Model RC-E5

Read together with indoor unit's installation manual.

⚠WARNING

● Fasten the wiring to the terminal securely and hold the cable securely so as not to apply unexpected stress on the terminal.
Loose connection or hold will cause abnormal heat generation or fire.   **!**

● Make sure the power source is turned off when electric wiring work.
Otherwise, electric shock, malfunction and improper running may occur.   **!**

⚠CAUTION

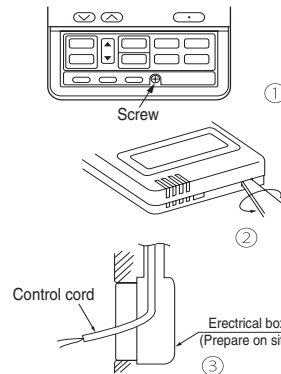● Do not install the remote control at the following places in order to avoid malfunction.

(1) Places exposed to direct sunlight
(2) Places near heat devices
(3) High humidity places

(4) Hot surface or cold surface enough to generate condensation
(5) Places exposed to oil mist or steam directly
(6) Uneven surface   🚫

● Do not leave the remote control without the upper case.

In case the upper cace needs to be detached, protect the remote control with a packaging box or bag in order to keep it away from water and dust.   🚫

Accessories	Remote control, wood screw (ø3.5×16) 2 pieces
Prepare on site	Remote control cord (2 cores) the insulated thickness in 1mm or more. [In case of embedding cord] Erectrical box, M4 screw (2 pieces) [In case of exposing cord] Cord clamp (if needed)

Installation procedure

① Open the cover of remote control, and remove the screw under the buttons without fail.

② Remove the upper case of remote control.
Insert a flat-blade screwdriver into the dented part of the upper part of the remote control, and wrench slightly.

Screw
①
②

[In case of embedding cord]

③ Embed the erectrical box and remote control cord beforehand.

Control cord
Erectrical box (Prepare on site)
③

④ Prepare two M4 screws (recommended length is 12-16mm) on site, and install the lower case to erectrical box.
Choose either of the following two positions in fixing it with screws.
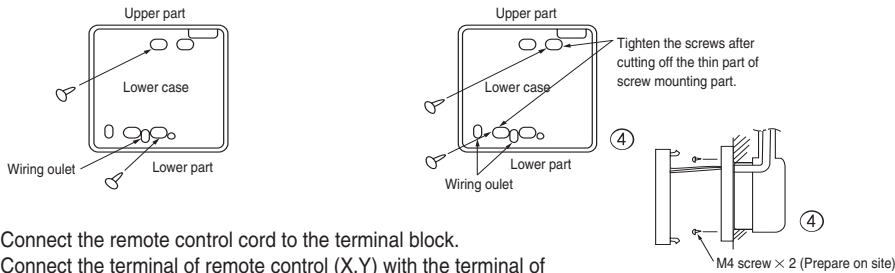
Upper part
Lower case
Wiring oulet
Lower part

Upper part
Lower case
Tighten the screws after cutting off the thin part of screw mounting part.
Lower part
Wiring oulet
④

M4 screw × 2 (Prepare on site)
④

⑤ Connect the remote control cord to the terminal block.
Connect the terminal of remote control (X,Y) with the terminal of indoor unit (X,Y). (X and Y are no polarity)

⑥ Install the upper case as before so as not to catch up the remote control cord, and tighten with the screws.

The thin part
Upper
Lower case
Lower
③

[In case of exposing cord]

③ You can pull out the remote control cord from left upper part or center upper part.
Cut off the upper thin part of remote control lower case with a nipper or knife, and grind burrs with a file etc.

④ Install the lower case to the flat wall with attached two wooden screws.
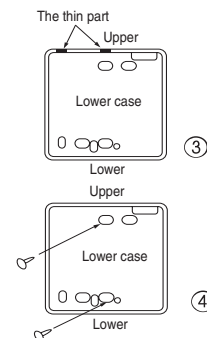
Upper
Lower case
Lower
④

⑤ Connect the remote control cord to the terminal block.
Connect the terminal of remote control (X,Y) with the terminal of indoor unit (X,Y).
(X and Y are no polarity)
Wiring route is as shown in the right diagram depending on the pulling out direction.

