

CENTRAL REMOTE CONTROLLER INSTALLATION MANUAL



PART No. 9373328476-02
For authorized service personnel only.

[Original instructions]

Installation by end-users or not qualified persons can cause harm to personal safety, can cause severe damage to building and product, can lead to improper function or reduced lifetime of the equipment.

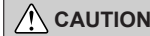
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1. SAFETY PRECAUTIONS

- The "SAFETY PRECAUTIONS" indicated in the manual contain important information pertaining to your safety. Be sure to observe them.
- For details of the operation method, refer to the operating manual.
- Request the user to keep the manual on hand for future use, such as for relocating or repairing the product.

	WARNING	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.		
Each terminal marked with (Protective earth mark) shall be securely connected to grounding.		
Perform installation work in accordance with the installation manual. Request an authorized service personnel to perform installation work. Do not install this product by yourself. Improper installation will cause injury, electric shock, fire, etc.		
Perform electrical work by an authorized service personnel in accordance with the installation manual and the electrical wiring regulations or implementation regulations of the country. Also do not install this product by yourself. Improper electric work will cause electric shock or a fire.		
In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel.		
Install a leakage circuit breaker to power supply cable in accordance with the related laws and regulations and electric company standards.		
Use a power source exclusively for this product. Never share the power source with indoor unit or other electrical equipment. Doing so will cause fire and electric shock.		
Do not install the product in the following areas: <ul style="list-style-type: none"> • Do not install the product near a source of heat, steam, or flammable gas. Otherwise, fire could result. • Area filled with mineral oil or containing a large amount of splashed oil or steam, such as a kitchen. It will deteriorate plastic parts, causing the parts to fall. • Area that generates substances that adversely affect the equipment, such as sulfuric gas, chlorine gas, acid, or alkali. It will cause corrosion on electronic components which may lead to failure and/or fire. • Area containing equipment that generates electromagnetic interference. It will cause the control system to malfunction, and cause erroneous operation. • Install the product in a well-ventilated place avoiding rains and direct sunlight. 		
Do not operate this product when your hands are wet. Touching the product with wet hands will cause an electric shock.		
When children can approach the product or touch the product, take preventive measures.		
Dispose of the packing materials safely. Tear and dispose of the plastic packing bags so that children cannot play with them. There is the danger of suffocation if children play with the original plastic bags.		



CAUTION

This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.

Pay abundant care when transporting this product because it is a precision device. Improper transportation will cause trouble.

Do not touch the switches with sharp objects. Doing so will cause injury, trouble, or electric shock.

Do not expose this product directly to water. Doing so will cause trouble, electric shock, or heating.

Do not set vessels containing a liquid on this product. Doing so will cause heating, fire, or electric shock.

2. PRODUCT SPECIFICATION

2.1. Main product and accessories

The following installation parts are supplied. Use them as required.

Name and Shape	Q'ty	Name and Shape	Q'ty
This product 	1	Screw (M4 × 16mm) For installing this product	4
Installation manual (This manual) 	1	Cable tie For binding power supply cable and transmission cable	4
Operating manual 	1		

2.2. Optional parts

The following options are available.

Description	Model	Application
External connect kit	UTY-XWZXZ7	For external input function (Dry contact terminal / CN12 and CN13)
	UTY-XWZXZ8	For external input function (Apply voltage terminal / CN14 and CN15)
	UTY-XWZXZA	For external output function (Output terminal / CN18)

3. ELECTRICAL REQUIREMENT

When connecting this product, use the following wiring.

