8. External input and output

With using external input and output functions, this product can be operated inter-connectedly with an external device.

Connector	Input	Output	Remarks
CN102	Control input	—	See external input/output settings for details.
CN103	—	Operation status output	

8-1. External input

- "Operation/Stop" mode or "Forced stop" mode can be selected with function setting of indoor unit.
- A twisted pair cable (22AWG) should be used. Maximum length of cable is 150 m.
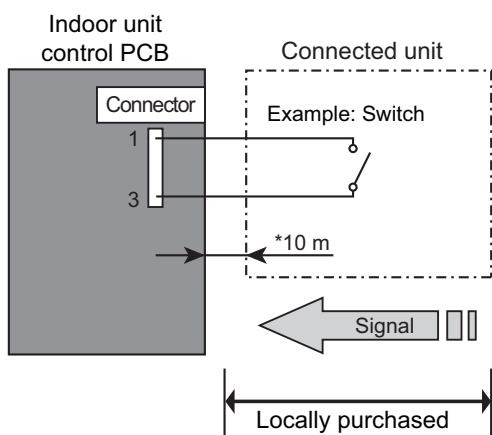- The wire connection should be separate from the power cable line.

■ Control input (Operation/Stop or Forced stop)

The air conditioner can be remotely operated by means of the following on-site work.

Unit operation is started at the following contents by adding the contact input of a commercial on/off switch to a connector on the external control PCB and turning it on.
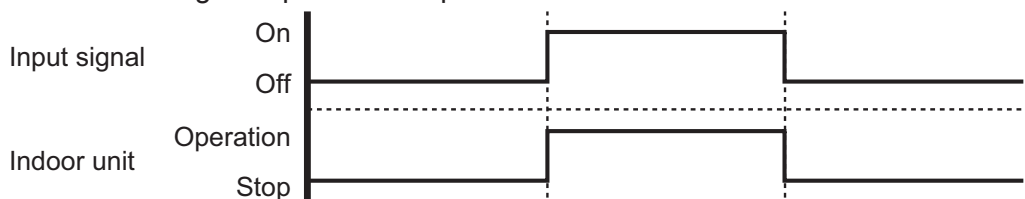
Unit operation	Initial setting after power is on	Starting mode other than initial setting
Operation mode	Auto changeover	Mode at previous operation
Set temperature	24 °C	Temperature at previous operation
Airflow mode	AUTO	Mode at previous operation
Air direction (swing)	Standard air direction (swing OFF)	Air direction at previous operation

● Circuit diagram example

Indoor unit
control PCB

Connected unit

Connector

Example: Switch
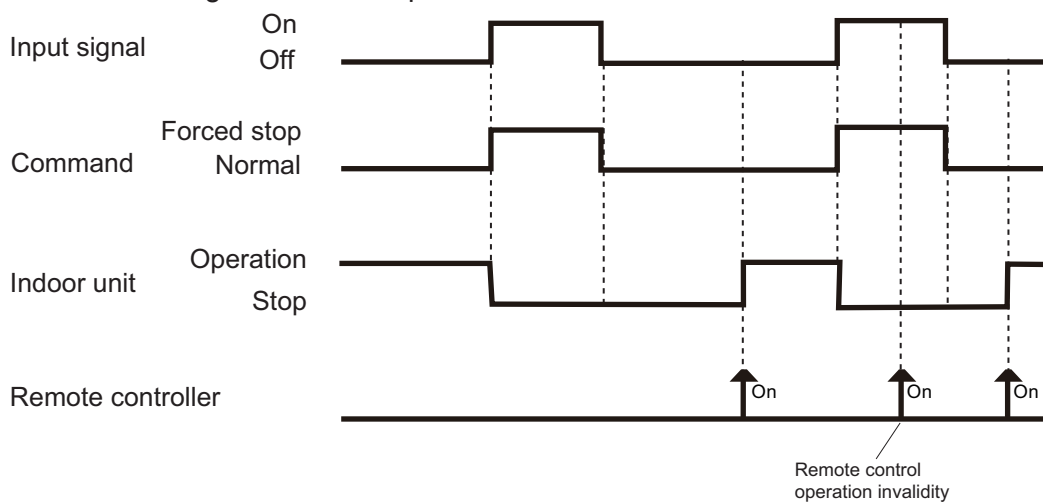
1

3

*10 m

Signal

Locally purchased

- Contact capacity: DC 24 V or more, 10 mA or more.
- *: Make the distance from the PCB to the connected unit within 10 m.
- Use non-polar relays and switches.

