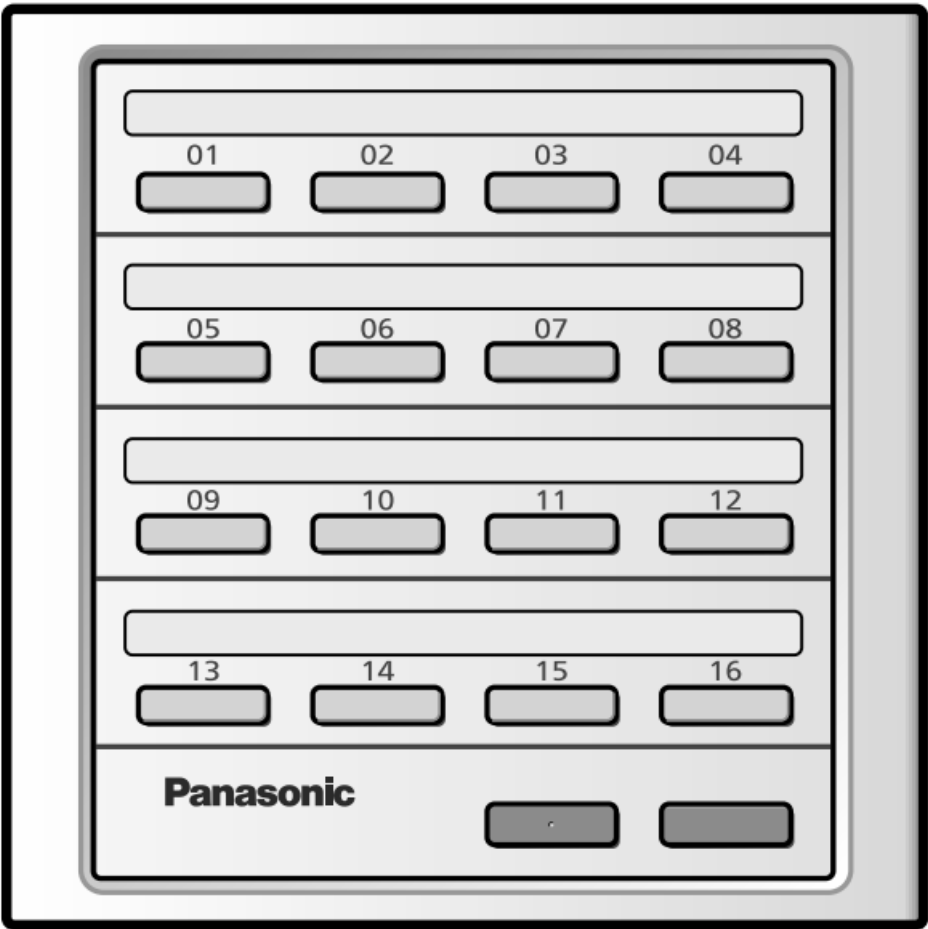


# Panasonic CZ-ANC3 On-Off Controller Instruction Manual

[Home](#) » [Panasonic](#) » Panasonic CZ-ANC3 On-Off Controller Instruction Manual 

## Panasonic CZ-ANC3 On-Off Controller



## Contents

- 1 Safety Precautions
- 2 Specifications
- 3 Dimensions
- 4 Installation Precautions
  - 4.1 Installation location
  - 4.2 General precautions on wiring
- 5 Wiring
  - 5.1 Power supply wiring
  - 5.2 Inter-unit control wiring
  - 5.3 External I/O wiring
  - 5.4 Basic wiring diagram
  - 5.5 Schedule Timer wiring
  - 5.6 How to attach the ring pressure terminal
  - 5.7 Connecting wiring
  - 5.8 Connecting to external equipment
- 6 Mounting
- 7 Switches
- 8 Test Operation
- 9 Central Address Setting
- 10 Documents / Resources
  - 10.1 References
- 11 Related Posts

## Safety Precautions

### Please Read Before Starting

- This controller must be installed by the sales dealer or installer. These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.



**WARNING** This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



**CAUTION** This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

- We assume no responsibility for accidents or damages resulting from methods other than those described in the installation instructions or methods without using specified parts. Malfunctions that occurred due to the unauthorised installation methods are not covered by the product warranty.
- This controller shall be installed in accordance with National Wiring Regulations.
- After the installation is complete, perform test operation to confirm that no abnormality is present.
- Read the installation instructions of devices to be connected as well.
- When relocating or repairing this controller, provide the Installation Instructions to the servicing personnel.



ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

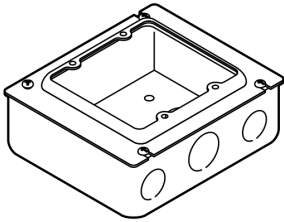
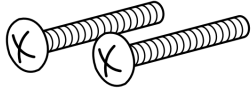
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause accidental injury or death.
- This controller is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown. Earth Leakage Circuit Breaker (ELCB) must be incorporated in the fixed wiring in accordance with the wiring regulations. The Earth Leakage Circuit Breaker (ELCB) must be an approved 10 A, having a contact separation by 3 mm in all poles.
- Provide a power outlet to be used exclusively for this controller.
- Turn off the circuit breaker of the controllers before installation.
- Do not supply power to the controller until all wiring is completed or reconnected and checked.
- Fix the power supply wiring securely with the clammer so that the power supply terminal board part is free of tension (external force) when pulled. Loose connection of the terminal board may occur fire.
- To prevent possible hazards from insulation failure, the controller must be grounded.
- Select an installation location which is rigid and strong enough to support or hold the controller, and select a location for easy maintenance.
- This product must not be modified or disassembled under any circumstances. Modified or disassembled controller may cause fire, electric shock or injury.
- Do not clean inside the controller by users. Engage authorized dealer or specialist for cleaning.
- Do not operate with wet hands.



- Ground yourself to discharge static electricity before performing any wiring.
- Do not use the controller at the following locations.
- Areas where leakage of flammable gas may be expected
- Places where large amounts of oil mist exist
- Locations where external air may enter the room directly (This may cause “condensation”).
- Locations where high-frequency emissions are generated
- Location where voltage fluctuation frequently occurs
- Do not wash with water.

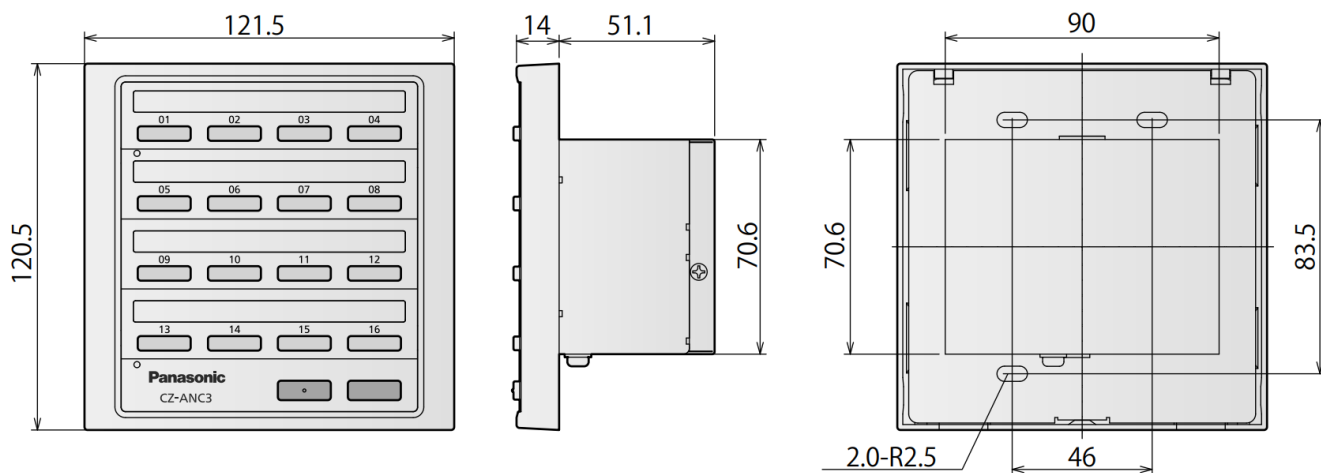
## Specifications

<b>Model No.</b>	CZ-ANC3
<b>Dimensions</b>	(H) 120.5 mm x (W) 121.5 mm x (D) 14 + 51.1 mm
<b>Weight</b>	500 g
<b>Temperature/ Humidity range</b>	0 °C to 40 °C / 20 % to 80 % (no condensation) *Indoor use only.
<b>Power Source</b>	Single phase 100-240 V ~ 50-60 Hz
<b>Power consumption</b>	Max. 4.0 W
<b>Number of connected indoor units</b>	Up to 16 groups (64 units)