Use	Size	Wire type
Power supply cable (for stranded wire)	Max.1.25 mm ² (16AWG)	Type60245 IEC57 or equivalent
	Min.0.8 mm ² (18AWG)	
Power supply cable (for solid wire)	Max.2.00 mm ² (14AWG)	—
	Min.0.8 mm ² (18AWG)	
Transmission cable	0.33mm ² (22AWG)	22AWG LEVEL 4 (NEMA) non-polar 2 core, twisted pair solid core diameter 0.65mm (0.03 in), shielded type
External input/output cable	0.33mm ² (22AWG)	2 core, twisted pair (Max. cable length : 25m (82ft.))
LAN cable	—	Category 5 or more straight cable

English

Deutsch

Français

Español

Italiano

Ελληνικά

Portugués

Русский

Türkçe

中文

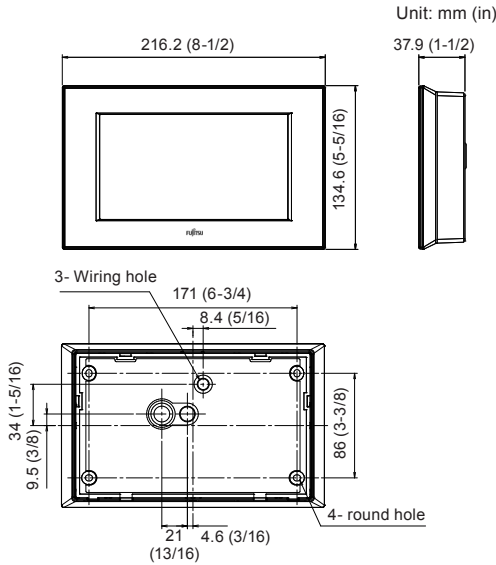
Use	Remark
Power supply cable	1Φ 50/60Hz 100-240V 2 wire + earth (ground) (Always earth (ground) the product)
Transmission cable	LONWORKS® compatible cable
External input/output cable	Use cable in accordance with local rules for cable
LAN cable	100BASE-TX support

* LONWORKS® is registered trademark of Echelon Corporation in the United States and other countries.

Breaker capacity	5 A
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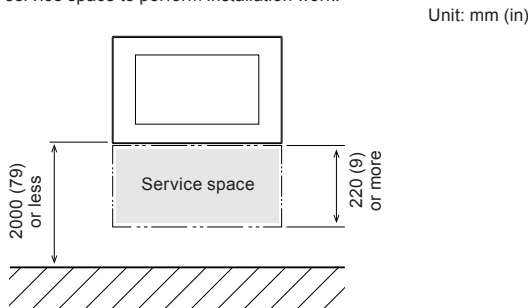
4. SELECTING AN INSTALLATION LOCATION

4.1. Dimensions



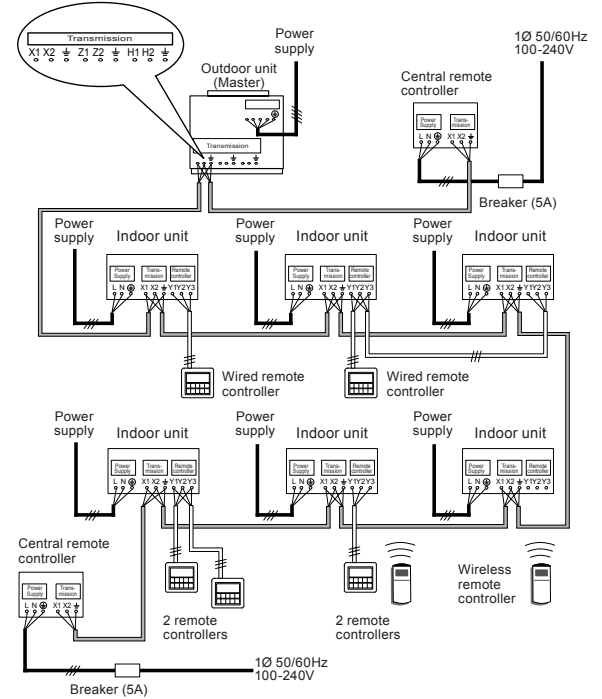
4.2. Installation space

Make a service space to perform installation work.



4.3. Wiring rules

- When wiring between the outdoor unit, indoor unit, and central remote controller, refer to the indoor unit and outdoor unit installation manuals.
- Always connect both ends of the earth (ground) connection of the transmission cable.
- Install all-pole circuit breaker to the easily accessible location.
- Circuit breaker has 3 mm or more contact gap and breaking capacity is 5 A.



