



Model No.: S-19FK1E S-24FK1E S-27FK1E S-36FK1E S-45FK1E S-52FK1E

https://eu.datanavi.ac.smartcloud.panasonic.com/documents/index.htm?model=S-19FK1E

Required tools for Installation Works

- | | | | |
|--|-------------------|-------------------|---------------------|
| 1 Phillips screw driver | 6 Spanner | 11 Thermometer | 42 N•m (4.3 kg•m) |
| 2 Flathead screw driver | 7 Pipe cutter | 12 Megohmmeter | 55 N•m (5.6 kg•m) |
| 3 Level gauge | 8 Reamer | 13 Multimeter | 65 N•m (6.6 kg•m) |
| 4 Electric drill, hole core drill (ø70 mm) | 9 Knife | 14 Torque wrench | 100 N•m (10.2 kg•m) |
| 5 Hexagonal wrench (4 mm) | 10 Measuring tape | 18 N•m (1.8 kg•m) | |

Note: Ensure to hand over this installation instruction manual to the person performing the installation and inform the customer to keep it properly stored.

DISCLAIMER

Panasonic will not be responsible for any accident or damage due to improper installation in anyway not described in the detailed manuals. Malfunction caused by incorrect installation is also not covered by product warranty.

SAFETY PRECAUTIONS

- Read the following "SAFETY PRECAUTIONS" carefully before installation.
- Electrical work must be installed by a licensed electrician. Be sure to use the correct rating of the power plug and main circuit for the model to be installed.
- The caution items stated here must be followed because these important contents are related to safety. The meaning of each indication used is as below. Incorrect installation due to ignoring of the instruction will cause harm or damage, and the seriousness is classified by the following indications.

WARNING	This indication shows the possibility of causing death or serious injury.
CAUTION	This indication shows the possibility of causing injury or damage to properties only.

The items to be followed are classified by the symbols:

	Symbol with white background denotes item that is PROHIBITED.
	Symbol with dark background denotes item that must be carried out.

- Carry out test running to confirm that no abnormality occurs after the installation. Then, explain to user the operation, care and maintenance as stated in instructions. Please remind the customer to keep the operating instructions for future reference.

WARNING

- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Any unfit method or using incompatible material may cause product damage, burst and serious injury.
- Do not use unspecified cord, modified cord, joint cord or extension cord for power supply cord. Do not share the single outlet with other electrical appliances. Poor contact, poor insulation or over current will cause electrical shock or fire.
- Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen.
- Do not insert your fingers or other objects into the unit, high speed rotating fan may cause injury.
- Do not sit or step on the unit, you may fall down accidentally.
- Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.
- Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flame, sparks, or other sources of ignition. Else, it may explode and cause injury or death.
- Engage authorized dealer or specialist for installation. If installation done by the user is incorrect, it will cause water leakage, electrical shock or fire.
- For refrigeration system work, install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock or fire.
- Use the attached accessories parts and specified parts for installation. Otherwise, it will cause the set to fail, water leakage, fire or electrical shock.
- Install at a strong and firm location which is able to withstand weight of the set. If the strength is not enough or installation is not properly done, the set will drop and cause injury.
- For electrical work, follow the national regulation, legislation and this installation instruction. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in electrical work, it will cause electrical shock or fire.
- Do not use joint cable for connection cable. Use the specified connection cable, refer to instruction ③ ELECTRICAL WIRING and connect tightly for connection. Clamp the cable so that no external force will have impact on the terminal. If connection or fixing is not perfect, it will cause heat up or fire at the connection.
- Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause fire or electrical shock.
- This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD), with sensitivity of 30mA at 0.1 sec or less. Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.
- Tighten the flare nut with torque wrench according to specified method. If the flare nut is over-tightened, after a long period, the flare may break and cause water leak.
- This equipment must be properly earthed. Earth line must not be connected to gas pipe, water pipe, earth of lightning rod and telephone. Otherwise, it may cause electrical shock in case of equipment breakdown or insulation breakdown.

CAUTION

- Do not install the unit at place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire.
- Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.
- Do not touch the sharp aluminium fin, sharp parts may cause injury.
- Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.
- Select an installation location which is easy for maintenance. Incorrect installation, service or repair of this fan coil unit may increase the risk of rupture and this may result in loss damage or injury and/or property.
- Power supply connection to the fan coil unit. Use power supply cord type designation 60245 IEC 57 or heavier cord. Connect the power supply cord of the fan coil unit to a circuit breaker for the permanent connection. It must be a double pole switch with a minimum 3.0mm contact gap. Power supply point should be in easily accessible place for power disconnection in case of emergency.
- Installation work. It may need two people to carry out the installation work.
- Keep any required ventilation openings clear of obstruction.

ACCESSORIES SUPPLIED WITH INDOOR UNIT

Make sure all accessory parts listed are with the system before beginning.