Upper | Sheath | Upper | Sheath
Board | Upper case | Board | Upper case
X Y | X Y
Lower Wiring | Wiring Lower
⑤

In case of pulling out from upper left | In case of pulling out from upper center

The wiring inside the remote control case should be within $0.3mm^2$ (recommended) to $0.5mm^2$.
The sheath should be peeled off inside the remote control case.
The peeling-off length of each wire is as below.

Pulling out from upper left	Pulling out from upper center
X wiring : 215mm	X wiring : 170mm
Y wiring : 195mm	Y wiring : 190mm
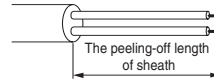
The peeling-off length of sheath

⑥ Install the upper case as before so as not to catch up the remote control cord, and tighten with the screws.
⑦ In case of exposing cord, fix the cord on the wall with cord clamp so as not to slack.

Installation and wiring of remote control

① Wiring of remote control should use $0.3mm^2 \times 2$ cores wires or cables. (on-site configuration)
② Maximum prolongation of remote control wiring is 600 m.
If the prolongation is over 100m, change to the size below.
But, wiring in the remote control case should be under $0.5mm^2$. Change the wire size outside of the case according to wire connecting. Waterproof treatment is necessary at the wire connecting section. Be careful about contact failure.

100 - 200m·························$0.5mm^2 \times 2$ cores
Under 300m·······················$0.75mm^2 \times 2$ cores
Under 400m·······················$1.25mm^2 \times 2$ cores
Under 600m·······················$2.0mm^2 \times 2$ cores

Master/ slave setting when more than one remote controls are used

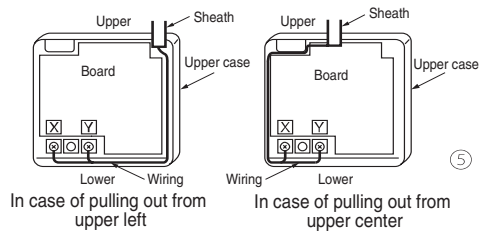A maximum of two remote controls can be connected to one indoor unit (or one group of indoor units.)

Indoor units
X Y
Remote control cord (no polarity)
X Y | X Y
Remote control SW1 "Master" | Remote control SW1 "Slave"

Switch	Setting	Contents
SW1	M	Master remote control
	S	Slave remote control

Upper
Master
↑
Slave
SW1
SW2
SW1
Board
Lower
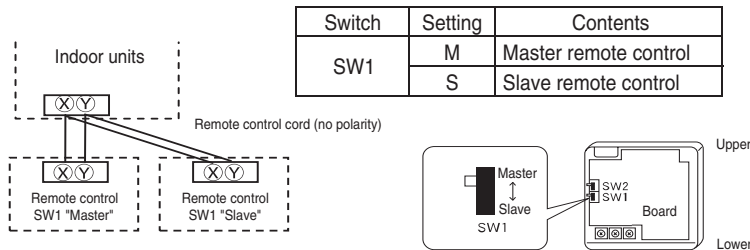
Set SW1 to "Slave" for the slave remote control. It was factory set to "Master" for shipment.
Note: The setting "Remote control sensor enabled" is only selectable with the master remote control in the position where you want to check room temperature.
The air-conditioner operation follows the last operation of the remote control regardless of the master/ slave setting of it.

The indication when power source is supplied

When power source is turned on, the following is displayed on the remote control until the communication between the remote control and indoor unit settled.
Master remote control : " ⏻WAIT⏻   M"
Slave remote control : " ⏻WAIT⏻   S"

At the same time, a mark or a number will be displayed for two seconds first.
This is the software's administration number of the remote control, not an error cord.

Ob   AC
⏻WAIT⏻   M
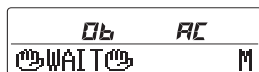
※ The left mark is only an example. Other marks may appear.

When remote control cannot communicate with the indoor unit for half an hour, the below indication will appear.
Check wiring of the indoor unit and the outdoor unit etc.