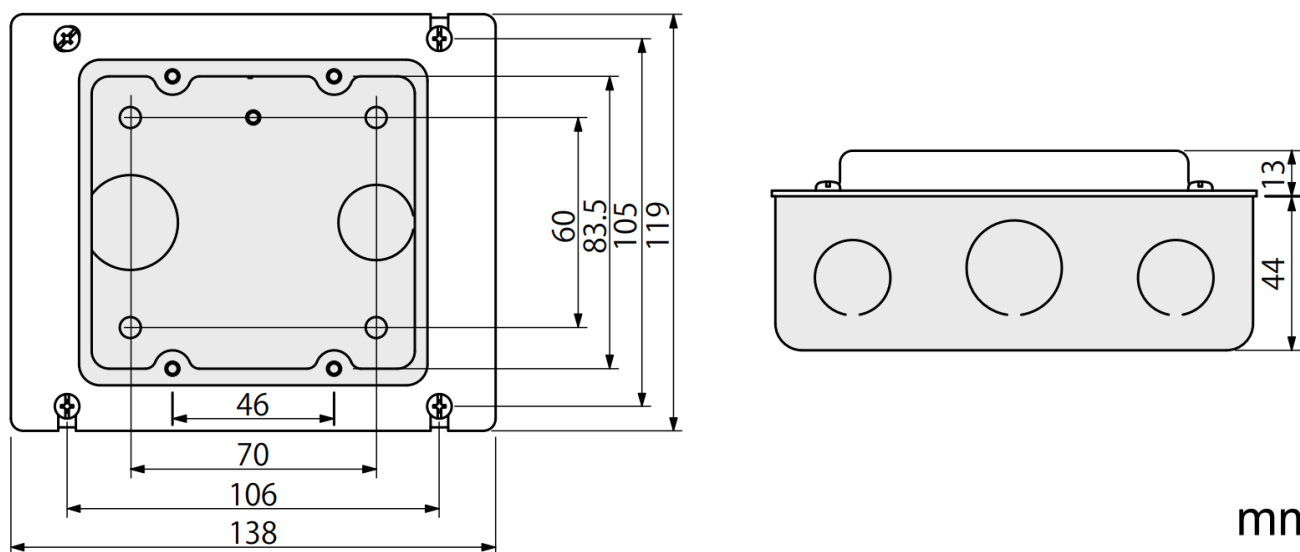
Supplied accessories		
<b>Operating Instructions (1)</b> <b>Installation Instructions (1)</b> <b>Switch name label (1)</b>	<p><b>Switch box</b> (1)</p> 	<p><b>Machine Screw M4 × 25 (2) (For Switch Box)</b></p> 

## Dimensions

- ON/OFF Controller



- Switch box



mm

## Installation Precautions

### Installation location

- Avoid the following locations for installation.
  - Under direct sunlight
  - Location near heat source
  - Uneven surface
  - Locations where the controller will be splashed with water or affected by dampness or humidity
  - Location that is subject to excessive vibration or physical impacts. (Fixing screws may come off , and the controller may drop.)
- Install the controller away from any sources of electrical noise.
- Install the controller to the locations where is suitable to the temperature for using or environment.
- When installing more than 1 controller next to each other, keep distance of 5 mm or more on the right and left and 50 mm or more on top and bottom.

### General precautions on wiring

- Regulations on wire diameters differ from locality to locality. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning.

You must ensure that installation complies with all relevant rules and regulations.

- Use the field supplied wiring with at least 1 mm in thickness of insulation part including the sheath.
- Connect all wiring tightly to prevent the terminal board from loosening when the wiring connection part is pulled by an external force. (Otherwise, fire or overheating may occur.)
- Do not bury the inter-unit control wiring in the ground.
- Do not store the power supply wiring and other wiring in the same metal tube or bundle them together. (An operational error or noise may occur.)

## **Wiring**

Before connecting wiring, be sure to turn the circuit breaker off. After all wiring arrangements are complete, turn the circuit breaker on. If the power supply wiring is mistakenly connected to a terminal board other than the power supply terminal board, the devices to be connected to this controller or this controller will malfunction. After connecting wiring, confirm that the power supply wiring is properly connected.

### **Power supply wiring**

- Be sure to use a dedicated line for power source.
- Be sure to earth this controller.
- Do not connect the earth wiring to those of gas pipe, water pipe, lighting rod, telephone, etc.

### **Type of wiring:**

- Use a flexible wiring of 2 mm<sup>2</sup> (Recommended).
- Use the standard power supply wiring for Europe (such as H05RN-F or H07RN-F which conform to CENELEC (HAR) rating specifications) or use the wiring based on IEC standard (60245 IEC57, 60245 IEC66).

Total Wire Length: 30 m or less

Power supply terminal screw: M4

### **Inter-unit control wiring**

### **Type of wiring:**

- Use a flexible shield wiring of 0.5 to 2 mm<sup>2</sup>

### **Total wire length:**

- 1000 m or less

Number of connectable units and devices:

(Up to total of 100 units and devices can be connected.)

Indoor unit	Up to 64 units (*1)
Outdoor unit	Up to 30 units
Central control device	Up to 10 units

#### External I/O wiring

#### Type of wiring:

- Use a flexible wiring of 0.5 to 2 mm<sup>2</sup>

#### Total Wire Length:

- 100 m or less

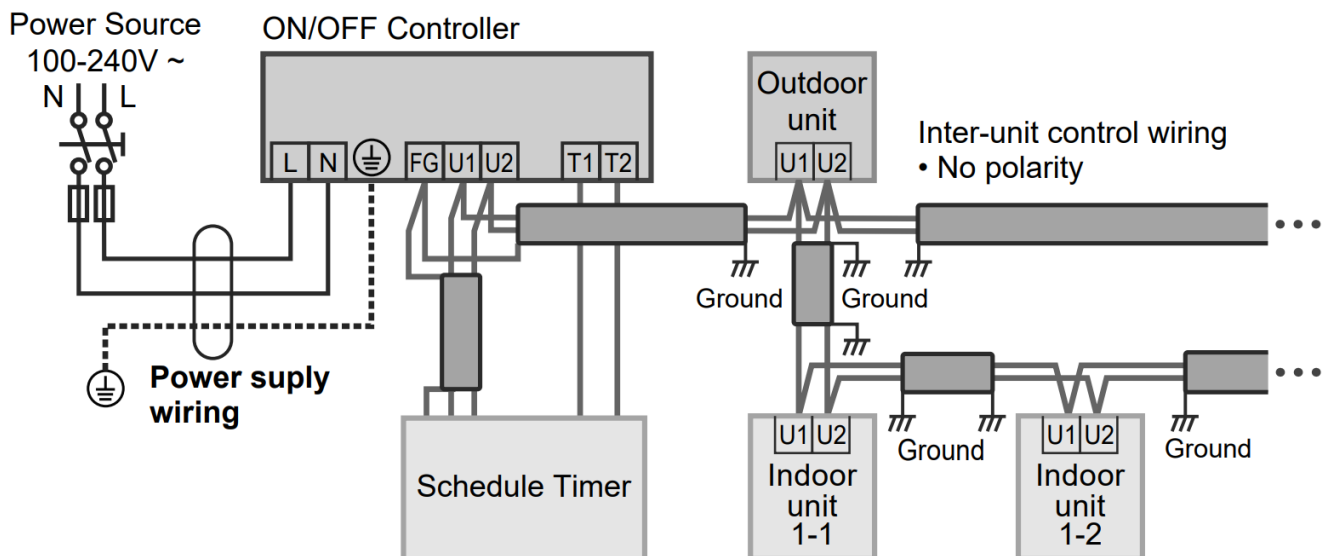
#### Attention

- When using the controller at a location susceptible to noise, use a shield wiring.

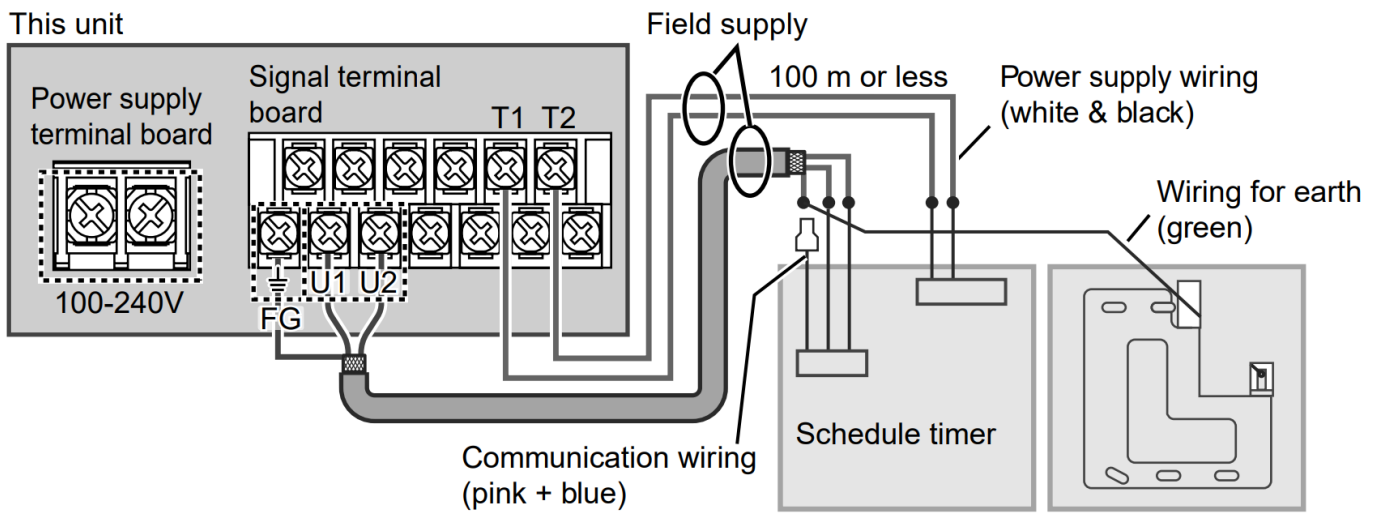
#### Basic wiring diagram

Connect the inter-unit control wiring as shown in the figure.

