

# INSTALLATION INSTRUCTIONS

## Panel for Cassette (ECONAVI type)

**Model No. CZ-KPU3AW**  
Applicable indoor unit : 4-Way Cassette



Read through the Installation Instructions before you proceed with the installation. In particular, you will need to read under the "IMPORTANT!" section at the top of the page.

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ACXF60-38210  
DC0719-0

### IMPORTANT! Please Read Before Starting

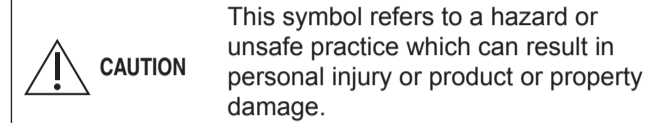
This air conditioner must be installed by the sales dealer or installer. This information is provided for use only by authorized persons.

**For safe installation and trouble-free operation, you must:**

- Carefully read this instruction booklet before beginning.
- Follow each installation or repair step exactly as shown.
- This air conditioner shall be installed in accordance with National Wiring Regulations.
- The product meets the technical requirements of EN/IEC 61000-3-3.
- Pay close attention to all warning and caution notices given in this manual.



**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.

#### If Necessary, Get Help

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.

#### In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

### SPECIAL PRECAUTIONS



**WARNING** When Wiring

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

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- 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.**

- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.
- Provide a power outlet to be used exclusively for each unit.
- Provide a power outlet exclusively for each unit, and full disconnection means having a contact separation by 3 mm in all poles must be incorporated in the fixed wiring in accordance with the wiring rules.
- To prevent possible hazards from insulation failure, the unit must be grounded.
- This equipment 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.

#### When Transporting

- It may need two or more people to carry out the installation work.
- Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

#### When Installing...

Select an installation location which is rigid and strong enough to support or hold the unit, and select a location for easy maintenance.

#### ...In a Room

Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.



**CAUTION** Keep the fire alarm and the air outlet at least 1.5 m away from the unit.

### 1. GENERAL

This booklet briefly outlines where and how to install the air conditioning system. Please read over the entire set of instructions for the indoor and outdoor units and make sure all accessory parts listed are with the system before beginning.

#### 1-1. Tools Required for Installation (not supplied)

1. Flathead screwdriver
2. Phillips head screwdriver
3. Knife or wire stripper
4. Tape measure
5. Carpenter's level
6. Sabre saw or keyhole saw
7. Hacksaw
8. Core bits
9. Hammer
10. Drill
11. Tube cutter
12. Tube flaring tool
13. Torque wrench
14. Adjustable wrench
15. Reamer (for deburring)

#### 1-2. Accessories Supplied

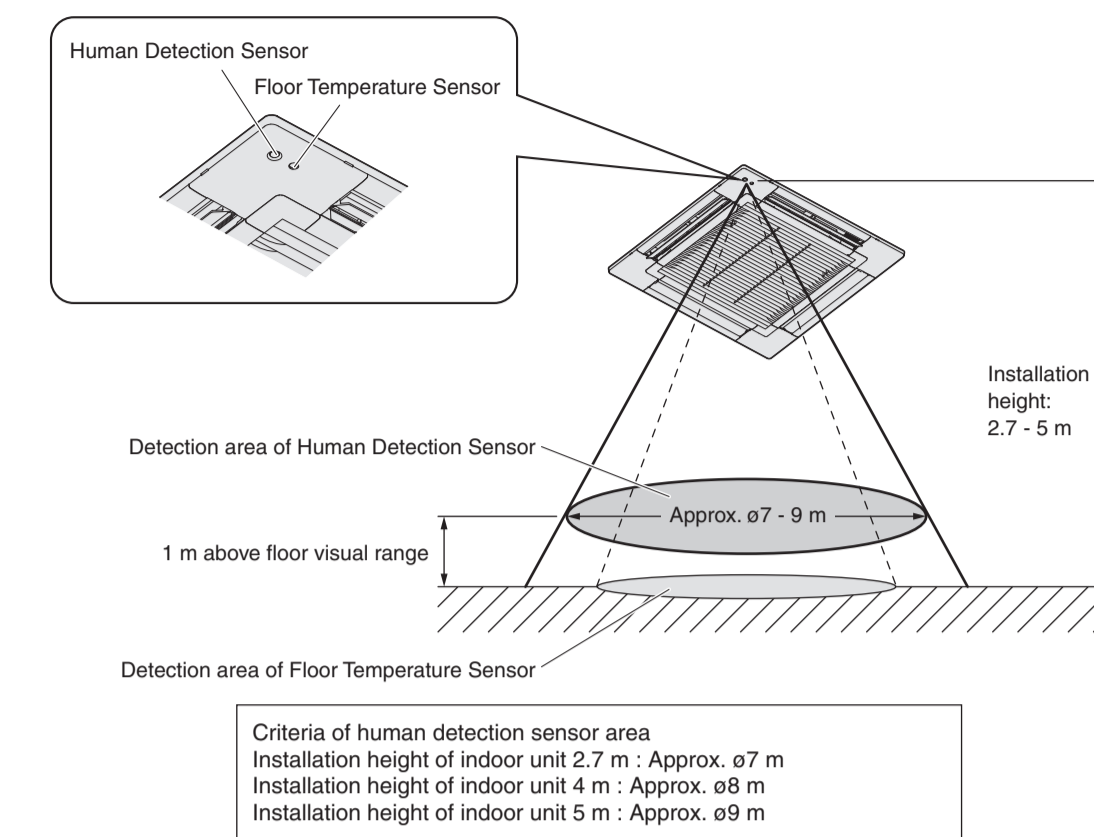
Part Name	Figure	Q'ty	Remarks
ECONAVI panel		1	ECONAVI type
Screw		4	4 x 12
Operating Instructions		1	
Installation Instructions		1	

Since the accessories need for installation work, do not dispose of them until the unit of work is complete.

