

# **SERVICE MANUAL & TEST RUN SERVICE MANUAL**

# **VRF SYSTEMS INDOOR UNIT**





4-Way Cassette (Type U2)



Ceiling (Type T2)



Low Silhouette Ducted (Type F2)

#### Indoor Unit

	Туре	15	22	28	36	45	56	60	73	90	106	140	160
U2	4-Way Cassette		S-22MU2E5A	S-28MU2E5A	S-36MU2E5A	S-45MU2E5A	S-56MU2E5A	S-60MU2E5A	S-73MU2E5A	S-90MU2E5A	S-106MU2E5A	S-140MU2E5A	S-160MU2E5A
U1	4-Way Cassette		S-22MU1E5A	S-28MU1E5A	S-36MU1E5A	S-45MU1E5A	S-56MU1E5A	S-60MU1E5A	S-73MU1E5A	S-90MU1E5A	S-106MU1E5A	S-140MU1E5A	S-160MU1E5A
Y2	4-Way Cassette 60×60	S-15MY2E5A	S-22MY2E5A	S-28MY2E5A	S-36MY2E5A	S-45MY2E5A	S-56MY2E5A						
F2	Low Silhouette Ducted	S-15MF2E5A	S-22MF2E5A S-22MF2E5A8	S-28MF2E5A S-28MF2E5A8	S-36MF2E5A S-36MF2E5A8	S-45MF2E5A S-45MF2E5A8	S-56MF2E5A S-56MF2E5A8	S-60MF2E5A S-60MF2E5A8	S-73MF2E5A S-73MF2E5A8	S-90MF2E5A S-90MF2E5A8	S-106MF2E5A S-106MF2E5A8	S-140MF2E5A S-140MF2E5A8	S-160MF2E5A S-160MF2E5A8
Т2	Ceiling				S-36MT2E5A	S-45MT2E5A	S-56MT2E5A		S-73MT2E5A		S-106MT2E5A	S-140MT2E5A	
К2	Wall Mounted	S-15MK2E5A	S-22MK2E5A	S-28MK2E5A	S-36MK2E5A								
К1	Wall Mounted					S-45MK1E5A	S-56MK1E5A		S-73MK1E5A		S-106MK1E5A		
M1	Slim Low Static Ducted	S-15MM1E5A	S-22MM1E5A	S-28MM1E5A	S-36MM1E5A	S-45MM1E5A	S-56MM1E5A						

#### Indoor Unit

	Туре	180	224	280
E2	High Static Pressure Ducted	S-180ME2E5	S-224ME2E5	S-280ME2E5

#### Connectable outdoor unit lineup

This document is the Service Manual of the indoor unit. For outdoor unit, refer to the Service Manual of the outdoor unit.

#### For Europe

Туре	Outdoor Unit Type	4 hp	5 hp	6 hp	8 hp	10 hp
ME1	2WAY VRF System				U-8ME1E81	U-10ME1E81
MF2	3WAY VRF System				U-8MF2E8	U-10MF2E8
	Mini VRF System	U-4LE1E5	U-5LE1E5	U-6LE1E5		
		U-4LE1E8	U-5LE1E8	U-6LE1E8		
Туре	Outdoor Unit Type	12 hp	14 hp	16 hp	18 hp	20 hp
ME1	2WAY VRF System	U-12ME1E81	U-14ME1E81	U-16ME1E81	U-18ME1E81	U-20ME1E81
MF2	3WAY VRF System	U-12MF2E8	U-14MF2E8	U-16MF2E8		

#### For Oceania

Туре	Outdoor Unit Type	4 hp	5 hp	6 hp	8 hp	10 hp
					U-8ME1R8	U-10ME1R8
ME1	2WAY VRF System				U-8ME1R8B	U-10ME1R8B
					U-8ME1R8BE*	U-10ME1R8BE*
					U-8MF2R7	U-10MF2R7
MF2	3WAY VRF System				U-8MF2R7B	U-10MF2R7B
					U-8MF2R7BE*	U-10MF2R7BE*
		U-4LE1R5	U-5LE1R5	U-6LE1R5		
		U-4LE1R5E*	U-5LE1R5E*	U-6LE1R5E*		
	IVIIIII VHF System	U-4LE1R8	U-5LE1R8	U-6LE1R8		
		U-4LE1B8E*	U-5LE1B8E*	U-6LE1B8E*		

Туре	Outdoor Unit Type	12 hp	14 hp	16 hp	18 hp	20 hp
	2WAY VRF System	U-12ME1R8	U-14ME1R8	U-16ME1R8	U-18ME1R8	U-20ME1R8
ME1		U-12ME1R8B	U-14ME1R8B	U-16ME1R8B	U-18ME1R8B	U-20ME1R8B
		U-12ME1R8BE*	U-14ME1R8BE*	U-16ME1R8BE*	U-18ME1R8BE*	U-20ME1R8BE*
	3WAY VRF System	U-12MF2R8	U-14MF2R8			
MF2		U-12MF2R8B	U-14MF2R8B			
		U-12MF2R8BE*	U-14MF2R8BE*			

\* Salt-Air Damage Resistant Specifications.

#### For Asia

Туре	Outdoor Unit Type	4 hp	5 hp	6 hp	8 hp	10 hp
	2WAY VEE System				U-8ME1H7	U-10ME1H7
	200AT VRF System				U-8ME1H7E*	U-10ME1H7E*
		U-4LE1H4	U-5LE1H4	U-6LE1H4		
	Mini VDE Svotom	U-4LE1H4E*	U-5LE1H4E*	U-6LE1H4E*		
	Mini VRF System	U-4LE1H7	U-5LE1H7	U-6LE1H7		
		U-4LE1H7E*	U-5LE1H7E*	U-6LE1H7E*		

Туре	Outdoor Unit Type	12 hp	14 hp	16 hp	18 hp	20 hp
	2WAY VEE System	U-12ME1H8	U-14ME1H8	U-16ME1H8	U-18ME1H8	U-20ME1H8
	ZVVAY VRF System	U-12ME1H8E*	U-14ME1H8E*	U-16ME1H8E*	U-18ME1H8E*	U-20ME1H8E*

\* Salt-Air Damage Resistant Specifications.

November 2014

## 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.



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



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.



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

### ...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 Pumptype Systems)

Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

#### ...At least 2.5 m

Indoor unit of this air conditioner shall be installed in a height of at least 2.5 m.

#### ...In laundry rooms

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

# When Connecting Refrigerant Tubing

Pay particular attention to refrigerant leakages.

# 

- When performing piping work, do not mix air except for specified refrigerant (R410A) in refrigeration cycle. It causes capacity down, and risk of explosion and injury due to high tension inside the refrigerant cycle.
- If the refrigerant comes in contact with a flame, it produces a toxic gas.
- Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury, etc.
- Ventilate the room immediately, in the event that is refrigerant gas leaks during the installation. Be careful not to allow contact of the refrigerant gas with a flame as this will cause the generation of toxic gas.

- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.
- Do not leak refrigerant while piping work for an installation or re-installation, and while repairing refrigeration parts. Handle liquid refrigerant carefully as it may cause frostbite.

**R**---

### When Servicing

- Turn the power OFF at the main power box (mains), wait at least 10 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.

# 

- 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 to the sales dealer or service dealer for a repair.

# 

- 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

# 

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

The English text is the original instructions. Other languages are translations of the original instructions.

This notice is only for High Static Pressure Ducted type.

## 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.

• 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 Installing...

Check the following to use the FRESH AIR INTAKE MODE.

# 

- Install the outdoor air intake port in an area where the combustion gas cannot be inhaled.
  If safety issues exist, the room becomes oxygen-deprived and this will cause the fatal accident.
- Do not make air around the discharge air outlet lead to the outdoor air intake port. The indoor air is contaminated and this causes the health problem.

# 

- In the area where the temperature inside the unit becomes below 0°C due to cold air in cold climates, install the electrical damper onto the outdoor air duct for antifreeze measurement.
- Select the installation location where the temperature and humidity are within the usability range. If the relative humidity inside the ceiling exceeds 80%, measure against the condensation (additional insulation, etc.)
- Be sure to insulate the piping to protect the condensation.
  In the case of insufficiency, water may enter the building and this may cause damage to the furniture or interiors, etc.
- Install the piping to be slightly slanting to the outdoor side.
  In the case of insufficiency, rain drops may enter the building and damage the furniture or cause electric shock and fire.
- Avoid the area where sulfurous acid gas, corrosive gas or salt erosion potentially occur. This may cause corrosion to the copper tube and brazing part.

As a result, refrigerant gas may leak.

# — CONTENTS ——

Section 1:	CONTROL FUNCTIONS-Outdoor Unit
Section 2:	CONTROL FUNCTIONS-Indoor Unit2-11. Room Temperature Control2-22. Heating Standby2-53. Automatic Fan Speed Control2-64. Indoor Unit MOV Control2-75. Drain Pump Control2-76. Automatic Heating / Cooling Control2-87. Discharge Air Temperature Control2-98. RAP Valve Kit Control2-99. Automatic Flap Control2-1010. Filter Sign2-1011. Electric Heater Control2-1112. Fan Control during Dry Mode2-1214. T10 Terminal2-1215. Parameter2-1316. Indoor Unit Control PCB2-14
Section 3:	OUTDOOR UNIT REPAIR PROCEDURES
Section 4:	OUTDOOR UNIT MAINTENANCE REMOTE CONTROLLER
Section 5:	REMOTE CONTROLLER FUNCTIONS5-11. Simple Settings Function5-22. Detailed Settings Function5-93. Remote Controller Servicing Functions5-44
Section 6:	<b>TROUBLE DIAGNOSIS</b> 6-1     * Refer to the Service Manual of Outdoor Unit.
Section 7:	<b>TEST RUN from the remote controller 7-1</b> 1. Test Run.   7-2     2. Auto Address Setting.   7-4

# – MEMO –

# 1. CONTROL FUNCTIONS-Outdoor Unit

\* Refer to the Service Manual of Outdoor Unit.

# - MEMO -

# 2. CONTROL FUNCTIONS-Indoor Unit

1.	Room Temperature Control
2.	Heating Standby
3.	Automatic Fan Speed Control
4.	Indoor Unit MOV Control
5.	Drain Pump Control
6.	Automatic Heating / Cooling Control
7.	Discharge Air Temperature Control
8.	RAP Valve Kit Control
9.	Automatic Flap Control
10.	Filter Sign
11.	Electric Heater Control
12.	Fan Control during Dry Mode2-11
13.	Ventilation Fan Output
14.	T10 Terminal
15.	Parameter
16.	Indoor Unit Control PCB

#### 1. Room Temperature Control

• The body sensor or remote controller sensor detects temperature in the room. The detected temperature is called the room temperature. The body sensor is the one contained in the indoor unit.

	Body sensor is enabled	Remote controller sensor is enabled
Set temp.	Set temp. in remote controller	Set temp. in remote controller
Detected temp. by sensor	Detected temp. by body sensor	Detected temp. by remote controller sensor
Room temp.	Detected temp. by body sensor - *correction temp.	Detected temp. by remote controller sensor

#### • The thermostat is turned ON or OFF according to the following $\Delta T$ .

∆T (Cooling)	$\Delta T$ = room temp. – set temp. (set temp. in remote controller)
∆T (Heating)	$\Delta T$ = set temp. – room temp.

※ Correction temperature (only during heating)

If the indoor unit is installed on the ceiling, temperature near the ceiling is higher than near the floor. When the body sensor is enabled, lower temperature near the floor must be considered. To correct this difference in temperature, the correction temperature is used.

The factory setting for the correction temperature is different depending on the model. Refer to "15. Parameter".

Example: Cooling temperature correction 4-Way cassette (correction temperature: 0 degrees) Body sensor is enabled

Set temp. in remote controller	28°C	28°C	28°C
Detected temp. by sensor	30.0°C	27.5°C	27.0°C
Detected temp. by body sensor	30.0°C	27.5°C	27.0°C
Detected temp. by remote controller sensor	30.0°C	27.5°C	27.0°C
Room temp. = temp. detected by body sensor	30.0°C =30.0	27.5°C =27.5	27.0°C =27.0
ΔΤ	+2.0deg	-0.5deg	-1.0deg
	Thermostat ON	Thermostat ON	Thermostat OFF

Example: Heating temperature correction 4-Way cassette (correction temperature: 4 degrees) Body sensor is enabled

Set temp. in remote controller	20°C	20°C	20°C
Detected temp. by sensor	17.0°C	22.0°C	25.0°C
Detected temp. by body sensor	17.0°C	22.0°C	25.0°C
Detected temp. by remote controller sensor	13.0°C	18.0°C	21.0°C
Room temp. = temp. detected by body sensor – 4 deg	13.0°C =17.0-4 deg	18.0°C =22.0-4 deg	21.0°C =25.0-4 deg
ΔΤ	+7.0deg	+2.0deg	-1.0deg
	Thermostat ON	Thermostat ON	Thermostat OFF

Remote	controller	sensor	is	enabled
TIEITIOLE	CONTROLLET	3611301	13	enableu

Set temp. in remote controller	28°C	28°C	28°C
Detected temp. by sensor	30.0°C	27.5°C	27.0°C
Detected temp. by body sensor	30.0°C	27.5°C	27.0°C
Detected temp. by remote controller sensor	30.0°C	27.5°C	27.0°C
Room temp. = temp. detected by remote controller sensor	30.0°C =30.0	27.5°C =27.5	27.0°C =27.0
ΔΤ	+2.0deg	-0.5deg	-1.0deg
	Thermostat ON	Thermostat OFF	Thermostat OFF

Remote controller sensor is enabled				
Set temp. in remote controller	20°C	20°C	20°C	
Detected temp. by sensor	17.0°C	20.5°C	21.0°C	
Detected temp. by body sensor	21.0°C	24.5°C	25.0°C	
Detected temp. by remote controller sensor	17.0°C	20.5°C	21.0°C	
Room temp. = temp. detected by remote controller sensor	17.0°C =17.0	20.5°C =20.5	21.0°C =21.0	
ΔΤ	+3.0deg	-0.5deg	-1.0deg	
	Thermostat ON	Thermostat OFF	Thermostat OFF	





- ① The thermostat does not turn OFF for 3 minutes after it turns ON.
- (2) The thermostat does not turn ON 1 to 3 minutes after it turns OFF.
- ③ The thermostat does not turn OFF for 60 minutes during the test run mode. (Forced thermostat ON) \*However, the thermostat turns OFF if an alarm occurs.

#### < FRESH AIR INTAKE MODE (Type E2) >

#### Intake Air Temperature Control

This product brings outdoor fresh air into the building and adjusts and supplies the air with nearly current indoor temperature.

#### Automatic cooling and heating operation mode

Due to the temperature difference between the outdoor air and preset temperature in remote controller, cooling or heating operation can be automatically selected.

In the case of group control, the setting is possible when all of the indoor units in the same refrigerant circuit consist of one group.

- ① Cooling operation mode: In case that the outdoor temperature is 5°C higher than the preset temperature in remote
  - controller.
- (2) Fan operation mode : In case that the outdoor temperature and preset temperature in remote controller are within  $\pm 5^{\circ}$ C.
- (3) Heating operation mode : In case that the outdoor temperature is 5°C lower than the preset temperature in remote controller.

Example: In case that the preset temperature in remote controller set at 20°C



#### Cooling operation mode

It is recommended that the temperature setting in remote controller be more than 24°C.

If the intake air temperature is getting higher than the preset temperature in remote controller, the unit operates in cooling mode. On the contrary, if the intake air temperature becomes lower than the preset temperature, the unit operates in fan mode.

