-up of the heating and defrosting operation when the thermostat is on. When the outlet air temperature exceeds approximately 30 °C, the louvers start to swing.

When the louvers are fixed at an angle of 55° for RCI, 65° for RCD or 70° for both during the heating operation, and the operation mode is changed to cooling, the louvers will be automatically fixed at an angle of 45° for RCI or 60° for RCD.

**i** **NOTE:**  
There is a time lag between the actual angle of the louver and the indication on the liquid crystal display. When the SWING LOUVER switch is pressed, the louver will not stop immediately. The louver will move one extra swing. If the louvers are moved when cleaning or for any other reason, select the auto setting mode to move the four louvers to the same position.

**RCI (4-way cassette type)**

Indication							
Louver angle (approx.)	Approx. 20°	Approx. 25°	Approx. 30°	Approx. 35°	Approx. 45°	Approx. 55°	Approx. 70°
Cooling	Angle Range						
Heating	Angle Range						

Angle range  
 Recommended angle

**RCD (2-way cassette type)**

Indication							
Louver angle (approx.)	Approx. 40°	Approx. 45°	Approx. 50°	Approx. 55°	Approx. 60°	Approx. 65°	Approx. 70°
Cooling	Angle Range						
Heating	Angle Range						

Angle range  
 Recommended angle

**RPK (Wall-mounted type)**

Indication							
Louver angle (approx.)	Approx. 35°	Approx. 40°	Approx. 45°	Approx. 50°	Approx. 55°	Approx. 60°	Approx. 70°
Cooling	Angle Range						
Louver angle (approx.)	Approx. 40°	Approx. 45°	Approx. 50°	Approx. 55°	Approx. 60°	Approx. 65°	Approx. 70°
Heating	Angle Range						

Angle range  
 Recommended angle

**RPC (Ceiling-mounted type)**

Indication							
Louver angle (approx.)	Horizontal	Approx. 15°	Approx. 30°	Approx. 40°	Approx. 50°	Approx. 60°	Approx. 80°
Cooling	Angle Range						
Heating	Angle Range						

Angle range  
 Recommended angle

Do not turn the air louver by hand. The louver mechanism may be damaged if moved (in all units).

◆ **Wall-mounted type (RPK):**

Adjust the vertical louvers by hand to discharge air in the required direction.  
Do not swing blade 1 to the left and blade 2 to the right of the vertical louvering.

◆ **Automatic setting of the louver:**

When the unit is not in operation, two air louvers stop automatically in the closed position.

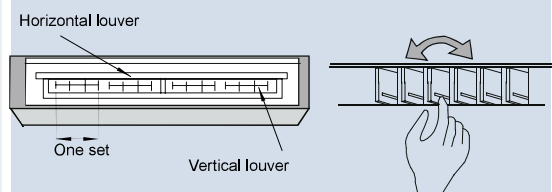
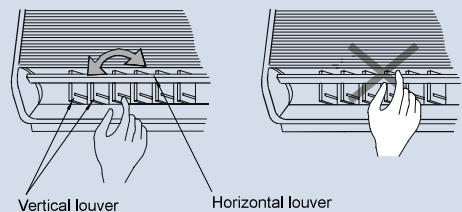
◆ **Ceiling-mounted type (RPC):**

The vertical louver consists of four sets of louvers. Adjust the vertical louvers by hand to discharge air in the required direction.

**i** **NOTE:**

The models which do not have a swing louver will not show the above indications on the remote control. In this case, the louver must be adjusted manually.

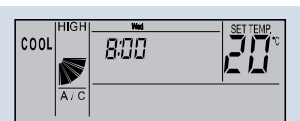
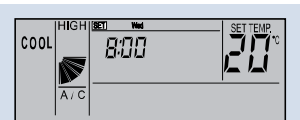
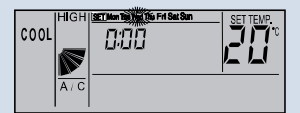
**CAUTION:**



**10.1.6. Timer Operation Procedure**

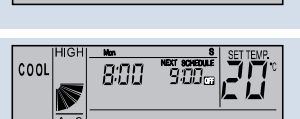
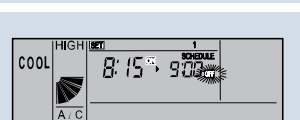
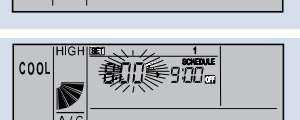
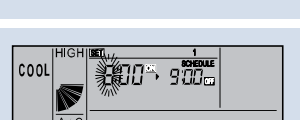
◆ Setting current day and time

1. Hold down the SELECT (⇩) DAY switch for more than 3 seconds to change to current day setting mode. SET is indicated and the day blinks. All the days except the current day are indicated.
2. Hold down the SELECT (⇩) DAY switch until the current day blinks, then press OK. The date is indicated, and the time blinks.
3. Press the SELECT (⇧⇩) DAY/SCHEDULE switches to adjust the “hour” setting, and then press again. “Hour” is indicated and “minutes” blinks.
4. Press the SELECT (⇧⇩) DAY/SCHEDULE switches to adjust the “minutes” setting, and then press again. The current time setting mode ends and returns to normal mode. “Minutes” is indicated and the SET indication goes out. The “seconds” start from zero.