### 2. CAUTION ON INSTALLATION

#### 2-1. Criteria for Human Detection Area

- A place where the blind angle of the Human Detection Sensor cannot detect human. Install the panel for cassette (ECONAVI type) so that human motion can be detected.
- If there is a heat source or cooling unit in the detection area, the sensor cannot occasionally detect properly.
- The Floor Temperature Sensor detects within the sensor area of Human Detection Sensor.



Do not install at the following locations. (Cause of trouble and malfunction)

- Humid, oily, frequent vibration
- Direct sunlight and near by heat source
- Frost

**...In Moist or Uneven Locations**  
Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

**...In an Area with High Winds**  
Securely anchor the outdoor unit down with bolts and a metal frame. Provide a suitable air baffle.

**...In a Snowy Area (for Heat Pump-type Systems)**  
Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

**...In laundry rooms**  
Do not install in laundry rooms. Indoor unit is not drip proof.

#### When Servicing

- Contact the sales dealer or service dealer for a repair.
- Be sure to turn off the power before servicing.
- Turn the power OFF at the main power box (mains), wait at least 5 minutes until it is discharged, then open the unit to check or repair electrical parts and wiring.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit.

#### WARNING

- This product must not be modified or disassembled under any circumstances. Modified or disassembled unit may cause fire, electric shock or injury.
- Do not clean inside the indoor and outdoor units by users. Engage authorized dealer or specialist for cleaning.
- In case of malfunction of this appliance, do not repair by yourself. Contact the sales dealer or service dealer for a repair and disposal.

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#### CAUTION

- Ventilate any enclosed areas when installing or testing the refrigeration system. Leaked refrigerant gas, on contact with fire or heat, can produce dangerously toxic gas.
- Confirm after installation that no refrigerant gas is leaking. If the gas comes in contact with a burning stove, gas water heater, electric room heater or other heat source, it can cause the generation of toxic gas.

#### Others

#### WARNING

- Do not sit or step on the unit, you may fall down accidentally.

#### CAUTION

- Do not touch the air inlet or the sharp aluminum fins of the outdoor unit. You may get injured.
- Do not stick any object into the FAN CASE. You may be injured and the unit may be damaged.

#### NOTICE

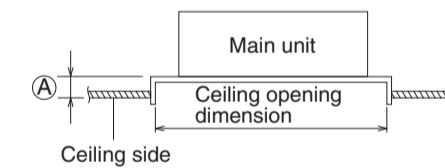
- Do not install at the following locations. Humid, oily, frequent vibration, direct sunlight, nearby heat source, frost (Cause of trouble) Noise occurrence (Cause of malfunction)
- Panel for cassette (ECONAVI type) is only for indoor use.
- Do not scratch the surface of the sensor. (Cause of detected error)
- Do not press the sensor forcibly. (Cause of damage)
- If any heating or cooling sources exists within the detection area, the sensor may sometimes cannot detect correctly.
- Do not wipe with benzine, thinner or disposal cloth. (Cause of discoloration or deformation) In case of heavy dirt, mix a tiny amount of neutral detergent with water and soak it into a soft cloth, squeeze well and gently wipe off the dirt. Then, wipe with a soft dry cloth.
- Do not install improper optional parts simultaneously with the Panel for cassette (ECONAVI type). (Cause of malfunction) See the catalogue and confirm whether a combination use is valid or invalid.
- The movement of human body on the opposite side of the mirror cannot be detected.
- After actuation, it takes 2 to 5 minutes to verify the judgment of presence and absence.

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### 3. HOW TO INSTALL THE PANEL FOR CASSETTE (ECONAVI TYPE)

#### 3-1. Preparation for Panel for Cassette Installation

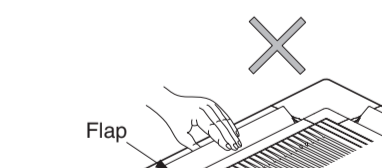
- (1) Checking the unit position
  - 1) Check that the ceiling hole is within this range: 860 x 860 mm to 910 x 910 mm
  - 2) Confirm that the position of the indoor unit and the ceiling as shown in the diagram. If the positions of the ceiling surface and unit do not match, air leakage, water leakage, flap operation failure, or other problems may occur.



A : Be sure to necessarily make a space within the range of 12 ~ 17 mm. If not within this range, malfunction or other trouble may occur.

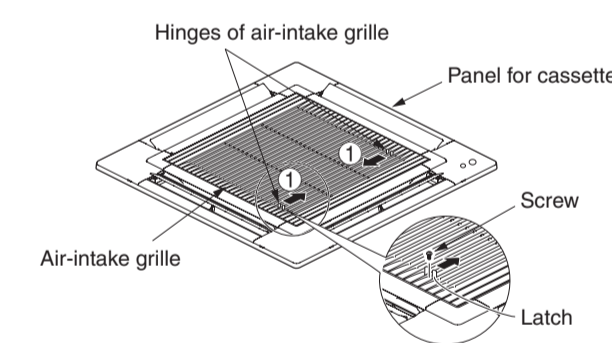
#### CAUTION

- Never place the panel face-down. Either hang it vertically or place it on top of a projecting object. Placing it face-down will damage the surface.
- Do not touch the flap or apply force to it. (This may cause flap malfunction.)