INSPECT I/U

When shipped, the range of set temperature differs depending on the operation mode as below.
  Heating : 16-30°C (55-86°F)
  Except heating (cooling, fan, dry, automatic) : 18-30°C (62-86°F)

● **Upper limit and lower limit of set temperature can be changed with remote control.**
 Upper limit setting: valid during heating operation. Possible to set in the range of 20 to 30°C (68 to 86°F).
 Lower limit setting: valid except heating (automatic, cooling, fan, dry) Possible to set in the range of 18 to 26°C (62 to 79°F).
 When you set upper and lower limit by this function, control as below.

 1. When ⑫ TEMP RANGE SET, remote control function of function setting mode is "INDN CHANGE" (factory setting),
   【 If upper limit value is set 】
   During heating, you cannot set the value exceeding the upper limit.

   【 If lower limit value is set 】
   During operation mode except heating, you cannot set the value below the lower limit.

 2. When ⑫ TEMP RANGE SET, remote control function of function setting mode is "NO INDN CHANGE"
   【 If upper limit value is set 】
   During heating, even if the value exceeding the upper limit is set, upper limit value will be sent to the indoor unit.
   But, the indication is the same as the temperature set.

   【 If lower limit value is set 】
   During except heating, even if the value lower than the lower limit is set, lower limit value will be sent to the indoor unit.
   But, the indication is the same as the temperature set.

● **How to set upper and lower limit value**
 1. Stop the air-conditioner, and press [○] (SET) and [↻] (MODE) button at the same time for over three seconds .
   The indication changes to "FUNCTION SET ▼".
 2. Press ▼ button once, and change to the "TEMP RANGE ▲ " indication.
 3. Press [○] (SET) button, and enter the temperature range setting mode.
 4. Select "UPPER LIMIT ▼ " or "LOWER LIMIT ▲" by using ▲ ▼ button.
 5. Press [○](SET) button to fix.
 6. When "UPPER LIMIT ▼ " is selected (valid during heating)
   ① Indication: " ☝ ∨ ∧ SET UP" → "UPPER 30°C ∨ "
   ② Select the upper limit value with temperature setting button ∨ ∧ . Indication example: "UPPER 26°C ∨ ∧" (blinking)
   ③ Press [○](SET) button to fix. Indication example: "UPPER 26°C" (Displayed for two seconds)
    After the fixed upper limit value displayed for two seconds, the indication will return to "UPPER LIMIT ▼".
 7. When "LOWER LIMIT ▲ " is selected (valid during cooling, dry, fan, automatic)
   ① Indication: "☝ ∨ ∧ SET UP" → "LOWER 18°C ∧ "
   ② Select the lower limit value with temperature setting button ∨ ∧ . Indication example: "LOWER 24°C ∨ ∧" (blinking)
   ③ Press [○](SET) button to fix. Indication for example: "LOWER 24°C" (Displayed for two seconds)
    After the fixed lower limit value displayed for two seconds, the indication will return to "LOWER LIMIT ▼ ".
 8. Press [ON/OFF] button to finish.

・ It is possible to finish by pressing [ON/OFF] button on the way, but unfinished change of setting is unavailable.

・ During setting, if you press [∥] (RESET) button, you return to the previous screen.

6-②
7-②

TEMP RANGE ▲

↓TEMP   ON/OFF

8

3・5・6-③
7-③

1

TIMER SET FAN SPEED MODE
RESET LOUVER VENTI
AIR CON No. CHECK TEST

2・4 Previous button

The functional setting

● The initial function setting for typical using is performed automatically by the indoor unit connected, when remote control and indoor unit are connected.
　As long as they are used in a typical manner, there will be no need to change the initial settings.
　If you would like to change the initial setting marked "○", set your desired setting as for the selected item.
　The procedure of functional setting is shown as the following diagram.

[Flow of function setting]

Start : Stop air-conditioner and press "○" (SET) and "⟳" (MODE) buttons at the same time for over three seconds.
Finalize : Press "○" (SET) button.
Reset : Press "✎" (RESET) button.
Select : Press ▲ ▼ button.
End : Press ON/OFF button.
It is possible to finish above setting on the way,
and unfinished change of setting is unavailable.
"○" : Initial settings
"※" : Automatic criterion

Record and keep the setting

Consult the technical data etc. for each control details

Stop air-conditioner and press ○ (SET) + ⟳ (MODE) buttons at the same time for over three seconds.