◆ Setting the timer (programming)

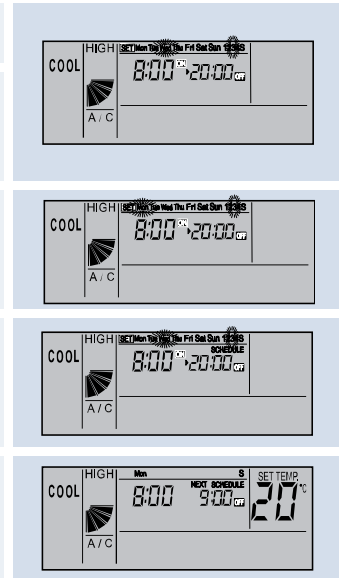
1. Press the TIMER switch. SET and SCHEDULE are indicated. Schedule number “1” blinks and other numbers are indicated.
2. When the SCHEDULE switch (⇧) is pressed, the schedule number moves [1] → [2] → [3] → [4] → [S] → [1]→....  
\* Select [S] to set the ON/OFF time and temperature shifts.  
\* By pressing the TIME switch, the SET and SCHEDULE indicators go out and the mode changes back to normal.
3. When the OK switch is pressed, the selected schedule number is indicated. The other schedule number indicators go out, and the ON time “hour” indicator for the number selected blinks.
4. Press the SELECT (⇧⇩) DAY/SCHEDULE switches to adjust the “hour” setting, and then press again. “Hour” is indicated and “minutes” blinks.
5. Press the SELECT (⇧⇩) DAY/SCHEDULE switches to adjust the “minutes” setting, and then press again. “Minutes” is indicated and the OFF time “hour” setting blinks.
6. Set the OFF time the same way as the ON time. After setting the “minutes”, the OFF time is indicated. If the schedule number [1][2][3][4] is selected, the indication changes to set the schedule number shown in 2. If [S] is selected, see the section on setting temperature shifts for details.
7. By pressing the (⇧⇩) DAY/SCHEDULE switches, the SET and SCHEDULE indicators go out and the mode returns to normal.





◆ Defining the schedule to be applied

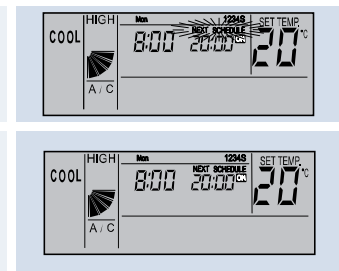
1. Hold down the (△▽) DAY/SCHEDULE switch for more than 3 seconds and the SET indicator appears. All the days and schedule numbers are indicated.
2. Press the (△▽) DAY/SCHEDULE switches until the day you wish to set blinks. When pressed, the day blinks [Mon] → [Tue] →... → [Sun] → [Mon~Sun] → [Mon~Fri] → [Sat, Sun] → [Mon]... If several days are blinking, the same setting will be applied to all the days.
3. Press the (△) DAY switch until the schedule number you wish to set blinks.
4. Press the (⇒) SCHEDULE switch, and the SCHEDULE indication appears. Then the schedule number indicated in step 3 is applied to the days set in step 2. Press the OK switch to activate or deactivate the schedule. If the schedule is activated, the word SCHEDULE is lit up.
5. Press the TIMER switch and the mode returns to normal.



◆ Cancelling the timer

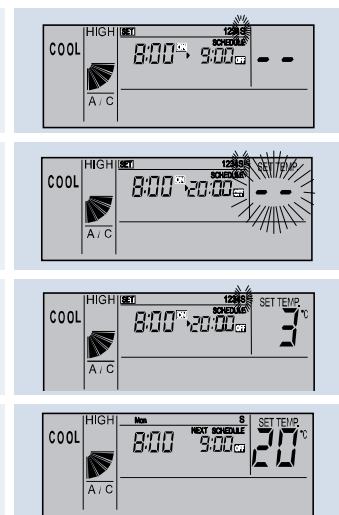
In the normal mode, hold down the (△▽) DAY/SCHEDULE switches for more than 3 seconds. The NEXT SCHEDULE indicator blinks. (Cancellation of all the timer)

While the timer is in cancellation mode, hold down the (△▽) DAY/SCHEDULE switches for more than 3 seconds. NEXT SCHEDULE is indicated. (Timer activation)



◆ Setting the temperature shifts (energy saving mode)

1. Set the ON/OFF operation as in steps 1 and 2 of the "Setting the timer" section, and then select "S" as the schedule number.
2. Set the ON/OFF operation in steps 4,5 and 6 of the "Setting the timer" section, and set the ON/OFF time. The temperature setting is then indicated.
3. Select the temperature shift with the (△▽) switches. "3" or "5" can be selected. If the reset switch is pressed at this time, the temperature shift is not set and the indication "- -" appears. When the TIMER switch is pressed, the temperature is indicated and the mode changes to schedule number selection.
4. When the TIMER switch is pressed, the SET and SCHEDULE indicators go out and the mode returns to normal.