#### Heating operation mode

It is recommended that the temperature setting in remote controller be set at 16°C.

If the intake air temperature is getting lower than the preset temperature in remote controller, the unit operates in heating mode. On the contrary, if the intake air temperature becomes higher than the preset temperature, the unit operates in fan mode.

#### • Fan operation mode

In the moderate climates, supply of fresh outdoor air can provide as passive cooling.



In general, it is recommended that you set in the automatic cooling and heating operation mode.

# 2. Heating Standby

### 2. Heating Standby

- In heating mode, the indoor fan speed decreases to prevent cold air discharge from the indoor unit. During this time, (\*) (heating standby) is displayed on the remote controller.
  - 1 This condition occurs in the following cases.
  - Thermostat OFF
  - Defrosting operation
  - Indoor heat exchanger liquid temperature (E1) < 28°C and discharge air temperature < 25°C just after heating operation started

The fan speed may sometimes increase when this condition continues for 6 minutes.

- ② The fan mode increases when the heat exchanger liquid temperature (E1) or discharge air temperature increases.
  - % The fan mode is selected based on the discharge air temperature and E1 temperature as shown in the below figure. If the E1 temperature and discharge air temperature are different, the higher temperature is used.



% The function of "HH" is identical to the automatic fan speed mode.

**2** - 5

#### 3. Automatic Fan Speed Control

- ① The indoor fan mode is controlled as shown below during the automatic fan mode.
- 2 The fan mode does not change for 3 minutes during cooling operation and 1 minute during heating operation once it is changed.
- ③ The values in the parenthesis are when the remote controller sensor is enabled.



## 4. Indoor Unit MOV Control 5. Drain Pump Control

#### 4. Indoor Unit MOV Control

• For details, refer to the Service Manual of Outdoor Unit.

% The MOV is at 480 pulses in the following cases.

- ① At the time of factory shipment
- ② Just after the indoor unit power cord is connected.

#### 5. Drain Pump Control

The drain pump operates in the following conditions.

- ① Cooling thermostat ON
- ② The float switch worked.
- ③ The drain pump may often operate for a while when the cooling thermostat turns OFF or the indoor unit is stopped.
- ④ The drain pump can be turned on when the cooling thermostat is OFF if the setting is made to prevent water collected in the drain pan for a long time. For details, refer to "5-2. Detailed Settings Function."
- (5) The indoor unit heat exchanger liquid temperature (E1) is less than 0°C when the cooling thermostat is OFF or the indoor unit is stopped.

% The drain pump operates for 20 minutes once it starts operating.

#### 6. Automatic Heating / Cooling Control

- This function is only valid as long as one indoor unit is installed within one refrigerant system or all indoor units are controlled within a group control.
- When operating in a group control, the sub-indoor units become the same operation mode of the main unit.
- As for the indoor units in a group control, install them in the same air conditioning circumstances.
- Use the temperature sensor which is built-in sensor of the indoor unit.
  - ① When operation starts, heating or cooling is selected according to the set temperature and the room temperature.
    - Room temperature  $\geq$  Set temperature + 1  $\rightarrow$  Cooling
    - Set temperature 1 < Room temperature  $\leq$  Set temperature + 1  $\rightarrow$  Monitoring mode (\*1)
      - Room temperature < Set temperature 1  $\rightarrow$  Heating
        - \*1: If the difference between the room temperature and set temperature is small when operation starts, the cooling thermostat remains in standby status (OFF) until the temperature difference increases. When the temperature difference increases, either cooling operation or heating operation is selected. This standby status is known as "monitoring mode."
  - 2 After operation starts in the selected operating mode, the set temperature is automatically shifted by +2°C (\*3) (cooling operation) or -2°C (\*3) (heating operation).

Example: Temperature set on the remote controller is 20°C.

Control temp. for cooling	22°C	* 20°C (temperature set) + 2°C (*3)
Remote controller display	20°C	
Control temp. for heating	18°C	* 20°C (temperature set) – 2°C (*3)

- ③ Operating mode changes (heating → cooling, cooling → heating) which occur during operation as a result of temperature changes are handled as shown below.
  - Heating → cooling: Room temperature → Shifted set temperature (set temperature + 2°C (\*3)) + 0.5°C
  - Cooling  $\rightarrow$  heating: Room temperature  $\rightarrow$  Shifted set temperature (set temperature 2°C (\*3)) 1.0°C

Example: Temperature set on the remote controller is 20°C.

Operating mode change		Shifted set temp.
1	Heating $\rightarrow$ Cooling	20 + 2 (*3) + 0.5 = 22.5°C or higher (*2)
2	Cooling $\rightarrow$ Heating	20 – 2 (*3) – 1.0 = 17°C or lower

- \*2: During heating operation when the body sensor is used, a temperature shift is applied to the intake temperature detected by the sensor, in consideration of the difference in temperature at the top and bottom of the room. (Refer to the "Room Temperature Control" item.) If this intake shift temperature is 4°C, then the heating → cooling change occurs when the temperature detected by the body sensor is 26.5°C or higher.
- (4) Cooling (heating) operation does not change if the room temperature changes from area  $C \rightarrow A$  (or  $A \rightarrow C$ ) within 10 minutes after the compressor turns OFF. (Monitoring mode is excepted.)
- (5) When the heating/cooling change occurs, the 4-way valve switches approximately 30 to 50 seconds after the compressor turns ON.



\*3: Correction temp. is different depending on the model.

See the right column [ Indoor item code "1E" ] under the section "15. Parameter".

#### 7. Discharge Air Temperature Control

Discharge air temperature is controlled using the indoor unit discharge air temperature sensor. The discharge air temperature is set in the EEPROM on the PCB. The setting is different depending on the model. Discharge air temperature setting (at the time of factory shipment)

Indoor unit typo	Discharge air temperature setting		
	Cooling	Heating	
Y2, F2, M1, E2, K2, U2	12°C	50°C	
E2 (FRESH AIR INTAKE MODE)	18°C	45°C	

● Condition for Thermostat ON → OFF under discharge air temperature control

- Temperature less than "Discharge air temperature setting 2°C" is continuously detected for 20 minutes in cooling mode
- ② Temperature more than "Discharge air temperature setting + 2°C" is continuously detected for 20 minutes in heating mode
- ③ Temperature less than "Discharge air temperature setting 3.5°C" is continuously detected for 7 minutes in cooling mode
- ④ Temperature more than "Discharge air temperature setting + 3.5°C" is continuously detected for 7 minutes in heating mode

X There is no priority order between the room temperature control and discharge air temperature control.

 Relation between thermostat ON / OFF and room temperature control / discharge air temperature control Thermostat turns OFF: Either room temperature control or discharge air temperature control satisfies thermostat OFF condition.

Thermostat turns ON: Both of room temperature control and discharge air temperature control satisfy thermostat ON condition.

#### 8. RAP Valve Kit Control

% The RAP valve kit is sometimes used in the 2-Way system.

The RAP valve kit prevents refrigerant from collecting in the indoor heat exchanger when the indoor unit is stopped. The following table shows the RAP valve kit operation.

Operating mode		RAP valve kit
Stopped		OFF
Fan		OFF
Cooling	Thermostat ON	OFF
	Thermostat OFF	OFF
Heating	Thermostat ON	ON
	Thermostat OFF	OFF

#### 9. Automatic Flap Control

• The flap position can be selected from 5 positions.



Flap position
F1 • F2 • F3 *
F1 • F2 • F3 • F4 • F5
F1 • F2 • F3 • F4 • F5

\* Type U2 can set the flap position F4 and F5

- The flap moves to the following position automatically when the indoor unit is stopped. F0 (close): Types K1, K2, T2, U1, U2, Y2
  - F5: Models other than the above
- 2 The flap closes once and moves to the set position when the operating mode is changed.
  - X If the flap position cannot be adjusted because of a problem, only the swing operation can be used. Check the flap and flap motor.
  - % The swing operation can be set for the flap.

#### 10. Filter Sign

- When accumulated operating time of the indoor unit reaches the set time, the filter sign appears on the remote controller. Clean the filter. See page 5-6.
- ② After cleaning the filter, press the filter button on the remote controller once. The filter sign turns off.

## 11. Electric Heater Control 12. Fan Control during Dry Mode

#### **11. Electric Heater Control**

The electric heater control is performed when an electric heater is installed with the indoor unit.

The heater turns ON when all of the following conditions (1 to 3) are satisfied in heating mode (thermostat ON).

- (1) Body sensor enabled: ON when  $\Delta T \ge 4.0$  °C (Remote controller sensor enabled: ON when  $\Delta T \ge 2.0$  °C) OFF when  $\Delta T \le 1.0$  degree
- ② ON: body sensor temperature < 26°C, OFF: body sensor temperature ≥ 29°C
- (3) ON: discharge air temperature < 40°C, OFF: discharge air temperature  $\leq$  45°C



For details on  $\Delta$ T, refer to "1. Room Temperature Control".

#### 12. Fan Control during Dry Mode

The fan control during dry mode is as follows.



A: Fan mode set in the remote controller

B: Fan mode is L during thermostat ON, LL during thermostat OFF

% For details on  $\Delta T$ , refer to "1. Room Temperature Control".

## 13. Ventilation Fan Output 14. T10 Terminal

#### **13. Ventilation Fan Output**

- The output of ventilation turns ON when the indoor unit turns ON. Also, when the indoor unit turns OFF, the output of the ventilation turns OFF.
- The ventilation fan can also be turned ON and OFF using the ventilation button on the remote controller.

Refer to the operating instractions supplied with the remote controller.

To enable this function, set the indoor EEPROM DN31 to "0001" in advance.

#### 14. T10 Terminal

Using the T10 terminal, each indoor unit can be operated or stopped separately. Also, operating condition can be checked.

#### 15. Parameter

		Indoor item code "06"	Indoor item code "1E"
Туре	Model	Heating intake temperature shift	Temperature shift for cooling / heating change in auto heat / cool mode
		Setting at time of factory shipment	Setting at time of factory shipment
U1, U2	4-Way Cassette	4 deg	2 deg
Y2	4-Way Cassette 60×60	4 deg	2 deg
F2	Low Silhouette Ducted	4 deg	2 deg
T2	Ceiling	4 deg	2 deg
K1	Wall Mounted	2 deg	2 deg
K2	Wall Mounted	3 deg	2 deg
M1	Slim Low Static Ducted	4 deg	2 deg
E2	High Static Pressure Ducted	4 deg	2 deg
	High Static Pressure Ducted (FRESH AIR INTAKE MODE)	0 deg	5 deg

#### Indoor Unit Control PCB Switches and Functions

Indoor uni	it control PCB			
<b>T10:</b> (CN061)	6P plug (yellow): Used for Control items: (1) Start/sto (3) Start sig	remote control. (Refer to the re p input (2) Remote contronal output (4) Alarm signal	mote control section.) oller prohibit input putput	
EXCT: (CN073)	2P plug (red): Can be use OFF.	d for demand control. When inp	ut is present, forces the unit to	operate with the thermostat
DISP:	(CN072) <b>2P plug (white):</b> (CN063) <b>2P plug (black) T</b> (CN062) <b>6P plug (black) 3</b> Short-circui connected (In this case and outdoo	ype T2, F2, U1: -4pin Type U2 only: ting this plug allows the unit to to an outdoor unit. e, alarm "E04," which indicates r unit, does not occur.)	be operated by the remote cont trouble in the serial communica	troller, even if it is not ation between the indoor
СНК:	(CN071) <b>2P plug (white):</b> (CN062) <b>2P plug (black) T</b> (CN062) <b>6P plug (black) 5</b> Test pin. St (F1 position However th The unit ca However ev This function	ype T2, F2, U1: -6pin Type U2 only: nort-circuiting this pin allows the ), and electronic expansion val is function turns OFF if the indo n be operated even if the remot ren if the remote controller canr n can be used for short-term te	indoor FM (H fan speed), drair ve full-open position to be chec or unit protection mechanism is e controller and outdoor unit ar not is connected, it cannot be us sts.	n pump, flap motor ked. s activated. e not connected. sed to operate the unit.
<b>JP1:</b> (J001)	Jumper wire: Allows select Status at shi Jumper wire	tion of the T10 terminal start/sto pment : Pulse signal cut : Static signal (continuous s	op signal. (Refer to the remote o	control section.)
FAN DRIVE (CN032)	2P plug (white): This termi controller (Refer to t	nal sends a signal to the ventila is used to operate a commercia he remote control section.) tilation fan which can accent po	ition fan when the FAN button c illy-available ventilation fan.	on the wired remote
Power LED: (D002)	: LED (red): Illuminates whe memory).	n power is supplied. Blinks whe	in there is a failure in the EEPR	ROM (IC10: nonvolatile
<b>EEPROM:</b> (IC010)	Nonvolatile memory: Men Whe new If an and	nory which stores the unit type on the PCB is replaced, remove PCB. IC failure occurs, replace with set the necessary information f	Jata and other information. the EEPROM from the old PCE a new IC which was provided w rom the wired remote controller	B and install it onto the vith the service PCB,
• The indo The basi Therefor	(For oor unit power terminal plate ic wiring diagram shows the re the terminal plate may diff	the procedure, refer to the service may be a 7P type, 6P type or r 7P-type terminal plate. er from the illustrations.	anal technical materials.)	figure at below.)
4P term	ninal board 2P terminal board	6P terminal board	6P	terminal board



Type U2





#### Type F2, T2, U1



 $\otimes$  $(\otimes)$  $(\mathbb{X})$ (x õ õ 0 Ð (83 Æ Þ L Ν U1 U2 R1 R2 Remote control wiring Inter-unit Power control wiring supply Type M1



Type Y2

1. Wall Mounted (Type K2) CR-22MK2E5 : S-15MK2E5A / S-22MK2E5A / 28MK2E5A / 36MK2E5A



VRF SYSTEMS Indoor Unit

#### 2. Wall Mounted (Type K1) CR-K186XH : S-45MK1E5A / 56MK1E5A / 73MK1E5A / 106MK1E5A



# **16. Indoor Unit Control PCB**

#### 3. 4-Way Cassette (Type U1) : S-22~160MU1E5A Ceiling (Type T2) : S-36~140MT2E5A F747931

Power LED FAN DRIVE GRL 0014B ....imi 1111111, <sup>9</sup>1 EEPROM OPTION DISP CHK RC T10 JP001 EXCT

#### 4. Low Silhouette Ducted (Type F2) F747938 : S-15~160MF2E5A



Power LED FAN DRIVE

#### 5. 4-Way Cassette 60×60 (Type Y2) CR-22MY2E5, POW-22MY2E5 : S-15~56MY2E5A



CR-22MY2E5

POW-22MY2E5

UT MA

MB

HHS



#### 6. High Static Pressure Ducted (Type E2) CR-280ME2E5 : S-180ME2E5 / 224ME2E5 / 280ME2E5

### 7. Slim Low Static Ducted (Type M1) A748023 :

S-15MM1E5A / 22MM1E5A / 28MM1E5A / 36MM1E5A / 45MM1E5A / 56MM1E5A



# 8. 4-Way cassette (Type U2) ACXA73-02060 : S-22MU2E5A / 28MU2E5A / 36MU2E5A / 45MU2E5A / 56MU2E5A / 60MU2E5A / 73MU2E5A / 90MU2E5A / 106MU2E5A / 140MU2E5A / 160MU2E5A



# - MEMO -

# 3. OUTDOOR UNIT REPAIR PROCEDURES

\* Refer to the Service Manual of Outdoor Unit.

