



WECS Series 4 Way Water Cassette Fan Coil Installation Manual

ENGLISH

- ✓ Read this Manual before the operation and keep it for reference.
- ✓ Read all safety precautions on the manual, improper use can cause serious injury.

Specification and performance data listed herein are subject to change without notice

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Environmental Technologies LLC.

Thank you for choosing our company products!

Air conditioning facilities are valuable products. In order to protect your legitimate rights and interests, please make sure that the installations are done by professional technicians. This manual is a general-purpose version for the conditioning systems manufactured by our CO., the one that you have chosen might be a little different in appearance from the ones described in the manual . But these differences will not have any impacts upon your operation and use of the system.

Please read the manual carefully before you operate the system and check to see if the model is identical to the one you have purchased, keep the manual properly in case you might refer to it in the future.

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NOTICES TO USERS

1. 1 Safety Notices

" Important Safety Information " affords very important points about how to operate the unit safely. To prevent injury to the user or other people and property damage, the following instructions must be followed. Incorrect operation due to ignoring of instructions may cause harm or damage.

The safety precautions listed here are divided into two categories. In either case, important safety information is listed which must be read carefully.



WARNING

Failure to observe a warning may result in serious injury, grave accidents even death.



CAUTION

Failure to observe a caution may lead to injury or damage to the equipment.

Please read the mark of the unit carefully .If you detect any abnormality, such as abnormal noise, smell, fog, temperature rise, creepage, fire and so on; Please turn off the power supply immediately and call your dealer or local service center for instructions. Do not repair the unit by yourself. If necessary, call the local fire department or Emergency department for help.



WARNING

1. Never install the unit by yourself and call the professionals from distributor or maintenance center for installation, or it may lead to accidents and affect the performance of usage .
2. Never dismantle the units without the guidance of the professionals, or it may cause danger .
3. Do not place insecticides or paints and other flammable sprays near the unit or spray them directly at the unit. It might cause fire hazards.
4. Do not install the main power supply switch at the places where the children might touch it to avoid of accidents .
5. Do not spray water or other liquid to the air conditioner, or else it may cause electric shock.
6. Do not touch the unit with wet hands, otherwise it might cause electric shocks .
7. Disconnect the power during lighting storm day, otherwise it might cause

Lightning shocks or damage the unit .

8. If the unit will be idle for a long time, disconnect the power to avoid of accidents .
9. The unit shall be equipped with special power supply switch and power line to avoid of sharing the same power line with other devices. Besides, it adopts the stated- cross-section wire to supple the power, matching with the corresponding breaker(with creepage protect function) .
10. The unit is connected with the stated-cross-section earth wire, which is grounded safely and is not allowed to be connected with the gas pipe, water pipe, lightning conductor or the telephone earth wire in order to avoid of electric shocks.
11. Never stop the operation of the unit by pulling out the power supply line in order to avoid of electric shocks or fire hazards .



CAUTION

1. Do not put your hands or sticks into the air vents . As the fan running with high speed will hurt you.
2. Keep the electric control system from damp to avoid of circuit-short or damage of unit .
3. After cleaning the filter screen, install the air filter screen quickly .It is not allowed to operate the unit without the air filter screen which may get the poor performances.
4. When there are old men, children and patient in the room, please adjust the room temperature properly.
5. If the unit is interrupted by the lightning or other electromagnetic radiation, cut off the power, restart the unit after eliminating that factors.
6. Do not clog the air inlet and outlet of the unit.
7. Never use the fuse with incorrect capacity or iron or copper wires for fuse .
8. Keep the unit off the places where might happen fire hazards .Pull out the power plug immediatly and put down the fire with fire extinguisher result from circuit-short.
9. Cut off the power supply before servicing.
10. Do not touch the fin and sharp edge which will hurt you.
11. Do not move the unit randomly without professional guidance, otherwise it may cause the damage of the unit .
12. Do not touch the rotary air vents with your hands or other objects to avoid of accidents or damage.
13. It is forbidden placing goods above the machine set, so as not to result in the