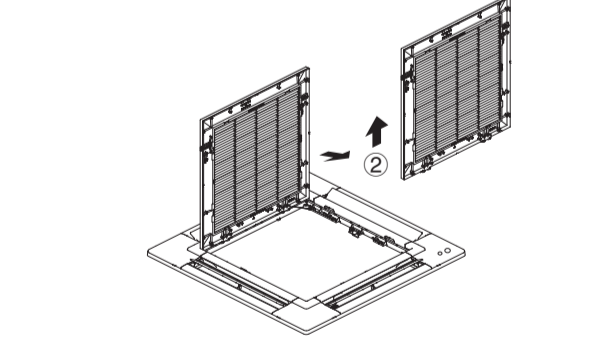


#### 3-2. How to Install the Panel for Cassette

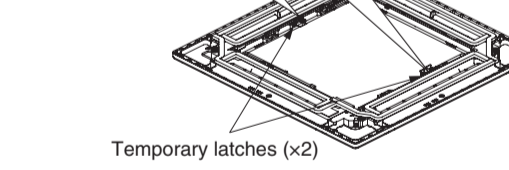
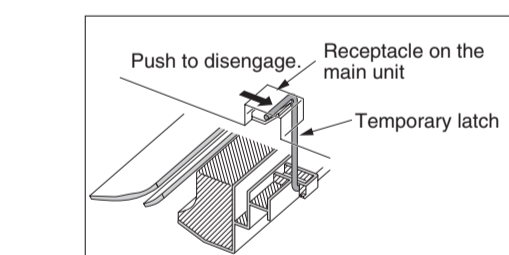
- (1) Removing the air-intake grille
  - 1) Remove the 2 screws on the latch of the air-intake grille. (Reattach the air-intake grille after installation of the panel for cassette.)
  - 2) Slide the air-intake grille catches in the direction shown by the arrows ① to open the grille.



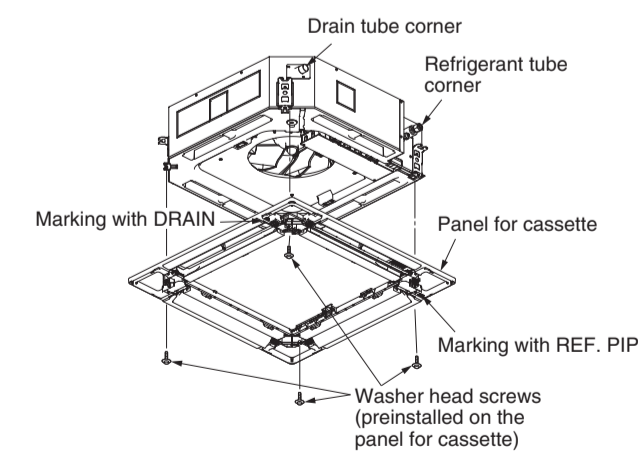
- (2) Removing the corner cover
  - 1) Push the latches on the corner cover in the direction of the arrow ① and remove them by sliding in the direction of the arrow ②.



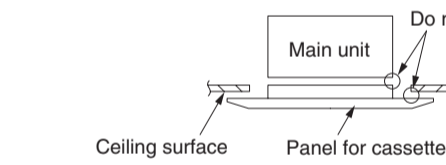
- (3) Installing the panel for cassette
  - 1) Hang the temporary latches on the inside of the panel for cassette to the receptacle on the unit to temporarily attach the panel for cassette in place.
  - The panel for cassette must be installed in the correct direction relative to the unit. Align the REF. PIPE and DRAIN marks on the panel for cassette corner with the correct positions on the unit.
  - When removing the panel for cassette, push the temporary latches outward while holding the panel for cassette.



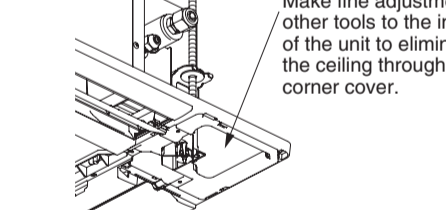
- 2) Align the panel installation holes and the unit screw holes.
- 3) Tighten the provided washer head screws at the 4 panel installation locations so that the panel is attached tightly to the ceiling.



- 4) Check that the panel is attached tightly to the ceiling.
  - At this time, make sure that there are no gaps between the unit and the panel for cassette, or between the panel for cassette and the ceiling surface.

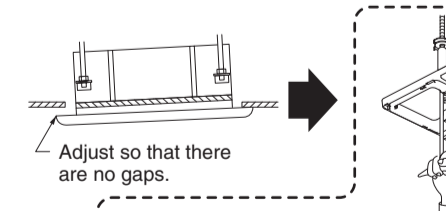


- If there is a gap between the panel and the ceiling, leave the panel for cassette attached and make fine adjustments to the installation height of the unit to eliminate the gap with the ceiling.



#### CAUTION

- If the screws are not sufficiently tightened, trouble such as that shown in the figure below may occur. Be sure to tighten the screws securely.
- If a gap remains between the ceiling surface and the panel for cassette even after the screws are tightened, adjust the height of the unit again.