Part Name	Figure	Q'ty	Remarks	Part Name	Figure	Q'ty	Remarks
Installation plate		1		Insulator		1	For tube connector insulation 200 mm x 300 mm
Screw (4x20)		5	For installation plate installation	Cable Tie		2	For fixing wires (optional)
Ferrite core		1	For electrical EMC stability (Used when using wired remote controller)	Packing		2	For tube connector sealing

1 SELECT THE INDOOR UNIT INSTALLATION LOCATION

1-1. Indoor Unit

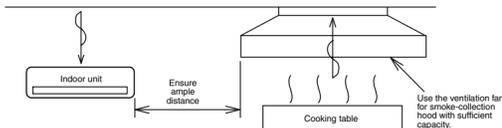
- Install the indoor unit once the following conditions are satisfied and after receiving the customer approval.
- The indoor unit must be within a maintenance space.
- The indoor unit must be free from any obstacles in path of the air inlet and outlet, and must allow spread of air throughout the room.
- If the height from the floor to ceiling exceeds three meters, air flow distribution deteriorates and the effect is decreased.

WARNING

- The installation position must be able to support a load four times the indoor unit weight.
- The indoor unit must be away from heat and sources of steam, but avoiding installation near an entrance.
- The indoor unit must allow easy draining.
- The indoor unit must allow easy connection to the outdoor unit.
- The indoor unit must be at least 3 m away from any noise-generating equipment. The electrical wiring must be shielded with a steel conduit.
- If the power supply is subject to noise generation, add a suppressor.
- Do not install the indoor unit in a laundry. Electric shocks may result.
- Installation height is more than 1.8m.

NOTE

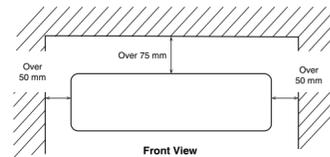
- Thoroughly study the following installation locations
- In such places as restaurants and kitchens, considerable amount of oil steam and flour adhere to the fan, the fin of the heat exchanger, resulting in heat exchange reduction, spraying, dispersing of water drops, etc. In these cases, take the following actions:
 - Make sure that the ventilation fan for smoke-collecting hood on a cooking table has sufficient capacity so that it draws oily steam which should not flow into the suction of the indoor unit.
 - Make sure there is enough distance from the cooking room to install the indoor unit in such place where it may not suck in oily steam.
 - Avoid installing the indoor unit in such circumstances where cutting oil mist or iron powder exist, especially in factories, etc.
 - Avoid places where inflammable gas is generated, flows-in, contaminated, or leaked.
 - Avoid places where sulphurous acid gas or corrosive gas can be generated.
 - Avoid places near high frequency generators.



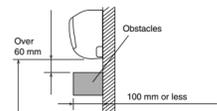
Wall Mounted

The air inlet and outlet of the indoor unit must be free of any obstructions to allow air to spread throughout the room.

- The indoor unit must be within a maintenance space.



Front View



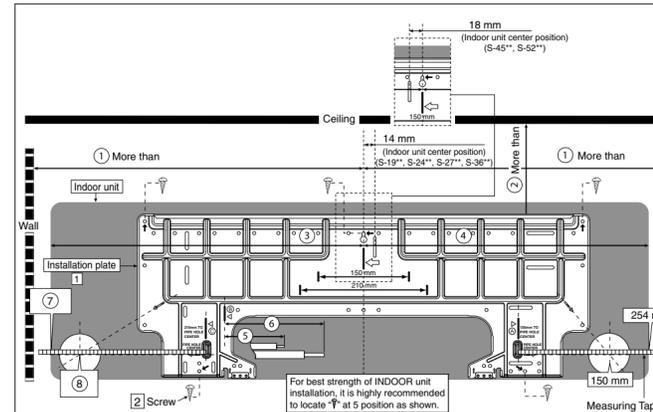
Side View

Over 1.8 m

2-2. How to Fix Installation Plate

The mounting wall should be strong and solid enough to withstand the unit's vibration.

- Place the installation plate from the indoor unit on the wall at the location selected.



Model	Dimension							
	①	②	③	④	⑤	⑥	⑦	⑧
S-19**, S-24**, S-27**, S-36**	508 mm	67 mm (-)	432 mm	458 mm	113 mm	203 mm	229 mm	150 mm
S-45**, S-52**	600 mm	67 mm (-)	550 mm	511 mm	223 mm	313 mm	289 mm	210 mm

- The center of installation plate should be at more than ① at right and left of the wall.
- The distance from installation plate edge to ceiling should more than ②.
- From installation plate center to unit's left side is ③.
- From installation plate center to unit's right side is ④.

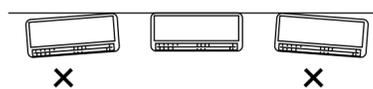
- For left side piping, piping connection for water inlet should be about ⑤ from this line.
- For left side piping, piping connection for water outlet should be about ⑥ from this line.

- Mount the installation plate on the wall with 5 screws or more (at least 5 screws).

- (If mounting the unit on the concrete wall, consider using anchor bolts.)
- Always mount the installation plate horizontally by aligning the marking-off line with the thread and using a level gauge.

