2-6. Wired remote controller (Touch panel: UTY-RNR∗Z∗)
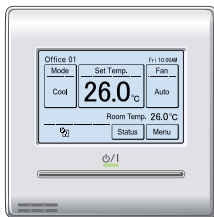
- Easy finger touch operation with LCD panel.
- Built-in Weekly/Daily time (On/Off, Temp., Mode)
- The backlit LCD enables easy operation in a dark room.
- Room temperature display
- Control up to 16 indoor units
- Corresponds to 12 different languages (English, Chinese, French, German, Spanish, Russian, Polish, Italian, Portuguese, Greek, Turkish, and Dutch)

■ Accessory

Name and shape	Q'ty	Application
CD-ROM	1	
Screw	2	For installing the remote controller
Cable tie	1	For remote controller and remote controller cable binding
Installation manual	1	
Operation manual	1	

■ Overview
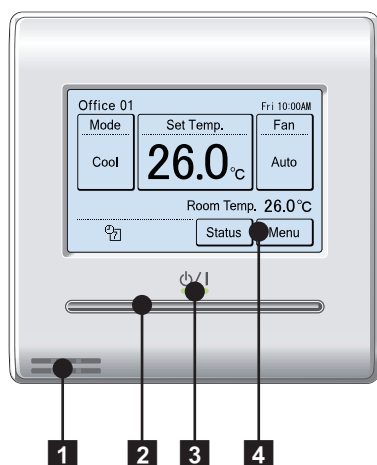
1 **Remote temperature sensor (inside)**

2 **On/off button**
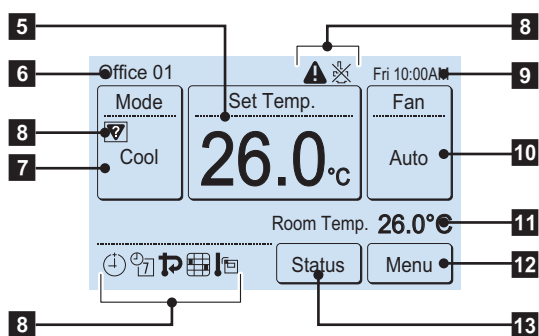Operable only while displaying the "Monitor mode" screen.

3 **LED lamp (operation indicator)**

4 **Touch panel display**

5 **Set temperature**
Operating temperature can be set.

6 **Remote controller group name**

7 **Mode**
Operation mode can be set.

8 **Status icons**

9 **Clock**

10 **Fan**
Fan speed can be set.

11 **Room temperature**

12 **Menu**
Various settings can be set.
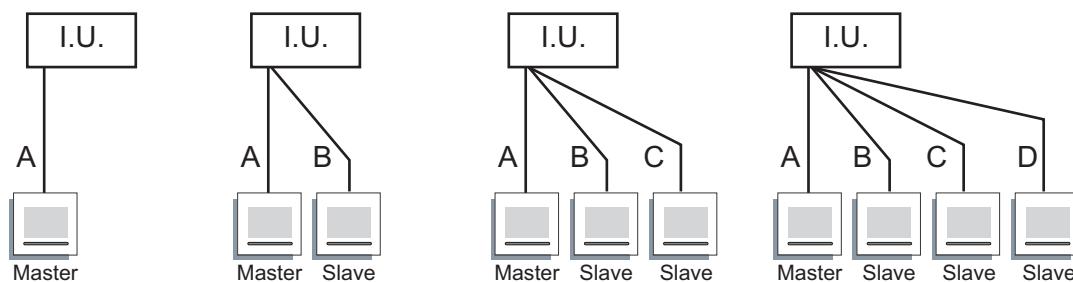
13 **Status**
Status of the indoor unit and error can be checked.

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

Display panel

CONTROL SYSTEM

■ System diagrams

- **Multiple remote control**
  Up to 4 remote controllers can be used to operate the indoor units.

A, B, C, D: Remote controller cable (For details of controller cable specifications, refer to "Controller cable" in Chapter 6. SYSTEM DESIGN.)