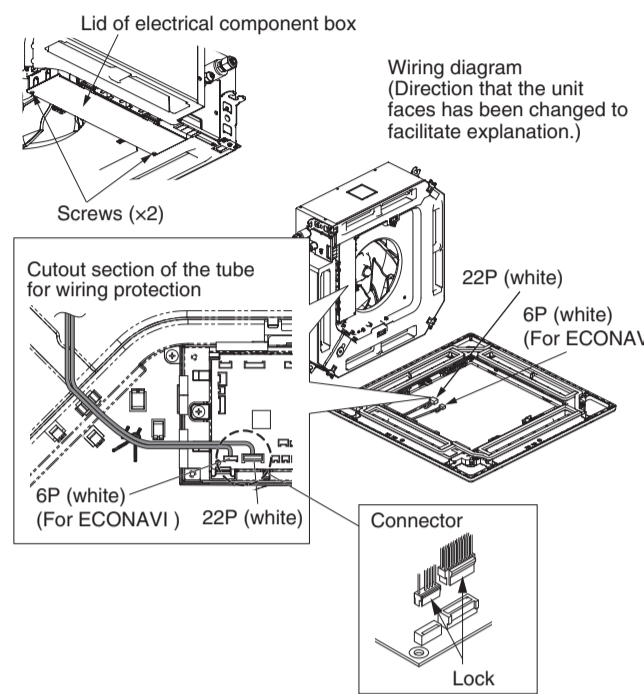


If there is no affect to the horizontal of the unit and drain tube, adjustment to the installation height of the unit can be made through the hole of the panel for cassette corner.

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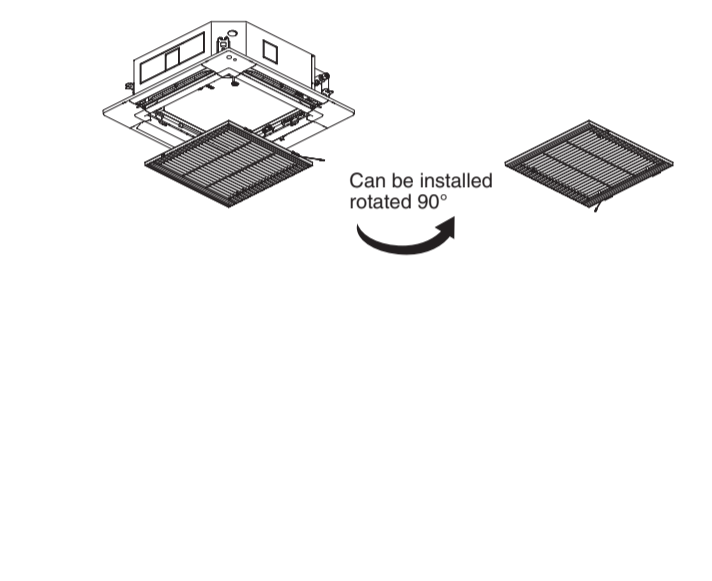
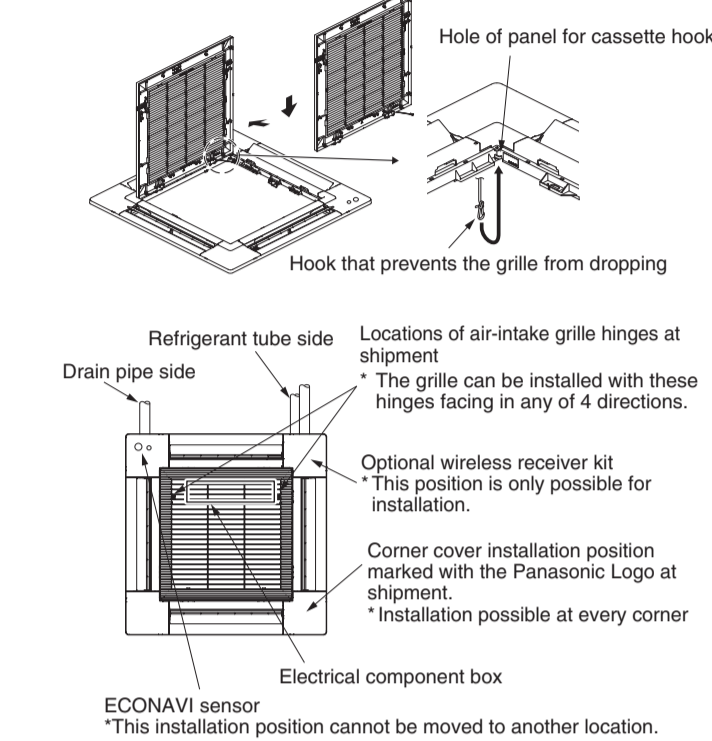
8

- 4) Wiring the Panel for Cassette
- Open the cover of the electrical component box for control PCB.
  - Connect the 22P connector (white) and 6P connector (white) from the panel for cassette to the connector on the control PCB in the unit electrical component box. In this case, expose the cutout section of the tube for the wiring protection to the outside from the electrical component box and fix it with the clamp attached to the electrical component box.
  - Insert connector lock facing PCB edge until it is locked in place. (If not connected completely, the Auto Flap will not operate and "P09" is displayed on the remote controller. When the connector plugged in the wrong direction, parts on the PCB may be damaged.)
  - Check that the wiring connector is not caught between the electrical component box and the cover.
  - Check that the wiring connector is not caught between the unit and the panel for cassette.

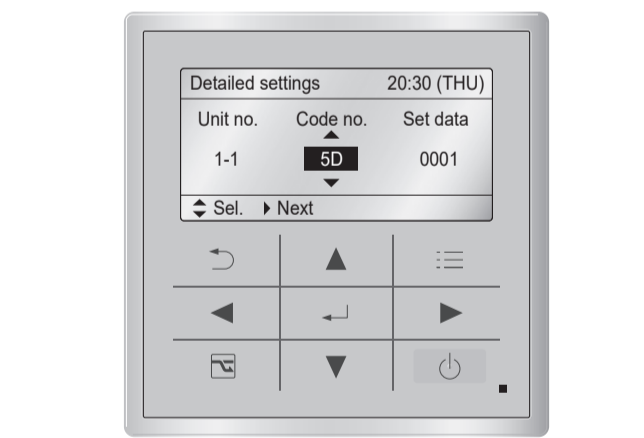


- 5) How to Attach the Corner & Air-Intake Grille
- A. Attaching the corner cover**
- Check that the safety cord from the corner cover is fastened to the panel for cassette pin, as shown in the figure below.
  - Use the supplied screws to attach the corner cover to the panel for cassette.
- 
- Place the corner cover so that the 5 tabs fit into the holes in the panel for cassette. Then fasten it in place with the supplied screws.