If Wooden Wall

- Attach the installation plate to the wall with the 5 screws (4 x 20) provided.
- Double check with a carpenter's level or tape measure that the panel is level. This is important to install the unit properly.



- Make sure the panel is flush against the wall. Any space between the wall and unit will cause noise and vibration.

If Concrete Wall

- When attaching the installation plate to the concrete wall, use the screws (field supply) for concrete or an optional anchor plug and fix to the hole of ø5 mm of the installation plate as shown in the figure under Section 2-2.
- When fixing with bolt, attach to the hole of ø8 mm.

- Double check with a carpenter's level or tape measure that the plate is level. This is important to install the unit properly.

- Make sure the installation plate is flush against the wall. Any space between the wall and unit will cause noise and vibration.

- Drill the piping plate hole with ø70 mm hole-core drill.
- Line according to the left and right side of the installation plate. The meeting point of the extended line is the center of the hole. Another method is by putting measuring tape at position as shown in the diagram above. For S-19**, S-24**, S-27**, S-36**, the hole center is obtained by measuring the distance namely 150 mm for left and right hole respectively. For S-45**, S-52**, the hole center is obtained by measuring the distance namely 210 mm for left hole and 150 mm for right hole respectively.
- Drill the piping hole at either the right or the left and the hole should be slightly slanting to the outdoor side.

2-3. To Drill a Hole in the Wall and Install a Sleeve of Piping

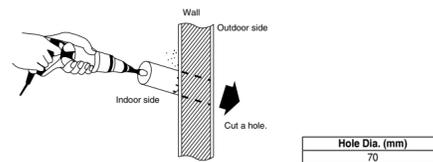
- Before making the hole, check carefully that no studs or pipes are directly run behind the spot to be cut.

CAUTION

Avoid areas where electrical wiring is located.

The above precautions are also applicable if tubing goes through the wall in any other location.

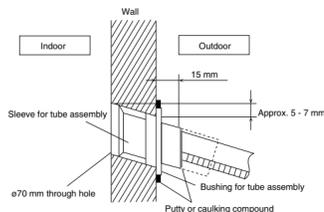
- Using a sabre saw, keyhole saw or hole-cutting drill attachment, cut a hole of ø70 mm in the wall. Hole should be made at a slight downward slant to the outdoor side.



- Place a plastic cover over the end of the pipe (for indoor side only) and insert the pipe in the wall. This will protect the tube from contacting the metal lath or wire lath, leakage due to condensation or entering small animals through the hole.

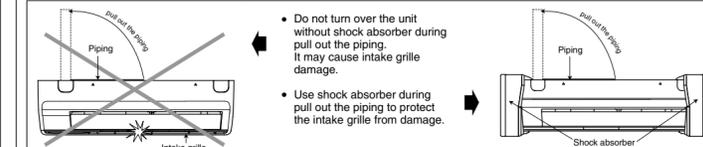
CAUTION

When the wall is hollow, please be sure to use the piping sleeve assembly to prevent dangers caused by mice biting the connection cable.



- Insert the piping sleeve to the hole.
- Fix the bushing to the sleeve.
- Cut the sleeve until it extrudes about 15 mm from the wall.
- Finish by sealing the sleeve with putty or caulking compound at the final stage.

2-4. Indoor Unit Installation



- Do not turn over the unit without shock absorber during pull out the piping. It may cause intake grille damage.
- Use shock absorber during pull out the piping to protect the intake grille from damage.

1. FOR THE RIGHT REAR PIPING

- Step-1 Pull out the Indoor piping

- Step-2 Install the Indoor Unit

- Step-3 Secure the Indoor Unit

- Step-4 Insert the power supply cord cable

- Insert the cables from bottom of the unit through the control board hole until terminal board area.

2. FOR THE RIGHT AND RIGHT BOTTOM PIPING

- Step-1 Pull out the Indoor piping

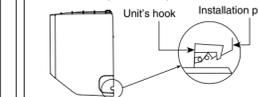
- Step-2 Install the Indoor Unit

- Step-3 Insert the power supply cord cable

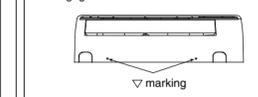
- Insert the cables from bottom of the unit through the control board hole until terminal board area.
- Step-4 Secure the Indoor Unit

Secure the Indoor Unit

Press the lower left and right side of the unit against the installation plate until hooks engage with their slot (sound click).



To take out the unit, push the ∇ marking at the bottom unit, and pull it slightly towards you to disengage the hooks from the unit.



3. FOR THE EMBEDDED PIPING

- Step-1 Change the drain hose position

- Step-2 Bend the embedded piping

- Use a spring bender or equivalent to bend the piping so that the piping is not crushed.

- Step-3 Pull the connection cable into Indoor Unit

- The power supply cord cable can be connected without removing the front grille.