- When connecting interface adaptor, read the installation instructions supplied with each product.



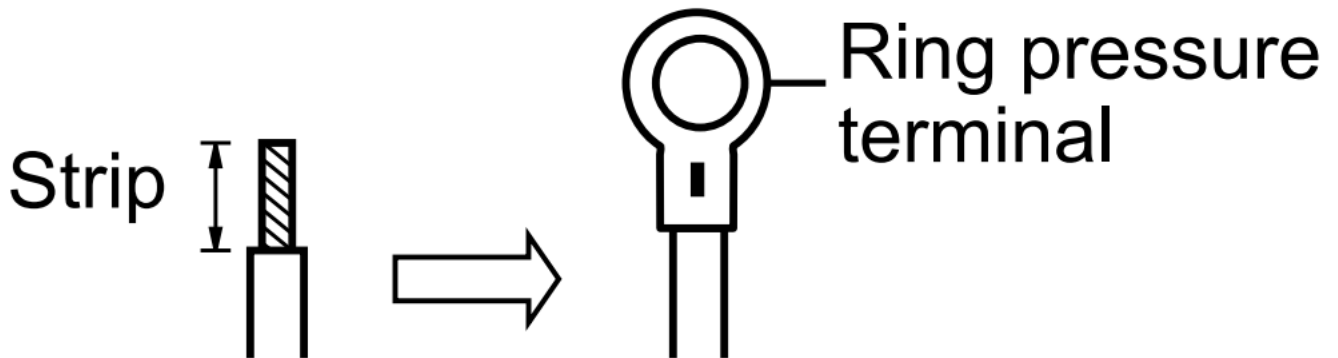
#### Schedule Timer wiring



#### How to attach the ring pressure terminal

##### For power supply wiring

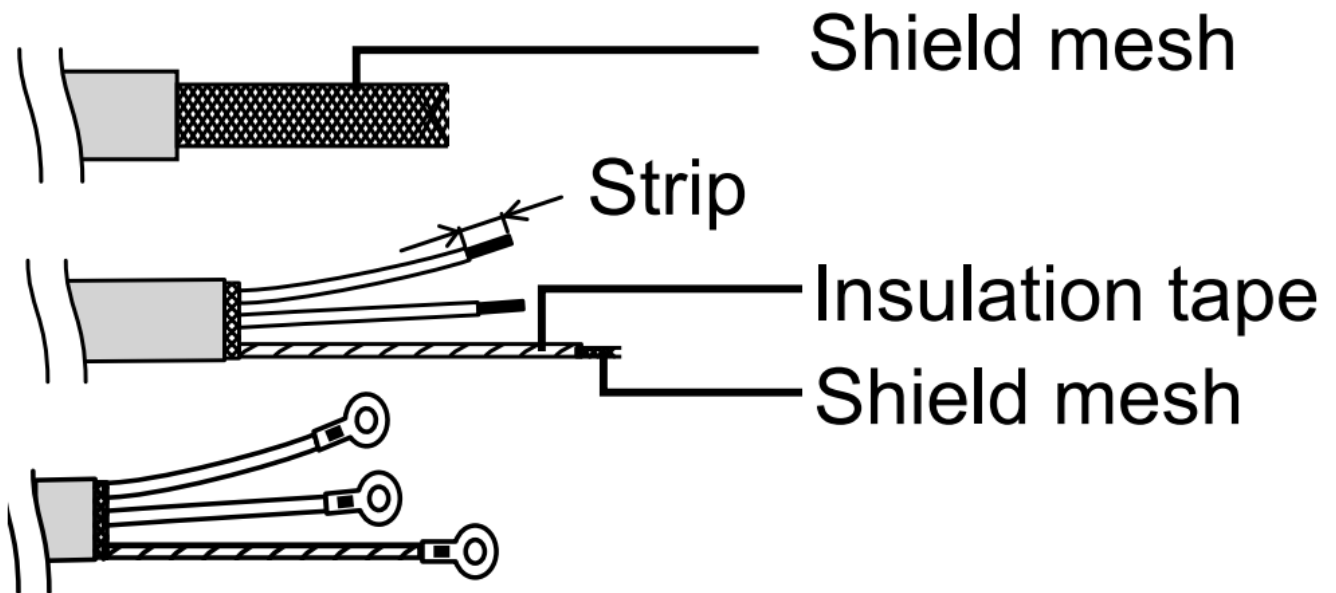
- Process the end of each wiring and attach the ring pressure terminal (field supplied item).



##### For shield wiring

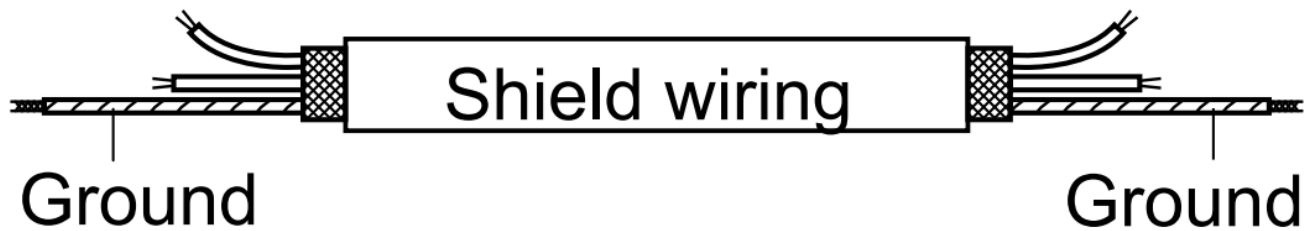
- Process the end of the each wiring and attach the ring pressure terminal (field supplied item).
  - ① Remove wiring coat.
  - ② Cover with the tape.
  - ③ Attach ring pressure terminal.





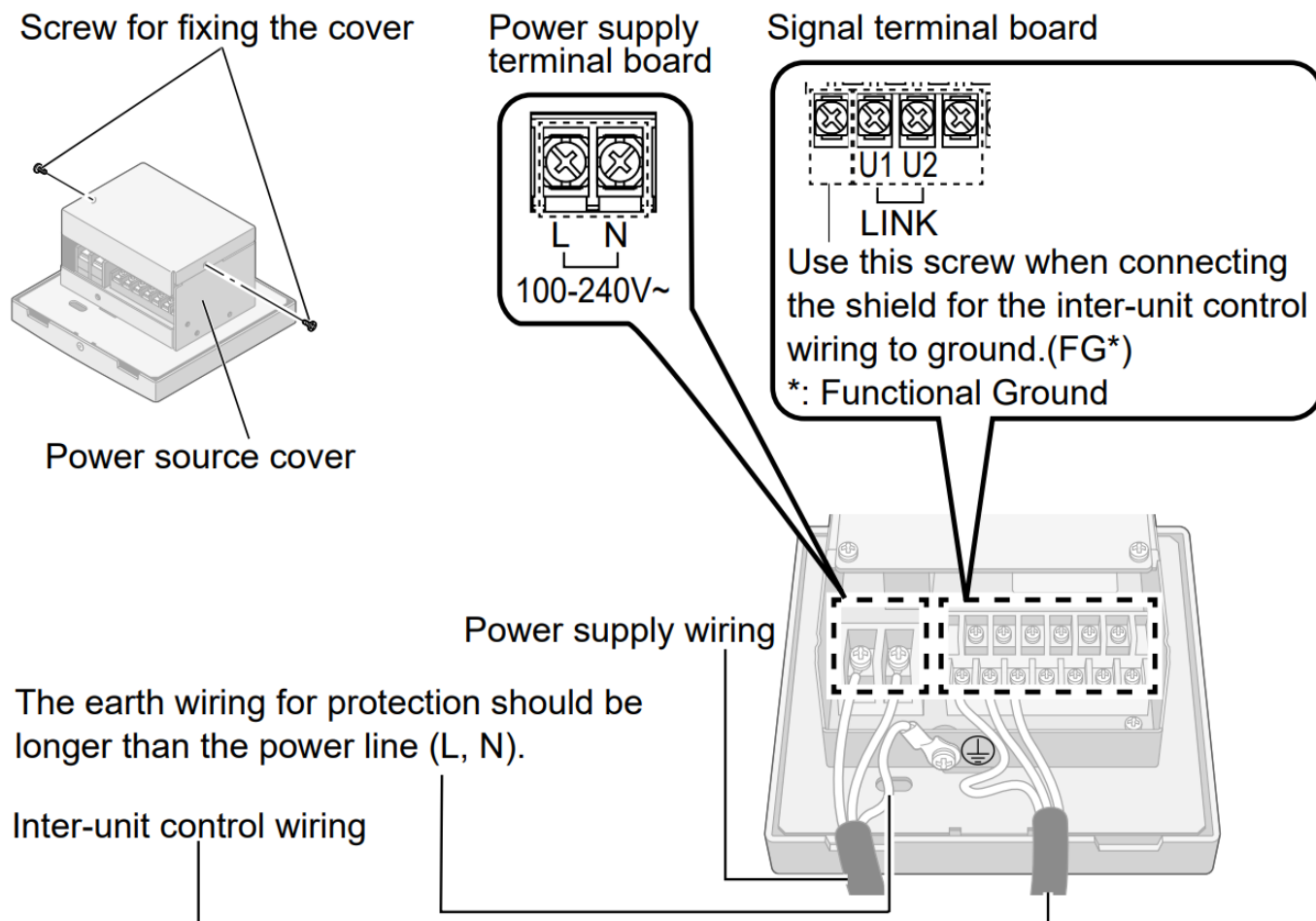
#### Attention

- Ground the shield on both sides of shield wiring, other wise an operation error from noise may occur.