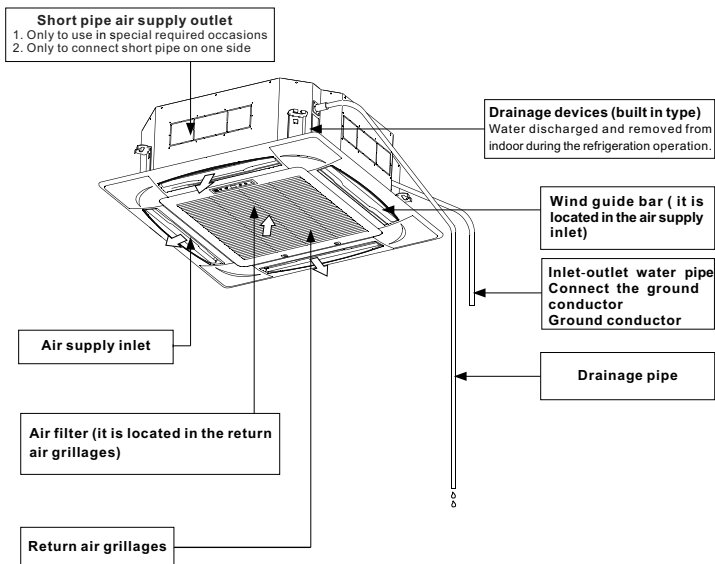
danger of the fall off when they are running.

1. 2 Use notices

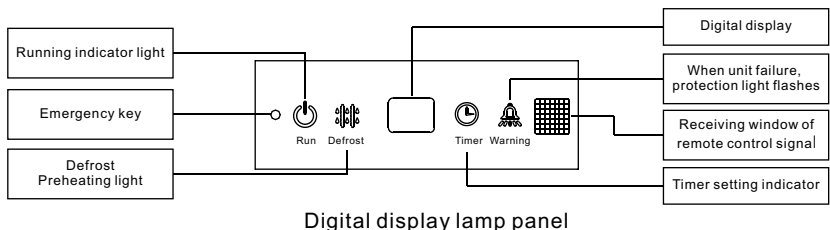
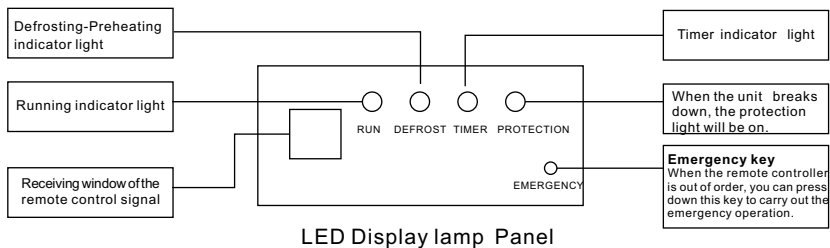
1. All the operation parameters of the unit set , the set values of the protective device have been set before the delivery , the consumers are not allowed to change the set values at random , and also are not allowed to make the line of the protective devices of the machine set , short-circuit or the unit may be damaged as result of improper protection.
2. When the unit is running, the unprofessional personnel do not touch any electrical element and buttons, or it will result in serious accident.
3. If the unit goes wrong , don' t repair it by yourself , please consult the service center of the company (the consultation telephone number can refer to the back over). If the machine set is repaired by unprofessional personnel , it may result in the machine breakdown or the casualty of personnel.
4. During cleaning the unit, never clean the operational panel with benzene, diluent agent , or chemical cloth and so on , or it will result into fade or the fault function of the buttons ; It is not allowed to directly sprinkle the unit with water or cleaning agent, when it is necessary, please clean them with a cloth that is stained with water or neutral cleaning agent.
5. Please service the machine set termly according to the requirements of the specification , in order to make sure that the operation condition of the machine set is good.