- B. Attaching the air-intake grille**
- To install the air-intake grille, follow the steps for "Removing the grille" in the reverse order. By rotating the air-intake grille, it is possible to attach the grille onto the panel for cassette from any of 4 directions. Coordinate the directions of the air-intake grilles when installing multiple units, and change the directions according to customer's requests.
  - When attaching the air-intake grille, be careful that the flap lead wire does not become caught.
  - Be sure to attach the safety cord that prevents the air-intake grille from dropping off to the panel for cassette unit as shown in the figure below.
  - With this panel for cassette, the directions of the air-intake grille lattices when installing multiple units, and the position of the label showing the company name on the corner panel, can be changed according to customer's requests, as shown in the figure below. However, the wireless signal receiver can only be installed at the refrigerant-tubing corner of the ceiling unit.



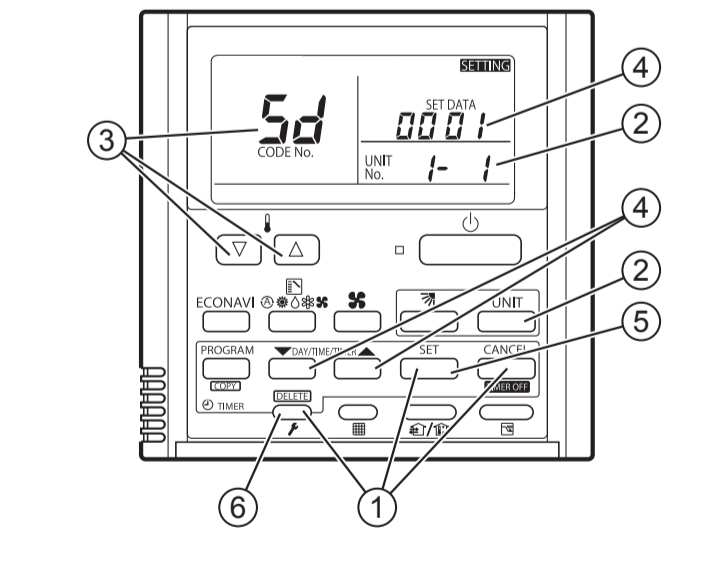
- Select the "Unit no." by pressing the  $\blacktriangledown$  or  $\blacktriangle$  button for changes.
- 
- Select the "Code no." by pressing the  $\blacktriangle$  or  $\blacktriangledown$  button. Change the "Code no." to "5D" by pressing the  $\blacktriangledown$  or  $\blacktriangle$  button (or keeping it pressed).



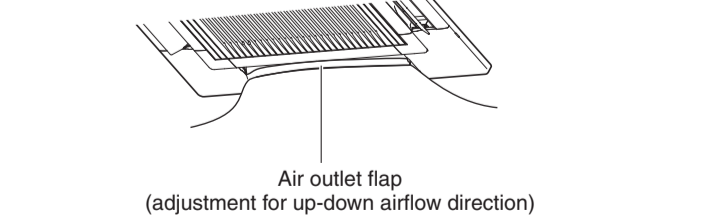
- Select the "Set data" by pressing the  $\blacktriangle$  or  $\blacktriangledown$  button. Select one of the "Set data" in "Table for DC Fan Motor Tap Settings" by pressing the  $\blacktriangledown$  or  $\blacktriangle$  button. Then press the  $\rightarrow$  button.
- 

- Press the  $\rightarrow$  button. The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display. Select "YES" and press the  $\rightarrow$  button.
- 
- If you wish to change the selected indoor unit, follow the step 2).

- <Procedure of CZ-RTC4>**  
Stop the system before performing these steps.
- Press and hold the  $\rightarrow$ ,  $\blacktriangle$ , and  $\blacktriangledown$  buttons simultaneously for 4 seconds or longer.
  - If group control is in effect, press the  $\rightarrow$  button to set. At this time, the fan at the indoor unit begins and select the address (unit No.) of the indoor unit operating.
  - Designate the item code 5d by adjusting the Temperature Setting  $\blacktriangledown$ / $\blacktriangle$  buttons.
  - Press the timer time  $\rightarrow$ / $\leftarrow$  buttons to select the desired setting data.
  - Press the  $\rightarrow$  button. (The display stops blinking and remains lit, and setting is completed.) If you wish to change the selected indoor unit, follow the step 2).
  - Press the  $\rightarrow$  button to return to normal remote controller display.



- 4) Setting the Flap Separately
- The 4-air outlet flap can be adjusted separately during operation. When not adjusted separately, all flaps operate in the same manner.



- 3-3. Others**
- Checking After Installation
    - Check that there are no gaps between the unit and the panel for cassette, or between the panel for cassette and the ceiling surface.
      - \* Gaps may cause water leakage and condensation.
    - Check that the wiring is securely connected.
      - \* If it is not securely connected, the auto flap will not operate.
      - (\*P09" is displayed on the remote controller.)
      - In addition, the water leakage and condensation may occur.
  - Operating the Wireless Remote Controller
 

For details of installation, refer to the section "Wireless Signal Receiver" in the supplied installation instructions.
  - Selecting DC Fan Motor Tap (4-Way Cassette)
 

Check the optional parts accordingly in the following table.