FUNCTION SET ▼

Note 1: The initial setting marked "※" is decided by connected indoor and outdoor unit, and is automatically defined as following table.

Function No.	Item	Default	Model
Remote control function02	AUTO RUN SET	AUTO RUN ON	"Auto-RUN" mode selectable indoor unit.
		AUTO RUN OFF	Indoor unit without "Auto-RUN" mode
Remote control function06	FAN SPEED SW	VALID	Indoor unit with two or three step of air flow setting
		INVALID	Indoor unit with only one of air flow setting
Remote control function07	LOUVER SW	VALID	Indoor unit with automatically swing louver
		INVALID	Indoor unit without automatically swing louver
Remote control function13	I/U FAN	HI-MID-LO	Indoor unit with three step of air flow setting
		HI-LO	Indoor unit with two step of air flow setting
		HI-MID	
		1 FAN SPEED	Indoor unit with only one of air flow setting
Remote control function15	MODEL TYPE	HEAT PUMP	Heat pump unit
		COOLING ONLY	Exclusive cooling unit

Note 3: As for plural indoor unit, set indoor functions to each master and slave indoor unit.
But only master indoor unit is received the setting change of indoor unit function "05 EXTERNAL INPUT" and "06 PERMISSION / PROHIBISHION".

Note2: Fan setting of "HIGH SPEED"

Fan tap		Indoor unit air flow setting				
FAN SPEED SET	STANDARD	UH - Hi - Me - Lo	Hi - Me - Lo	Hi - Lo	Hi - Me	
	HIGH SPEED1, 2	UH - UH - Hi - Me	UH - Hi - Me	UH - Me	UH - Hi	

Initial function setting of some indoor unit is "HIGH SPEED".

Indoor unit No. are indicated only when I/U FUNCTION ▲ plural indoor units are connected.

FUNCTION ▼ (Remote control function)

	Function	setting	
01	ESP SET	ESP VALID ○	Validate setting of ESP:External Static Pressure
		ESP INVALID	Invalidate setting of ESP
02	AUTO RUN SET	AUTO RUN ON ※	
		AUTO RUN OFF ※	Automatical operation is impossible
03	TEMP SW	VALID ○	
		INVALID	Temperature setting button is not working
04	MODE SW	VALID ○	
		INVALID	Mode button is not working
05	ON/OFF SW	VALID ○	
		INVALID	On/Off button is not working
06	FAN SPEED SW	VALID ※	
		INVALID ※	Fan speed button is not working
07	LOUVER SW	VALID ※	
		INVALID ※	Louver button is not working
08	TIMER SW	VALID ○	
		INVALID	Timer button is not working
09	SENSOR SET	SENSOR OFF ○	Remote thermistor is not working.
		SENSOR ON	Remote thermistor is working.
		SENSOR +3.0℃	Remote thermistor is working, and to be set for producing +3.0°C increase in temperature.
		SENSOR +2.0℃	Remote thermistor is working, and to be set for producing +2.0°C increase in temperature.
		SENSOR +1.0℃	Remote thermistor is working, and to be set for producing +1.0°C increase in temperature.
		SENSOR -1.0℃	Remote thermistor is working, and to be set for producing -1.0°C increase in temperature.
		SENSOR -2.0℃	Remote thermistor is working, and to be set for producing -2.0°C increase in temperature.
		SENSOR -3.0℃	Remote thermistor is working, and to be set for producing -3.0°C increase in temperature.
10	AUTO RESTART	INVALID ○	
		VALID	
11	VENT LINK SET	NO VENT ○	
		VENT LINK	In case of Single split series, by connecting ventilation device to CNT of the indoor printed circuit board (in case of VRF series, by connecting it to CND of the indoor printed circuit board), the operation of ventilation device is linked with the operation of indoor unit.
		NO VENT LINK	In case of Single split series, by connecting ventilation device to CNT of the indoor printed circuit board (in case of VRF series, by connecting it to CND of the indoor printed circuit board), you can operate /stop the ventilation device independently by (VENT) button.
12	TEMP RANGE SET	INDN CHANGE ○	If you change the range of set temperature, the indication of set temperature will vary following the control.
		NO INDN CHANGE	If you change the range of set temperature, the indication of set temperature will not vary following the control, and keep the set temperature.
13	I/U FAN	HI-MID-LO ※	Air flow of fan becomes the three speed of ▥ -▤ -▧ or ▥ -▤ -▧.
		HI-LO ※	Air flow of fan becomes the two speed of ▥ -▧.
		HI-MID	Air flow of fan becomes the two speed of ▥ -▤.
		1 FAN SPEED ※	Air flow of fan is fixed at one speed.
14	POSITION		If you change the remote control function "14 POSITION", you must change the indoor function "04 POSITION" accordingly.
		4POSITION STOP ○	You can select the louver stop position in the four.
		FREE STOP	The louver can stop at any position.
15	MODEL TYPE	HEAT PUMP ※	
		COOLING ONLY ※	
16	EXTERNAL CONTROL SET	INDIVIDUAL ○	If you input signal into CnT of the indoor printed circuit board from external, the indoor unit will be operated independently according to the input from external.
		FOR ALL UNITS	If you input into CNT of the indoor printed circuit board from external, all units which connect to the same remote control are operated according to the input from external.
17	ROOM TEMP INDICATION SET	INDICATION OFF ○	In normal working indication, indoor unit temperature is indicated instead of air flow. (Only the master remote control can be indicated.)
		INDICATION ON	
18	INDICATION	INDICATION ON ○	
		INDICATION OFF	Heating preparation indication should not be indicated.
19	℃/℉ SET	℃ ○	Temperature indication is by degree C.
		℉	Temperature indication is by degree F.