PARTS NAME AND FUNCTION

■ Indoor unit



■ The indicator light board of the indoor unit





CAUTION

When equipped with Digital display lamp panel (only for big panel type) , please toggle the fourth point of dialing switches SW1 to DP in the electronic controller of indoor unit, as shown in the right figure:



INTRODUCTION OF CONTROLLERS

I. Use-method

The control panel of wire controller is responsible for controlling the operation status of the system by the button and displaying the working status of the entire system by its LCD screen, and is responsible for communicating with the control board of the system.



Fig1 Appearance of Wire Controller

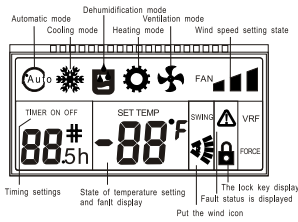


Fig2 LCD display content of Wire Controller

Operation and Instruction:

⏻ Button (ON/OFF) :

Control the On/Off status of the system.

⚙️ Button (MODE) :

When the air conditioning is powered on, every time you press mode button or the mode button of remote controller, the mode will change in the following sequence.

Auto Mode → Refrigeration → Dehumidification → Heating → Ventilation → Auto Mode

⬆️ and ⬆️ Button (TEMP+ and TEMP-) :

1) Boot state, press "▲" and "▼" Button, increase/decrease the setting temperature, Refrigeration, Dehumidification, Ventilation and Heating mode Scope of temperature setting: 16℃ ~ 32℃. The setting temperature do not adjust in Auto Mode.

2) Press the "▲" and "▼" button for 3s simultaneously to lock this button. At this time, it will display the locking icon in LCD. Deactivate this button, and press the "▲" and "▼" button again simultaneously.

⌚ Button (TIMER) :

Set Timing On or Timing Off, The wire controller to set the time range as 1-24h.

1) Press the Timer button in the Off status to go into the Timing On for 1 hour, and then press the Timer button plus 1 until it is timing on for 24h. At this time, if you press the Timer button, it will deactivate Timing On.

2) Press the Timer button in the On status to go into the Timing Off for 1 hour, and then press the Timer button plus 1 until

it is timing off for 24h. At this time, if you press the Timer button, it will deactivate Timing Off.

🌀 Button (FAN) :

1) The Fan Speed button is valid in the "Cooling mode", "Heating mode" and "Ventilation mode".

2) Press the Fan Speed button of the wire controller or the Volume button of the remote controller in the Cooling mode, Heating mode or Ventilation mode, and the volume changes as follows:

High speed d → Middle speed d → Low speed d → Auto wind

3) There is no Auto wind in the Ventilation mode, and the volume changes as follows:

High speed d → Middle speed d → Low speed d

🌀 Button (SWING) :

1) Press it to display the Swing icon. The Swing icon will swing back and forth.

2) Press the Swing button, and the upper and lower wind deflectors will swing within the specified range automatically, and the left and right wind deflectors will swing within the specified range automatically, and press it again to stop the swing.

3) Press the Swing button for 4 seconds to switch degree freely. The default degree is Fahrenheit degree.

26.0/🌡️ Button (26℃/CHECK) :

1) Short press this button, Enter a state of energy saving of 26℃, namely the setting temperature is 26℃. This function under the boot of Refrigeration and Heating mode is effective.

2) Long press this button, will enter the query condition. It will exit the query condition, when you press this button again and do not operate for five seconds in the condition of the query.

By pressing "▲" and "▼" Button to check the current state of indoor unit in the query condition. The first time is to display the address and model HP of the indoor unit, the second time is to display the address and the power consumption of the indoor unit, the third time is to display the address of the indoor unit and T1 temperature, the fourth time is to display the address of the indoor unit and T2 temperature, the fifth time is to display the address of the indoor unit and T2B temperature, the sixth time is to display the address of the indoor unit and T2 average temperature, the seventh time is to display the address of the indoor unit and opening of expansion valve, and recovery the main page status for the eight time.

Description of DIP Switch :

	ON	OFF
4	with power failure memory	without power failure memory

1) The first, second, third bit of the DIP Switch is no meaning. The factory all dial to the OFF state.