**Table for DC Fan Motor Tap Settings\*1**

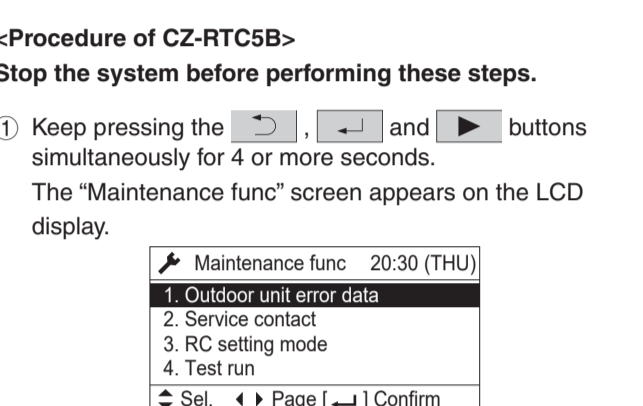
Setting No.	Remote controller setting data Item code 5d	Contents & optional parts name
(1)	0001	Air-flow blocking kit (for 3-way air flow) Air-flow blocking kit (when a duct is connected) High-ceiling setting 1
(3)	0003	High-ceiling setting 2
(6)	0006	Air-flow blocking kit (for 2-way air flow)

\*1 Refer to the Installation Instructions attached to the indoor unit for details.

- When setting on the P.C. Board
 

**<Procedure>**  
Stop the system before performing these steps.

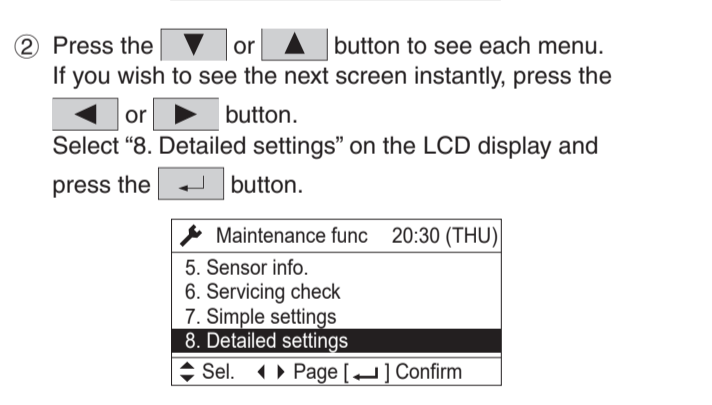
  - Open the electrical component box cover, then check the indoor unit control PCB.
  - Change the DIP switch on the indoor unit control PCB in accordance with the setting number which was confirmed in Table for DC Fan Motor Tap Settings.



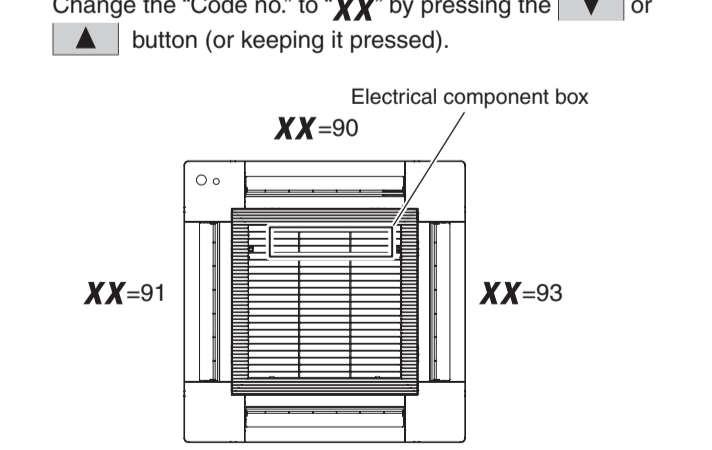
- <Procedure of CZ-RTC5B>**  
Stop the system before performing these steps.
- Keep pressing the  $\blacktriangledown$ ,  $\blacktriangle$ , and  $\rightarrow$  buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.
  - Press the  $\blacktriangledown$  or  $\blacktriangle$  button to see each menu. If you wish to see the next screen instantly, press the  $\blacktriangle$  or  $\blacktriangledown$  button. Select "8. Detailed settings" on the LCD display and press the  $\rightarrow$  button.

The "Detailed settings" screen appears on the LCD display.

- <Procedure of CZ-RTC5B>**  
Stop the system before performing these steps.
- Keep pressing the  $\blacktriangledown$ ,  $\blacktriangle$ , and  $\rightarrow$  buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.
  - Press the  $\blacktriangledown$  or  $\blacktriangle$  button to see each menu. If you wish to see the next screen instantly, press the  $\blacktriangle$  or  $\blacktriangledown$  button. Select "8. Detailed settings" on the LCD display and press the  $\rightarrow$  button.



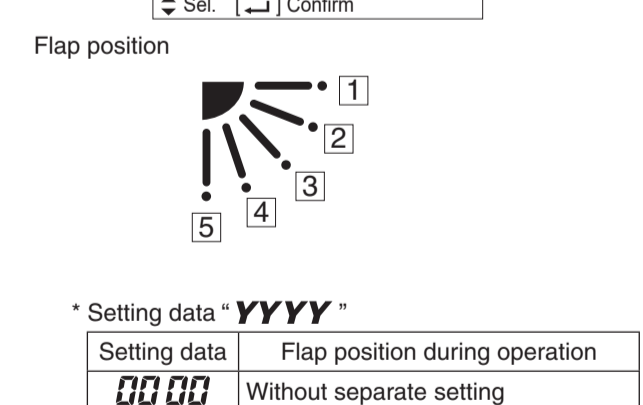
- Select the "Unit no." by pressing the  $\blacktriangledown$  or  $\blacktriangle$  button for changes.
- Select the "Code no." by pressing the  $\blacktriangle$  or  $\blacktriangledown$  button. Change the "Code no." to "XX" by pressing the  $\blacktriangledown$  or  $\blacktriangle$  button (or keeping it pressed).