$A \leq 500$ m, $A + B \leq 500$ m, $A + B + C \leq 500$ m, $A + B + C + D \leq 500$ m

NOTE: Multiple installation method described above is prohibited to combine with 3-wired type remote controller (UTY-RNK∗, UTY-RSK∗, or UTY-RHK∗) and 2-wired type remote controller (UTY-RNR∗, UTY-RNR∗Z∗, or UTY-RLR∗)

- **Group control**
  With a single remote controller, up to 16 indoor units can be simultaneously operated.
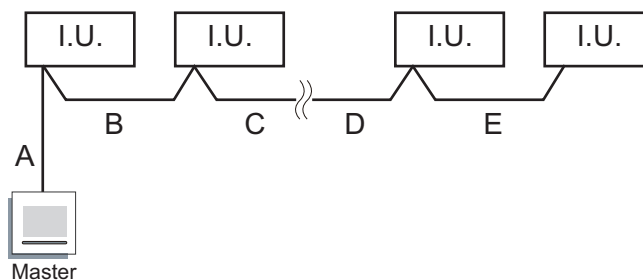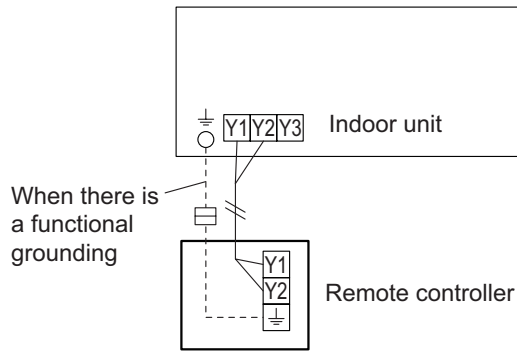
A, B, C, D, E: Remote controller cable (For details of controller cable specifications, refer to "Controller cable" in Chapter 6. SYSTEM DESIGN.)

$A + B + C + D + E \leq 500$ m

■ Electrical wiring

1 remote controller:

Indoor unit

When there is a functional grounding

Remote controller

2 remote controllers:

Indoor unit

When there is a functional grounding

Remote controller   Remote controller

Group control:

Indoor units

When there is a functional grounding

Remote controller

■ Dimensions

Unit: mm

120
120
20.4
Hole: 9 × 4.5
30   33
23
15.3
45.3
63.5
83.5
Hole: 6 × 4.5   Hole: 12.5 × 4.5
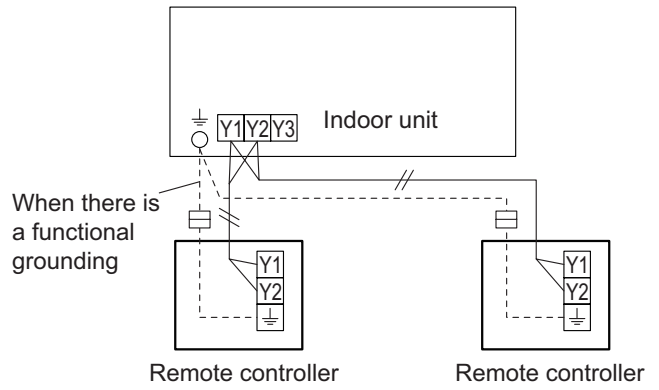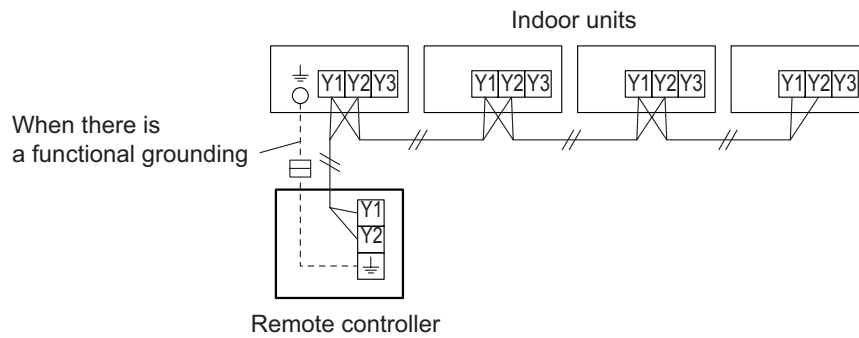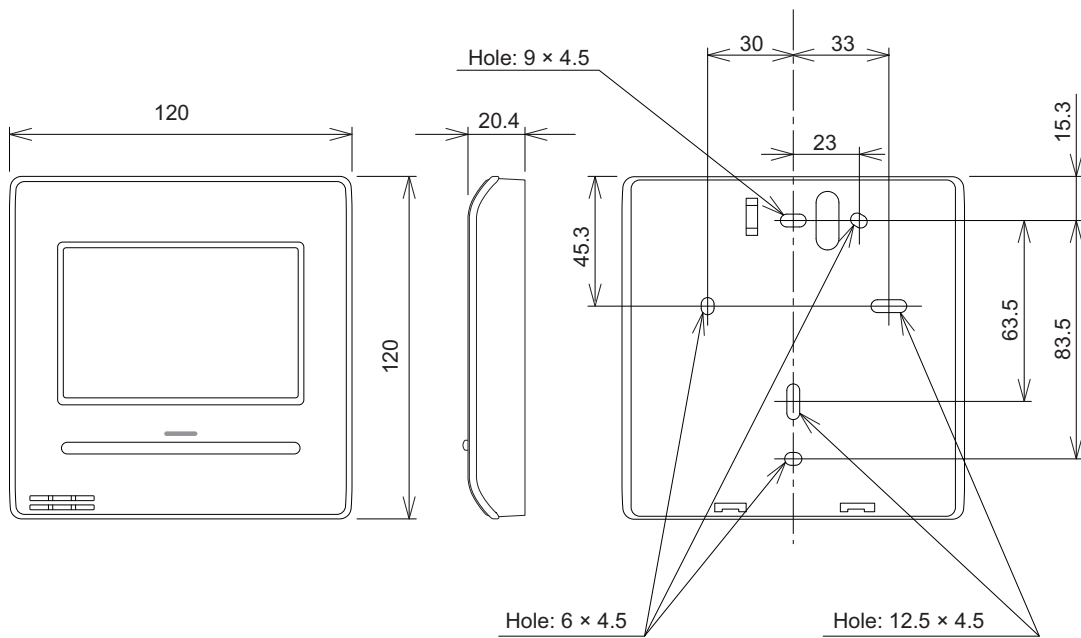
■ Installation space