(Indoor unit function)

I/U000 ▲
I/U001 ⇕
I/U002 ⇕
I/U003 ⇕
I/U004 ⇕

To set other indoor unit, press AIR CON No. button, which allows you to go back to the indoor unit selection screen (for example: I/U 000 ▲).

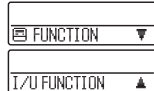|	Function	setting	
02	FAN SPEED SET	STANDARD ※	
		HIGH SPEED 1 ※	
		HIGH SPEED 2	
03	FILTER SIGN SET	INDICATION OFF	
		TYPE 1 ○	The filter sign is indicated after running for 180 hours.
		TYPE 2	The filter sign is indicated after running for 600 hours.
		TYPE 3	The filter sign is indicated after running for 1000 hours.
		TYPE 4	The filter sign is indicated after running for 1000 hours, then the indoor unit will be stopped by compulsion after 24 hours.
04	POSITION		If you change the indoor function "04 POSITION", you must change the remote control function "14 POSITION" accordingly.
		4POSITION STOP ○	You can select the louver stop position in the four.
		FREE STOP	The louver can stop at any position.
05	EXTERNAL INPUT	LEVEL INPUT ○	
		PULSE INPUT	
06	PERMISSION/PROHIBITION	INVALID ○	
		VALID	Permission/prohibition control of operation will be valid.
07	EMERGENCY STOP	INVALID ○	
		VALID	With the VRF series, it is used to stop all indoor units connected with the same outdoor unit immediately. When stop signal is inputed from remote on-off terminal "CNT-6", all indoor units are stopped immediately.
08	SP OFFSET	OFFSET +3.0℃	To be reset for producing +3.0°C increase in temperature during heating.
		OFFSET +2.0℃	To be reset for producing +2.0°C increase in temperature during heating.
		OFFSET +1.0℃	To be reset for producing +1.0°C increase in temperature during heating.
		NO OFFSET ○	
09	RETURN AIR TEMP	OFFSET +2.0℃	To be reset producing +2.0°C increase in return air temperature of indoor unit.
		OFFSET +1.5℃	To be reset producing +1.5°C increase in return air temperature of indoor unit.
		OFFSET +1.0℃	To be reset producing +1.0°C increase in return air temperature of indoor unit.
		NO OFFSET ○	
		OFFSET -1.0℃	To be reset producing -1.0°C increase in return air temperature of indoor unit.
		OFFSET -1.5℃	To be reset producing -1.5°C increase in return air temperature of indoor unit.
		OFFSET -2.0℃	To be reset producing -2.0°C increase in return air temperature of indoor unit.
10	FAN CONTROL	LOW FAN SPEED ○	When heating thermostat is OFF, fan speed is low speed.
		SET FAN SPEED	When heating thermostat is OFF, fan speed is set speed.
		INTERMITTENCE	When heating thermostat is OFF, fan speed is operated intermittently.
		FAN OFF	When heating thermostat is OFF, the fan is stopped. When the remote thermistor is working, "FAN OFF" is set automatically. Do not set "FAN OFF" when the indoor unit's thermistor is working.
11	FROST PREVENTION TEMP	TEMP HIGH	Change of indoor heat exchanger temperature to start frost prevention control.
		TEMP LOW	