# - MEMO -

# 4. OUTDOOR UNIT MAINTENANCE REMOTE CONTROLLER

\* Refer to the Service Manual of Outdoor Unit.

# - MEMO -
# 5. REMOTE CONTROLLER FUNCTIONS

1.	Simple Settings Function	<b>5</b> -2
2.	Detailed Settings Function	<b>5</b> -9
3.	Remote Controller Servicing Functions	<b>5</b> -44

# Regarding the content of the remote controller mentioned below:

# Refer to the 2WAY VRF SYSTEM Technical Data (TD831159).

- Main Operating Functions
- Wireless Remote Controller (CZ-RWSU2, CZ-RWST2, CZ-RWSL2, CZ-RWSC2, CZ-RWSY2)
- Timer Remote Controller (CZ-RTC2)
- Simplified Remote Controller (CZ-RE2C2, CZ-RELC2)
- System Controller (CZ-64ESMC2)
- Schedule Timer (CZ-ESWC2)
- ON/OFF Controller (CZ-ANC2)
- Intelligent Controller (CZ-256ESMC2)
- Communication Adapter (CZ-CFUNC2)
- Remote Sensor (CZ-CSRC2)
- LonWorks Interface (CZ-CLNC2)
- Seri-Para I/O Unit for outdoor unit (CZ-CAPDC2)
- Seri-Para I/O Unit for each indoor unit (CZ-CAPBC2)
- Interface Adapter (CZ-CAPC2)
- Web Interface (CZ-CWEBC2)
- Intelligent Management System

Basic Software (CZ-CSWKC2) Distribution Ratio Software (CZ-CSWAC2) Web Software (CZ-CSWWC2) Layout Display Software (CZ-CSWGC2) BACnetTM Software (CZ-CSWBC2)

# Refer to the VRF SYSTEM INDOOR UNIT Technical Data (TD831193).

- High-spec Wired Remote Controller (CZ-RTC3)
- ECONAVI Sensor (CZ-CENSC1)
- Timer Remote Controller (CZ-RTC4)
- High-spec Wired Remote Controller (CZ-RTC5A)

# **1. Simple Settings Function**

 This allows the filter lifetime, operating mode priority change, central control address, and other settings to be made for an individual or groupcontrol indoor unit to which the remote controller used for simple settings is connected.

When simple settings mode is engaged, operation stops at the individual or group-control indoor unit to which the remote controller for simple settings is connected.

### <Procedure of CZ-RTC2>

- Press and hold the ET and Duttons simultaneously for 4 seconds or longer.
- (2) "SET DATA," unit No. " 1" (or " ALL" in the case of group control), item code " U1," and settings data
   " U1 XX " are displayed blinking on the remote controller LCD display (Fig. 1-1). At this time, the indoor unit fan (or all indoor unit fans in the case of group control) begins operating.
- ③ If group control is in effect, press the UNIT button and select the address (unit No.) of the indoor unit to set. At this time, the fan at the indoor unit begins operating.
  - \* If unit No. "**ALL**" is displayed, the same setting will be made for all indoor units.
- Press the temperature setting / 
   buttons to select the item code to change.
- (5) Press the timer time / buttons to select the desired setting data.
  - \* For item codes and setting data, refer to the following page.
- 6 Press the SET button. (The display stops blinking and remains lit, and setting is completed.)
- ⑦ Press the button to return to normal remote controller display.

#### L'NIT No. **GEXX** -SET DATA CODE No. F 3 00 0 TIMER A#0## $\bigcirc$ PROGRAM 5 (金) UNIT ▼ DAY (4) Ŕ III SET CAN **V** -6 5

#### [Remote Controller Functions Section]

Fig. 1-1

#### <Procedure of CZ-RTC3 / CZ-RTC5A>

		_	
		20:30 (THU)	
[ᠿ] STAR	[] START		
5		=	
	V	(b)	



Keep pressing the 
 , 
 and 
 buttons simultaneously for 4 or more seconds.
 The "Maintenance func" screen appears on the LCD display.

Maintenance func	20:30 (THU)		
1. Outdoor unit error da	ata		
2. Service contact			
3. RC setting mode	3. RC setting mode		
4.Test run			
🗸 Sel. 🔸 Page [	] Confirm		

(2) Press the v or button to see each menu.

If you wish to see the next screen instantly, press the or button.

Select "7. Simple settings" on the LCD display and press the July button.



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

Select	t the "Unit no." by pressing the	0
	button for changes.	



(3) Select the "Code no." by pressing the or button.

Change the "Code no." by pressing the ▼ or ↓ button.



④ Select the "Set data" by pressing the or
 button.

Select one of the "Set data" by pressing the **v** or **b** button.

Then press the



(5) Select the "Unit no." by pressing the or
 button and press the button.
 The "Exit simple settings and restart?" (Simple setting-end) screen appears on the LCD display.
 Select "YES" and press the button.

Si	Exit simple settings and restart?	U) I
	YES > NO	
\$		

#### <Procedure of CZ-RTC4>

- (1) Press and hold the  $\frown_{\not r}$  and  $\frown_{\widehat{\mathfrak{U}/\mathbb{K}}}$  buttons simultaneously for 4 seconds or longer.
- (2) "SETTING ", unit No. " /- /" (or "A L L" in the case of group control), item code " [] /", and settings data " [] [] XX" are displayed blinking on the remote controller LCD display (Fig. 1-3). At this time, the indoor unit fan (or all indoor unit fans in the case of group control) begins operating.
- If group control is in effect, press the button and select the address (unit No.) of the indoor unit to set.
   At this time, the fan at the indoor unit begins operating.
  - \*If unit No. " # L " is displayed, the same setting will be made for all indoor units.
- ④ Press the temperature setting ♥ / △ buttons to select the item code to change.
- (5) Press the timer time is / buttons to select the desired setting data.

\*For item codes and setting data, see the following page.

- 6 Press the button. (The display stops blinking and remains lit, and setting is completed.)
- $\widehat{\mathcal{T}}$  Press the  $\widehat{\phantom{\mu}}$  button to return to normal remote controller display.



Fig. 1-3

## List of Simple Setting Items

Itom code	ltom		Setting data		
item code		No.	Descr	iption	
		0000	Not displayed		
		0001	150 hours		
<b>ח</b> ו	Filter sign ON time	0002	2,500 hours		
<u> </u>	(filter life time)	0003	5,000 hours		
		0004	10,000 hours		
		0005	Use the filter clogging sensor.		
		0000	Standard (setting at time of shipping)		
	Degree of filter fouling	0001	Highly fouled		
			(Filter sign ON time is reduced to one-ha	alf the set time.)	
		0001	Central control address 1		
		0002	Central control address 2		
		0003	Central control address 3		
03	Central control address	2	2		
		0064	Central control address 64		
		0099	No central control address set (setting a	t time of shipping)	
กม	Operating mode	0000	Normal (setting at time of shipping)		
<u> </u>	priority change	0001	Priority		
			Compressor ON	Compressor OFF	
	<b>5</b> Fan speed when heating thermostat is	0000	L 1 min., LL 3min.	LL LL	
DE		0001	L L		
125		0002			
	OFF	0004	L 1 min., LL 3min.		
		0005			
		0006		L	
		0000			
		0001	Shifts intake temperature 1°C down.		
ne	Heating intake	0002	Shifts intake temperature 2°C down.		
100	temperature shift	0003	Shifts intake temperature 3°C down.		
	·	0004	Shifts intake temperature 4°C down.		
		0005	Shifts intake temperature 5 C down.		
	<b>E</b> 1 1 1 1	0006	Shins intake temperature 6°C down.		
	Electric heater	0000	No neater		
	Installation	0001	Heater Installed		
	Humidifying when	0000	No (setting at time of shipping)		
	OFF	0001	Yes		
<u>_</u>	Permit / prohibit	0000	Permit		
	heating / cooling	0001	Prohibit		
00	Cool-only	0000	Normal		
	COOL ONLY	0001	Cool only (Set "1" for item code OD.)		

# NOTE

• In order to avoid water leakage and damage to the fan, do not set for humidifying when the thermostat is OFF unless a vaporizing humidifier is used.

- Consider the device purpose and type when changing the settings. Incorrect settings may result in malfunction.
- Do not change any setting data that does not appear in this list.

## Simple setting items

Item code	Item	Description
01	Filter sign ON time setting (filter lifetime)	Changes the indoor unit filter lifetime when a high-performance filter or other optional product is installed.
02	Degree of filter fouling	Reduces the filter sign ON time to 1/2 of the standard time (setting at the time of shipping) for cases when filter fouling is more severe than normal.

#### Filter sign ON times for each model

		Filter sign ON time			
Model data	Model	Standard		Long-life	
		Standard	High fouling	Standard	High fouling
0001	4-Way cassette (U1, U2) 4-Way cassette 60 × 60 (Y2)	×	×	2500	1250
0005	Low Silhouette Ducted (F2) Slim Low Static Ducted (M1)	×	×	×	×
0006	High Static Pressure Ducted (E2)	×	×	×	×
0007	Ceiling (T2)	×	×	1500	750
0008	Wall Mounted (K1, K2)	150	75	×	×

Unit: hour

# NOTE

- $\,$   $\,$  x indicates that there is no corresponding filter.
- 150 indicates the filter sign ON time that is set at shipment.
- High fouling: Set when III is selected for the degree of filter fouling (item code II ).

# **1. Simple Settings Function**

Item code	ltem	Description
03	Central control address	Set when using a central control device. Used when setting the central control address manually from the remote controller.
04	Operating mode priority change	Note (1)

## NOTE

### (1) Explanation of operation mode priority change

Enabled only in 2WAY System heat-pump models.

#### <Function>

With indoor units that are installed in combination with an outdoor unit model where either heating or cooling operation can be selected, the operating mode of the indoor unit that starts first takes priority. The first indoor unit to operate can select any operating mode. When any mode other than fan mode is selected, then the operating modes that cannot be selected are not displayed on all remote controllers that are subsequently operated. "Operation change control in progress" is displayed, indicating that there are restrictions on the operating modes that can be selected.

### Controlling the operating mode from a specific remote controller

- When there are multiple remote controllers in the same refrigerant system, it is possible to set one remote controller as the priority remote controller (the remote controller which is given priority for selecting the operating mode). (If 2 or more remote controllers are set as priority remote controllers, an alarm will occur at the remote controllers, and operation will not be possible.)
- When the priority remote controller is set to the operating mode for control, then all other remote controllers can select only the permitted operating mode, regardless of whether the priority remote controller is operating or stopped.
- When a controlled remote controller is operated, "Operation change control in progress" is displayed.

Set mode at priority remote controller	Modes that can be selected at other remote controllers
Cooling or dry	Cooling, dry, fan
Heating	Heating, fan
Fan	Whichever mode (heating / cooling) is selected first

## NOTE

There are other methods to avoid control in which the mode selected first takes priority.

Methods of remotely controlling the operating mode

- (1) Use the central functions of a central control device.
- (2) Use a remote control relay PCB at the outdoor unit.

# 1. Simple Settings Function

When the operating mode at the priority remote controller is changed, the operating modes of other remote controllers change as shown below.

Mode change at pri	ority remote controller	Operating modes at other remote controllers		
Current mode	New mode	Current mode	New mode	
Cooling or dry	Heating	Cooling or dry	Heating	
	пеашу	Fan	Fan (not changed)	
Heating	Cooling	Heating	Cooling	
пеашу	Cooling	Fan	Fan (not changed)	
Cooling	Dry	Cooling	Cooling (not changed)	
Cooling		Dry	Dry (not changed)	
Heating	Dry	Heating	Cooling	
пеашу	Dry	Fan	Fan (not changed)	
		Cooling	Cooling (not changed)	
Cooling or dry	Fan	Dry	Dry (not changed)	
		Fan	Fan (not changed)	
Heating	Fan	Heating	Heating (not changed)	
пеаши		Fan	Fan (not changed)	

Item code	Item	Description
05	Fan speed setting when heating thermostat is OFF	Changes the fan speed setting when the heating thermostat is OFF.
06	Heating intake temperature shift	Shifts the intake temperature during heating. Can be set when the body thermostat is used.
07	Electric heater installation	Set when cost distribution is performed using an AMY central control system or similar system, and when an optional electric heater is installed. (This is unrelated to control of the electric heater.)
08	Humidifying when heater thermostat is OFF	Normally humidifying does not occur when the thermostat is OFF during heating operation. However, this setting can be changed in order to increase the amount of humidifying. Caution: In order to avoid water leakage and damage to the fan, do not use this setting unless a vaporizing humidifier is used.
0D	Permit / prohibit automatic heating / cooling	This setting can be used to prevent the automatic heating / cooling display on the remote control if the unit configuration permits automatic heating / cooling operation.
0F	Cooling-only	This setting allows a heat pump indoor unit to be operated as a cooling-only unit.

 This allows the system address, indoor unit address, and other settings to be made for the individual or group-control indoor unit to which the remote controller used for detailed settings is connected.

When detailed settings mode is engaged, operation stops at the individual or group-control indoor unit where the remote controller used for detailed settings is connected. Simple settings items can also be set at this time.

#### <Procedure of CZ-RTC2>

- ① Press and hold the 
  , SET and 
  EN buttons simultaneously for 4 seconds or longer.
- ② "SET DATA," unit No. " : [" (or " FLL" in the case of group control), item code " []"," and settings data " []" XX" are displayed blinking on the remote controller LCD display (Fig. 2-1).

At this time, the indoor unit fan (or all indoor unit fans in the case of group control) begins operating.

- ③ If group control is in effect, press the UNIT button and select the address (unit No.) of the indoor unit to set. At this time, the fan at the indoor unit begins operating.
- ④ Press the temperature setting / 
   buttons to select the item code to change.
- (5) Press the timer time / buttons to select the desired setting data.
  - \* For item codes and setting data, refer to the following page.
- 6 Press the SET button. (The display stops blinking and remains lit, and setting is completed.)
- ⑦ Press the button to return to normal remote controller display.





<Procedure of CZ-RTC3 / CZ-RTC5A>

	:	20:30 (THU)	
[] STAR	<u>.</u> T		
		=	
7	▼	(4)	



 Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.

🔎 Mai	ntenance func	20:30 (THU)				
1. Outd	oor unit error da	ata				
2. Service contact						
3. RC setting mode						
4.Test run						
	► Page [	] Confirm				

(2) Press the or button to see each menu.

If you wish to see the next screen instantly, press the **I** or **I** button.

Select "8. Detailed settings" on the LCD display and press the



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

Select the "Unit no." by pressing the **▼** or **▲** button for changes.



③ Select the "Code no." by pressing the orbutton.



Detailed se	Detailed settings						
Unit no.	Code no.	Set data					
3-1	10	0001					
\$ Sel. →	Next						

④ Select the "Set data" by pressing the orbutton.

Select one of the "Set data" by pressing the volume or button.

Then press the 🖵 button.

Detailed se	Detailed settings					
Unit no.	Code no.	Set data				
3-1	10	0001				
♣ Sel.	[+]	] Confirm				

(5) Select the "Unit no." by pressing the or
 button and press the button.
 The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display.
 Select "YES" and press the button.