- Step-4 Install the Indoor Unit

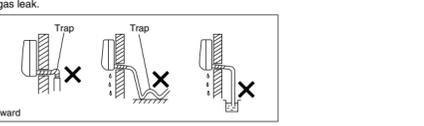
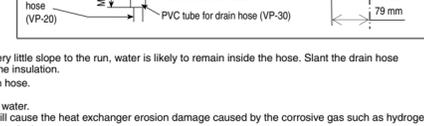
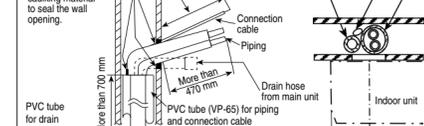
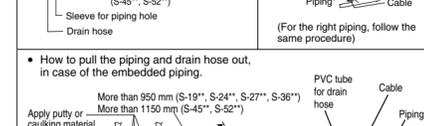
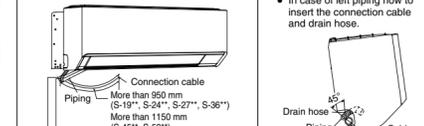
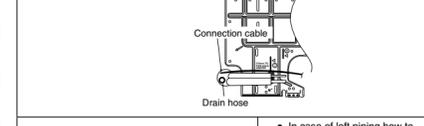
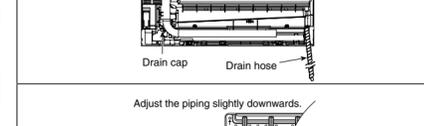
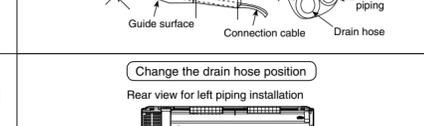
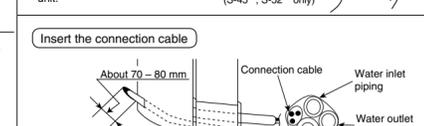
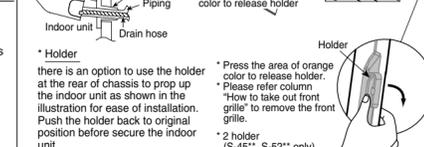
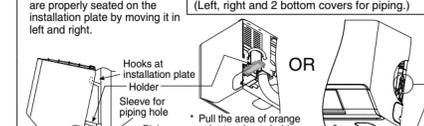
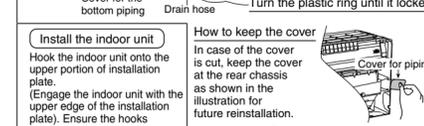
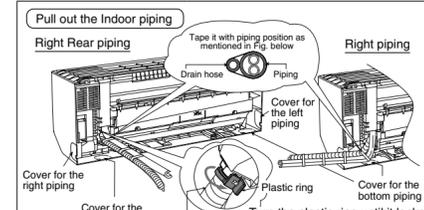
- Step-5 Connect the piping

- Please refer to "Pipe connection" column.

- Step-6 Insulate and finish the piping

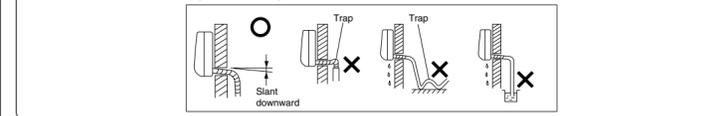
- Please refer to "Insulating the piping" column.
- Step-7 Secure the Indoor Unit

(This can be used for left rear piping also.)



NOTE

- When there is a long horizontal drain hose runs with very little slope to the run, water is likely to remain inside the hose. Slant the drain hose downward slightly to the outdoors and insulate it with the insulation.
- Slant downward not to remain water inside the drain hose.
- Make sure tubing does not become trapped.
- Do not let the tip of the drain hose dip into the drain water.
- Do not leave the drain hose in the sewerage. This will cause the heat exchanger erosion damage caused by the corrosive gas such as hydrogen sulfide occurred inside the sewerage and lead to a gas leak.



3 ELECTRICAL WIRING

3-1. General Precautions on Wiring

WARNING

- This fan coil unit must be installed in accordance with national wiring regulations.
- Cables connected to indoor unit must be approved polychloroprene sheathed type 60245 IEC 57 or heavier.
- The units must be connected to the supply cables for fixed wiring by qualified technician. Circuit breaker must be incorporated in the fixed wiring in accordance with the national wiring regulations. The circuit breaker must be approved, suitable for the voltage and current ratings of equipment and have a contact separation by 3mm in all poles. When the supply cable is damaged, it must be replaced by qualified technician.
- Be sure to install a current leakage breaker, main switch and fuse to the main power supply, otherwise electric shocks may result.
- Be sure to connect the unit to secure earth connection. If the earthing work is not carried out properly, electric shocks may result.
- Wiring shall be connected securely by using specified cables and fix them securely so that external force of the cables may not transfer to the terminal connection section. Imperfect connection and fixing leads to fire, etc.

- Select a power source that is capable of supplying the current required by the fan coil unit.
- Feed the power source to the unit via a distribution switch board designed for this purpose, the switch should disconnect all poles with a contact separation of at least 3 mm.
- Always ground the fan coil unit with a grounding wire and screw to meet the LOCAL REGULATIONS.
- Be sure to connect the connection wires correctly to terminal board.
- Be sure to turn off the main power before installing and connecting the remote controller.
- Each wiring connection must be done in accordance with the wiring system diagram.