- Wire the transmission cable to any one of the following:

- ① Transmission terminal block inside the indoor unit (Fig. 1)
- ② Terminal block for branch transmission cable (Procured at the site) (Fig. 2)
- ③ Transmission terminal block inside the outdoor unit (Fig. 3)

Fig. 1

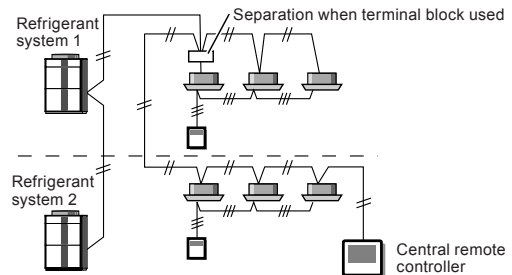


Fig. 2

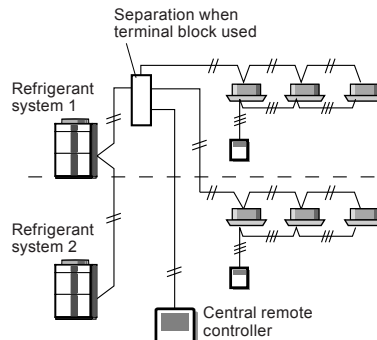
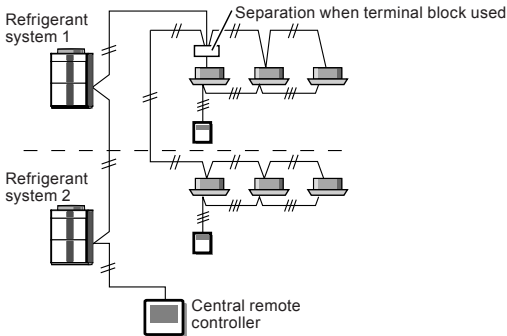


Fig. 3



5. INSTALLATION WORK

⚠ WARNING

Always use the accessories and specified installation work parts. Check the state of the installation parts. Not using the specified parts will cause products to fall off, water leakage, electric shock, fire, etc.

Install at a place that can withstand the weight of the product and install positively so that the product will not topple or fall.

When installing this product, make sure that there are no children nearby. Otherwise, injury or electric shock could result.

Before starting installation work, turn off the power of this product and the connection destination. Do not turn on the power again until installation is completed. Otherwise, it will cause electric shock or fire.

Use the specified power supply cable and connection cables. Do not modify power supply cable and connection cables other than those specified, do not use extension cables, and do not use independent branch wiring. The allowable current will be exceeded and cause electric shock or fire.

Install the connection cables securely to the terminal block. Confirm that external force is not applied to the cable. Use connection cables made of the specified cable. If intermediate connection or insertion fixing are imperfect, it will cause trouble, electric shock, fire, etc.

When connecting the cables to this product, route the cables so that the case of this product is securely fixed. If the case is imperfectly fixed, it may cause fire or overheating of the terminals.

Perform earth (ground) work securely. Do not connect the earth (ground) cable to a telephone earth (ground) cable, water pipe, or conductor rod. It will cause trouble or fire.

Always fasten cable sheath of the connection cable with the cable tie. If the cable sheath is chafed, electric discharge may occur.

Install a circuit breaker. Not installing a circuit breaker will cause electric shock or fire.

If any cable is damaged, do not repair or modify it yourself. Improper work will cause electric shock or fire.

⚠ CAUTION

Use an insulated screwdriver to set the DIP switches.

Before opening the case of this product, completely discharge static electricity charged on your body. Not doing so will cause trouble.

Do not touch the circuit board and circuit board parts directly with your hands. Otherwise, injury or electric shock could result.

Tightening the mounting screws too tight will damage the case of this product.

When the front case is removed by removing the front case fixing screws, be careful that the front case does not fall off. It will cause an injury.