De	( ''	U)
ι	Exit detailed settings and restart?	a
	YES NO	
\$		

### <Procedure of CZ-RTC4>

- (1) Press and hold the  $\frown_{\mathbf{F}}$ ,  $\overset{\text{\tiny CMCEL}}{\stackrel{}{\stackrel{}{\stackrel{}{\stackrel{}}{\stackrel{}}}}}$  and  $\overset{\text{\tiny SET}}{\stackrel{}{\stackrel{}}{\stackrel{}}}$  buttons simultaneously for 4 seconds or longer.
- (2) "SETTING ", unit No. " /- /", item code " /[]", and settings data "[][] XX" are displayed blinking on the remote controller LCD display (Fig. 2-3). At this time, the indoor unit fan begins operating.
- If group control is in effect, press the indoor unit to set.
   At this time, the fan at the indoor unit begins operating.

\* If unit No. " **A L L** " is displayed, the same setting will be made for all indoor units.

- ④ Press the temperature setting ♥ / △ buttons to select the item code to change.
- (5) Press the timer time is / buttons to select the desired setting data.
  - \*For item codes and setting data, see the following page.
- (6) Press the button. (The display stops blinking and remains lit, and setting is completed.)
- $\widehat{\mathcal{T}}$  Press the  $\widehat{\phantom{\mu}}$  button to return to normal remote controller display.



Fig. 2-3

- Setting the Flap Separately (When setting the CZ-RTC2)
  - The 4-air outlet flap can be adjusted separately during operation. When not adjusted separately, all flaps operate in the same manner.



(adjustment for up-down airflow direction)

#### <Procedure of CZ-RTC2>

#### Stop the system before performing these steps.

- ① Press and hold the ∠, SET and CEN buttons simultaneously for 4 seconds or longer.
- ② If group control is in effect, press the UNIT button and select the address (unit No.) of the indoor unit to set. At this time, the fan at the indoor unit begins operating.
- (3) " SETTING," unit No. " :- ; " (or " PLL" in the case of group control), item code " XX," and settings data
   " YYYY" are displayed blinking on the remote controller LCD display.
- ④ Designate the item code "XX " by adjusting the Temperature Setting 
   / 
   buttons.



(Shows Type U1)

 ⑤ Press the timer time ▲ / ▼ buttons to select the desired setting data.



\* Setting data " YYYY" (refer to Fig.2-4)

Setting data	Flap position during operation
00 00	Without separate setting
0001	Swing
5000	Move to position 1 and stay
00 03	Move to position 2 and stay
00 04	Move to position 3 and stay
00 05	Move to position 4 and stay
00.06	Move to position 5 and stay

When the flap position is set to  $\boxed{4}$  or  $\boxed{5}$  and the unit is in the cooling or dry mode, the flap position is moved to  $\boxed{3}$  and the operation is started. (refer to Fig.2-4)

# NOTE

The flap swings during the operation under "Setting the Flap Separately".

At this time, the unselected flaps are moved to the position  $\boxed{1}$ . (refer to Fig.2-4)

6 Press the SET 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 button to return to normal remote controller display.



When setting the flap for each air outlet individually according to the room condition. (from Operating Instructions)

## <Procedure of CZ-RTC3 / CZ-RTC5A>

Panasonic						
Menu 20:30 (TH						
1. Basic i	nstructions					
2. FLAP						
3. Lock in	div.flap					
4. ON/OFF	timer					
– Sel. →	Page [+]Co	onfirm				
		· · · · · · · · · · · · · · · · · · ·				
_	_					
		_				

① Display the menu screen.



- To return to the previous screen Press \_\_\_\_.
- To return to the top screen Press 2 times.
- ② Select "3. Lock indiv. flap"



③ Select the indoor unit to set.

		$\rightarrow$	
e.g. 1-1	$  \rightarrow$	1-2 t	o 1-8

🐼 Lock ind	🕅 Lock indiv.flap 👘						
UNIT NO.	UNIT NO. OUTLET						
▲ 1-1 ↓		Unlock					

④ Select the air outlet.

$$\blacksquare \quad \bigtriangledown \quad \rightarrow \quad \blacktriangleright$$

• The air outlet No. changes according to the installation direction. Check by actual operation.



- 5 Select the flap direction. (Press 2 times to finish.) Although **∂**∙ . ! ₽. is also displayed in Cool and Dry mode, the actual direction is f 🕅 Lock indiv.flap 20:30 (THU) UNIT NO. LOCK OUTLET Swing Unlock 1-1 1 A . ₽. • <u>.</u> . ! Unlock ß
  - \* For types other than the 4-Way cassette type, the following display appears and this function cannot be used.



#### <Procedure of CZ-RTC4>

### Stop the system before performing these steps.

- If group control is in effect, press the <u>UNIT</u> button to set. At this time, the fan at the indoor unit begins and select the address (unit No.) of the indoor unit operating.
- ③ Designate the item code "XX" by adjusting the Temperature Setting ♥/△ buttons.



(Shows Type U2)

1

④ Press the timer time <sup>→</sup>/<sup>→</sup>/<sup>→</sup> buttons to select the desired setting data.

Flap position

#### \* Setting data "**YYYY** "

Setting data	ing data Flap position during operation			
Without separate setting				
Swing				
50.00	Move to position 1 and stay			
0003	Move to position 2 and stay			
0004	Move to position 3 and stay			
00.05	Move to position 4 and stay			
00.05	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  $\boxed{1}$ .

5 Press the \_\_\_\_\_ 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.

6 Press the putton to return to normal remote controller display.



					Setting data						
Item code	Item	No.	Description	No.	Description	No.	Description				
. =		0001	4-Way Cassette (60×60) (U1, U2, Y2)	0002	2-Way Cassette (L1)	0003	1-Way Cassette (D1)				
		0005	Low Silhouette Ducted (F2) Slim Low Static Ducted (M1)	0006	High Static Pressure Ducted (E1,E2)	0007	Ceiling (T2)				
	Туре	0008	Wall mounted (K1, K2)	0010	Floor Standing (P1)	0011	Concealed Floor Standing (R1)				
		0017	Fresh Air Intake Duct (H1) For S-140MH1H5	0026	Fresh Air Intake Duct (H1) and S-280MH1H5 High Static Pressure Du	For S-2	24MH1H5 2) Fresh Air Intake Mode				
		0037	Slim Type Ducted (Z1)								
		0038	15 (Type 15)	0001	22 (Type 22)	0003	28 (Type 28)				
		0005	36 (Type 36)	0007	45 (Type 45)	0009	56 (Type 56)				
11	Indoor unit	0010	63 (Type 60)	0011	71 (Type 73) For S-71MP1E5 and S-71MR1E5	0012	80 (Type 73) Except S-71MP1E5 and S-71MR1E5				
		0013	90 (Type 90)	0015	112 (Type 106)	0017	140 (Type 140)				
		0018	160 (Type 160)	0020	180 (Type 180)	0021	224 (Type 224)				
		0023	280 (Type 280)			11					
		0001	Unit No. 1								
		0002	Unit No. 2								
	Custam	0003	Unit No. 3								
12	System address	)	)								
		(	( Lipit No. 30								
		0030	Not set								
		0099									
		0001	Unit No. 2								
	Indoorunit	0003	Unit No. 3								
17	address	)	)								
		0064	Unit No. 64								
		0099	Not set								
		0000	Individual (1:1 = Indoor u	nit with	no group wiring)						
	Group control	0001	Main unit (One of the gro	up-con	trol indoor units)						
14	address	0002	Sub unit (All group-contro	ol indoc	or units except for main unit	t)					
		0099	Not set								
		-010	Shifts intake temperature	10°C c	lown.						
		-009	Shifts intake temperature	9°C do	own.						
		2	2								
	Cooling	-001	Shifts intake temperature	1°C do	own.						
	temperature	0000	No intake temperature sh	hift							
	shift	0001	Shifts intake temperature	1°C up	).						
		~	2								
		0009	Shifts intake temperature	9°C up	).						
	A	0010	Shifts intake temperature	10°C ι	ıp.						
	stop time	0000	Function disabled		fter energian starts						
	after	0001	Stops automatically 5 min	inutes a	ofter operation starts.						
!0	operation	)	)	mutes	aner operation starts.						
	start	( 0123	( Stops automatically 615 (	minutes	after operation starts						
	*Can be set	0124	Stops automatically 620	minutes	after operation starts						
	units.	0125	Stops automatically 625	minutes	after operation starts						
1	1	1 2.20			operation otalito.						

# List of Detailed Setting Items

			Setting data			
	Item		No.	Description		
(1B)	Forced thermostat ON time		0000	5 minutes		
			0001	4 minutes		
			-010	Shifts discharge temperature setting 10°C down		
_			-009	Shifts discharge temperature setting 9°C down		
	tomporature shift	9	-008	Shifts discharge temperature setting 8°C down		
	temperature shint		2	$\left\{ \right.$		
			0010	Shifts discharge temperature setting 10°C up		
			-010	Shifts discharge temperature setting 10°C down		
			-009	Shifts discharge temperature setting 9°C down		
!-!	Heating discharge	е	-008	Shifts discharge temperature setting 8°C down		
	temperature shift	t		$\rangle$		
			0010	Shifts disabaraa tamparatura satting 10°C up		
			0010			
			0002	±2°C		
15	Iemperature shift f	or	0003	±3°C		
	auto beat / cool mo	ige in de	)	)		
		ue	(	(		
			0007	±7°C		
<i> </i>  F			0018			
(Upper limit)		ing	)			
הר		00	(	(		
Cü		0	0029	29°C		
(Lower limit)			0030	30°C (Upper limit at shipment)		
21			0016	16°C (Lower limit at shipment)		
(Upper limit)		change to remote	0017	17°C		
			(	(		
C'C'			0029	29°C		
(Lower limit)	Change to remote		0030	30°C (Upper limit at shipment)		
22	setting range		0018	18°C (Lower limit at shipment)		
(Lipper limit)		D	0019	19°C		
		ying	>	$\rangle$		
24		ā	0020	29°C		
(Lower limit)			0029	30°C (Upper limit at shipment)		
77	1	0	0017	17°C (Lower limit at shipment)		
C'D		, co	0018	18°C		
(Upper limit)		eat /		)		
25		he	0006			
(Lower limit)		Auto	0026	20 C		
		4	0027	Normal		
23	Humidifier operation	Humidifier operation		Ignore heat exchanger temperature conditions.		
			0000	Filter input (differential pressure switch input)		
20	Filter (CN70) inpu	ıt	0001	Alarm input (for trouble input about air cleaner or similar device)		
כח	switching		0002	Humidifier input (Operates linked with drain pump when humidifier is		
			0002	ON.)		
ק	Indoor unit electror	nic	0000	Present (Setting at shipment)		
	control valve		0002			
םב		inc	0000	INORMAI (Used as optional relay PUB or JEMA standard HA terminal.)		
ככ	I TO terminal switch	ing	0001	Used for UFF reminder		
			0002	rite prevention input		

	<b>H</b> =		Setting data			
Item code	item	No.		Desc	ription	
		0000	No forced operation			
	Automatic drain numn	0001	Forced operation for 1 min	ute		
<i>⊂'</i> '-	operation	2	2			
		0060	Continuous operation			
	Ventilation for operation	0000	None			
יב	ventilation fan operation	0001	Ventilation fan operated by	remote contr	oller.	
22	Wired remote controller	0000	Not used. (Body sensor is	used.)		
]]]	sensor	0001	Remote control sensor is u	Remote control sensor is used.		
שע	"Operation change	0000	Normal (displayed)			
	display	0001	Not displayed			
20	OFF reminder function	0000	None			
	used	0001	Only stop time setting is er	nabled.		
20	Discharge temperature	0000	Discharge temperature co	ntrol OFF		
	control	0001	Discharge temperature co	ntrol ON		
	Heat exchanger	0013	Control temperature 13°C			
	temperature for cold air	0014	Control temperature 14°C			
36	(Heat exchanger control	2	2			
	point for control to	0025	Control temperature 25°C			
	prevent cold air)	0026	Control temperature 26°C			
	<b>–</b>	0000	Output linked with fan. (ON	when indoor	unit fan is operating.)	
10	Fan output switching	0001	Fan mode operation outpu	t		
		0000	No delayed stop			
		0001	1 second delayed stop	Execut	1 minute delayed stop	
		0002	2 seconds delayed stop	Indoor unit	2 minutes delayed stop	
35	Drain pump delayed	2	<b>&gt;</b>			
	stop time	0058	58 seconds delayed stop	Туре	58 minutes delayed stop	
		0059	59 seconds delayed stop	U1, U2, Y2,	59 minutes delayed stop U1, U2, Y2,	
		0060	60 seconds delayed stop	F2, T2, E2	60 minutes delayed stop	
		0000	Humidifier output OFF. Dra	in pump stop	ped.	
		0001	Humidifier output ON. Drai	n pump opera	ates.	
40	Humidifier setting	0002	Humidifier output ON. Drai	Humidifier output ON. Drain pump operates for 1 minute when total humidifier		
		0003	Humidifier output ON. Drai	n pump stopp	ed.	
		0000	Standard setting			
45	Flap operation mode	0001	Draft reduction mode (Flar	lower-limit p	osition is shifted upwards.)	
		0000	Smudging reduction mode	(Flap swing L	upper-limit position is shifted downwards.)	
45	Flap swing mode	0001	Normal mode			
פר	Thap swing mode	0002	Draft reduction mode (Flar	swing lower-	limit position is upwards.)	

			Setting data			
Item code	Item	No.		Desc	cription	
			DC fan tap opera mode	ating	Purpose	
		0000	Standard	Standard (settin	g at shipment)	
			High ceiling use	High ceiling sett	ing 1 (with standard panel)	
	<b>–</b>	0001	For low	Ultra long-life filt	ter, oil guard panel, ammonia deodorizing	
	Fan tap setting		static-pressure fil	ter filter, optical reg	enerative deodorizing filter	
	to prevent drop in air			(Antibacterial) h	igh-performance filter (90%)	
10	discharge caused by		For low	(Antibacterial) h	igh-performance filter (65%)	
	filter installation)	0003	static-pressure fil	ter Air-cleaning unit	t, air-cleaning unit + optical regenerative	
				deodorizing filte	r, deodorant (activated charcoal) filter	
			material	For 3-way disch	arge, when discharge duct is connected	
		0006	For air-blocking	For 2-way disch	arge	
		0000	No humidifier out	put		
		0001	1 second	F		
	Humidifier ON time	0002	2 seconds			
55	(ON time per 60	2	2			
	seconds)	0058	58 seconds			
		0059	59 seconds			
		0060	Continuously ON			
50	Timer function change	0000	Function disabled	Function disabled		
52	Smudging control	0000	No smudging cor	Function enabled		
		0000	Without dew condensation prevention control			
	Waiting time for dew condensation prevention control	0001	Dew condensation prevention control after 10 minutes			
		0002	Dew condensatio	Dew condensation prevention control after 20 minutes		
85		2	2			
		0010	Dew condensation prevention control after 100 minutes			
		0011	Dew condensatio	Dew condensation prevention control after 110 minutes		
		0012	Dew condensatio	n prevention control a	fter 120 minutes	
90	Setting the Flap Separately *Only for 4-Way Cassette type	0000 0001 0002 0003	Flap 2 (Motor No. 2) Flap 2 (Motor No. 2) Flap 2 (Motor No. 2) Flap 4 (Motor No. 3) Flap 4 (Motor No. 3)			
		0004	(adjustment for up-	down	<b>XX</b> -93 [5]	
<b></b>	Setting the Flap	0005	airflow direction	) Flap	3 <b>XX</b> =92	
91	*Only for 4-Way	0000		(Mot	or No. 1)	
	Cassette type	0006	Setting data F	lap position during ope	eration When the flap position is set to	
				Vithout separate settin	g	
	Setting the Flap Separately		0001 s	Swing	position is moved to 3 and the	
) 3C	*Only for 4-Way Cassette type		0002 N	Nove to position 1 and	d stay operation is started.	
			<i>0003</i> ∧	Nove to position 2 and	d stay The flap swings during the	
	Setting the Flap			Nove to position 3 and	d stay operation under "Setting the	
Q7	Separately		00.05	Nove to position 4 and	d stay Flap Separately".	
	Cassette type		0006	Nove to position 5 and	are moved to the position 1.	