- Press the  $\rightarrow$  button. The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display. Select "YES" and press the  $\rightarrow$  button.



- Select the "Set data" by pressing the  $\blacktriangle$  or  $\blacktriangledown$  button. Select one of the Setting Data "YYYY" by pressing the  $\blacktriangledown$  or  $\blacktriangle$  button. Then press the  $\rightarrow$  button.

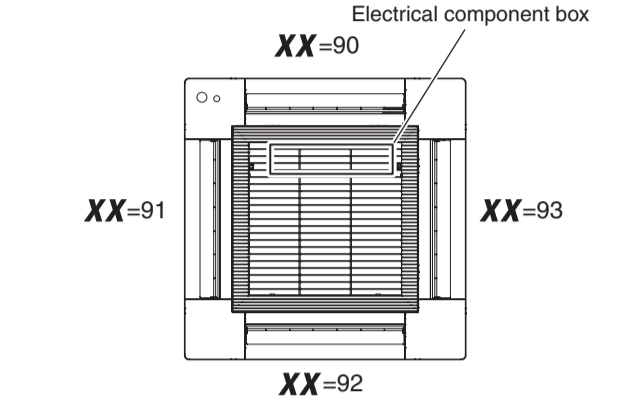


- \* Setting data "YYYY"
- | Setting data | Flap position during operation |
|--------------|--------------------------------|
| 0000         | Without separate setting       |
| 0001         | Swing                          |
| 0002         | Move to position [1] and stay  |
| 0003         | Move to position [2] and stay  |
| 0004         | Move to position [3] and stay  |
| 0005         | Move to position [4] and stay  |
| 0006         | Move to position [5] and stay  |
- NOTE**  
The flap swings during the operation under "Setting the Flap Separately". At this time, the unselected flaps are moved to the position [1].

- Press the  $\rightarrow$  button. The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display. Select "YES" and press the  $\rightarrow$  button.

- 
- If you wish to change the selected indoor unit, follow the step 2).

- <Procedure of CZ-RTC4>**  
Stop the system before performing these steps.
- Press and hold the  $\rightarrow$ ,  $\blacktriangle$ , and  $\blacktriangledown$  buttons simultaneously for 4 seconds or longer.
  - If group control is in effect, press the  $\rightarrow$  button to set. At this time, the fan at the indoor unit begins and select the address (unit No.) of the indoor unit operating.
  - Designate the item code "XX" by adjusting the Temperature Setting  $\blacktriangledown$ / $\blacktriangle$  buttons.



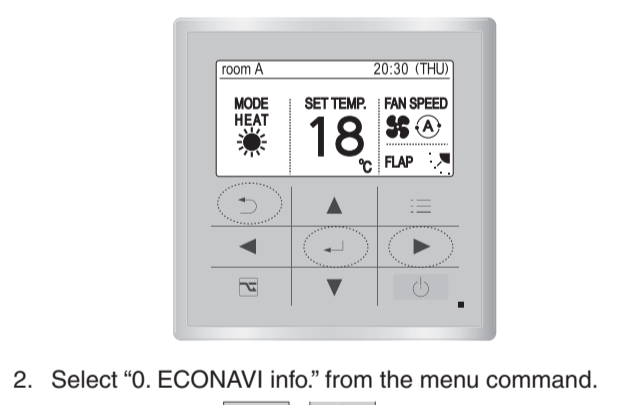
- Press the timer time  $\rightarrow$ / $\leftarrow$  buttons to select the desired setting data.
- 

\* Setting data "YYYY"

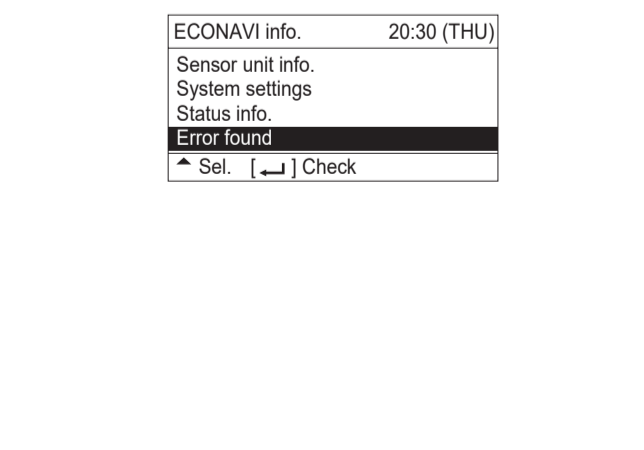
Setting data	Flap position during operation
0000	Without separate setting
0001	Swing
0002	Move to position [1] and stay
0003	Move to position [2] and stay
0004	Move to position [3] and stay
0005	Move to position [4] and stay
0006	Move to position [5] and stay

**NOTE**  
The flap swings during the operation under "Setting the Flap Separately". At this time, the unselected flaps are moved to the position [1].

- 5. ECONAVI TEST OPERATION**
- Preparation: Refer to the manuals of the indoor unit and turn on the main power switch in advance. Human detection cannot be made for approx. 90 seconds when switched on the power because the human detection sensor is set in initial setup.
- Press three buttons. Keep pressing the  $\rightarrow$ ,  $\blacktriangle$ , and  $\blacktriangledown$  buttons simultaneously for more than 4 seconds. The "Maintenance func" menu appears on the screen.