- When function setting is "Operation/Stop" mode

Input signal
On
Off

Indoor unit
Operation
Stop

- When function setting is "Forced stop" mode

Input signal
On
Off

Command
Forced stop
Normal

Indoor unit
Operation
Stop

Remote controller
On   On   On

Remote control
operation invalidity

● Optional part

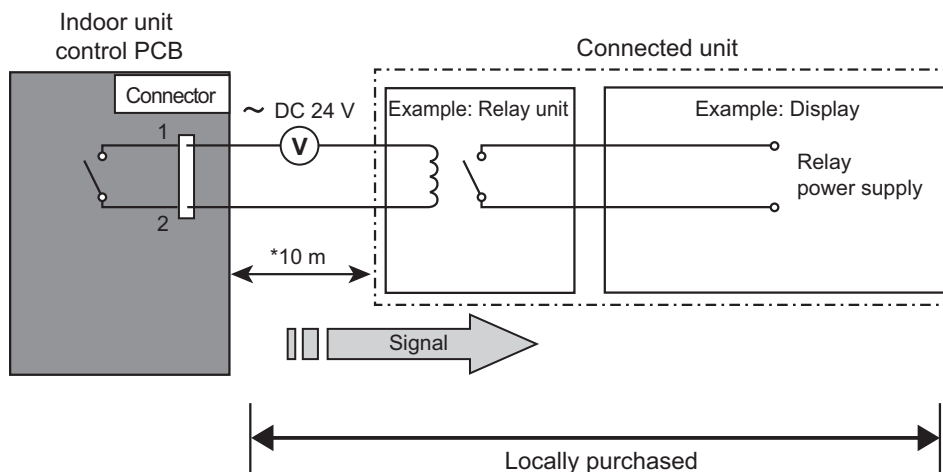| Part name	Model name	Exterior
External connect kit	UTY-XWZX	External input wire

8-2. External output

With using external output function, operating status of this product can be transmitted to the external device, and also, this product can be inter-connected with the external device.
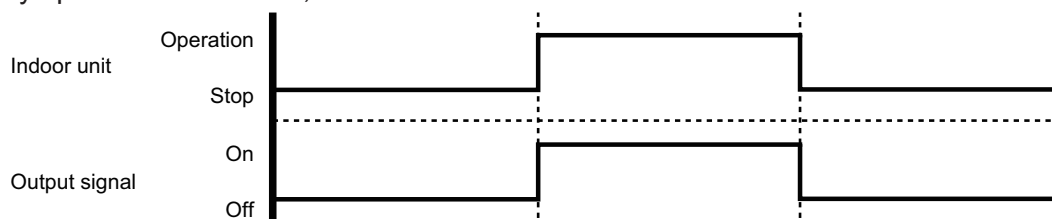
■ Operation status output

Air conditioner operation status signal can be output.

● Circuit diagram example

- • *: Make the distance from the PCB to the connected unit within 10 m.
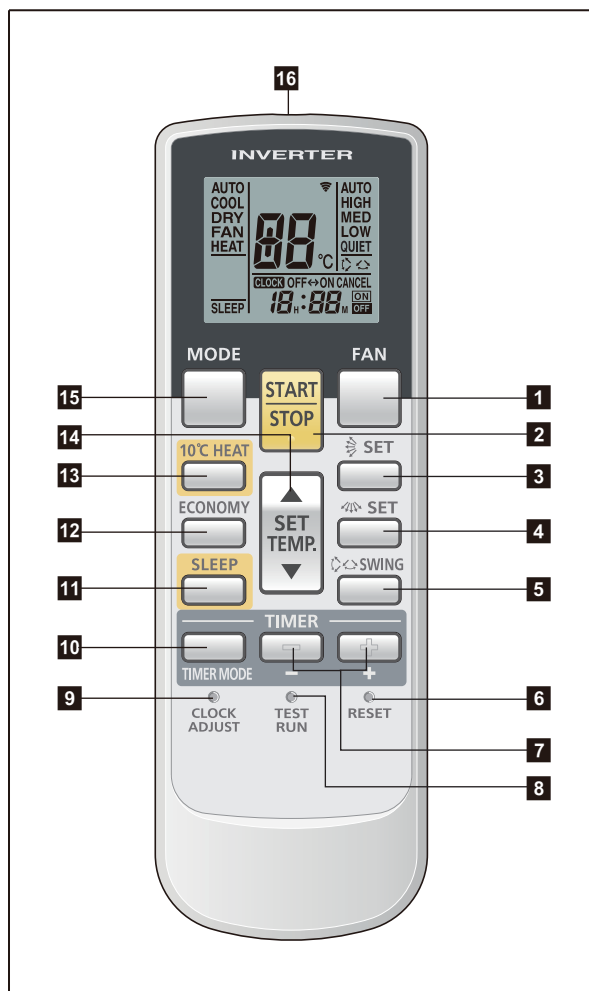- • Relay spec: Max. DC 24 V, 10 mA to less than 500 mA.