Do not bind up the power supply cable together with the transmission cable. It will cause erroneous operation.

When performing wiring work, be careful not to damage the cable or injure yourself. Also, connect the connectors securely. Loose connectors will cause trouble, heating, fire, or electric shock.

Install the indoor and outdoor units, power supply cable, transmission cable and remote controller cable 1m (40 in) away from television and radio to avoid distorted images and noise. Otherwise, a malfunction could result.

When installing the transmission cable near a source of electromagnetic waves, use shielded cable. Otherwise, a breakdown or malfunction could result.

Perform wiring so that water does not enter this product along the external wiring. Always install a trap to the wiring or take other countermeasures. Otherwise it will cause trouble, electric shock, or fire.

Confirm the name of each terminal block of the product and connect the wiring in accordance with the directions given in the manual. Improper wiring work will damage the electric parts and cause smoke and fire.

5.1. Preparing for Installation

5.1.1 Strip of the cables

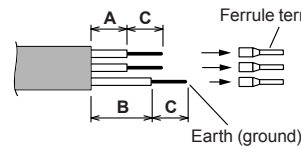
⚠ CAUTION

Strip length must be as specified.

■ Power supply cable

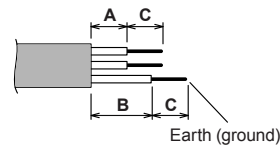
When using stranded wire type cable:

When stranded wire is used, connect the ferrule terminal (locally purchased) to the cable before use. When the ferrule terminal is connected to the cable, use a specialized tool.



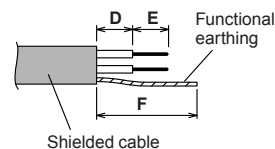
- A: 25 mm (1 in)
- B: 35 mm (1-3/8 in)
- C: Refer to the instruction manual of the using ferrule terminal.

When using solid wire type cable:



- A: 25 mm (1 in)
- B: 35 mm (1-3/8 in)
- C: 7 mm (1/4 in)

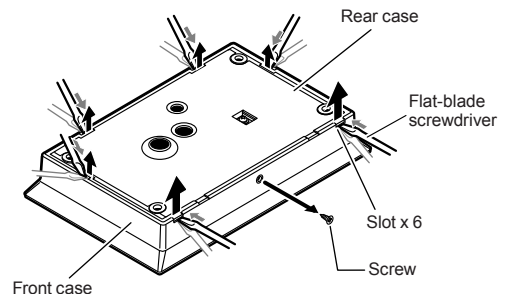
■ Transmission cable

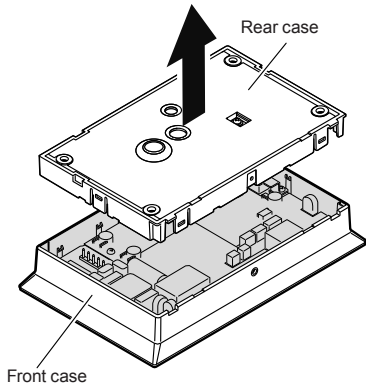


- D: 25 mm (1 in)
- E: 7 mm (1/4 in)
- F: 42 mm (1-5/8 in)

5.2. Removing parts

- (1) Remove the screw. (1 pc.)
- (2) Lift up the rear case while inserting the flat-blade screwdriver into the slots, and separate from the front case.

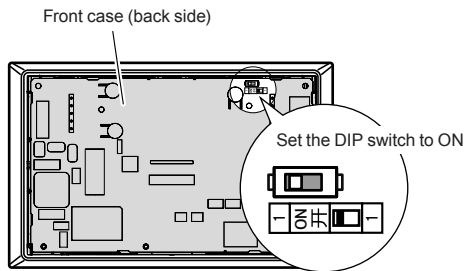




5.3. Setting the DIP switch

CAUTION

Use an insulated screwdriver to set the DIP switches. Do not touch the DIP switch with your hands.



DIP Switch		Details
OFF	ON	
★Disabled	Enabled	For enabling/disabling the backup function.