12	FROST PREVENTION CONTROL	FAN CONTROL ON ○	Working only with the Single split series. To control frost prevention, the indoor fan tap is raised.
		FAN CONTROL OFF	
13	DRAIN PUMP LINK	❄△ ○	Drain pump is run during cooling and dry.
		❄△ AND ☼	Drain pump is run during cooling, dry and heating.
		❄△ AND ☼ AND ▥	Drain pump is run during cooling, dry, heating and fan.
		❄△ AND ▥	Drain pump is run during cooling, dry and fan.
14	FAN REMAINING	NO REMAINING ○	After cooling is stopped is OFF, the fan does not perform extra operation.
		0.5 HOUR	After cooling is stopped is OFF, the fan perform extra operation for half an hour.
		1 HOUR	After cooling is stopped is OFF, the fan perform extra operation for an hour.
		6 HOUR	After cooling is stopped is OFF, the fan perform extra operation for six hours.
15	FAN REMAINING	NO REMAINING ○	After heating is stopped or heating thermostat is OFF, the fan does not perform extra operation.
		0.5 HOUR	After heating is stopped or heating thermostat is OFF, the fan perform extra operation for half an hour.
		2 HOUR	After heating is stopped or heating thermostat is OFF, the fan perform extra operation for two hours.
		6 HOUR	After heating is stopped or heating thermostat is OFF, the fan perform extra operation for six hours.
16	FAN INTERMITTENCE	NO REMAINING ○	
		20minOFF 5minON	During heating is stopped or heating thermostat is OFF, the fan perform intermittent operation for five minutes with low fan speed after twenty minutes' OFF.
		5minOFF 5minON	During heating is stopped or heating thermostat is OFF, the fan perform intermittent operation for five minutes with low fan speed after five minutes' OFF.
17	PRESSURE CONTROL	STANDARD ※	Connected "OA Processing" type indoor unit, and is automatically defined.
		TYPE1 ※	

ON/OFF button (finished)

How to set function

1. **Stop air-conditioner and press ⬭(SET) ↻(MODE) buttons at the same time for over three seconds, and the "FUNCTION SET ▼" will be displayed.**

```
┌──────────────────────┐
│ FUNCTION SET      ▼  │
└──────────────────────┘
```

2. **Press ⬭(SET) button.**

3. **Make sure which do you want to set, "▤ FUNCTION ▼" (remote control function) or "I/U FUNCTION ▲" (indoor unit function).**

4. **Press ▲ or ▼ button.**
   Selecct "▤ FUNCTION ▼" (remote control function) or "I/U FUNCTION ▲" (indoor unit function).

```
┌──────────────────────┐
│ ▤ FUNCTION        ▼  │
└──────────────────────┘
┌──────────────────────┐
│ I/U FUNCTION      ▲  │
└──────────────────────┘
```

5. **Press ⬭(SET) button.**

Operation message
Function description: Ⓑ,
setting description: Ⓒ

Function No. Ⓐ

Fixing button

Finishing button

7

Starting button 2

1

6 — ⑧ Indoor unit selection button   Previous screen button

6. 【On the occasion of remote control function selection】

① "DATA LOADING" (Indication with blinking)
   ↓
   Display is changed to "01 ⏻▨▥ ESP SET".