Itom oodo	Item		Setting data		
item code		No.	Description		
	With or without	0000	Without nanoe™ X function		
95	nanoe <sup>™</sup> X function,	0001	With nanoe <sup>™</sup> X function (Not operational if R/C with nanoe <sup>™</sup> X not connected)		
	Operation setting	0002	With nanoe <sup>™</sup> X function (Operational even if R/C with nanoe <sup>™</sup> X not connected)		
		0000	Without fan operation		
		0001	1 minute		
	Internal cleaning dry	0002	2 minute		
F8	times (when humidity is over	2	2		
	70%)	0118	118 minute		
		0119	119 minute		
		0120	120 minute		
		0000	Without fan operation		
		0001	1 minute		
	Internal cleaning dry	0002	2 minute		
Fg	times (when humidity is less	2	2		
	than 70%)	0118	118 minute		
		0119	119 minute		
		0120	120 minute		

Item code	Item	Description	
10	Unit type	Set when the indeer unit EERROM memory is replaced during corvising	
11	Indoor unit capacity	Set when the indoor unit EEPROM memory is replaced during servicing.	
12	System (outdoor unit) address	These are not set at the time of shipping from the factory.	
13	Indoor unit address	These must be set after installation if automatic address setting is not performed	
14	Group address		
17	Cooling intake temperature shift	Shifts the intake temperature during cooling and dry operation. (Enabled only when the body thermostat is used.) Increase this value when it is difficult to turn the thermostat ON.	
18	Automatic stop time after operation start	The time at which an indoor unit is automatically stopped after operation start can be set in increments of 5 minutes.	
1E	Temperature shift for cooling / heating change in "auto heat / cool" mode	"Auto heat / cool" selects the operating mode automatically based on the difference between the room temperature and the temperature set on the remote controller. This setting establishes a shift temperature for the heating / cooling temperature setting relative to the remote controller temperature setting.	



Item code	Item		Description
<b>1F</b> (Upper limit) <b>20</b> (Lower limit)		Cooling	
<b>21</b> (Upper limit) <b>22</b> (Lower limit)	Change to the remote	Heating	This setting changes the temperature range (upper limit and lower limit) which is set from the remote controller or central control device.
23 (Upper limit) 24 (Lower limit)	setting range	Drying	temperature setting is to be a single point, set the upper limit and lower limit to the same temperature.
25 (Upper limit) 26 (Lower limit)		Auto heat / cool	
29	Humidifier operation which ignores the heat exchanger temperature		During heating operation, the humidifier operates when the heat exchanger temperature is suitable for humidifying. This setting is used to ignore this condition for humidifier operation and operate the humidifier more.
2A	Filter input switching		This setting switches the filter input according to the purpose of use.
2C	Indoor unit electronic control valve		This setting indicates whether or not an indoor unit electronic control valve is present. At the time of shipping, this setting is set according to the conditions of the indoor unit.
2E	T10 terminal input switching		Ordinarily, the T10 terminal is used as the HA terminal at the time of shipping. However, this setting is used when the T10 terminal is used for OFF reminder or for fire prevention input.
31	Ventilation fan operation from remote controller		It is possible to install a total heat exchanger and ventilation fan in the system, which can be started and stopped by the wired remote controller. The ventilation fan can operate linked with the start and stop of the indoor unit, or can be operated even when the indoor unit is stopped. Use a ventilation fan that can accept the no-voltage A contact as the external input signal. In the case of group control, the fans are operated together. They cannot be operated individually.
32	Switching to remote controller sensor		This setting is used to switch from the body sensor to the remote controller sensor. Check that "remote controller sensor" is displayed. Do not use this setting with models that do not include a remote controller sensor. Do not use this setting if both the body sensor and remote sensor are used.
34	ON / OFF of "Operation change control in progress" display		In a MULTI system with multiple remote controllers, switching between heating and cooling is restricted, and "Operation change control in progress" is displayed. This setting is used to prevent this display from appearing. Refer to the item concerned with operating mode priorities.
35	OFF reminder function for weekly timer		This setting switches the operation when the weekly timer is connected to the remote controller. This can be used to prevent cases in which the unit is accidentally left ON. There is no change when this setting is ON, however it is necessary to set the weekly timer ON time.

(Continued)

5

Item code	Item	Description
3C	Heat exchanger temperature for cold air discharge	The heat exchanger temperature control point for prevention of cold air discharge during heating operation can be changed.
3d	Fan output switching	The indoor unit PCB optional output for the fan can be switched according to the purpose of use.
3E	Drain pump delayed stop time The drain pump stops after the set time delay after cooling op stops.	
40	Humidifier drain pump setting	This specifies the humidifier and drain pump setting.
45	DC flap operation mode	Changes flap operation to draft reduction mode.
46	DC flap swing mode	Selects the swing operation mode for the flap.
5d	DC fan tap setting	Sets the DC fan tap according to the purpose of use. Change the settings data at the same time.
5E     Humidifier ON time     Sets the h ON / OFF This setting		Sets the humidifier output ON time for when the humidifier is operating. ON / OFF control is performed during humidifier operation. This setting therefore sets the ON time per 60-second interval.
5F	Stop at time set for OFF timer after operation starts	This setting enables a function that stops operation when the amount of time set for the OFF timer has passed after remote controller operation was started.
60	Timer function change prohibit	This function prohibits changes from being made to the remote controller time setting.
62	Smudging control	Smudging control is disabled when 0000 is set.

# (Continued from previous page)

# Selecting the DC fan motor tap (when setting with the remote controller)

#### <Procedure of CZ-RTC2>

Stop the system before performing these steps.

- ② If group control is in effect, press the UNIT button and select the address (unit No.) of the indoor unit to set. At this time, the fan at the indoor unit begins operating.
- $^{(3)}$  Use the temperature setting buttons to select item code "5d."
- ④ Press the timer time ▲ / ▼ buttons to select the desired setting data.
   \* For item codes and setting data, see Table 2-1 Table 2-3.
- ⑤ Press the SET button. (The display stops blinking and remains lit, and setting is completed.)
   To change the selected indoor unit, go to step ②.
- 6 Press the button to return to normal remote controller display.



\* Failure to make this setting may result in decreased airflow and condensation.

#### Table 2-1 Table of DC Fan Motor Tap Settings (4-Way Cassette type) (Type U1)

Setting No.	Remote controller setting data	Contents & optional parts name		
	0000	tandard (setting at time of shipping)		
(2) 0003 Air-blocking material (for 3-way air discharge)		Air-blocking material (for 3-way air discharge)		
(0)	(3) 0003 Air-blocking material (when a discharge duct is connected)			
(6)	0006	ir-blocking material (for 2-way air discharge)		

#### Table 2-2 Table of DC Fan Motor Tap Settings (Ceiling type)

Setting No.	Remote controller setting data	Purpose of use, names of accessories	
	0000	Standard (setting at time of shipping)	
		High ceiling setting	
(1)	0001	Super long-life filter	
	0001	Ammonia deodorant filter (65% by JIS colorimetric method)	
		Optical regeneration deodorant filter	
(0)	0000	High performance filter (65% by JIS colorimetric method)	
(3)	0003	Deodorant filter (65% by JIS colorimetric method)	

#### Table 2-3 Table of DC Fan Motor Tap Settings (4-Way Cassette type) (Type U2)

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

\* When using optional parts in different setting No. in combination with multiple units, conform it to the larger setting No. \*1 Ceiling height (m)

Indoor unit type	22, 28, 36, 45, 56	60, 73, 90	106, 140, 160
Standard (factory setting)	2.7	3.0	3.6
High-ceiling setting 1	3.2	3.3	4.3
High-ceiling setting 2	3.5	3.6	5.0
Air-flow blocking kit (for 3-way air flow)	3.8	3.8	4.7
Air-flow blocking kit (for 2-way air flow)	4.2	4.2	5.0

#### <Procedure of CZ-RTC3 / CZ-RTC5A> Stop the system before performing these steps.

 Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.



(2) Press the v or button to see each menu.

If you wish to see the next screen instantly, press the **I** or **I** button.

Select "8. Detailed settings" on the LCD display and press the

✤ Maintenance func	20:30 (THU)		
5. Sensor info.			
6. Servicing check			
7. Simple settings			
8. Detailed settings			
Sel. ↓ Page [↓	] Confirm		

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

③ Select the "Unit no." by pressing the ▼ or ▲ button for changes.

Detailed se	ttings	20:30 (THU)
Unit no.	Code no.	Set data
1-1	10	0001
\$ Sel. ►	Next	

④ Select the "Code no." by pressing the ✓ or✓ button.

Change the "Code no." to "5D" by pressing the ▼ or ▲ button (or keeping it pressed).



(5) Select the "Set data" by pressing the or button.

Select one of the "Set data" in "Table for DC Fan Motor Tap Setting (Table 2-1 – Table 2-3)" by pressing the ▼ or ▲ button. Then press the ↓ button.

Detailed settings		20:30 (THU)
Unit no. Code no.		Set data
1-1	5D	0003
≎ Sel.	[ 🛶 ] Confi	rm

6 Press the 🚺 button.

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

De	(-'ll(l'	U)
ι	Exit detailed settings and restart?	a
	YES NO	
\$		

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

## <Procedure of CZ-RTC4>

#### Stop the system before performing these steps.

- (1) Press and hold the  $\overbrace{\mathbf{F}}^{\text{ET}}$ ,  $\overset{\text{set}}{=}$  and  $\overset{\text{CANCEL}}{=}$  buttons simultaneously for 4 seconds or longer.
- (2) If group control is in effect, press the button to set. At this time, the fan at the indoor unit begins and select the address (unit No.) of the indoor unit operating.
- (3) Designate the item code **5<sup>***I***</sup>** by adjusting the Temperature Setting ∇ / △ buttons.
- (4) Press the timer time *I* buttons to select the desired setting data.
  - \* For item codes and setting data, see Table 2-1 – Table 2-3.
- (5) Press the  $\__{\text{set}}$  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.

(6) Press the press that the press the press the press that the press the



\* Failure to make this setting may result in decreased airflow and condensation.

### Selecting the DC fan motor tap (when setting from the PCB)

#### • 4-Way Cassette type (Type U1)

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

- (1) Open the electrical component box cover, then check the indoor unit control PCB. (Fig. 2-5)
- 2 Connect the jumper connector (2P: yellow) which was supplied with the accessory to the correct connector pin on the indoor unit control PCB according to the setting number which was confirmed in Table for DC Fan Motor Tap Settings.

Setting No. (3) :

Then connect the jumper connector to the connector pin TP3 (2P: yellow) on the indoor unit control PCB. Setting No. (6) :

Then connect the jumper connector to the connector pin TP6 (2P: white) on the indoor unit control PCB.

#### Ceiling type

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

- (1) Open the electrical component box cover, then check the indoor unit control PCB. (Fig. 2-6)
- 2 Connect the jumper connector (2P: yellow) which was supplied with the accessory to the correct connector pin on the indoor unit control PCB according to the setting number which was confirmed in Table 2-2 (Table of DC Fan Motor Tap Settings).
  - If the setting No. is (1), then connect the jumper connector to the connector pin TP1 (2P: red) on the indoor unit control PCB.
  - If the setting No. is (3), then connect the jumper connector to the connector pin TP3 (2P: yellow) on the indoor unit control PCB.



Fig. 2-5

## • 4-Way Cassette type (Type U2)

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

- (1) Open the electrical component box cover, then check the indoor unit control PCB. (Fig. 2-6)
- <sup>(2)</sup> 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.

Setting No.	DIP switch
(1)	ON 1 2 3
(3)	ON 1 2 3
(6)	ON 1 2 3



Fig. 2-6

5

#### **EXTERNAL STATIC PRESSURE SETTING**

#### Low Silhouette Ducted (S-15~160MF2E5A / S-15~160MF2E5A8)

Choose one of the following methods from "a", "b", "c" or "d" as shown in the flow chart (within the dotted lines) and then make the setting accordingly.

- a. No setting modification.....: Use-as-is at shipment (there are cases in which the setting may differ from the shipment setting when reset after once setting the external static pressure.) b. Manual setting (set with the PC board).....: For high static pressure. Switching method with the short-circuit connector.
- c. Manual setting (set with the wired remote controller) .....: Low static pressure ~ high static pressure

d. Auto airflow volume setting (set on the wired remote controller) ....: Air outlet volume is automatically adjusted to the rated airflow volume with the auto airflow control drive.



#### NOTE

- (1) Check the following items before performing the setting-check operations or auto airflow volume operations.
  - 1) Check to make sure that the electrical wiring and ducting have been completed. Activate the stand-by mode. In particular, make sure that the closed damper located in the middle of the duct is open, if installed. Also, make sure that air filters have been installed inside the air inlet duct.
    - Check to make sure air is not leaking from the joints.
  - 2) If multiple air outlets and air inlets are included, adjust the airflow volume ratio of all of them until they meet the design airflow ratio.
  - 3) Make sure the address setting has been completed.
- (2) The operation check will be completed in approximately three minutes if the settings have been made correctly. The settings will be modified if they are out of the range of use (maximum 30 minutes). If this is not completed within 31 minutes, check whether the air speed is set to "H" or not.

- (3) Refer to Table 2-5, 2-6, 2-7 and Fig. 2-8 for details on the relationship between the value of item code "b0" and the external static pressure.
- (4) When set in group control (connecting multiple indoor units with one wired remote controller), set each indoor unit to item code "b0". When amending the setting after selecting [ b. Manual setting] (due to airflow path changes, etc.), it is necessary to cancel [b. Manual setting] (disconnect short-circuit connector). When [b. Manual setting] has not been cancelled, [c. Manual setting] and [d. Auto airflow volume setting] will be activated if selected, but [b. Manual setting] takes precedence when the power is switched back on after power outages, etc.
- (5) If this is not completed within 8 minutes, check the drive mode, air speed and air inlet temperature.
- (6) When set in group control (connecting multiple indoor units with one wired remote controller), the test run operations display will disappear once the external static pressure setting check or auto airflow volume control operation check have been completed for the main unit. Decisions on sub-unit complete are not possible. The test run operation display will disappear after one hour even if the external static pressure setting check or auto airflow volume control operation check have not been completed.

# 

- Be sure to check that the external static pressure is within the range for use and then make the setting. Failure to observe this may result in insufficient airflow or water leakages. Refer to Fig. 2-8 for the external static pressure setting range.
- There are cases in which automatic variable dampers and other mounted items may trigger the P12 alarm on systems that modify the static pressure of outdoor units when the auto airflow volume control operations or setting check operations are carried out if high static pressure in the outdoor unit is lowered. In this event, lower the dampers, etc., so that the static pressure in the outdoor unit reaches its lowest level, and then carry out the auto airflow volume control operations or setting check operations.
- Be sure to set the [External Static Pressure Setting] once again after amending the airflow path for the duct or air outlet after setting the external static pressure.
- Set the air inlet temperature within the range for use. The auto airflow volume control will not function if the air inlet temperature is over 45°C or not in the fan mode.