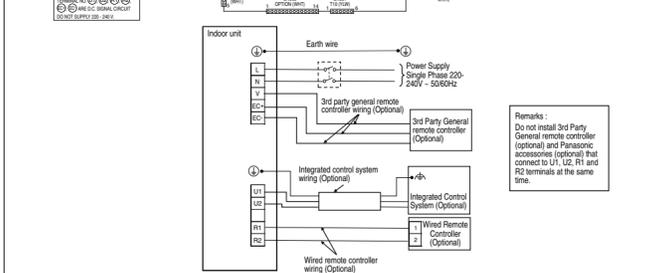
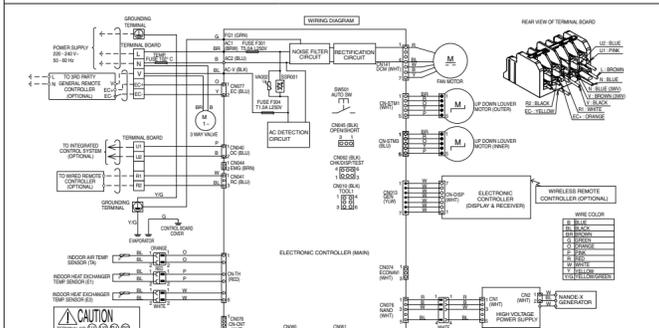
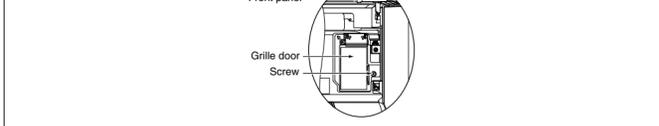
NOTE

If momentarily turning on the power supply for fan coil unit, do not turn the power off after at least 1 minute has passed. (For the system's automatic setting.) Turning off the power supply on the way may cause an abnormal operation.

3-2. Wiring System Diagrams

The power supply cord cable, 3rd party general remote control (optional) and integrated control system (optional) wires can be connected without removing the front grille.

- Install the indoor unit on the installing holder that mounted on the wall.
- Open the front panel and grille door by loosening the screw.



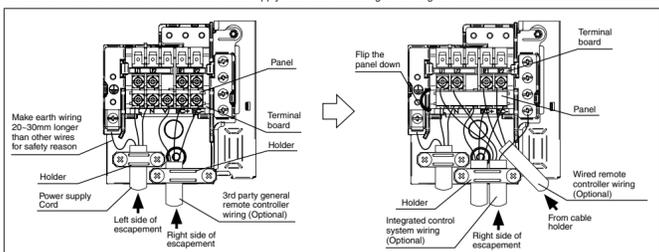
- Make sure that screws of the terminal are securely tightened.
- Before obtaining access to terminals, all supply circuits must be disconnected.

3-3. Recommended Wire Length and Wire Size

Wire Size	Length	Wire Size	Length
1.5mm ²	Max. 40m	0.75mm ² (AWG#18)	Max. 500m

Wire Size	Length
0.75mm ² (AWG#18)	Max. 10m

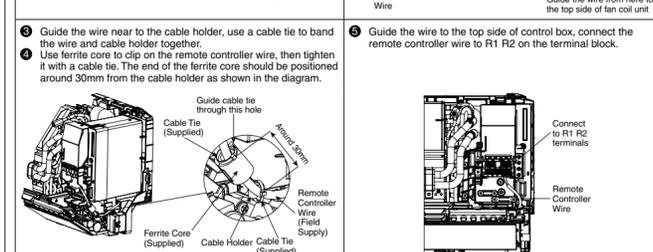
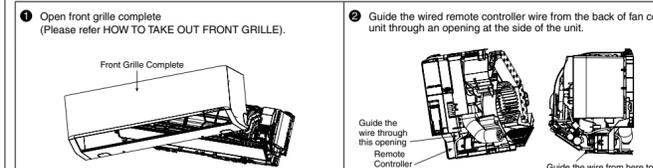
NOTE
For Optional Parts connecting wiring size, refer to Installation Manual of the Optional Parts. Connect the wired remote controller wire and Power supply cord cable according to the diagram below.



- Secure firmly the power supply cord and connecting cable onto the control board with the holder. Do not over-tighten holder screw, as this may damage the holder.
- Close grille door by tighten with screw and close the front panel.

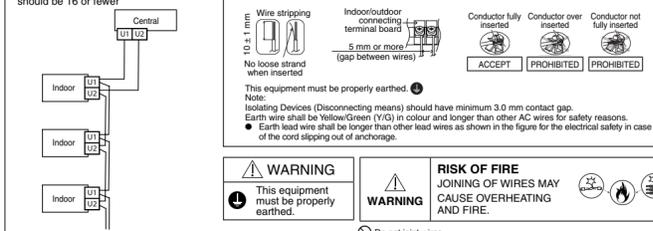
How To Connect Wired Remote Controller to The Indoor Unit

CAUTION Be sure to turn off the main power before installing and connecting the remote controller. Otherwise, it will cause the electrical shock.