● Optional part

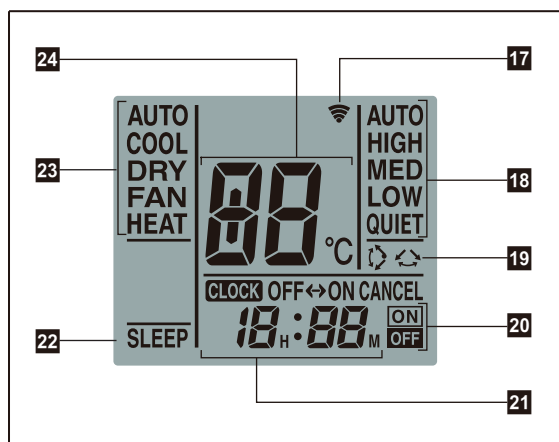| Part name	Model name	Exterior
External connect kit	UTY-XWZX	External output wire

9. Remote controller

9-1. Wireless remote controller (AR-RAH2E/AR-RAH1E)

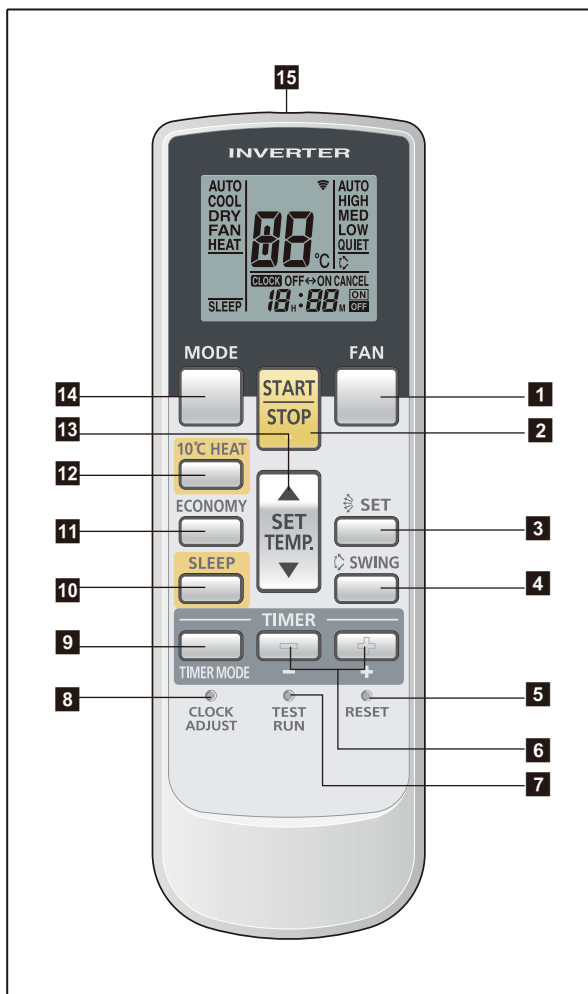### ■ Overview

● AR-RAH2E (for ABYG24LVTA)

Display panel

NOTE: Functions may differ by type of the indoor unit. For details, refer to the operation manual.

1 FAN button

Selects the fan speed (AUTO, HIGH, MED, LOW, and QUIET).

2 START/STOP button

Starts and stops operation.

3 SET button (vertical)

Adjusts the vertical airflow direction.

4 SET button (horizontal)

Adjusts the horizontal airflow direction.

5 SWING button

Sets the automatic swing operation and selects swing mode (Up/down, Left/right, Up/down/left/right, and Stop swing).

6 RESET button

Used when replacing batteries.

7 Timer set (- / +) button

Sets the current time and on-off time.

8 TEST RUN button

Only used for the initial test in the unit installation.

9 CLOCK ADJUST button

Used for adjusting the clock.

10 TIMER MODE button

Selects the timer mode (off timer, on timer, program timer, and timer reset).

11 SLEEP button

Pressed to select sleep timer.

12 ECONOMY button

13 10 °C HEAT button

14 SET TEMP. (temperature) (▲ / ▼) button

- Sets desired temperature.
- Sets remote controller custom code.

15 MODE button

- Switches operation mode (AUTO, COOL, DRY, FAN, and HEAT).
- Starts/ends the remote controller custom code (max. 4 types) change.

16 Signal transmitter

17 Signal transmit indicator

18 Fan speed indicator

19 Swing indicator

20 Timer mode indicator

21 Clock indicator

22 Sleep indicator

23 Operating mode indicator

24 Temperature indicator

● AR-RAH1E (for ABYG18LVTB)

Display panel

NOTE: Functions may differ by type of the indoor unit. For details, refer to the operation manual.

1 FAN button

Selects the fan speed (AUTO, HIGH, MED, LOW, and QUIET).

2 START/STOP button

Starts and stops operation.

3 SET button (vertical)

Adjusts the vertical airflow direction.