#### 1-1. How to Set on PC Board

- 1. Turn off the power breaker to halt the supply of electricity to the PC board.
- Open the lid of electrical equipment box and check where the short-circuit pin on the indoor unit control PC board is located (Fig. 2-7)
- Short circuit the applicable short-circuit pin in accordance with the selected short-circuit pin connected (Table 2-4).
   150 Pa : TP3 (2P: yellow) short-circuit
  - 140 Pa : TP1 (2P: red) short-circuit
  - \* Use the short-circuit connector (2P: yellow) supplied.

#### Table 2-4 Selection of connected short-circuit pins

External static pressure at the time of rated airflow volume	Short-circuit pin
Unusable	TP6 (2P: white)
150 Pa	TP3 (2P: yellow)
140 Pa	TP1 (2P: red)



Indoor Unit control PC board

Fig. 2-7

#### 1-2. Operating the Timer Remote Controller (CZ-RTC2)

#### 1-2-1. Setting Item Code "

- Press and hold down the *F*, *E* and *SET* buttons simultaneously for 4 or more seconds.
   (STING, the Unit No., Item Code and Detailed Data will blink on the remote controller's LCD display.)
- The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed UNIT.
   Only the fan motor for the selected indoor unit will operate during this.
- 4. Press the ▲/ ▼ buttons for the time to amend the values for the set data.
  - Refer to table 2-5 and Fig. 2-8 and select a value between "

Select " - [] []?" if the auto airflow volume setting is activated.

- Press the <u>SET</u> button. The display will stop blinking and remain illuminated.
- 6. Press the *S* button. The fan motor will stop operating and the LCD display will return to the normal stop mode.

#### 1-2-2. Auto Airflow Volume Control Operations and External Static Pressure Setting-Check Operation

- Press and hold down the *button* for 4 or more seconds. "TEST" will be displayed on the remote controller's LCD display.
- Press the :: U button to commence the test run.
   [Test Run] will be displayed on the remote controller's LCD display.
- 3. Select the fan mode and set it to "H" by pressing the state button.

# 

Auto airflow volume control operations and external static pressure setting-check operations will not be performed unless [H] has been selected for the fan mode.

4. The fan motor will be activated and auto airflow volume control operations or external static pressure setting-check operations will commence.

The power of the airflow will change while these operations are in progress.

The external static pressure setting-check operations and auto airflow volume control operations will be completed in about 3 to 30 minutes.

The "**TEST**" display will be extinguished from the remote controller's LCD display.

5. Press the :: U button to halt the test run.

#### Table 2-5 Setting the external static pressure

Indoor unit		Item code
15, 22, 28, 36, 45,	106, 140, 160	
56, 60, 73, 90		b0
External static press	ure of the rated	
air flow volume (Pa)		
150	150	00 /5
140	140	
130	130	EI 00
120	120	51 00
100	110	00 1 1
70 100		00 08
60 70		00 06
50	50 50	
30	30	00 03
10 10		00 0 I
No auto airflow volur	No auto airflow volume setting	
Auto airflow volume setting		-0.02



\* Failure to set this parameter may result in decreased airflow and condensation.



1-3. Operating the High-spec Wired Remote Controller (CZ-RTC3 / CZ-RTC5A)



### How to set the external static pressure

1. Keep pressing the , and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.



Press the ▼ or ▲ button to see each menu.
 If you wish to see the next screen instantly, press the
 or ▶ button.

Select "8. Detailed settings" on the LCD display and press the Jutton.



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

Select the "Unit no." by pressing the button for changes.

Э	or	
Э	or	



Select the "Code no." by pressing the or button.

Cha	ange t	he "Code no." to "B0" by pressing the	
or	or <b>button</b> (or keeping it pressed).		



Select the "Set data" by pressing the or button.

Select one of the "Set data" among "0001" – "0015" according to the desired external static pressure setting

by pressing the ▼ or ▲ button.

Then press the \_\_\_\_ button.

(See the table below.)

#### When setting to auto airflow volume control:

Select the setting data to "-002".

Then press the

#### Table 2-6 Setting the external static pressure

Indoor unit		Item code
15, 22, 28, 36, 45, 56, 60, 73, 90	106, 140, 160	B0
External static pressure air flow volume (Pa)	External static pressure of the rated air flow volume (Pa)	
150	150	0015
140	140	0014
130	130	0013
120	120	0012
100 110		0011
70 100		0008
60 70		0006
50 50		0005
30	30	0003
10	0001	
No auto airflow	-001	
Auto airflow volume setting		-002

5. Select the "Unit no." by pressing the dor button and press the dor button.

The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display.

Select "YES" and press the 🚽 button.

When the setting is completed, perform the test run for the external static pressure setting described in "Auto External Static Pressure Setting Operation".



button.

# Auto External Static Pressure Setting Operation

 Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.

Maintenance func	20:30 (THU)	
1. Outdoor unit error da	ata	
2. Service contact		
3. RC setting mode		
4. Test run		
l - Sel. ► Page [ -	] Confirm	

7. Press the ▼ or ▲ button to see each menu. If you wish to see the next screen instantly, press the

✓ or ▶ button.

Select "4. Test run" on the LCD display and press the Just button.



The "Test run" screen appears on the LCD display.

Test run	20:30 (THU)
	Test run
	OFF
	•
Change	[ 🖵 ] Confirm

Change the display from OFF to ON by pressing the ▼ or ▲ button. Then press the → button.



The "Maintenance func" screen appears on the LCD display.

✤ Maintenance func 20:30 (THU)		
1. Outdoor unit error data 2. Service contact 3. RC setting mode		
4.Test run		
\$ Sel. ▲ ▶ Page [ →	] Confirm	

8. Press the <u>button</u> button. "TEST" will be displayed on the LCD display.

	20:30 (THU)
TEST	
[也] START	

 Press the button. Test run will be started. Test run setting mode screen appears on the LCD display.



10. Set the operation mode to "♣" and fan speed mode to "♣" by pressing the ◀ or ▶ button or ▼

or button. Then press the 20:30 (THU) TEST MODE FAN SPEED

EST MODE FAN SS FLAP ---

The fan motor will be activated, the auto external static pressure setting operation and setting-check operation will be performed for about 3 to 30 minutes.

The fan speed will change automatically while these operations are in progress. When these operations completed, "TEST" will be disappeared from the LCD display.



#### NOTE:

The auto external static pressure setting operation and setting-check operation will not be performed unless " **S** (MODE FAN)" and " **S** (FAN SPEED)" have been selected.

11. Press the 🚯 button.

The LCD display will be returned to the initial screen.

	20:30 (THU)
[] I START	

#### NOTE:

Failure to set this parameter may result in decreased airflow and condensation.

# 1-4. Operating the Timer Remote Controller (CZ-RTC4)

# 1-4-1. Setting Item Code "

- Press and hold down the p, , definition of the p, , definition of the seconds.
   (SETTING, the Unit No., Item Code and Detailed Data will blink on the LCD display.)
- The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed INT
   Only the fan motor for the selected indoor unit will operate during this time.
- 3. Specify the "**bl**" item code by pressing the *∇*/ △ buttons for the temperature setting buttons and confirm the values.
  - (" 🚺 🚺 🖌 " set at shipment )
- Press the / buttons for the time to amend the values for the set data.
   Refer to Table 2-7 and Fig. 2-8 and select a value

between " [] [] [] / " and " [] [] /5 ".

Select " - [] [] ] ? if the auto airflow volume setting is activated.

- Press the button.
   The display will stop blinking and remain illuminated.
- Press the point button. The fan motor will stop operating and the LCD display will return to the normal stop mode.
- 1-4-2. Auto Airflow Volume Control Operations and External Static Pressure Setting-Check Operation
- Press and hold down the p button for 4 or more seconds.
   "TEST " will be displayed on the LCD display.
  - Press the  $\overbrace{\phantom{aaaa}}^{\cup}$  button to start the test run.
- 3. Select the operation mode **\$** (Fan) by pressing the <sup>@</sup>\*◊\*\*</sup> (Mode select) button.

Then select the fan speed **\$\$**} by pressing the **\*** (Fan speed) button.

## NOTE

Auto airflow volume control operations and external static pressure setting-check operations will not be performed unless the above settings are made.

4. The fan motor will be activated and auto airflow volume control operations or external static pressure setting-check operations will be started.

The power of the airflow will change while these operations are in progress.

The external static pressure setting-check operations and auto airflow volume control operations will be completed in about 3 to 30 minutes.

"TEST " display will be disappeared from the LCD display.

Press the  $\bigcirc$  button to halt the test run.

# Table 2-7 Setting the external static pressure

Indoor unit		Item code
15, 22, 28, 36, 45, 56, 60, 73, 90	106, 140, 160	b0
External static pressure of the rated air flow volume (Pa)		Ud
150	150	00 15
140	140	00 IY
130	130	00 13
120	120	00 IZ
100	110	00
70	100	00 08
60	70	00 06
50	50	0005
30	30	00 03
10	10	0001
No auto airflow volu	ume setting	-001
Auto airflow volume setting		- 8 8 2



\* Failure to set this parameter may result in decreased airflow and condensation.



2.

5.

**5** - 32



5

#### • High Static Pressure Ducted (S-180, 224, 280ME2E5)

Choose one of the methods (selection of "a", "b", "c" within the range of dotted line as shown in the flowchart below) and make settings.

a. No setting changes:

When using as it is factory preset at shipment.

(If resetting after external static pressure setting once, it might be different from factory preset.)

b. Manual setting (on PCB):

This is static pressure setting excepting factory preset at shipment. Dip switch select method.

c. Manual setting (by wired remote controller):

Static pressure setting excepting factory preset at shipment.

## Flow of External Static Pressure



#### NOTE

- (1) Refer to Table 2-9, 2-10, 2-11 and Fig. 2-10 for details on the relationship between the value of item code "5d" and the external static pressure.
- (2) When set in group control (connecting multiple indoor units with one wired remote controller), set each indoor unit to item code "5d".

When amending the setting after selecting [b. Manual setting] (due to airflow path changes, etc.), it is necessary to cancel [b. Manual setting] (switching OFF positions).

When [b. Manual setting] has not been cancelled, [c. Manual setting] will be activated if selected, but [b. Manual setting] takes precedence when the power is switched back on after power outages, etc.

 Make sure the external static pressure is in a range of specifications. Then proceed the external static pressure setting. Improper settings can cause noise, a shortage of airflow volume and water leakage.

Refer to Fig. 2-9 for the external static pressure setting range.

• Be sure to set the [External Static Pressure Setting] once again after amending the airflow path for the duct or air outlet after setting the external static pressure.

### 1-1. How to Set on PC Board

- 1. Turn off the power breaker to halt the supply of electricity to the PC board.
- 2. Open the lid of the electrical component box and confirm the location where the Select switch on the indoor unit control PCB is placed. (Fig. 2-9)
- Set the On/Off switches in the Off position which are now set in the On position. Select the positions of the Select SW001 switches respectively to make the desired external static pressure settings referring to the Table 2-8.

#### Table 2-8 External static pressure SW setting

External static pressure at the time of rated airflow volume		SW001		
224	280	TP6	TP3	TP1
270Pa	270Pa	ON D 1	2	3
140Pa	140Pa	1	ON 2	3
60Pa	72Pa	1	2	ON J 3

# 1-2. Operating the Timer Remote Controller (CZ-RTC2)

#### How to set the external static pressure

- Press and hold down the 
   , End SET buttons simultaneously for 4 or more seconds.
   (SETTING, the Unit No., Item Code and Detailed Data will blink on the LCD display.)
- The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed UNIT.
   Only the fan motor for the selected indoor unit will operate during this time.
- 3. Specify the "与d" item code by pressing the
  ▲ / ▼ buttons for the temperature setting buttons and confirm the values.
  ("OO O 3" set at shipment )
- Press the ▲/ ▼ buttons for the time to amend the values for the set data.

Refer to Table 2-9 and Fig. 2-10 and select a value "*00 06*", "*00 03*" or "*00 0 1*".

5. Press the <u>SET</u> button.

The display will stop blinking and remain illuminated.



Fig. 2-9

#### Table 2-9 Setting the external static pressure

Indoor unit		Item code
180, 224	280	
External static pressure of the rated air		5d
flow volume		
270 Pa	270 Pa	00 06
140 Pa	140 Pa	00 03
60 Pa	72 Pa	00 0 I



#### NOTE:

Failure to set this parameter may result in decreased airflow and condensation.

1-3. Operating the High-spec Wired Remote Controller (CZ-RTC3 / CZ-RTC5A)



#### How to set the external static pressure

 Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.

Maintenance func	20:30 (THU)	
1. Outdoor unit error data		
2. Service contact		
3. RC setting mode		
4.Test run		
🗸 Sel. 🔸 Page [ 🛶	] Confirm	

Press the v or button to see each menu. If you wish to see the next screen instantly, press the v or button.
 Select "8. Detailed settings" on the LCD display and press the v button.

Maintenance func	20:30 (THU)	
5. Sensor info.		
6. Servicing check		
7. Simple settings		
8. Detailed settings		
Sel. ↓ Page [ →	] Confirm	

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



Change the "Code no." to "5D" by pressing the ▼ or ▲ button (or keeping it pressed).



4. Select the "Set data" by pressing the or button.

Select one of the "Set data" among "0006", "0003" or "0001" according to the desired external static pressure setting by pressing the **▼** or **▲** button.

press the 🔔 button.
press the 🛛 🖵

(See the table below.)

Then press the Jutton.

#### Table 2-10 Setting the external static pressure

Indoor unit		Item code
180, 224	280	
External static pressure of the rated air flow volume (Pa)		5D
270 Pa 270 Pa		0006
140 Pa	140 Pa	0003
60 Pa	72 Pa	0001

5. Select the "Unit no." by pressing the or
button and press the button.
The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display.
Select "YES" and press the button.


# 1-4. Operating the Timer Remote Controller (CZ-RTC4)

## How to set the external static pressure

- Press and hold down the , and str
   buttons simultaneously for 4 or more seconds.
   (SETTING, the Unit No., Item Code and Detailed Data will blink on the LCD display.)
- The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed .
   Only the fan motor for the selected indoor unit will

operate during this time.

- Specify the " 与」" item code by pressing the
   ▽ / △ buttons for the temperature setting buttons and confirm the values.
   ("□□□□□" set at shipment )
- 4. Press the → / → buttons for the time to amend the values for the set data.
  Refer to Table 2-11 and Fig. 2-10 and select a value "□□□□5", "□□□□3" or "□□□□1".
- 5. Press the button.
  The display will stop blinking and remain illuminated.
- Press the p button. The fan motor will stop operating and the LCD display will return to the normal stop mode.

### Table 2-11 Setting the external static pressure

Indoo	Item code		
180, 224	180, 224 280		
External static pre air flow volume	5d		
270 Pa	270 Pa	00 06	
140 Pa	140 Pa	00 03	
60 Pa	72 Pa	0001	



## 2. Detailed Settings Function

### **Indoor Fan Performance**

					-		-	Гар				
				1	2	3	4	5	6	1	8	9
	00 06		Cooling				L			М		Н
Item code " <i>5d</i> " 00 03			Heating				L			Μ		Н
	Setting at	Cooling		L				М		Н		
	0003	shipment	Heating		L				Μ		Н	
		00.0.1	Cooling	L		М		Н				
			Heating	L		М		Н				













### • Slim Low Static Ducted (S-15~56MM1E5A)

Choose one of the methods (selection of "a", "b", "c" within the range of dotted line as shown in the flowchart below) and make settings.

a. No setting changes:

When using as it is factory preset at shipment.