Double check the wire is connected securely and firmly.

If branching in the inter-unit control wiring, the number of branch points should be 16 or fewer



Do not joint wires

4 HYDRAULIC CONNECTION

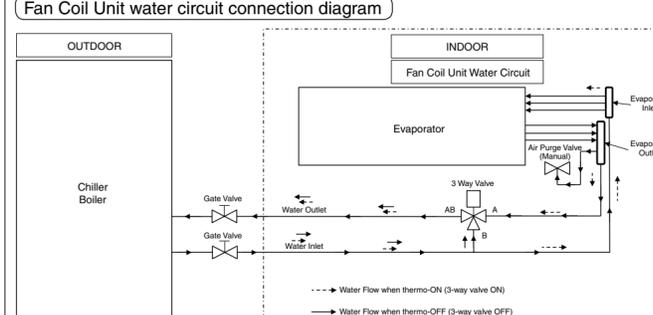
Must ensure mechanical connections be accessible for maintenance purposes.

WATER QUALITY REQUIREMENT

It is recommended to perform an analysis of the water circulating in the coil focusing on the research of the possible presence of bacteria (detection of iron bacteria and micro-organisms that can produce H2S or chemically reduce sulphates) and on the chemical composition of the water, to prevent corrosion and fouling inside the tubes. The water circuit must be supplied and replenished with treated water that does not exceed the threshold levels indicated below.

Total hardness in mmol/l	l < mmol/l < 1.5	Dissolved oxygen	4 < [O ₂] < 9 mg/litre
Chlorides [CL ⁻]	< 10 mg/litre	Carbon dioxide [CO ₂]	< 30 mg/litre
Sulphates [SO ₄ ²⁻]	< 30 mg/litre	Resistivity	20 Ohm·m < Resistivity < 50 Ohm·m
Nitrates [NO ₃ ⁻]	= 0 mg/litre	pH	6.9 < pH < 8
Dissolved iron	< 0.5 mg/litre		

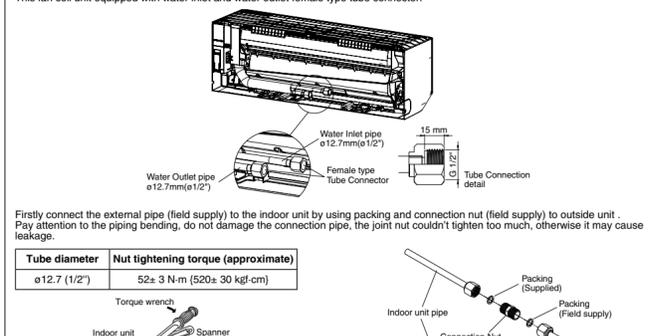
Fan Coil Unit water circuit connection diagram



Some main fitting components are needed in the system to enhance the capacity and ease of service such as gate valve, balancing valve, filter, strainer etc.

4-1. Pipe connection

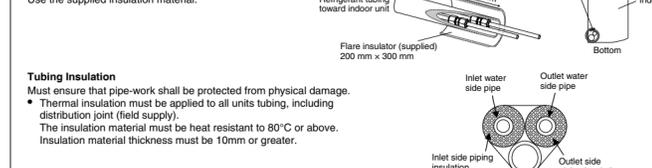
This fan coil unit equipped with water inlet and water outlet female type tube connector.



Tube diameter: ø12.7 (1/2")
Nut tightening torque (approximate): 52x 3 N·m (50±.30 kgf·cm)

4-2. Insulating the piping

Unless the insulation is made, condensation can cause damage to the interior of a property. Use the supplied insulation material.



NOTE
If noise bothers you from the area between indoor and outdoor units' connection pipes, it is effective to wind the soundproofing materials (field supply) to reduce noise.

After a tube has been insulated, never try to bend it into a narrow curve because it can cause the tube to break or crack. Never grasp the drain or water connecting outlets when moving the unit.

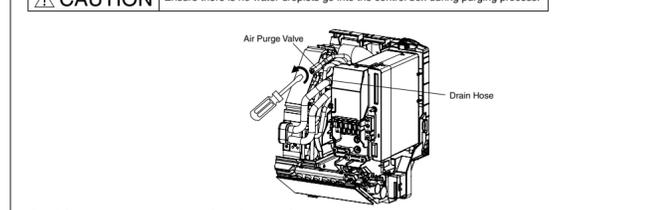
4-3. Purging the unit

This fan coil unit should not be energized until all water lines have been purged of air in order to prevent pump damage.

- Open front grille complete (Please refer HOW TO TAKE OUT FRONT GRILLE)
- Air purge valve is located at the top of unit.

By using screwdriver, rotate anti clockwise the valve slowly until the water and air smoothly come out. Note: Recommended maximum valve opening is half round in anti clockwise rotation to prevent water to outside unit.

CAUTION Ensure there is no water droplets go into the control box during purging process.