4 SWING button

Sets the automatic swing operation and selects swing mode (Left/right, Stop swing).

5 RESET button

Used when replacing batteries.

6 Timer set (- / +) button

Sets the current time and on-off time.

7 TEST RUN button

Only used for the initial test in the unit installation.

8 CLOCK ADJUST button

Used for adjusting the clock.

9 TIMER MODE button

Selects the timer mode (off timer, on timer, program timer, and timer reset).

10 SLEEP button

Pressed to select sleep timer.

11 ECONOMY button

12 10 °C HEAT button

13 SET TEMP. (temperature) (▲ / ▼) button

- Sets desired temperature.
- Sets remote controller custom code.

14 MODE button

- Switches operation mode (AUTO, COOL, DRY, FAN, and HEAT).
- Starts/ends the remote controller custom code (max. 4 types) change.

15 Signal transmitter

16 Signal transmit indicator

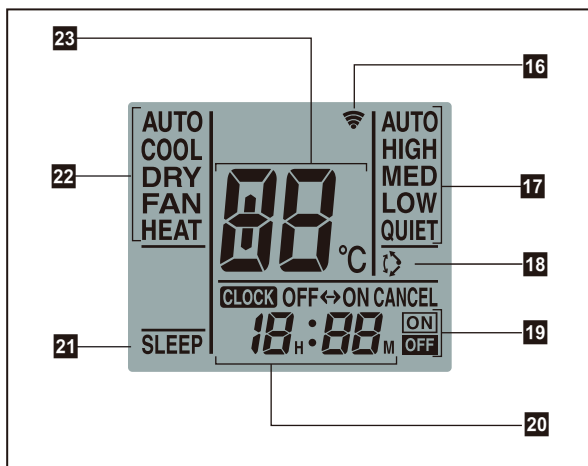**17 Fan speed indicator**

18 Swing indicator

19 Timer mode indicator

20 Clock indicator

21 Sleep indicator

22 Operating mode indicator
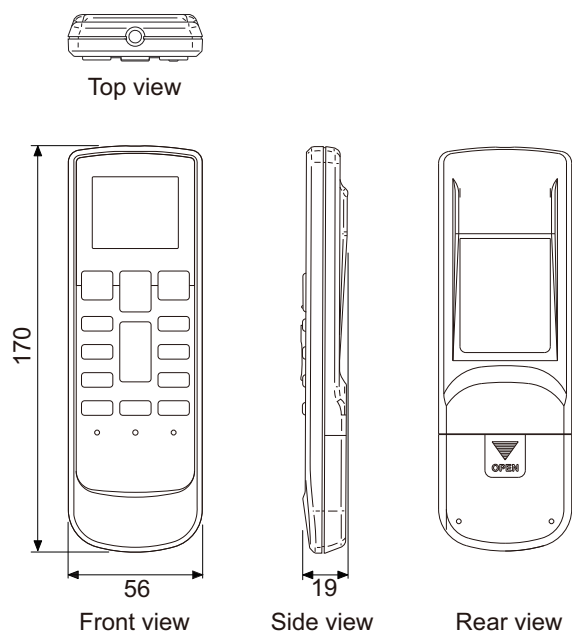
23 Temperature indicator

■ Specifications

● Controller

Unit: mm

Top view

Front view   Side view   Rear view

Size (H × W × D)	mm	170 × 56 × 19
Weight	g	85 (without batteries)

NOTE: Actual number of buttons might be different from the figure above.

● Holder

Unit: mm

Front view   Side view   Bottom view
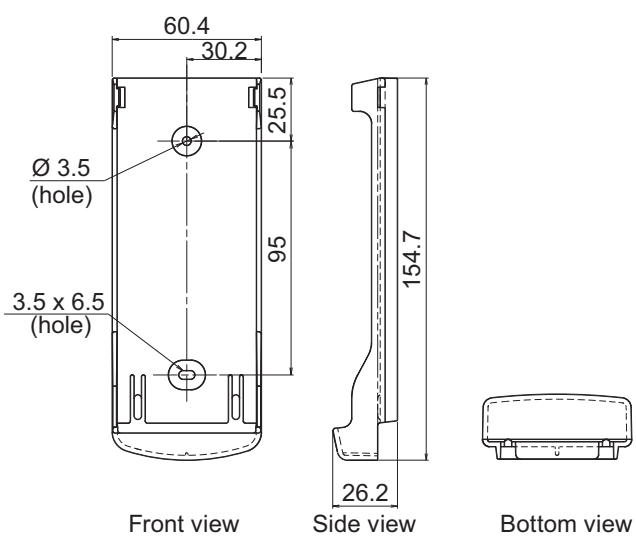
Size (H × W × D)	mm	154.7 × 60.4 × 26.2
Weight	g	28