(If resetting after external static pressure setting once, it might be different from factory preset.)

b. Manual setting (on PCB):

This is static pressure setting excepting factory preset at shipment. Dip switch select method.

c. Manual setting (by wired remote controller):

Static pressure setting excepting factory preset at shipment.

#### Flow of External Static Pressure



### NOTE

(1) Refer to Table 2-13, 2-14, 2-15 and Fig. 2-13 for details on the relationship between the value of item code "5d" and the external static pressure.

(2) When set in group control (connecting multiple indoor units with one wired remote controller), set each indoor unit to item code "5d". When amending the setting after selecting [ b. Manual setting] (due to airflow path changes, etc.), it is necessary to cancel [b. Manual setting] (switching OFF positions).

When [b. Manual setting] has not been cancelled, [c. Manual setting] will be activated if selected, but [b. Manual setting] takes precedence when the power is switched back on after power outages, etc.



- Make sure the external static pressure is in a range of specifications. Then proceed the external static pressure setting.
   Improper settings can cause noise, a shortage of airflow volume and water leakage.
   Refer to Fig. 2-13 for the external static pressure setting range.
- Be sure to set the [External Static Pressure Setting] once again after amending the airflow path for the duct or air outlet after setting the external static pressure.

5

## 2. Detailed Settings Function

## 1-1. How to Set on PC Board

- 1. Turn off the power breaker to halt the supply of electricity to the PC board.
- Open the cover of the electrical box and confirm that there is the indoor unit control PC board in it.
   When using with high static pressure mode, set the indoor unit control PC board as shown in Fig. 2-12.
- Connect the short circuit connector to the short circuit pin TP3 (2P: Yellow) of the indoor unit control board.
  - In the case of wired remote control setting, do not use the short circuit connector.

#### Table 2-12 External static pressure

Туре	15 22		28	36	56	
Standard (Pa) (shipment)	10		15	15		
High static pressure (Pa)	30		30			





Fig. 2-12

#### Table 2-13 Setting the external static pressure

Indoor unit						Item code
15	22	28	36	45	56	
Extern volum	al static e (Pa)	ir flow	5d			
1	0	15	15		<i>00 00</i>	
3	0	30	40		00 03	



#### NOTE:

## 1-2. Operating the Timer Remote Controller (CZ-RTC2)

### How to set the external static pressure

- The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed UNIT.

Only the fan motor for the selected indoor unit will operate during this time.

- 3. Specify the "与」" item code by pressing the
  ▲)/ ▼ buttons for the temperature setting buttons and confirm the values.
  ("□□□□" set at shipment )
- Press the ▲/ ▼ buttons for the time to amend the values for the set data.

Refer to Table 2-13 and Fig. 2-13 and select a value "OD D3".

- Press the <u>SET</u> button. The display will stop blinking and remain illuminated.
- Press the button. The fan motor will stop operating and the LCD display will return to the normal stop mode.

Failure to set this parameter may result in decreased airflow and condensation.

1-3. Operating the High-spec Wired Remote Controller (CZ-RTC3 / CZ-RTC5A)



## How to set the external static pressure

 Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.

Maintenance func	20:30 (THU)					
1. Outdoor unit error da	ata					
2. Service contact	2. Service contact					
3. RC setting mode						
4.Test run						
🖌 Sel. 🔹 Page [ 🛶	] Confirm					

Press the v or button to see each menu. If you wish to see the next screen instantly, press the v or button.
 Select "8. Detailed settings" on the LCD display and press the v button.

Maintenance func	20:30 (THU)					
5. Sensor info.						
<ol><li>Servicing check</li></ol>	6. Servicing check					
7. Simple settings						
8. Detailed settings						
Sel. ↓ Page [↓	] Confirm					

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





4. Select the "Set data" by pressing the or button.

Select one of the "Set data" among "0003" according to the desired external static pressure setting by pressing the v or button. Then press the v button. (See the table below.)

Then press the 🔔 button.

#### Table 1-14 Setting the external static pressure

Indoor unit						Item code
15	22	28 36 45 56				
External static pressure of the rated air flow volume (Pa)						5D
1	0	15	15		0000	
3	0	30	40			0003

5. Select the "Unit no." by pressing the or
 button and press the button.
 The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display.

Select "YES" and press the Jutton.



5

1-4. Operating the Timer Remote Controller (CZ-RTC4)

## How to set the external static pressure

- Press and hold down the , and set and buttons simultaneously for 4 or more seconds.
   (SETTING, the Unit No., Item Code and Detailed Data will blink on the LCD display.)
- The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed .

Only the fan motor for the selected indoor unit will operate during this time.

- 3. Specify the " 5 d " item code by pressing the ♥ / △ buttons for the temperature setting buttons and confirm the values. (" □ □ □ □ " set at shipment )
- 4. Press the *intermediate* / *intermediate* buttons for the time to amend the values for the set data.
   Performediate 2, 15 and Fig. 2, 13 and called a value.

Refer to Table 2-15 and Fig. 2-13 and select a value "CC C 3".

- Press the button.
   The display will stop blinking and remain illuminated.
- 6. Press the  $\bigcirc$  button.

The fan motor will stop operating and the LCD display will return to the normal stop mode.

## Table 2-15 Setting the external static pressure

Itom codo	Sot data	External static pressure of the rated air flow volume							
nem code	Sel uala	Indoor unit type							
		15	22	28	36	45	56		
51	<i>00 00</i>	10 Pa		15 Pa	15 Pa				
מכ	00 03	30 Pa		30 Pa	40 Pa				



### NOTE:

Failure to set this parameter may result in decreased airflow and condensation.

## 2. Detailed Settings Function



The remote controller includes a number of servicing functions. Use these as needed for test runs and inspections.
 Timer Remote Controller CZ-RTC2

#### SET DATA R.C. No. CODE No. 0 ::: TIMER ൫ӝ≬฿฿ PROGRAM 5 **\** DEL COPY 2 (F) UNIT DAY SET CAN ▼



## **List of Servicing Functions**

Functions	Description	Button operation	Reset operation	Unit status
Test run	Operation with forced thermostat ON	Press and hold the 🖉 button for 4 seconds or longer.		
Sensor temperature display	Temperature display from each sensor	Press and hold the 🖉 and 🖭 buttons for 4 seconds or longer.		Current operation is maintained.
Servicing check display	Alarm history display	Press and hold the 🖍 and 🖭 buttons for 4 seconds or longer.	Press the 🖉	
Simple settings	Filter lifetime, operating mode priority, central control address, and other settings	Press and hold the $\checkmark$ and $$ and $$ buttons for 4 seconds or longer.	outton.	When settings are made from a remote controller, the indoor unit
Detailed settings	System address, indoor unit address, central control address, and other settings	Press and hold the , and SET buttons for 4 seconds or longer.		where that remote controller is connected stops.
Automatic address	Automatic address setting based on command from the wired remote controller	Press and hold the 🔎 and the timer operation 🔺 buttons for 4 seconds or longer.	Automatic reset	Entire system
Address change	Change of indoor unit address	Press and hold the 🔎 and the timer operation 💌 buttons for 4 seconds or longer.	Press the 🗷 button.	isiops.

## High-spec Wired Remote Controller CZ-RTC3 / CZ-RTC5A

Display of "maintenance function" screen

- Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.
- (2) Press the v or button to see each menu.

If you wish to see the next screen instantly, press

the or button.





### **List of Servicing Functions**

Functions	Description	Menu selection	<b>Reset operation</b>	Unit status	
ECONAVI • CZ-KPU3A • CZ-CENSC1	Display from each sensor	0. ECONAVI info.			
Test run	Operation with forced thermostat ON	4. Test run	Press the		
Sensor temperature display	Temperature display from each sensor	5. Sensor info			
Servicing check display	Alarm history display	6. Service check			
Simple settings	nple settings Filter lifetime, operating mode priority, central control address, and other settings		Press the	When settings are made from a remote controller, the indoor	
Detailed settings	System address, indoor unit address, central control address, and other settings	8. Detailed settings	(Restart)	unit where that remote controller is connected stops.	
Automatic address	Automatic address setting based on command from the wired remote controller		Automatic reset	Entire system stops.	
nanoe™ X (CZ-RTC5A only)	Display status of nanoe™ X	13. nanoe	Press the 5		

## Timer Remote Controller CZ-RTC4





## List of Servicing Functions

Functions	Description	Button operation	<b>Reset operation</b>	Unit status
Test run	Operation with forced thermostat ON	Press and hold the $\bigcirc_{r}$ button for 4 seconds or longer.		
Sensor temperature display	Temperature display from each sensor	Press and hold the $\frown_{\mathbf{F}}$ and $\overset{\text{CANCEL}}{=}$ buttons for 4 seconds or longer.		Current operation is maintained.
Servicing check display	Alarm history display	Press and hold the $\frown_{\not}$ and $\boxdot_{}^{\text{set}}$ buttons for 4 seconds or longer.	Press the $\bigcirc$	
Simple settings	Filter lifetime, operating mode priority, central control address, and other settings	Press and hold the $\bigcirc_{\not}$ and $\bigcirc_{\Re/\Re}$ buttons for 4 seconds or longer.	button.	When settings are made from a remote controller,
Detailed settings	System address, indoor unit address, central control address, and other settings	Press and hold the $\overbrace{\textbf{\textit{r}}}^{\text{CANCEL}}$ , $\overbrace{\textbf{mass}}^{\text{CANCEL}}$ and $\overbrace{\textbf{mass}}^{\text{SET}}$ buttons for 4 seconds or longer.		where that remote controller is connected stops.
Auto address	Auto address setting based on command from the wired remote controller	Press and hold the $\frown_{r}$ and the timer operation $^{\square}$ buttons for 4 seconds or longer.	Automatic reset	Entire system
Address change	Change of indoor unit address	Press and hold the $\bigcirc_{\not}$ and the timer operation $\overset{\frown}{\longrightarrow}$ buttons for 4 seconds or longer.	Press the $\frown_{\not}$ button.	stops.

## ECONAVI Display

When the  $\triangle$  **ECONAVI** appears on the LCD display, the state of the sensor unit can be checked in the following method.





Fig. 3-4

## **3. Remote Controller Servicing Functions**

Code no.		Description
ECONAVI sensor	ECONAVI panel	Description
11	21	Data shows the status of the ECONAVI sensor. 0000: The sensor is not connected. 0001: The sensor can detect human motion. 0002: The sensor is initializing. (The sensor cannot detect human motion.) The initial setting is completed after about 90 seconds when switched on. 0003: Multiple sensor units are connected. Only one sensor unit per indoor group is connectable. 0004: The sensor is broken down. 0005: The floor temperature sensor is broken down. Data is automatically updated every 30 seconds.
12	22	In 30 seconds, data shows the number of times human motion was detected. Data is automatically updated every 30 seconds.
-	24	Data shows the floor temperature measured by the sensor. Data is automatically updated every 30 seconds.

## How to Check Human Detection Sensor

- Step 1 Check that Code no.11 or 21 is showing "0001".
- Step 2 Make the sensor that can detect a person.
  - Move back and forth and around for about 10 seconds under sensor activation.
- Step 3 Check that Code no.12 or 22 can show "1" or more within 30 seconds after Step 2 is performed.
- Step 4 Make the sensor that cannot detect a person.

Exclude the persons or animals (an object to be detected) from the detection area.

If the remote controller is placed within the detection area of the ECONAVI sensor, an inspector must check motionless the display of the remote controller.

Step 5 After a while, check that Code no.12 or 22 can show "0". (For about 30 seconds to 2 minutes)

## How to Check Floor Temperature Sensor

Code no. 24: There is no problem if data is within the range of -20 to 60. If data shows -35, the floor temperature is broken down.

## **Check of ECONAVI Operational Status**

The status of ECONAVI operation can be checked instantly. It is available to check the operation when installing the indoor unit.

<procedure cz-rtc3="" cz-rtc5a="" of=""></procedure>		
(1) Keep pressing the $\bigcirc$ , $\frown$ and $\blacktriangleright$		
buttons simultaneously for 4 or more seconds.	Status info.	20:30 (THU)
The "Maintenance func" screen appears on the		
LCD display.	ECONAVI	ON Normal
② Select "0. ECONAVI info." on the LCD display and		NOTINAT
press the	[ <sup>+</sup> ]Close	
Maintenance func 20:30 (THU) 0. ECONAVI info.		=
1. Outdoor unit error data 2. Service contact 3. RC. setting mode	▲ ↓	
y Sel. →Page [+]Confirm		(\$
③ Press the 🔽 or 🔺 button to see each menu.		
Select "Status info." on the LCD display and press the	Fig. 3-	5
ECONAVI info. 20:30 (THU) Setting info. Sensor unit info. System settings Status info. \$ Sel. [J]Check		
4 There are four patterns of operational status display as	shown below.	
(1) Under normal operation	(3) Under suspension with	absentee
Status info. 20:30 (THU)	Status info.	20:30 (THU)
ECONAVI ON Status Normal	ECONAVI Status	ON Vacant
[ <sup>t</sup> ⊃]Close	[ <sup>+</sup> →]Close	

State of no energy-saving operation

(2) Under temperature shift



State of energy-saving (temperature shift) operation



State of energy-saving (suspended) operation

\*Shows that air conditioner operation was suspended because no person was detected for a certain period.

This state remains until operation is restarted.

(4) Under sensor communication error

Status info.	20:30 (THU
FCONAVI	ON
Status	Error

[⊅]Close

Shows that the connected ECONAVI sensor is in error state. 5

## Test Run Function

Operates the unit with the thermostat forced ON.

## <Procedure of CZ-RTC2>

- (1) Press and hold the F button for 4 seconds or longer.
- $(\mathfrak{P})$  "TEST" appears on the remote controller LCD display (Fig. 3-6).
- (3) Start operation.
- (4) Press the F button to return to normal remote controller display.



Fig. 3-6

## <Procedure of CZ-RTC3 / CZ-RTC5A>

(1) Keep pressing the (1), (1) and (1)buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.

🗲 Mair	tenance func	20:30 (THU)
1. Outdo	oor unit error da	ata
2. Servio	ce contact	
3. RC setting mode		
4.Test ru	un -	
🖌 Sel.	نے   Page ا	] Confirm

- menu.
- ② Press the ▼ or ▲ button to see each

If you wish to see the next screen instantly, press

the **I** or **I** button.

Select "4. Test run" on the LCD display and press the 🚽 button.



Change the display from OFF to ON by pressing

the		or	button. Then press the	-
butto	on.			

Test run	20:30 (THU)
	Test run
	ON
Change	[ 🖵 ] Confirm



CZ-RTC3 / CZ-RTC5A

Fig. 3-7

③ Press the 🚺 button. "TEST" will be displayed on the LCD display.



(4) Press the button. Test run will be started. Test run setting mode screen appears on the LCD display.

	20:30 (THU)
	FAN SPEED
<b>4</b> 0	FLAP

## <Procedure of CZ-RTC4>

- (1) Press and hold the  $\bigcirc_{\mathbf{F}}$  button for 4 seconds or longer.
- (2) " TEST " appears on the remote controller LCD display (Fig. 3-8).
- ③ Press the  $\bigcirc$  button to start the test run.
  - The temperature cannot be adjusted in Test Run mode. (This mode places a heavy load on the machines. Therefore use it only when performing the test run.)
  - The test run can be performed using the HEAT, COOL, or FAN operation modes.
    - **NOTE** The outdoor unit will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.
  - If correct operation is not possible, an error code is displayed on the remote controller LCD display.
- ④ Press the  $\bigcirc_{\mathbf{F}}$  button to return to normal remote controller display.
- To prevent continuous test runs, this remote controller includes a timer function that cancels the test run after 60 minutes.
- The operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)



## Sensor Temperature Display Function (displayed regardless of whether unit is operating or stopped)

The procedure below displays the sensor temperatures from the remote controller, indoor unit, and outdoor unit on the remote controller.