- Rotate back valve in clockwise direction after complete purging process.

5 HOW TO INSTALL THE TIMER REMOTE CONTROLLER OR HIGH-SPEC WIRED REMOTE CONTROLLER (OPTIONAL PART)

Refer to the Installation Instructions attached to the optional Timer Remote Controller or optional High-spec Wired Remote Controller.

6 PRECAUTIONS ON TEST RUN

- Request that the customer be present when the test run is performed. At this time, explain the operation manual and have the customer perform the actual steps.
- Check that the 220-240 VAC power is not connected to the U1 & U2 terminal board terminal.
- If 220-240 VAC is accidentally applied, the Fuse on indoor unit Electronic Controller (Main) will blow in order to protect the PCB.
- In this case, recover the connection by disconnect 2P connector wires that originally connected to the indoor unit Electronic Controller OC connector and shift the connector wires to EMG connector on same indoor unit Electronic Controller (Main). If operation is still not possible after shift to EMG connector, cut the jumper JP040 on the same indoor unit Electronic Controller (Main).

Item to Check Before the Test Run

In the case of conditions below, restore the detailed setting code nos. 12, 13, 14 of all indoor units in the system to the Factory Setting and then set up the auto address setting.

- Indoor unit address has been assigned before.
- One or more PCBs of indoor units in the system are replaced.
- Detailed setting "Code no." 12, 13 or 14 doesn't match for system.
- The "Assigning" screen appears on the LCD display for more than 10 minutes.

Factory Setting

XX : Code no.	Item	YYYY : Set data
12	System Address	0099
13	Indoor Unit Address	0099
14	Group Control Address	0099

List of detailed setting items code nos. 12, 13, 14

Code no.	Item	No.	Set data	Description
12	System address	0001	Unit no. 1	
		0002	Unit no. 2	
		0003	Unit no. 3	
13	Indoor unit address	0030	Unit no. 30	
		0099	Not set	
		0001	Unit no. 1	
14	Group control address	0002	Unit no. 2	
		0003	Unit no. 3	
		0064	Unit no. 64	
		0099	Not set	
		0000	Individual (11 = Indoor unit with no group wiring)	
		0001	Main unit (One of the group-control indoor units)	
		0002	Sub unit (All group-control indoor units except for main unit)	
		0099	Not set	

* Code no. is displayed with 6 digits in wired remote controller, CZ-RTC6 series. In this case, read as follows. e.g. 11 → 000011

NOTE

The item code numbers 12, 13 and 14 can automatically be changed to the appropriate settings from Factory Settings listed above by making the auto address settings according to the number of indoor units. If needed to reset the settings after once changed, return all the item codes to the Factory Setting. It is necessary to make the auto address settings once again.

NOTE

In case of checking and changing before setting up the address settings in group connection, turn on only the power of the system to be checked and changed. If you turn on the power to all systems before address settings, the settings of all indoor units may not be seen correctly. After changing, turn off the power supply within 2 minutes or carry out the auto address setting procedures immediately. If the power of the system switched on for a while, the auto address setting may start as a single system and it might not match the multiple systems.

7 TEST RUN (COMMISSIONING)

7-1. Test Run Using the Wired Remote Controller

CZ-RTC5B (High-spec wired remote controller)

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

- Keep pressing the [ON] and [TEST] buttons simultaneously for 4 or more seconds. The "Maintenance func." screen appears on the LCD display.
 - Select "1. Outdoor unit error data", "2. Service contact", "3. RC setting mode", "4. Test run" and press the [OK] button.
- Press the [ON] or [TEST] button to see each menu. If you wish to see the next screen instantly, press the [TEST] button.
 - Select "4. Test run" on the LCD display and press the [TEST] button.
 - Change the display from "OFF" to "ON" by pressing the [ON] or [TEST] button. Then press the [TEST] button.
- Press the [TEST] button. "TEST" will be displayed on the LCD display.
 - Press the [ON] button. Test run will be started. Test run setting mode screen appears on the LCD display.
 - The test run can be performed using the HEAT, COOL, or FAN operation mode.
 - The temperature cannot be adjusted when in test run mode.
 - If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see the SUPPLEMENT at the end of this manual.)
 - After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
 - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

CZ-RTC6 series (Wired Remote Controller)

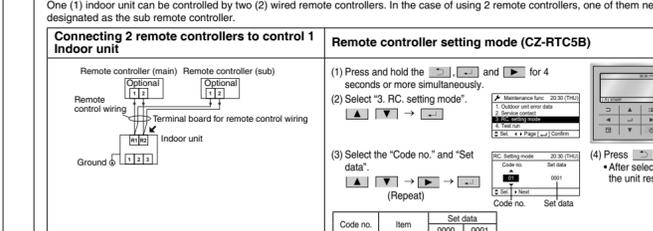
This mode places a heavy load on the machines. Therefore use it only when performing the test run.