(★:Factory setting)

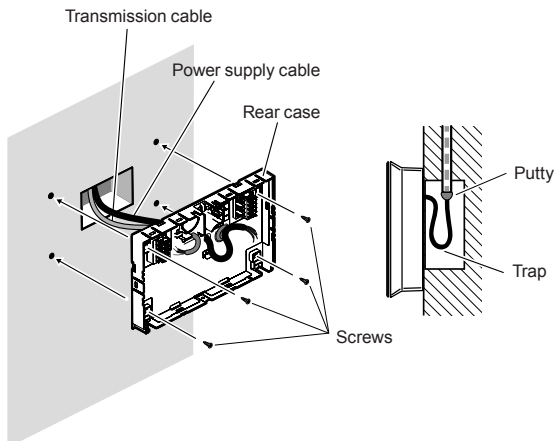
Before using this product, always set DIP switch to "ON". If not set, when the main power is turned on again, the set data by menu operation will be erased and cause erroneous operation.

[DIP Switch]

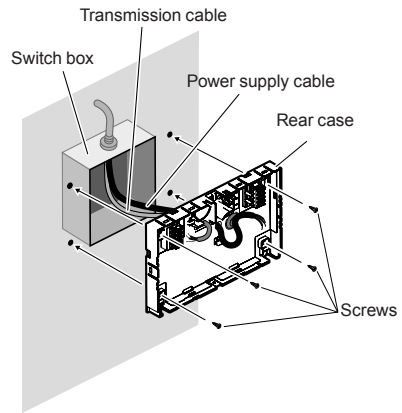
- When this switch is turned ON, the correct time is retained by the built-in battery even if the power is cut off due to power failure or maintenance.
- When shipped from the factory, this switch is OFF to prevent consumption of the battery charge.

5.4. Installing the rear case

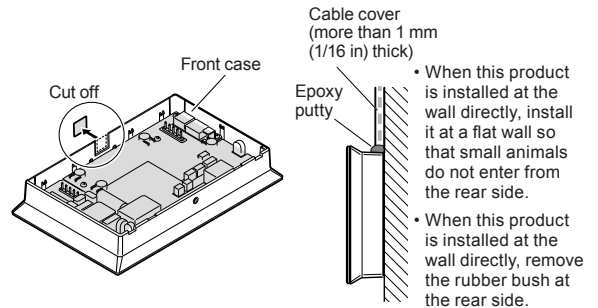
A. When the cable is in the wall:



B. When the cable is in the wall (switch box is used):



C. When the cable is along the wall:



5.5. Connecting the cable

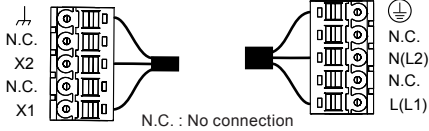
Connect the power supply cable and transmission cable. Fasten the cable with the cable tie.

Tighten the cable tie firmly so that pulling force does not propagate to the terminal connection even if force of 30 N is applied to the cable.

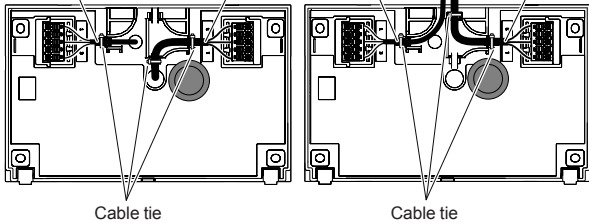
CAUTION

- Strip length must be specified dimension.
- Insert the cable deeply into the terminal.
- After the cable is inserted, check that the cable is not pulled out.
- Do not insert two or more cables at one hole of the power supply or transmission terminal block.
- Select a flexible cable that does not break the cable sheath even if you bind it with a cable tie around the cable sheath.
- Be careful to avoid breaking the cable by over-tightening the cable tie.