NOTE:

1. When this operation is performed, the temperature shift indicator changes.
2. When this operation is performed, the temperature setting of the CSNET NET WEB or PSC-5S has a normal range, while the remote control setting may be changed to a new range.
3. The increase or decrease in the temperature setting during the scheduled time ( $\pm 3\text{ }^{\circ}\text{C}$  or  $\pm 5\text{ }^{\circ}\text{C}$ ) varies according to the operation mode.
  - If the system is operating in FAN, COOL or DRY mode, the temperature variation is + .
  - If the system is operating in HEAT, mode, the temperature variation is - .

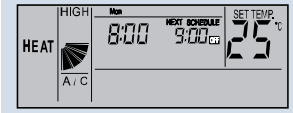
◆ Automatic operation with heating (anti-freeze protection)

1. In normal mode, hold down the switch for more than 3 seconds to change the operation mode. The automatic heating setting is activated and the ON indicator appears to the right of the current time. The ON indication blinks during the automatic heating operation.



Cancellation

While the system is operating in the automatic heating mode, hold down the MODE switch for more than 3 seconds to change back to normal mode. The automatic heating setting is deactivated, and the ON indication to the right of the current time goes out.



NOTE:

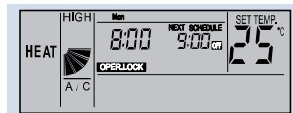
If the temperature in the room is lower than a predefined value\*, the heating will start up automatically. When the room temperature reaches the set temperature, the operation stops.

\*The temperatures 5, 10, or 15°C can be selected using an optional setting.

◆ Operation locking method

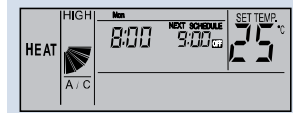
To prevent incorrect use of the switches, the switch operation \* can be locked.

1. In normal mode, hold down the SELECT switch for more than 3 seconds. The operation lock is activated and the OPER.LOCK indication appears. If a switch is pressed while it is locked, the indication OPER. LOCK blinks.



Cancellation

While the locking operation is activated, hold down the SELECT switch and MODE simultaneously for more than 3 seconds to return to normal mode. The locking operation will be cancelled and the OPER. LOCK indication goes out.



NOTE:

\*The switch to be locked can be selected from "operation mode change", "temperature setting", "airflow" and "autolouver" by an optional setting (F8~Fb) of up to 4 items.

The setting can be changed from CSNET or the sub-remote controller.

10.1.7. Indications under Normal Conditions

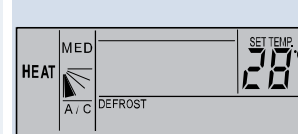
◆ Thermo-controller

When the thermo-controller is operated, the fan speed changes to LOW, and the indication remains unchanged. (Only in heating mode)

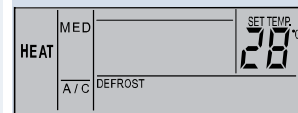


◆ Defrosting

When the system is operating in the defrost mode, the DEFROST indication is shown. The indoor fan slows down or stops (depending on the setting selected). The louver is fixed horizontally at 35°. However, the LCD indication is still activated. (The figure shows the DEFROST setting).

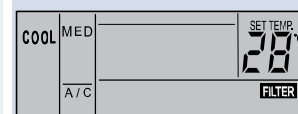


When the unit stops during the defrosting operation, the RUN indicator (red) goes out. However, the operation continues to show the DEFROST indication, and the unit starts up once the defrost operation is finished.



◆ Filter

Clogged filter: The "FILTER" indication appears when the filter is clogged with dust, etc. Clean the filter: Press the RESET switch after cleaning the filter. The "FILTER" indication goes out.





**10.1.8. Indications under Abnormal Conditions**

◆ **Disfunction**

The RUN indicator (red) blinks.  
 The ALARM indicator appears on the liquid crystal display.  
 The indoor unit number, the alarm code and the model code are indicated on the liquid crystal display. If several indoor units are connected, the above items are indicated one by one for each of them.  
 Make a note of the indications and contact your HITACHI service provider.

◆ **Power failure**

All the indications disappear.  
 If the unit stops because of a power failure, it will not restart even when the power returns. Perform the start-up operations again.  
 If the power failure lasts less than 2 seconds, the unit will automatically start up again.

◆ **Electrical noise**

The indications may all be OFF and the unit stopped. This is because the microcomputer has been activated in order to protect the unit from electrical noise.



**NOTE:**

*If the wireless remote control switch is used for the wall-mounted indoor unit, remove the connectors (CN25) connected to the indoor PCB. If they are not removed, the unit will not operate.  
 The memorized data can not be erased unless the remote control switch is initialized.*

Indoor unit number

Alarm code

Model code:

Alarm code

Alternating indication every second

No. of indoor units connected

Model code	
Indication	Model
H	Heat pump
P	Inverter
F	Multi
L	Only cooling
E	Others