#### Connecting wiring

- ① Remove the 2 screws for fixing the cover, and remove the power source cover.
- ② Connect the power supply wiring to the power supply terminal board. Be sure to connect the earth wiring to the earth terminal.
- ③ Connect the inter-unit control wiring to the U1 and U2 terminals.
- ④ When connecting to external equipment, refer to "Connecting to external equipment" (P.9)
- ⑤ Attach the power source cover, and tighten the 2 screws for fixing the cover.



#### Note

- There is no polarity for the inter-unit control wiring.

#### Attention

- Do not run the Inter-unit control wiring through the same conduit as the power supply, or run close to the power supply line.
- Use different inter-unit control wiring and power supply wiring so they can be differentiated visually.

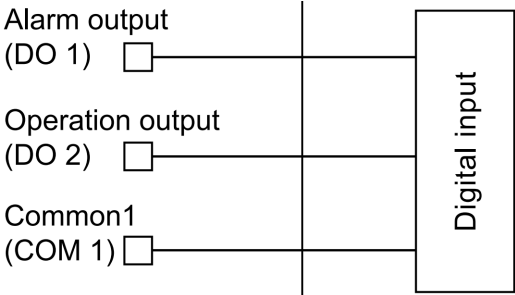
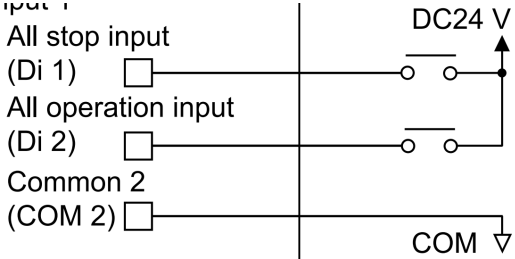
#### Symbols on the controller



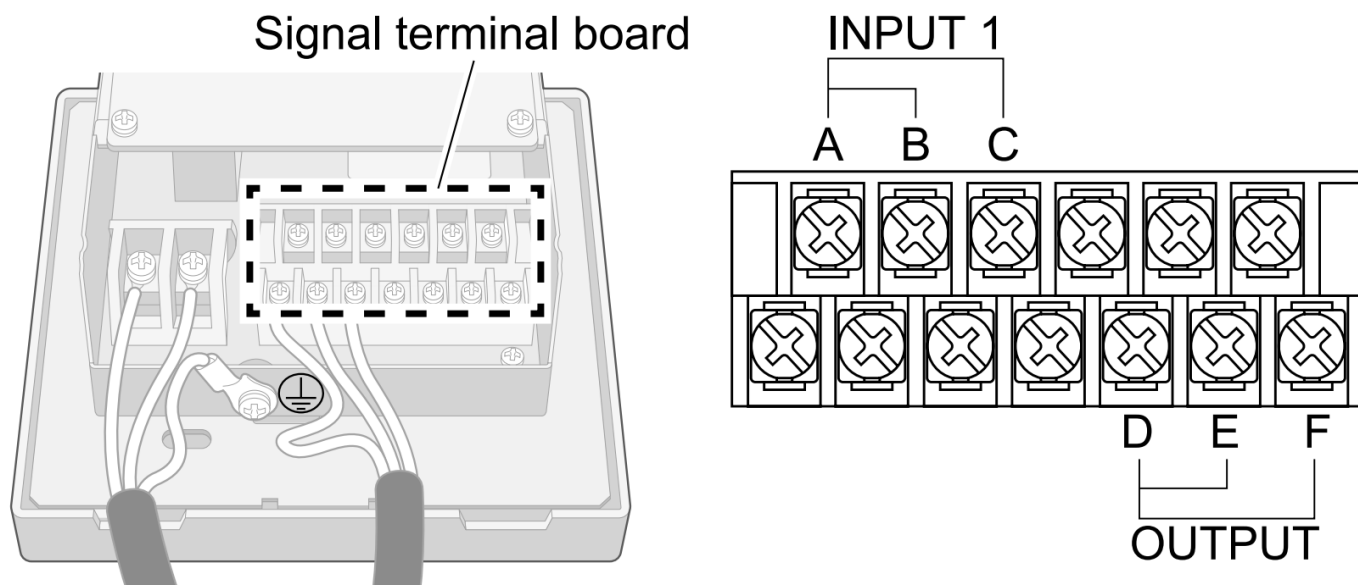
This symbol refers to "Protective earth".

#### Connecting to external equipment

- Keep the signal input line lengths to 100 meters or less. For distances greater than this, use a relay.

Name	Input/ Output item	ON/OFF controller side		External equipment side
		Condition	Terminal name	Circuit example
Contact input/output terminal	Status output	Non-voltage contact “a” Static (Relay output) Contact allowable voltage: Max. DC30 V Contact allowable current: Max. 0.5 A Minimum application load: DC 5 V 1 mA	Alarm output (DO 1) <input type="checkbox"/> Operation output (DO 2) <input type="checkbox"/> Common1 (COM 1) <input type="checkbox"/>	
	Control input	All stop: Voltage contact “a” Pulse (When all stop input is ON, the stop signal is sent periodically.) Pulse width: 300 msec or more All operation: Voltage contact “a” Pulse Pulse width: 300 msec or more Contact allowable voltage: DC24 V±10 % Contact allowable current: Max. 10 mA	All stop input (Di 1) <input type="checkbox"/> All operation input (Di 2) <input type="checkbox"/> Common 2 (COM 2) <input type="checkbox"/>	

- A. Common 2 (COM 2)
- B. All stop input (Di 1)
- C. All operation input (Di 2)
- D. Common 1 (COM 1)
- E. Alarm output (DO 1)
- F. Operation output (DO 2)



## Mounting

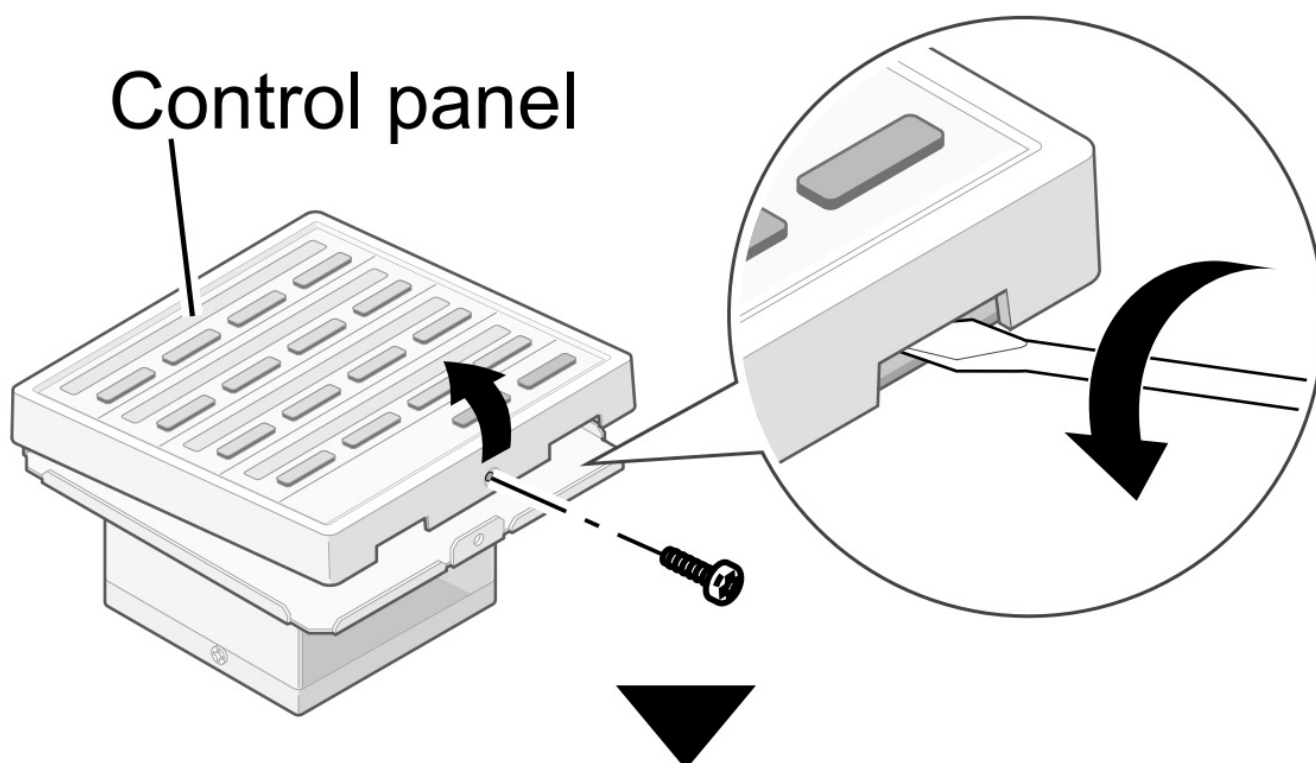
### When mounting the bottom case (step 2)

- Tighten the screws securely until they reach the bottom case. (Otherwise, loose screw heads may hit the PCB and cause malfunction when mounting the top case.)
- Do not over-tighten the screws. (The bottom case may be deformed, resulting in fall of the unit.)