- This product cannot be installed in wall.
- Recommendation installation height of the remote controller is from the floor surface to the bottom of the remote controller.
- Even when you install a remote controller to one of a switch box and the surface of a wall, secure the space shown in following figure. If spaces run short, it will become difficult to remove a remote controller.

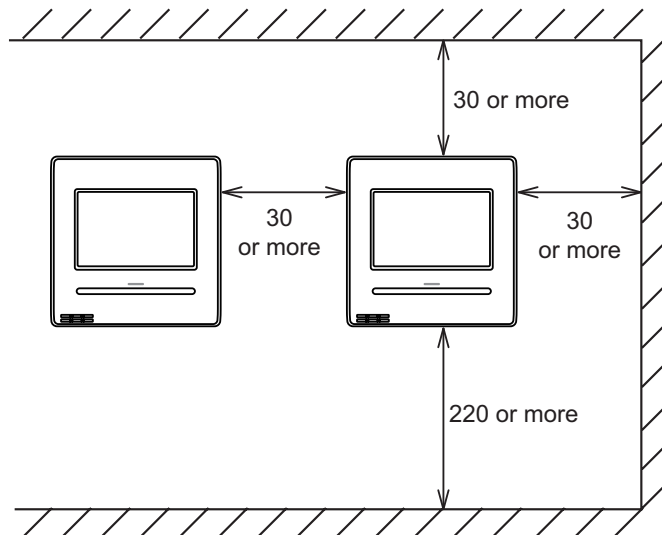Unit: mm

Secure enough space where a flat-blade screwdriver to take off a case can be inserted.

■ Installation

- **Connection pattern**

  NOTE: Connection pattern is different according to type of Indoor unit.