② Press ▲ or ▼ button.
   "No. and function"are indicated by turns on the remote control function table, then you can select from them.
   (For example)

```
┌──────────────────────┐
│              02   ← Function No.
│ AUTO RUN SET      ← Function
└──────────────────────┘
```
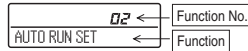
③ Press ⬭(SET) button.
   The current setting of selected function is indicated.
   (for example) "AUTO RUN ON" ← If "02 AUTO RUN SET" is selected

```
┌──────────────────────┐
│              02      │
│ AUTO RUN ON    ←  Setting
└──────────────────────┘
```

④ Press ▲ or ▼ button.
   Select the setting.

```
┌──────────────────────┐
│              02      │
│ AUTO RUN ON          │
└──────────────────────┘
         ↕
┌──────────────────────┐
│              02      │
│ AUTO RUN OFF         │
└──────────────────────┘
```
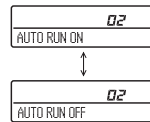
⑤ Press ⬭(SET)
   "SET COMPLETE" will be indicated, and the setting will be completed.
   Then after "No. and function" indication returns, Set as the same procedure if you want to set continuously ,and if to finish, go to 7.

```
┌──────────────────────┐
│              02      │
│ SET COMPLETE         │
└──────────────────────┘
```
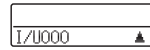
7. **Press ON/OFF button.**
   Setting is finished.
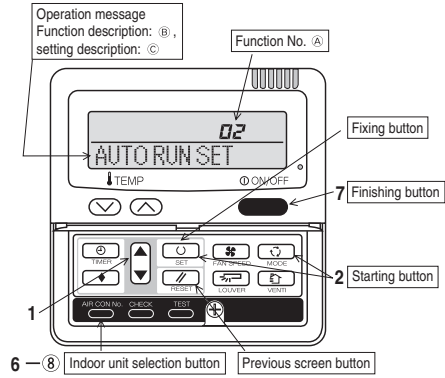
【On the occasion of indoor unit function selection】

① "DATA LOADING" (Blinking for 2 to 23 seconds to read the data)
   ↓
   Indication is changed to "02 FAN SPEED SET".
   Go to ②.

   [Note]
   (1) If plural indoor units are connected to a remote control, the indication is "I/U 000" (blinking) ← The lowest number of the indoor unit connected is indicated.

```
┌──────────────────────┐
│ I/U000            ▲  │
└──────────────────────┘
```

   (2) Press ▲ or ▼ button.
      Select the number of the indoor unit you are to set
      If you select "ALL UNIT ▼", you can set the same setting with all unites.
   (3) Press ⬭(SET) button.

② Press ▲ or ▼ button.
   "No. and function" are indicated by turns on the indoor unit function table, then you can select from them.
   (For example)

```
┌──────────────────────┐
│              02   ← Function No.
│ FAN SPEED SET     ← Function
└──────────────────────┘
```
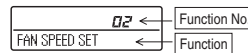
③ Press ⬭(SET) button.
   The current setting of selected function is indicated.
   (For example) "STANDARD" ← If "02 FAN SPEED SET" is selected

```
┌──────────────────────┐
│              02      │
│ STANDARD       ←  Setting
└──────────────────────┘
```
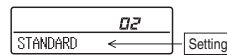
④ Press ▲ or ▼ button.
   Select the setting.

⑤ Press ⬭(SET) button.
   "SET COMPLETE" will be indicated, and the setting will be completed.
   Then after "No. and function" indication returns, set as the same procedure if you want to set continuously , and if to finish, go to 7.

```
┌──────────────────────┐
│              02      │
│ SET COMPLETE         │
└──────────────────────┘
```

   ※ When plural indoor units are connected to a remote control, press the AIR CON No. button, which allows you to go back to the indoor unit selection screen. (example "I/U 000 ▲")

- It is possible to finish by pressing ON/OFF button on the way, but unfinished change of setting is unavailable.
- During setting, if you press ⫽(RESET) button, you return to the previous screen.
- Setting is memorized in the control and it is saved independently of power failure.

【How to check the current setting】
When you select from "No. and funcion" and press set button by the previous operation, the "Setting" displayed first is the current setting.
(But, if you select "ALL UNIT ▼ ", the setting of the lowest number indoor unit is displayed.)