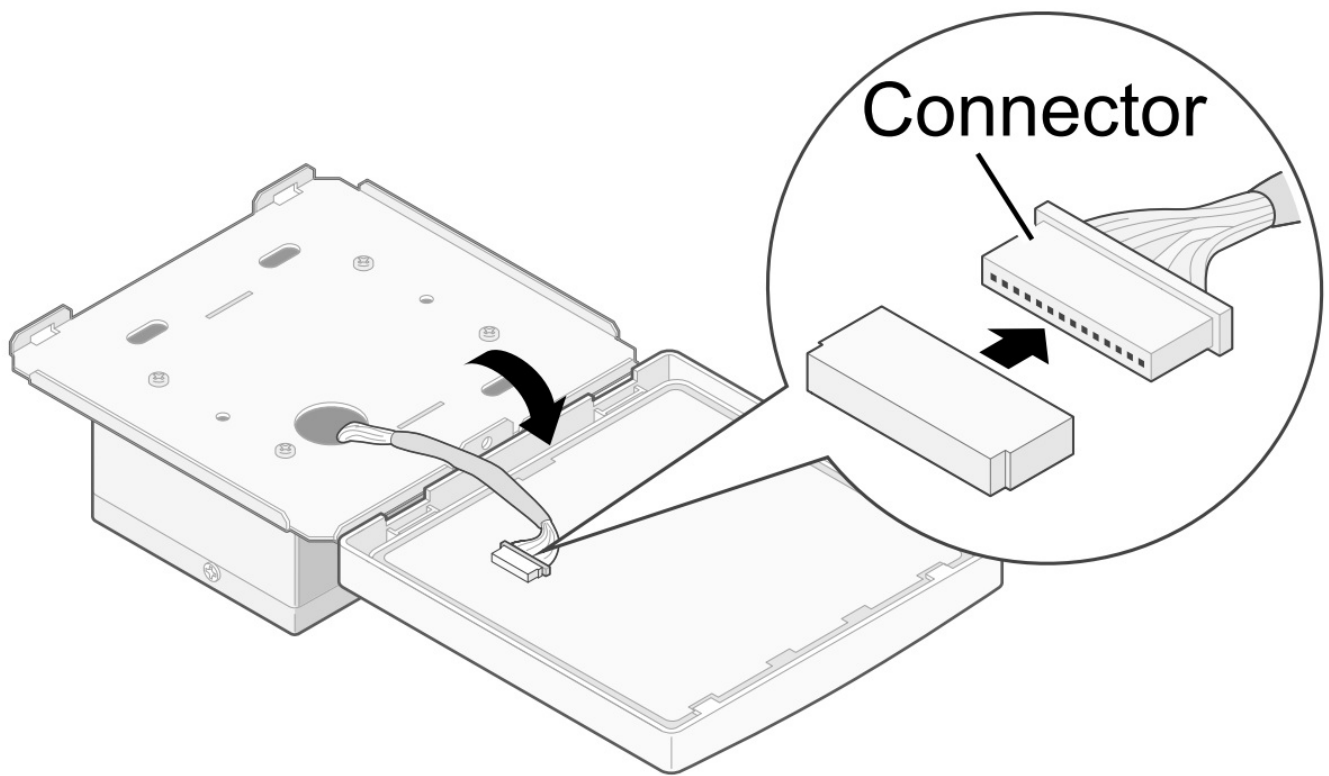
**Embed the included switch box into the wall beforehand.**