Indoor unit type	Connection pattern
All cassette type	Pattern A
All duct type	Pattern A
All floor type	Pattern A
Floor/Ceiling type	Pattern A
All ceiling type	Pattern A
All wall mounted type	Pattern B

- **Pattern A**
    1. Connect the end of remote controller cable directly to the exclusive terminal block.
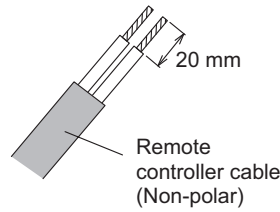   2. Set the DIP switch (SW1) to "2WIRE" on the PCB of the indoor unit.
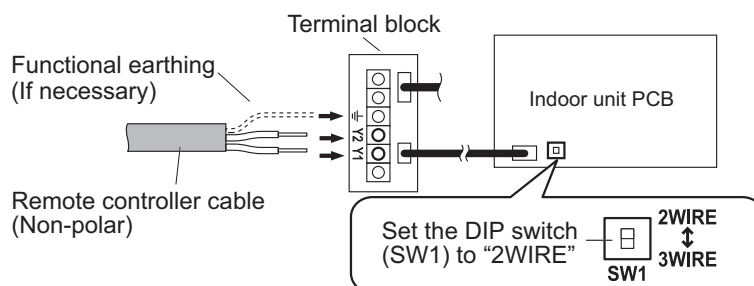

NOTES:
- Layout of terminal block and PCB is varies depending on the type of indoor unit.
- Operation may fail if it is connected to the outdoor unit or the terminal block for power supply.
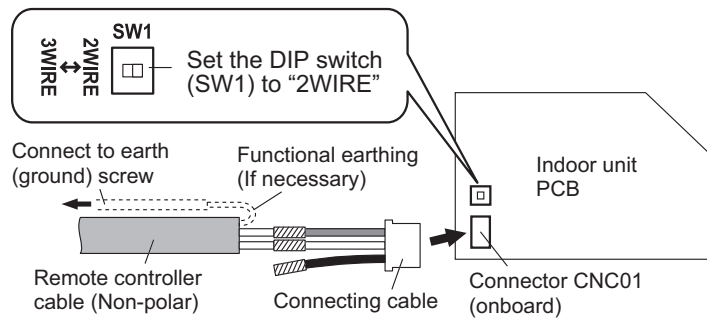
- **Pattern B**
  1. Use a tool to cut off the terminal on the end of the remote controller cable, and then remove the insulation from the cut end of the cable as shown below.
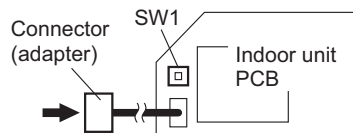
  20 mm

  Remote controller cable (Non-polar)

  2. Connect the remote controller cable and connecting cable as shown below. Be sure to insulate the connection between the cables.

  White
  Red
  Connecting cable
  Insulated connection
  Black
  Remote controller cable (Non-polar)
  Cut and insulate
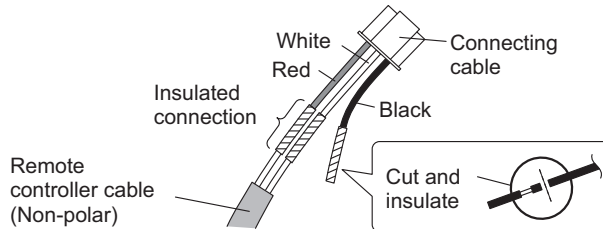
  3. Connect the remote controller cable to the connecting cable, and insert it to the connector. Set the DIP switch (SW1) to "2WIRE" on the PCB of the indoor unit.

  SW1
  3WIRE ↔ 2WIRE
  Set the DIP switch (SW1) to "2WIRE"

  Connect to earth (ground) screw
  Functional earthing (If necessary)
  Indoor unit PCB
  Remote controller cable (Non-polar)
  Connecting cable
  Connector CNC01 (onboard)

  NOTE: Layout of terminal block and PCB is varies depending on the type of indoor unit.

  Connector (adapter)
  SW1
  Indoor unit PCB

CONTROL SYSTEM

■ Specifications

Input voltage	V	DC 12
Power consumption	W	Max. 0.3
Display		3.8-inch FSTN LCD (255 × 160 dots) with touch panel
Usage temperature range	°C	0 to 40
Usage humidity range	%	20 to 90 (no condensation)
Storage temperature range	°C	-10 to 60
Storage humidity range	%	20 to 90 (no condensation)
Dimensions (H × W × D)	mm	120 × 120 × 20.4
Weight	g	220

● Wiring specifications

Use	Cable size	Wire type	Remarks
Remote controller cable	0.33 to 1.25 mm^2 (22 to 16 AWG)	Non polar 2-core	Use sheathed twist pair cable.*

*: Use shielded cable (locally purchased) in accordance with the regional cable standard.

CONTROL SYSTEM

CONTROL SYSTEM