Transmission line terminal name Power supply line terminal name

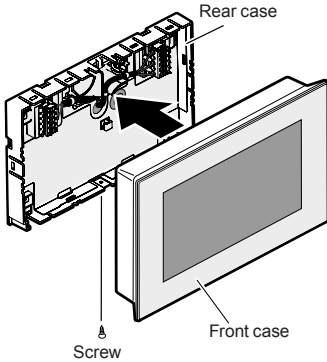


Transmission cable Power supply cable Transmission cable Power supply cable



5.6. Installing the front case

- (1) Install the front case to the rear case.
- (2) Install the screw (1 pc.) and fix the cases.



6. OPTIONAL INSTALLATION WORK

6.1. External Input/Output function

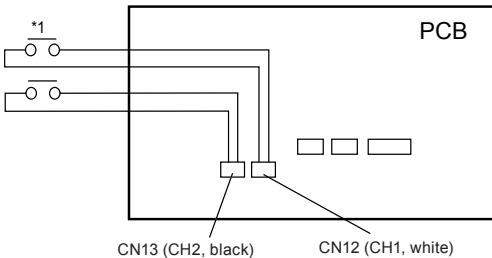
For connection cables, use the specified optional parts.

6.1.1 External input function

This function performs "Emergency stop" or "Batch start/stop(All On/All Off)" by using the signal to be input externally at external input terminals.
There are 2 kinds of input method of External input terminal: "Dry contact" or "Apply voltage contact".

6.1.2 Dry contact

When a power supply is unnecessary at the input device you want to connect, connect the connection cables to CN12(CH1) and CN13(CH2).



* Do not use the connectors other than specified connectors.

- *1. Short circuit detection resistance (R ON) : ≤ 500 (ohm).
Open circuit detection resistance (R OFF) : ≥ 100 (kilo-ohm).
- * A twisted pair cable (0.33mm² (22AWG)) should be used. Maximum length of cable is 25 m (82ft.).

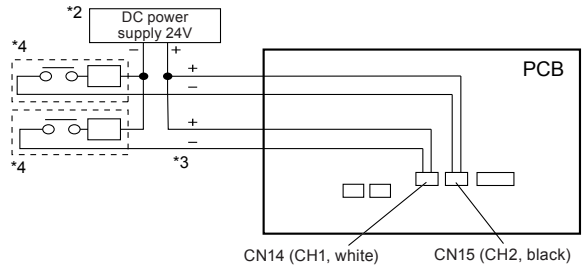
Input Method	Terminal	Input signal	Operation
Edge	CN12 (CH1)	Low→High	"Emergency stop" or "All On"
		High→Low	"Emergency stop"reset or "All Off"
Pulse	CN12 (CH1)	Low→High	"Emergency stop" or "All On"
	CN13 (CH2)	Low→High	"Emergency stop"reset or "All Off"

For "Operation" and "Input method" switching, perform the settings by "External Input Setting" of menu operation.
For details of setting method, refer to the operating manual.

"Operation"	"Emergency Stop" "All On/All Off" (Batch start/stop)
"Input Method"	"Edge" "Pulse"

6.1.3 Apply voltage contact

When a power supply must be provided at the input device, connect the connection cables to CN14(CH1) and CN15(CH2).



* Do not use the connectors other than specified connectors.

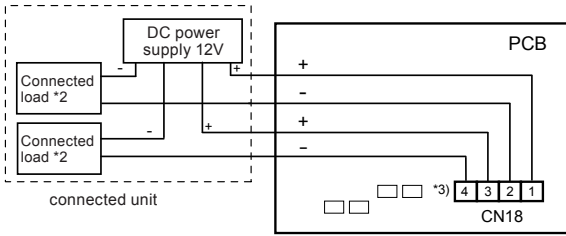
- *2. Make the power supply 24V. Select a power supply capacity with an ample surplus for the connected load.
- *3. Do not impress a voltage exceeding 24V across pin 1, 3.
- *4. The allowable current is DC5mA or less. (Recommended DC5mA)
Provide a load resistance such that the current becomes DC5mA or less.
A twisted pair cable (0.33mm² (22AWG)) should be used. Maximum length of cable is 25 m (82ft.).