1. Remove the screws for fixing the control panel, and remove the control panel.

① **Remove the control panel.**

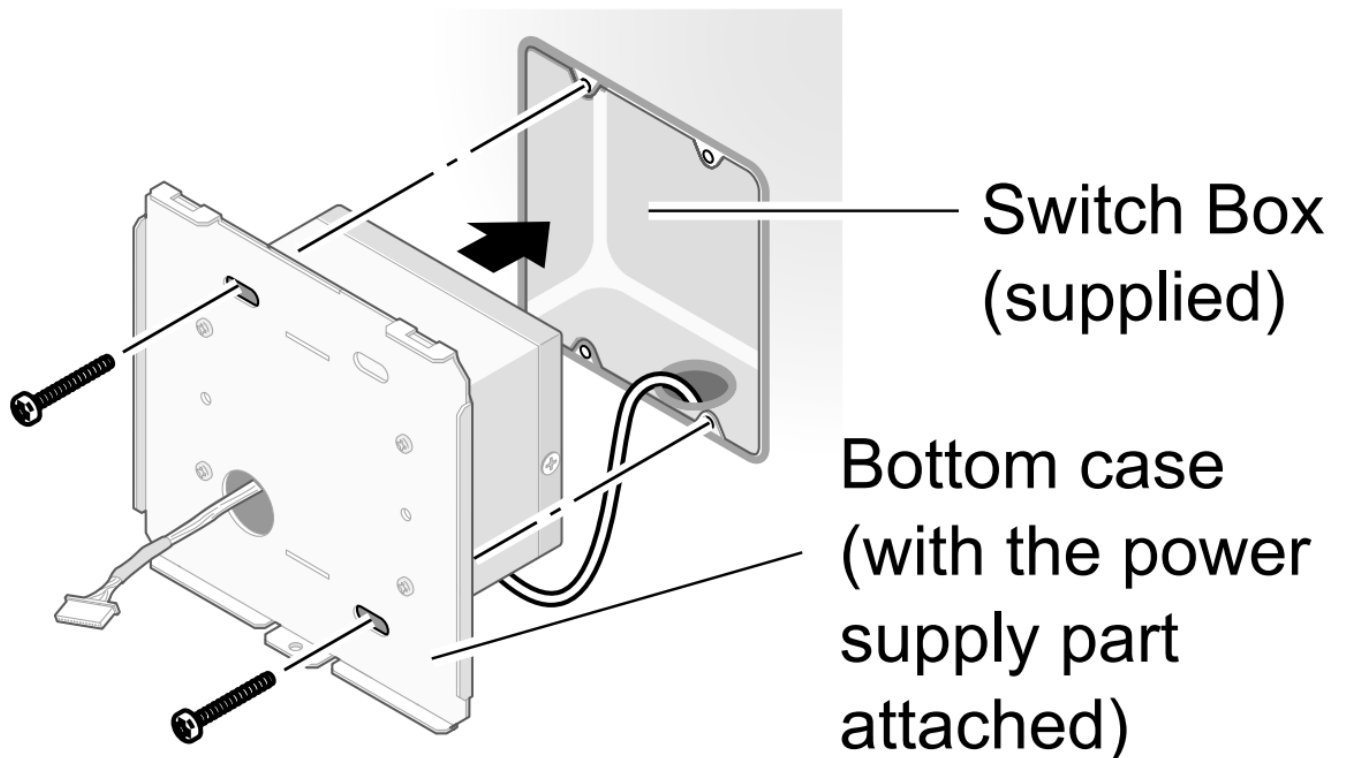


② **Remove the connector.**



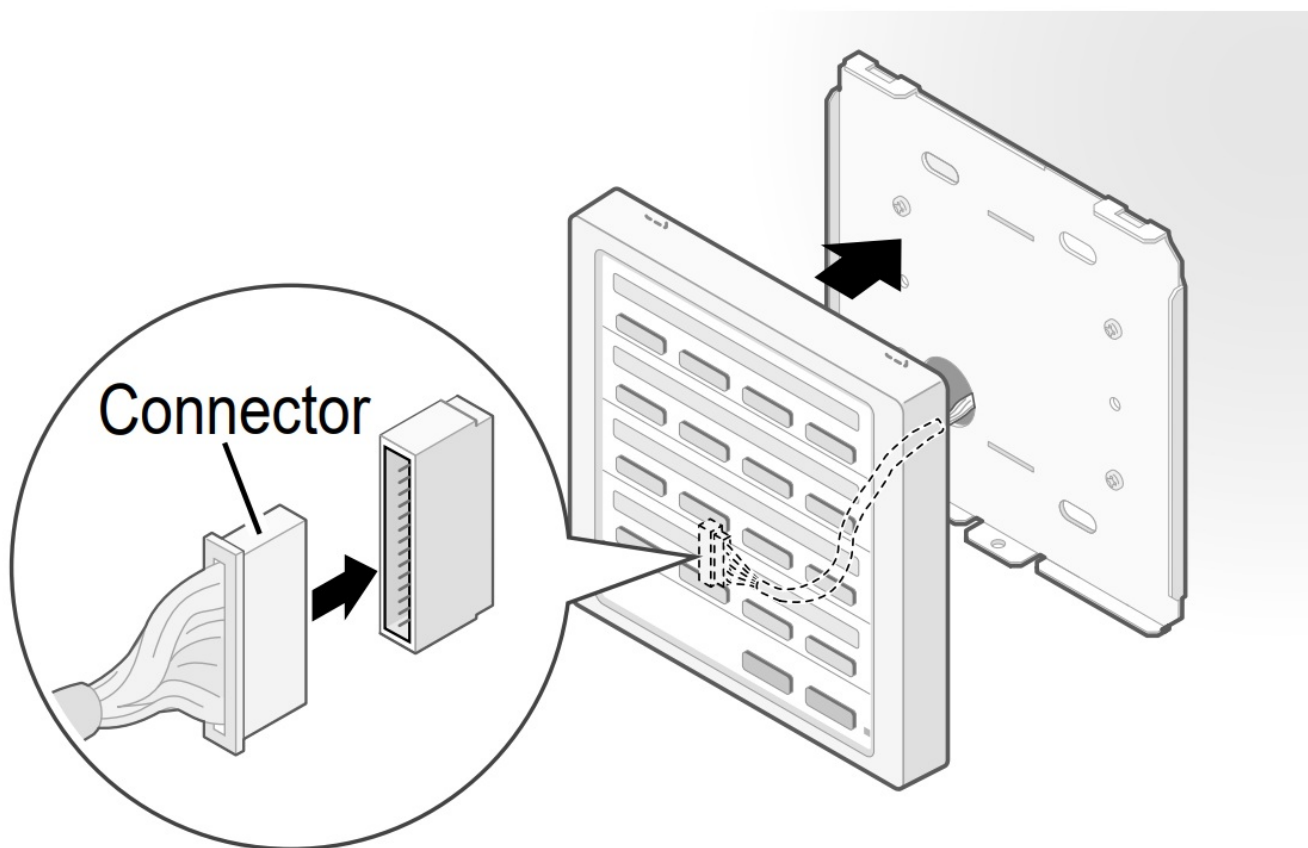
2. Mount to the switch box.

- ① Insert the controller to the switch box (supplied) that has been embedded in the wall.
  - ② Mount the bottom case. (with the power supply part attached) of the controller to the switch box (with small screws (supplied))
- Do not allow the connection to be exposed to the external force of wiring.



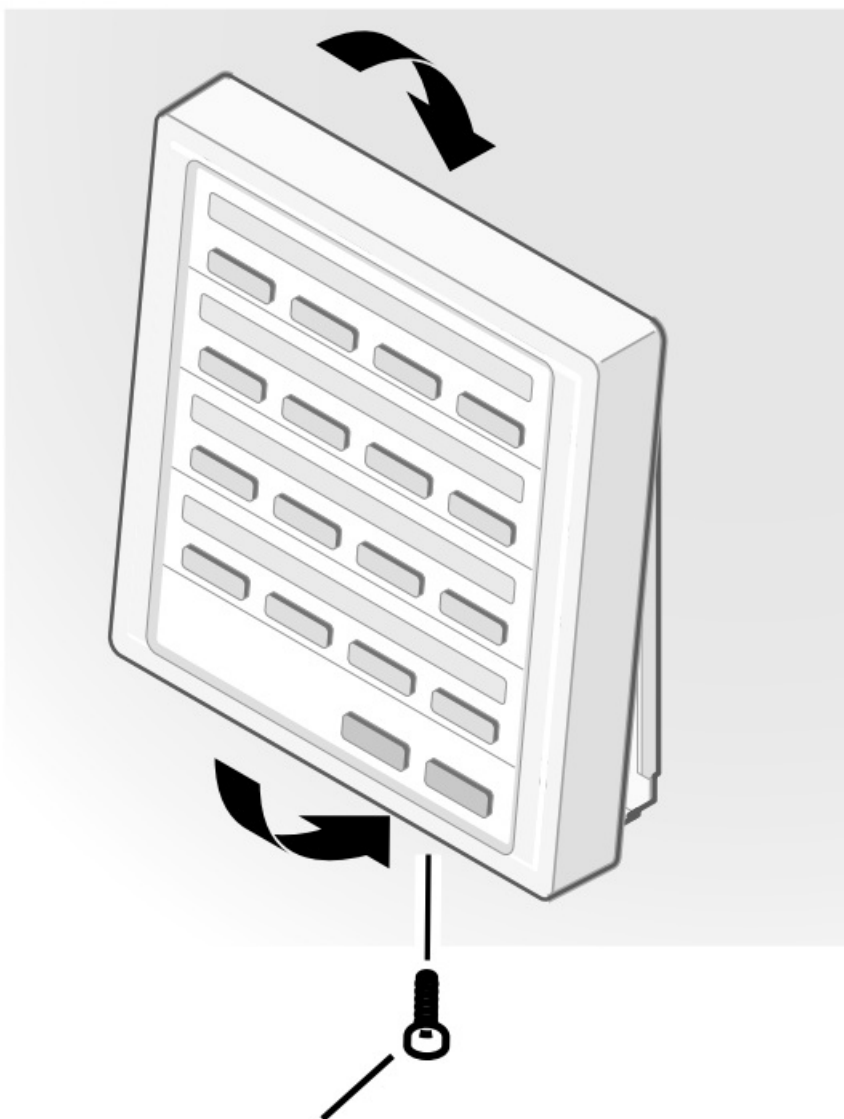
3. Connect the connector, and attach the control panel.

- ① Connect the connector.

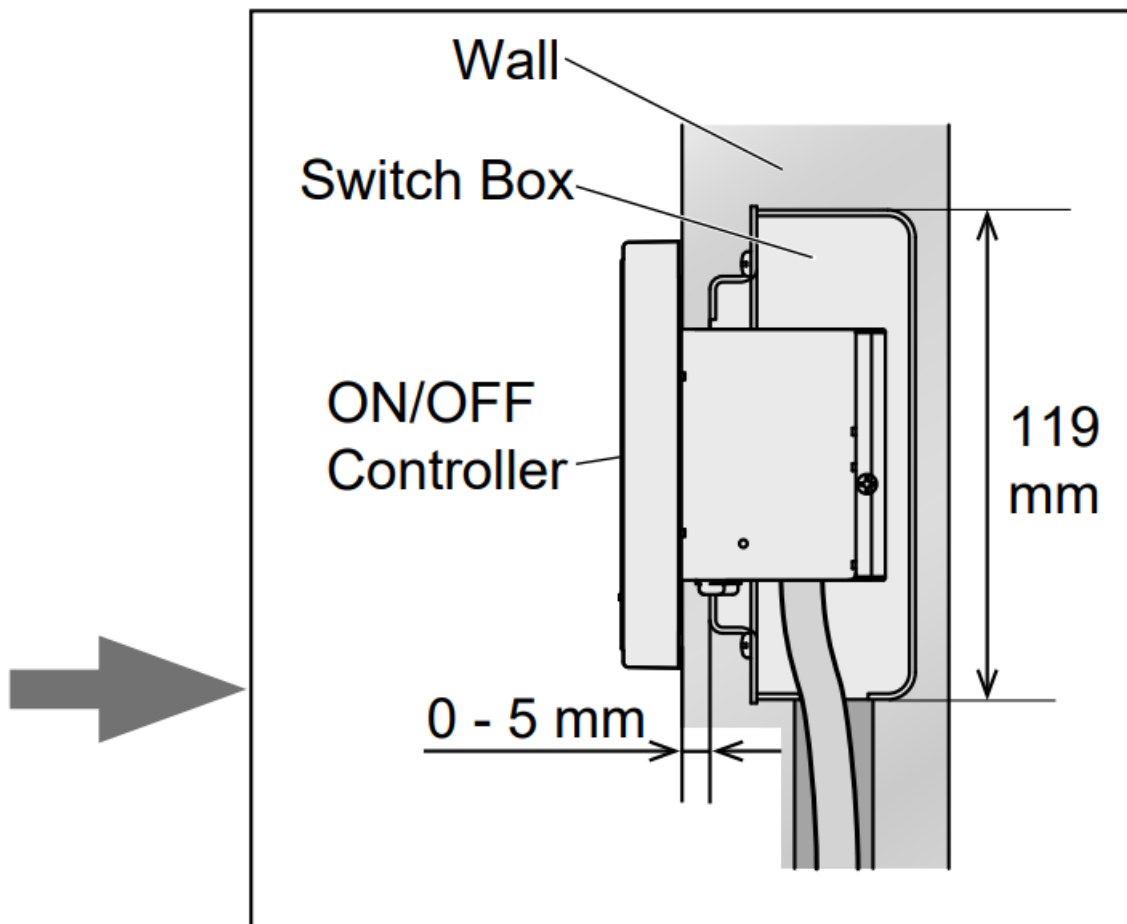


② Attach it from above.

Do not allow the wires to come in contact with parts on the PCB. (Caught wires may destroy the PCB.)