- Keep pressing the [ON] and [TEST] buttons simultaneously for 4 or more seconds. The "Maintenance func." screen appears on the LCD display.
 - Select "Test run" on the LCD display and press the [TEST] button.
- Press the [ON] or [TEST] button to see each menu.
 - Select "Test run" on the LCD display and press the [TEST] button.
- Change the display from "OFF" to "ON" by pressing the [ON] or [TEST] button. Then press the [TEST] button.
 - Press the [ON] button. "TEST" will be displayed on the LCD display.
- Press the [ON] button. Test run will be started.
 - Test run setting mode screen appears on the LCD display.
 - The test run can be performed using the HEAT, COOL, or FAN operation mode.
 - The temperature cannot be adjusted when in test run mode.
 - If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see the SUPPLEMENT at the end of this manual.)
 - After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
 - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

7-2. Main-Sub Remote Controller Control

One (1) indoor unit can be controlled by two (2) wired remote controllers. In the case of using 2 remote controllers, one of them needs to be designated as the sub remote controller.

Connecting 2 remote controllers to control 1 indoor unit



Remote controller setting mode (CZ-RTC5B)

- Press and hold the [ON] and [TEST] buttons for 4 seconds or more simultaneously.
 - Select "3. RC setting mode".
- Select the "Code no." and "Set data".
 - Press the [ON] button. "TEST" will be displayed on the LCD display.

Remote controller setting mode (CZ-RTC6 series)

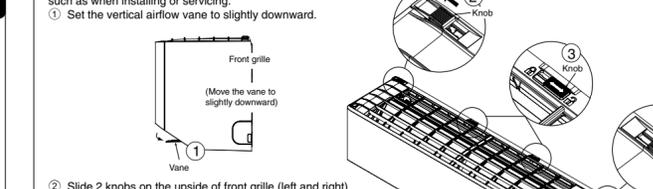
- Press and hold the [ON] and [TEST] buttons for 4 seconds or more simultaneously.
 - Select "RC setting mode".
- Select the "Code no." and "Set data".
 - Press the [ON] button. "TEST" will be displayed on the LCD display.

8 APPENDIX

HOW TO TAKE OUT FRONT GRILLE

Please follow the steps below to take out front grille if necessary such as when installing or servicing.

- Set the vertical airflow vane to slightly downward.



- Slide 2 knobs on the upside of front grille (left and right) away from the center to release them.
- Slide 1 knob (S-19", S-24", S-27", S-36") or 2 knobs (S-45", S-52") on the upside of front grille to unlock position.
- Open front panel.
- Slide 2 knobs on the front grille to unlock position.
- Remove 2 screws on the front grille as shown in the illustration.
- Push 2 caps upward and remove 2 screws on the front grille (only for S-45", S-52") as shown in the illustration.
- Pull the front grille towards you to remove the front grille.

SCREW CHASSIS TO INSTALLATION PLATE

Fasten the chassis to the installation plate with screws (Self purchase). Screw size: M4, max. length 10 mm) to provide a neat appearance of indoor unit. Please refer column "How to take out front grille" to remove the front grille.

AUTO SWITCH OPERATION

The below operations will be performed by pressing the "AUTO" switch.

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

- Press and hold the Emergency button for 4 seconds or more.
 - The indication lamps (OPERATION, TIMER, STANDBY) repeatedly light one after the other for 1 second.
 - The wireless remote controller address setting mode is set.
- Press and hold the Emergency button for 4 seconds or more again.
 - The indication lamps (OPERATION, TIMER, STANDBY) blink during test operation.
 - The test run can be performed using the HEAT, COOL, or FAN operation mode.
 - The temperature cannot be adjusted when in test run mode.
 - If correct operation is not possible, some of the display lamps (OPERATION, TIMER, STANDBY) will turn ON or OFF.
- To stop test operation, press and hold the Emergency button.
 - To prevent continuous test run, this mode includes a timer function that cancels the test run after 60 minutes.

NOTE

Should the power fail while the unit is running. If the power supply for this unit is temporarily cut off, the unit will automatically resume operation once power is restored using the same settings before the power was interrupted.

CHECK THE FOLLOWING ITEMS WHEN INSTALLATION IS COMPLETE

- After completing work, be sure to measure and record trial run properties, and store measuring data, etc.
- Measuring items are room temperature, outside temperature, suction temperature, blow out temperature, wind velocity wind volume, voltage, current, presence of abnormal vibration and noise, operating pressure, piping temperature, compressive pressure, airight pressure.
- As to the structure and appearance, check the following items.
 - Is circulation of air adequate?
 - Is draining smooth?
 - Is heat insulation complete (water piping and drain piping)?
 - Is there any leakage of water piping?
 - Is remote controller switch operated?
 - Is there any faulty wiring?
 - Are the terminal screws loosened?
 - M3_69-98Ncm (7-10kgf·cm)
 - M4_157-196Ncm (16-20kgf·cm)
 - M5_196-245Ncm (20-25kgf·cm)

HAND OVER

Teach the customer the operation and maintenance procedures, using the operation manual (air filter cleaning, temperature control, etc.)

Optional Parts

- Refer to installation manual of optional parts (sold separately).

ENGLISH

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