Input Method	Terminal	Input signal	Operation
Edge	CN14 (CH1)	Low→High	"Emergency stop" or "All On"
		High→Low	"Emergency stop"reset or "All Off"
Pulse	CN14 (CH1)	Low→High	"Emergency stop" or "All On"
	CN15 (CH2)	Low→High	"Emergency stop"reset or "All Off"

For "Operation" and "Input method" switching, perform the settings by "External Input Setting" of menu operation.
For details of setting method, refer to the operating manual.

"Operation"	"Emergency Stop" "All On/All Off" (Batch start/stop)
"Input Method"	"Edge" "Pulse"

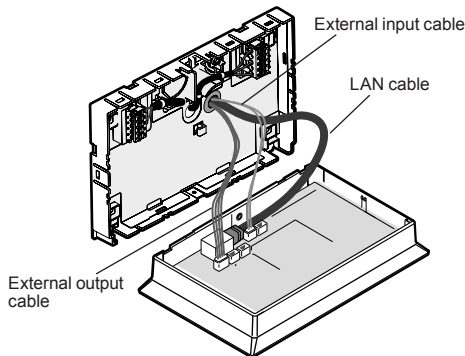
6.1.4 External output function



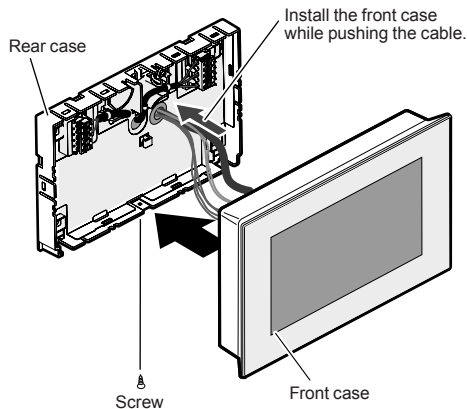
- *1. Provide a DC12V power supply. Select a power supply capacity with an ample surplus for the connected load. Do not impress a voltage exceeding 12V across pins 1-2, and 3-4
- *2. The allowable current is DC15mA or less. Provide a load resistance such that the current becomes DC15mA or less.
- *3. Polarity is [+] for pins 1,3 and [-] for pins 2,4.

Terminal	CH	pin	Condition
CN18	CH1	4	12V: 1 or more registered indoor units are operating.
		3	0V: All registered indoor units are stopped.
	CH2	2	12V: An error occurs somewhere in this product or registered indoor units and outdoor units.
		1	0V: This product and all registered indoor units and outdoor units are operating normally.

6.2. Connecting the external input/output cable and LAN cable



6.3. Installing the front case



7. TURN ON THE POWER

⚠ CAUTION

Check that the power supply voltage is within the specified range. If a power supply voltage outside the specification is input, it will cause trouble.

Recheck the wiring. Incorrect wiring will cause trouble.

After installation work is completed, check the following contents:

- (1) Is power supply cable and transmission cable wiring work complete?
- (2) Does the power supply match the rating of this product?
- (3) Turn on the power of this product. Since there is no power switch at this product, turn on the power by means of the power distribution panel (breaker).
- (4) If the following installer setting screen is displayed at the screen of this product, installation work is complete.

For setting and operating of the this product, refer to the operating manual.

* Since there is some kind of a problem when the installer setting screen does not appear, recheck the work contents.



8. INITIALIZATION PROCEDURE

After remote controller installation work is complete, perform initialization using the following procedures before starting to use the system. Perform the initial settings according to the screen instructions. For details, refer to the operating manual.

Initial settings

- (1) Language Setting
Sets the languages.
- (2) Panel Calibration
Calibrates the position of LCD panel.
- (3) Central Controller Address Setting
Sets the address of this controller.
- (4) Indoor Unit Registration
Registers the indoor unit.
- (5) Date Setting
Sets the date and time of the system.



Initialization end

NOTES:

If the power is turned off within 5 minutes of finishing the settings, the settings may not be saved.