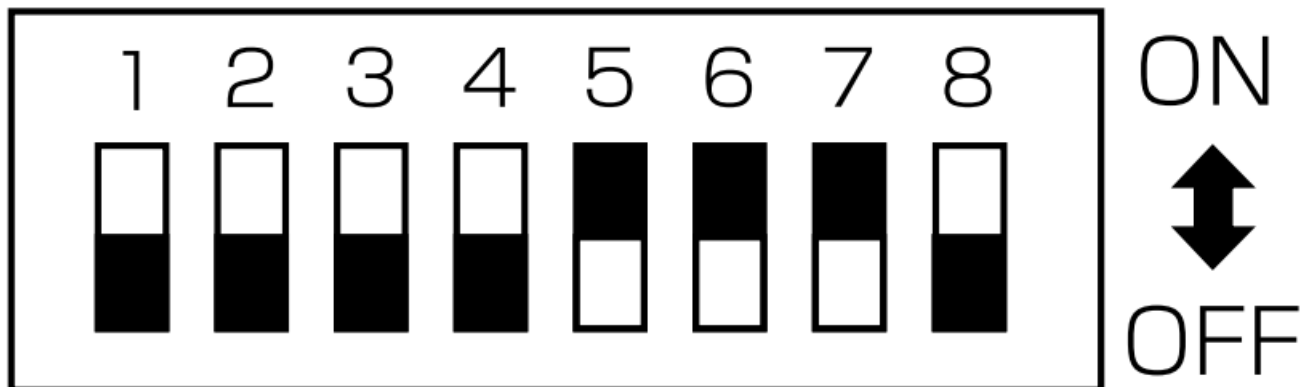


③ Attach the screw for fixing the control panel.



## Switches

- DIPSW1



\* The factory defaults are as follows.

- OFF : SW1·2·3·4·8





OFF

- ON : SW5-6-7





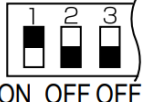
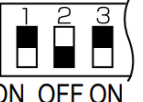
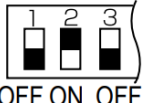
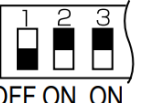
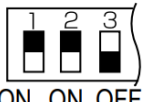
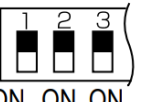
ON

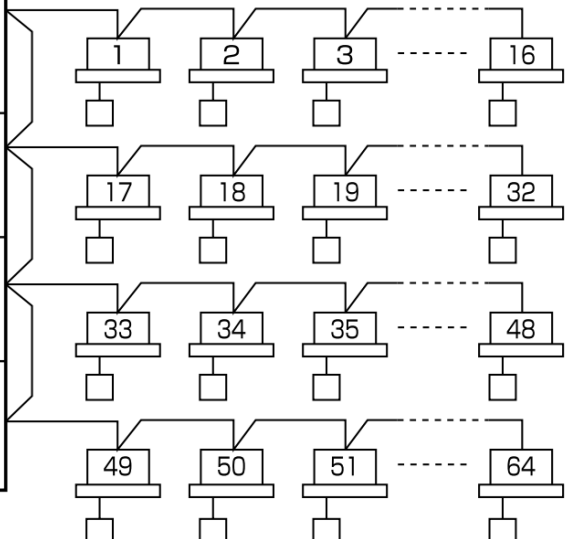
#### [SW1•2] Zone address setting

Select a zone from Zone 1 to 4 based on the group (Central address) to operate.

#### [SW3] ON/OFF controller Main/Sub setting (Main: OFF Sub: ON)

- ① When installing one ON/OFF controller in one zone, set this to Main (OFF).
  - ② When installing two ON/OFF controllers in one zone, set one to Main (OFF) and the other to Sub (ON).
- Up to two ON/OFF controllers with Main and Sub combined can be connected for each zone

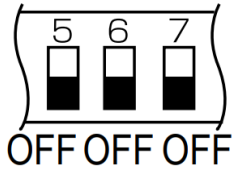
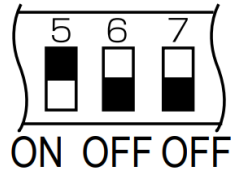
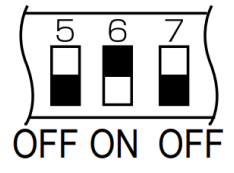
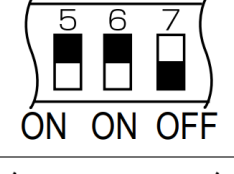
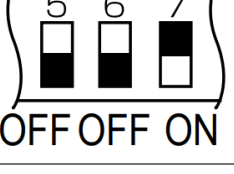
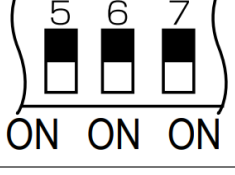
Switches (SW1 • 2 • 3)	ON/OFF controller Main/Sub	
	Main (SW3 OFF)	Sub (SW3 ON)
Zone 1 Group 1 to 16 (SW1 : OFF SW2 : OFF)	 OFF OFF OFF	 OFF OFF ON
Zone 2 Group 17 to 32 (SW1 : ON SW2 : OFF)	 ON OFF OFF	 ON OFF ON
Zone 3 Group 33 to 48 (SW1 : OFF SW2 : ON)	 OFF ON OFF	 OFF ON ON
Zone 4 Group 49 to 64 (SW1 : ON SW2 : ON)	 ON ON OFF	 ON ON ON



#### [SW4] Central control Main/Sub setting (Main: OFF Sub: ON)

- ① When using only one ON/OFF controller, set this to Main (OFF).
- ② When using this unit in combination with other central control devices such as an intelligent controller or a system controller, setting this unit to Sub (ON) is recommended. Note that when using "[SW5•6•7] Prohibition setting", set this to Main (OFF).
- ③ When using more than one ON/OFF controllers in a condition other than ②, set one unit to Main (OFF) and the

others to Sub (ON).

Switches(SW5•6•7)	
Group 1 to 16 : Permitted	
Group 1 to 16:Prohibited	
Group 1 to 4:Permitted Group 5 to 16:Prohibited	
Group 1 to 8:Permitted Group 9 to 16:Prohibited	
Group 1 to 12:Permitted Group 13 to 16:Prohibited	
Prohibition setting disabled	

### [SW5•6•7] Remote control prohibition setting

The remote control operations (operation/stop) are prohibited for groups for which the prohibition setting is made. This can be used when “[SW4] Switching Main/ Sub setting of the central control” is set to Main (OFF).

### [SW8] ALL ON/ALL OFF target group setting

Sets the target to operate/stop when the “ALL ON” or “ALL OFF” button is pressed.

1. Set this to OFF when all the groups in the zone selected for “[SW1•2] Zone address setting” are targeted.
2. Set this to ON when only groups for which the prohibition setting is made are targeted.

### Test Operation

(Preparation) Referring to the operating instructions for indoor units and outdoor units, perform the test operation beforehand.

1. Turn on this unit. (Button 16 of this unit blinks, and the indoor unit connection group is automatically checked.)
2. Press the "ALL ON" button of this unit, and confirm the buttons (indicators) light up. (The buttons light up in the ascending order of the button number at one-second intervals.) Confirm that the number of illuminating buttons is the same as the number of connected groups.

\* If not the same, see "[SW1•2] Zone address setting" and "Central address setting", and check the setting.

\* When connecting a Interface Adaptor, etc., set the central address.

- If the buttons of this unit are blinking, check the following.

1. If all the buttons from 1 to 16 are blinking fast (at 0.2-second intervals)

This unit is not recognizing indoor units.

- Check if the indoor units are turned on.
- Check if the central address is correctly set.
- Check if the inter-unit control wiring is short-circuited or disconnected at some location.

2. If the buttons blink fast (at 0.2-second intervals) for 15 seconds after this unit is operated.

The indoor units of blinking groups do not respond to the operation of this unit.

- Check if the indoor units are turned on.
- Check if the central address is correctly set.
- Check if the inter-unit control wiring is short-circuited or disconnected at some location.

3. If each button is blinking slowly (at 1-second intervals)

The indoor units of blinking groups are in alarming status.

- Check the operation of indoor units.
- See the "Installation Instructions" of indoor/outdoor units, and perform the test operation.

## Central Address Setting

\* After the test operations for indoor units and outdoor units have finished, set the central address.

- This unit is not equipped with the central address setting function.
- If using the unit in combination with central control devices (system controller, intelligent controller, etc.) that can set the central address, set the central address using such devices. (See "Installation Instructions" supplied with central control devices.)
- In a case other than the above, use a wired remote controller to set the address for each group. Set the central address according to the following procedure. Turn on this unit again after the setting is complete.