- Select "0. ECONAVI info." from the menu command. By pressing the  $\blacktriangledown$ / $\blacktriangle$  buttons, select "0. ECONAVI info." and press the  $\rightarrow$  button.
- Select "Error found" from the menu command. By pressing the  $\blacktriangledown$ / $\blacktriangle$  buttons, select "Error found" and press the  $\rightarrow$  button.



- Press the  $\rightarrow$  button. The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display. Select "YES" and press the  $\rightarrow$  button.

- Press the  $\rightarrow$  button. (The display stops blinking and remains lit, and setting is completed.) If you wish to change the selected indoor unit, follow the step 2).
  - Press the  $\rightarrow$  button to return to normal remote controller display.
- 

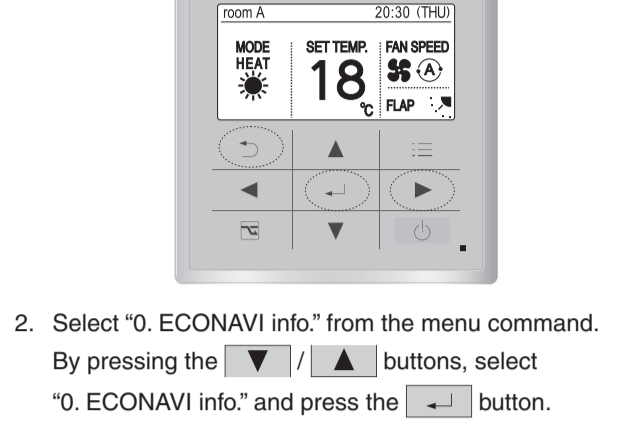


\* Setting data "YYYY"

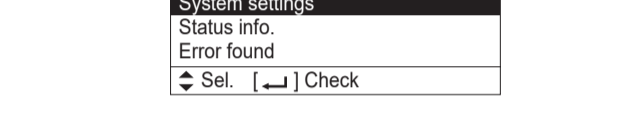
Setting data	Flap position during operation
0000	Without separate setting
0001	Swing
0002	Move to position [1] and stay
0003	Move to position [2] and stay
0004	Move to position [3] and stay
0005	Move to position [4] and stay
0006	Move to position [5] and stay

**NOTE**  
The flap swings during the operation under "Setting the Flap Separately". At this time, the unselected flaps are moved to the position [1].

- 4. ECONAVI SYSTEM SETTING**
- Change the settings of main and sub indoor units to correspond to the ECONAVI system function. For the benefit of using the ECONAVI function, the main indoor unit should be provided with the ECONAVI function.
- Press three buttons. Keep pressing the  $\rightarrow$ ,  $\blacktriangle$ , and  $\blacktriangledown$  buttons simultaneously for more than 4 seconds. The "Maintenance func" menu appears on the screen.



- Select "0. ECONAVI info." from the menu command. By pressing the  $\blacktriangledown$ / $\blacktriangle$  buttons, select "0. ECONAVI info." and press the  $\rightarrow$  button.
- Select "System settings" from the menu command. By pressing the  $\blacktriangledown$ / $\blacktriangle$  buttons, select "System settings" and press the  $\rightarrow$  button.

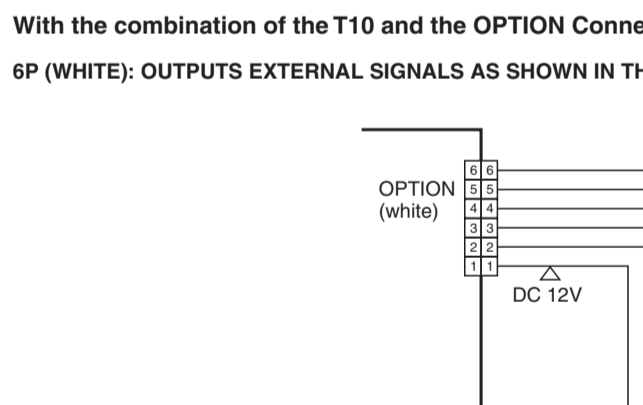


**NOTE**

Display message	Contents
Disabled in default mode.	After a while, select "0. ECONAVI info." again. If no status changes even after 10 minutes, make auto address setting and then select "0. ECONAVI info.".

Display message	Contents
Setup is not required.	The main indoor unit has already been provided with the ECONAVI function. So, it works right out of the box.
Main indoor unit is not found.	The power of indoor unit may possibly shut down. Check the power supply of indoor unit.
Indoor unit with ECONAVI is not found.	Since all indoor units in the group control are not available for the ECONAVI function, the ECONAVI function cannot be used.

- 6. EXTERNAL DEVICE INTERLOCK**
- Example of wiring: This is an example of the combination systems which extract optional output signal by the service wire and relay (field supply). When actuating the external device interlock, use the thermostat signal.
- OPTION Connector (CN060) Output external signals**
- PAW-OCT: Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-OCT to enable an easy connection to this OPTION Connector (CN060).



- With the combination of the T10 and the OPTION Connector (CN060) an external control of the I\_U is possible!
- 6P (WHITE): OUTPUTS EXTERNAL SIGNALS AS SHOWN IN THE FIGURE BELOW.
- Note: The relay must be installed at a distance of 2 m or less from the PCB.

- NOTE**
- The external output signal from the air conditioner is supplied for the purpose of controlling the external devices. If the air conditioner does not operate, take measures that the movement of external connecting devices can transfer to the safety zone in advance.
  - The external output signal from the air conditioner is turned off when the blackout occurs. If any special considerations are needed in case of blackout, provide an external circuit.