## <Procedure of CZ-RTC2>

- Press and hold the And CAN buttons simultaneously for 4 seconds or longer.
- ② The unit No. "X-X" (main unit No.), item code "XX" (sensor address), and servicing monitor " DD XX" (sensor temperature) are displayed on the remote controller LCD display. (See Fig. 3-9 at right.)

(For the relationships between the sensor addresses and sensor types, see the table of indoor and outdoor unit sensors on page 5-55.)

- If group control is in effect, press the UNIT button to select the unit to monitor.
   Press the temperature setting buttons to select the item code to change.
- (5) Press the button to return to normal remote controller display.



\* Display shows a discharge temperature of 00XX at unit No. 1-1.

In case, for example, the display shows "0085" in the figure above, a discharge temperature from the outdoor unit stands for 85°C.

Fig. 3-9

## NOTE

The temperature display appears as "- - - -" for units that are not connected.

\* If monitor mode is engaged while normal operation is in progress, only the parts of the LCD display shown in the figure will change. Other parts continue to display the same information as during normal operation.

## <Procedure of CZ-RTC3 / CZ-RTC5A>

 Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.

Maintenance func	20:30 (THU)
1. Outdoor unit error da	ata
2. Service contact	
3. RC setting mode	
4.Test run	
Sel. ▶ Page [ →	] Confirm

(2) Press the v or button to see each menu.

If you wish to see the next screen instantly, press

the **d** or **b** button.

Select "5. Sensor info." on the LCD display and

press the 🗾 button.

Maintenance func	20:30 (THU)
5. Sensor info.	
<ol><li>Servicing check</li></ol>	
7. Simple settings	
8. Detailed settings	
\$ Sel. ↓ Page [ ]	] Confirm

Select the "Unit no." by pressing the **v** or

button for changes.

Sensor in	nfo.	20:30 (THU)
Unit no.	Code no.	Data
	00	0026
1-1	01	0028
<b>—</b>	02	0026
✿ Sel.	Next	

Then press the **b**utton. Display sensor information of the unit.

Sensor info.		20:30 (THU)
Unit no.	Code no.	Data
	00	0026 📤
1-1	01	0028
	02	0026 💂
Scroll	-	

Refer to the information by pressing the **v** or **button**.



Fig. 3-10

## <Procedure of CZ-RTC4>

- (1) Press and hold the  $\frown_{\mathbf{F}}$  and  $\overset{CANCEL}{\frown}$  buttons simultaneously for 4 seconds or longer.
- (2) The unit No. "X-X" (main unit No.), item code "XX" (sensor address), and servicing monitor " III XX" (sensor temperature) are displayed on the remote controller LCD display. (See Fig. 3-11 at right.)
- ③ Press the temperature setting ▽ / △ buttons and select the item code to the address of the sensor to monitor.
- If group control is in effect, press the button to select the unit to monitor.
   Press the temperature setting buttons to select the item code to change.
- (5) Press the button to return to normal remote controller display.



\* Display shows a discharge temperature of 00XX at unit No. 1-1.

Fig. 3-11

## NOTE

The temperature display appears as "- - - -" for unit that are not connected.

\* If monitor mode is engaged while normal operation is in progress, only the parts of the LCD display shown in the figure will change. Other parts continue to display the same information as during normal operation.

	Indoor unit sensors
00	Room temp. controlled*
01	Remote controller temp.
02	Indoor unit intake temp. (TA)
03	Indoor unit heat exchanger temp. E1 (E1)
04	—
05	Indoor unit heat exchanger temp. E3 (E3)
06	Discharge air temp. (BL)
07	Discharge air temp. setting
08	Indoor unit MOV pulse (MOV)

#### Outdoor unit sensors

Refer to the Service Manual of Outdoor Unit.

\*Room temp. controlled: = Controlled room temperature

•When body thermostat controlled:

Controlled room temperature = Indoor unit intake temp. (TA) - Intake temperature shift (\*1)

•Remote control thermostat controlled:

Controlled room temperature = Remote controller temp.

\*1 Intake temperature shift: This is the shift value considered the temperature difference between the upper area and lower area of the room in heating mode.
 It is the value of the code "06" in the indoor unit's EEPROM setting.

Cooling mode: = 0

## ■ nanoe<sup>™</sup> X Display

When the  $\Lambda$  **nance** appears on the remote controller (CZ-RTC5A), the status of the nance<sup>TM</sup> X can be checked in the following way.

## <Procedure of CZ-RTC5A>

- ① Switch On the earth leakage circuit breaker.
- ② Wait until the remote control display returns to normal.



③ Operate the unit in FAN mode.



While operating in FAN mode (more than 5 minutes have elapsed), press the 
 , 
 and 
 buttons simultaneously for 4 or more seconds.
 The "Maintenance func" screen appears on the LCD display.

Maintenance func 20:30 (THU)
0. ECONAVI info.
1. Outdoor unit error data
2. Service contact
3. RC.setting mode
- Sel. →Page [←]Confirm

(5) Press the ▼ or ▲ button to see each menu. Select "13. nanoe" on the LCD display and press the

← button.

🗲 Maintenance	func	20:30 (THU)	
10. Set elec. consumption			
11. Set touch k	кеу		
12. Check touch	n key		
13. nanoe			
\$ Sel. ∢ ▶Page	. [₊]	]Confir <b>m</b>	



Fig. 3-12

⑥ Check that the nanoe™ X module status is "Normal". The indoor unit on the display can be scrolled up or down using ▼ / ▲ buttons.

nanoe	20:30 (THU)
<b>U</b> nit no.	Status
1-1	Normal
1-2	Not connected
1-3	Unsupported
- Scroll	

The nance<sup>™</sup> X module status of all indoor units will be displayed.

Normal : The nanoe<sup>™</sup> X module is operating normally. Unsupported : The indoor unit is not available to the nanoe<sup>™</sup> X function.

- \*1-1 and 1-2 represent the unit number.
- \*In the case of "Unsupported", select "8. Detailed settings" and check the setting data of the Code no. 9.
  \*If the setting data is "0000", the nanoe™ X module is not recognized. Check the status of the connection.
  If the display other than "Normal" or "Unsupported" appears, check the Step ⑦ next page.

⑦ In the case of the nanoe<sup>™</sup> X module status other than "Normal" or "Unsupported"

If the menu "13. nance" is not displayed or the module status becomes other than "Normal" or "Unsupported" even though the nance™ X module is connected, there is a probability that the following symptoms happen.

Display	Symptom	Countermeasure	
Display	The probability of occurrence of nanoe <sup>™</sup> X is deviated from the room temperature and humidity conditions. Outside the range of temperature: Below 5°C or over 35°C Outside the range of humidity: Over 86%	There is no abnormality in the nanoe™ X module. Use in the range of appropriate temperature and humidity.	
Abnormal humidity sensor	Humidity sensor not connected or sensor failure	Check if connected to the indoor unit PCB of the humidity sensor or replace the sensor.	
Disconnection failure The wiring between the indoor unit and nanoe™ X module is not connected.		Specialize the target indoor unit and	
Not connected	There is no abnormality in the nanoe™ X module. Use in the range of appropriate room temperature and humidity.	PCB of the nanoe™ X module.	

\*Specialization of the indoor unit can be checked by the operation of the airflow.

Checking method:

1. Stop the maintenance function.

Press the 📃 button to show the maintenance func display. Then press the 🗾 button.

2. Operate the airflow.

Select the Unit no. under the 📃 "2. Airflow setting". Make the airflow setting.

The unit which is corresponded to the preset flap operation will become the target unit.

When the unit is specialized, switch off the earth leakage circuit breaker and unplug the connector of the nanoe<sup>™</sup> X module wiring from the PCB. Then plug it in again. Switch on the earth leakage circuit breaker and once again check the Steps 1 to 3. Then check the status by selecting the menu "13. nanoe". If "Disconnection failure" or "Not connected" appears on the display, it is necessary to replace the nanoe<sup>™</sup> X module with a new one.

## -MEMO -

# 6. TROUBLE DIAGNOSIS

## \* Refer to the Service Manual of Outdoor Unit

However, refer to page 5-53 operations in the high-spec wired remote controller (CZ-RTC3 / CZ-RTC5A) of "Sensor temperature display function".

## -MEMO -

# 7. TEST RUN from the remote controller

1.	Test Run	<b>7</b> -2
2.	Auto Address Setting	<b>7</b> -4

## 1. Test Run

Regarding the detailed settings for the test run, refer to the service manual for each outdoor unit. If operating the high-spec wired remote controller (CZ-RTC3 / CZ-RTC5A / CZ-RTC4) is necessary, follow the procedure described below.

## 7-1. Test Run

<procedure cz-rtc3="" cz-rtc5a="" of=""></procedure>	
(1) Keep pressing the $\fbox$ , $\checkmark$ and $\blacktriangleright$	
buttons simultaneously for 4 or more seconds.	
The "Maintenance func" screen appears on the	
LCD display.	
✗ Maintenance func 20:30 (THU)	
1. Outdoor unit error data	
2. Service contact 3. RC setting mode	
4.Test run	
- Sel. ► Page [ - ] Confirm	
Press the  or  button to see each menu.	
If you wish to see the next screen instantly, press	
the or button. Select "4. Test run" on the LCD display and press	
the 💶 button.	
<ul> <li>✓ Maintenance func 20:30 (THU)</li> <li>1. Outdoor unit error data</li> <li>2. Service contact</li> <li>3. RC setting mode</li> <li>4.Test run</li> <li>♦ Sel. ▲ Page [ → ] Confirm</li> </ul>	(
Change the display from OFF to ON by pressing	
the <b>▼</b> or <b>▲</b> button. Then press the <del>↓</del> button.	
Test run 20:30 (THU)	(
Test run	
Change [→] Confirm	



Fig. 1

③ Press the \_\_\_\_\_ button. "TEST" will be displayed on the LCD display.



④ Press the button. Test run will be started. Test run setting mode screen appears on the LCD display.

	20:30 (THU)
MODE COOL	FAN SPEED

## 1. Test Run

## <Procedure of CZ-RTC4>

- 1. Press the remote controller  $\frown_{\mathbf{F}}$  button for 4 seconds or longer. Then press the  $\bigcirc$  button.
- "TEST" appears on the LCD display while the test run is in progress.
- The temperature cannot be adjusted when in Test Run mode. (This mode places a heavy load on the machines. Therefore use it only when performing the test run.)
- 2. The test run can be performed using the HEAT, COOL, or FAN operation modes.

## NOTE

The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.

- If correct operation is not possible, a code is displayed on the remote controller LCD display. (Refer to "Table of Self-Diagnostic Functions" and correct the problem.)
- 4. After the test run is completed, press the putton again. Check that "TEST" disappears from the LCD display. (To prevent continuous test runs, this remote controller includes a timer function that cancels the test run after 60 minutes.)
  - \* If the test run is performed using the wired remote controller, operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)



## 7-2. Auto address setting

<Procedure of CZ-RTC3 / CZ-RTC5A>

- Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.
- (2) Press the v or button to see each menu.

If you wish to see the next screen instantly, press the  $\checkmark$  or  $\blacktriangleright$  button.

Select "9. Auto address" on the LCD display and press the

🗲 Maintena	ance func	20:30 (THU)
9. Auto addr	ess	
10. Set elec.	consumptio	n
11. Set touch key		
12. Check tou	ich key	
🗢 Sel. 🖪	Page [	] Confirm

(3) The "Auto address" screen appears on the LCD display.

Change the "Code no." to "A1" by pressing the

▼ or ▲ button.



④ Select the "O/D unit no." by pressing the or button.

Select one of the "O/D unit no." for automatic address by pressing the ▼ or ▲ button. Then press the → button.

Approximately about 10 minutes are required. When automatic address setting is completed, the units return to normal stopped status.





## Checking indoor unit addresses

 Keep pressing the , and buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.

✤ Maintenance func	20:30 (THU)
1. Outdoor unit error da	ata
2. Service contact	
3. RC setting mode	
4.Test run	
✓ Sel.  ▶ Page [ →	] Confirm

(2) Press the or button to see each menu.

If you wish to see the next screen instantly, press the **I** or **I** button.

Select "7.	Simple	e settings'	' on the	LCD	display	and
press the	•	button.				

Maintenance func	20:30 (THU)
5. Sensor info.	
<ol><li>Servicing check</li></ol>	
<ol><li>Simple settings</li></ol>	
<ol><li>Detailed settings</li></ol>	
\$ Sel. ↓ Page [	] Confirm

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

Select	the "Unit no." by pressing the	or
	button for changes.	

Simple settings		20:30 (THU)
Unit no.	Code no.	Set data
3-1	01	0001
\$ Sel. →	Next	

The indoor unit fan operates only at the selected indoor unit.

## <Procedure of CZ-RTC4>

\* Automatic address setting in Cooling mode cannot be done from the remote controller.

### NOTE

- Selecting each refrigerant system individually for automatic address setting
- Automatic address setting for each system
   Item code "A1"



1. Press the remote controller timer time  $\stackrel{\text{max}}{\frown}$  button and  $\stackrel{\frown}{\blacktriangleright}$  button at the same time.

(Press and hold for 4 seconds or longer.)

- Next, press either the temperature setting ♥/△ button. (Check that the item code is "A1.")
- Use either the <sup>UNIT</sup> or <sup>3</sup>/<sub>2</sub> button to set the system No. to perform automatic address setting.
- 4. Then press the  $\_$  button.

(Automatic address setting for one refrigerant system begins.) (When automatic address setting for one system is completed, the system returns to normal stopped status.)

<Approximately 4 - 5 minutes is required.>

(During automatic address setting, " **SETTING**" is displayed on the remote controller.

This message disappears when automatic address setting is completed.)

5. Repeat the same steps to perform automatic address setting for each successive system.

### Request concerning recording the indoor/outdoor unit combination Nos.

After automatic address setting has been completed, be sure to record them for future reference. List the outdoor main unit system address and the addresses of the indoor units in that system in an easily visible location (next to the nameplate), using a permanent marking pen or similar means that cannot be abraded easily.

Example: (Outdoor) 1 - (Indoor) 1-1, 1-2, 1-3... (Outdoor) 2 - (Indoor) 2-1, 2-2, 2-3...

These numbers are necessary for later maintenance. Please be sure to indicate them.

## • Checking indoor unit addresses

### If 1 indoor unit is connected to 1 remote controller>

- Press and hold the → button and → button for 4 seconds or longer (simple settings mode).
- The address is displayed for the indoor unit that is connected to the remote controller.
   (Only the address of the indoor unit that is connected to the remote controller can be checked.)
- Press the → button again to return to normal remote controller mode.



Number changes to indicate which indoor unit is currently selected.

Indoor unit address

# <If multiple indoor units are connected to 1 remote controller (group control)>

- Press and hold the → button and → button for 4 seconds or longer (simple settings mode).
- 2. "ALL" is displayed on the remote controller.
- 3. Next, press the button.
- 4. The address is displayed for 1 of the indoor units which is connected to the remote controller. Check that the fan of that indoor unit starts and that air is discharged.
- 5. Press the button again and check the address of each indoor unit in sequence.
- Press the pagain to return to normal remote controller mode.



Number changes to indicate which indoor unit is currently selected.

Indoor unit address