### ***Setting from wired remote controllers (CZ-RTC4)***

#### **Make the setting while stopped.**

1. Press and hold the 2 buttons for several simultaneously.



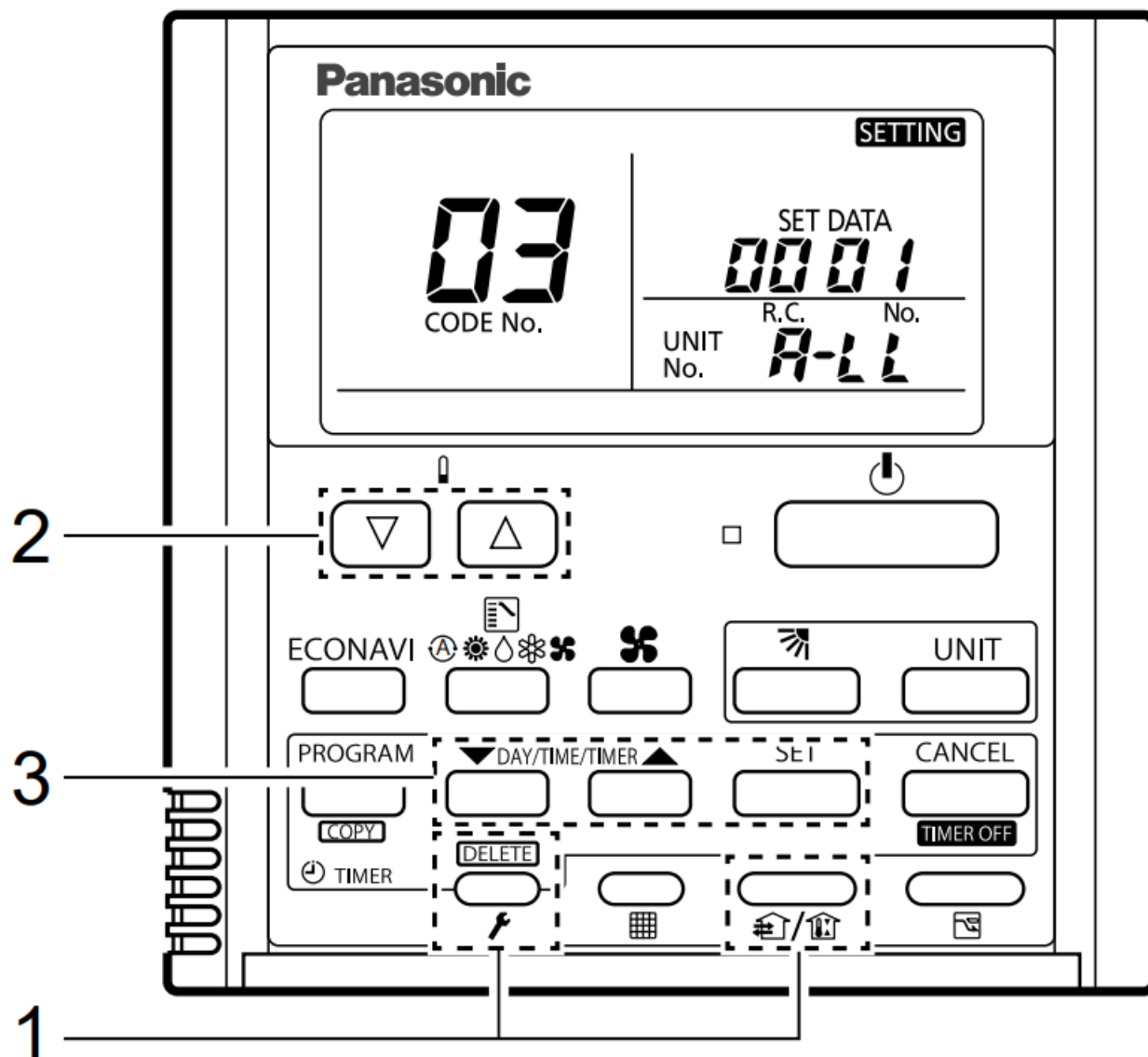
2. Select the Code no. 03.



3. Select the Set data.

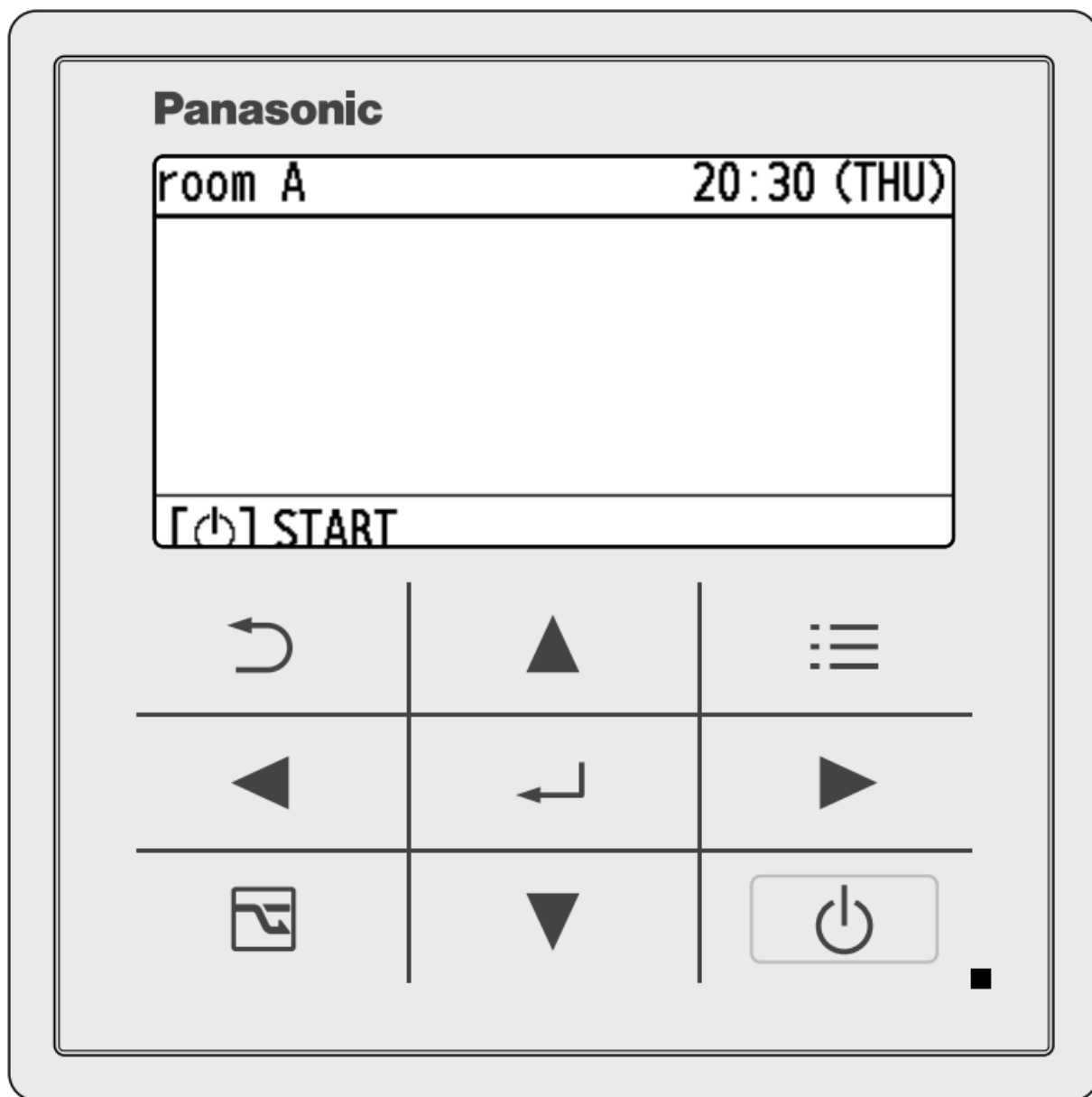


The indicator illuminates after blinking. Press

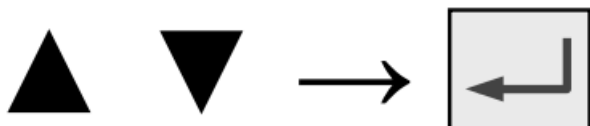


Setting from wired remote controllers (CZ-RTC3, CZ-RTC5, CZ-RTC5A)

1. Press and hold the 3 buttons for 4 seconds or more simultaneously.



2. Select [Simple settings].



Maintenance func		20:30 (THU)
4. Test run 5. Sensor info. 6. Service check <b>7. Simple settings</b>		
⬆ Sel. ⬅ ➡ Page [↵] Confirm		

### 3. Set



Do not change the Unit No. from the initial setting. Select the Code no. 03.

Change the setting data, and set the central address.

Press ↵ at the Unit No. selection position to finish the setting.

Simple settings		20:30 (THU)
Unit no.	Code no.	Set data
▲ <b>ALL</b> ▼	01	0002
⬆ Sel. ➡ Next		

Simple settings		20:30 (THU)
Unit no.	Code no.	Set data
ALL	03	▲ <b>0001</b> ▼
⬆ Sel. [↵] Confirm		

	<p><a href="#">Panasonic CZ-ANC3 On-Off Controller</a> [pdf] Instruction Manual CZ-ANC3 On-Off Controller, CZ-ANC3, On-Off Controller, Controller</p>
	<p><a href="#">Panasonic CZ-ANC3 ON/OFF Controller</a> [pdf] Instruction Manual CZ-ANC3, CZ-ANC3 ON-OFF Controller, ON-OFF Controller, Controller</p>

References

- [P Panasonic North America | Technologies that Move Us](#)