2) The fourth bit ON of the DIP switch indicates it is With Power Failure Memory function, and the fourth bit OFF indicates it is Without Power Failure Memory function. The factory dials to the OFF state.

II. Installation of Wire Controller

Safety Precautions

- ! Read the safety precautions carefully before installation.
- ! The following is the important content to be paid for the safety, be sure to follow it.
- ! The meaning of each part:

Warning:	Indicate it may cause the death or serious injury for the improper operation.
Note:	Indicate it may cause the death or serious injury for the improper operation.

Notes:

- Please do not install the wire controller in damp or direct sunlight places.
- Please do not hit, throw and frequent disassembling the wire controller.
- Please do not operating the wire controller with Wet hand ; Don't make any fluid into the wire controller .
- Please do not do dismantling the wire controller without authorization. Please consult after-sales maintenance personnel if you have a problem .
- To prevent water and dust into the wire controller, Affect the wire controller normal use. Please dismantle the wire controller When the indoor decoration and maintenancee .

Installation and disassembly of the wire controller

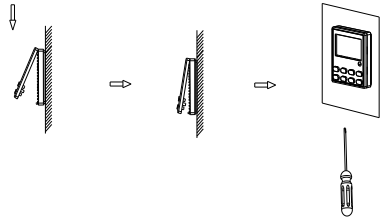
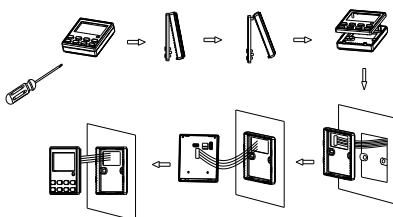
1. The installation position and requirements of the wire controller

- 1) Please do not install the wire controller in damp or direct sunlight places.
- 2) Please do not install the wire controller in the places. where is near the high temperature or easy to splash water.
- 3) To avoid the interference of the neighbors' remote controller which has the same model , then cause abnormal work. Please do not install the wire controller where the face up to the window.
- 4) Before installation , please cut off the power which is Buried in the wall mounting holes. The whole installation process does not allow operation with power.
- 5) In order to avoid the unit by reason of electromagnetic interference caused by abnormal work . When wiring , please pay attention to the following matters.
 - A) Ensure that communication line access right, otherwise will lead to communication failures.
 - B) If the air conditioning unit is installed on the places , which is influence by electromagnetic interference . the wire controller signal lines must use shielded twisted-pair cable .
 - 6) The standard accessories which is installation need to prepare : installed inside a wall socket bottom box, controller base plate, screw the M4 x 25, control panel.

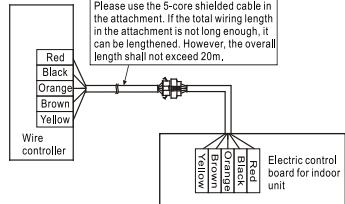
2. The installation of the wire controller

First of all, the wire controller signal line connection mode is as follows:

- 1) Open interior electrical lifted the lid, and the signal wires through the rubber ring;
- 2) Plug the wire controller signal lines within the five core needle base on the indoor machine circuit boards, and using cable tie line tied tightly fixed. Next, the wire controller installation steps as shown in the figure below:



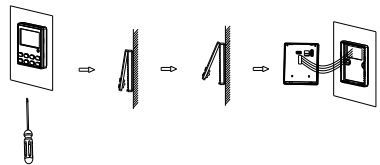
Connect the wire controller in the way as shown in the figure below



Brief description of the installation process is as follows:

- 1) The signal lines of short through rectangle hole of the wire controller bottom plate, and then pull out five core twisted pair from the wall installation hole. Finally connect the line and the other end.
- 2) Use screws M4 x 25 to fix the controller base plate on the mounting holes of the wall.
- 3) Put the wire controller panel and floor buttons together, and this installation is complete. When installation, please reserve a certain length of the line at the bottom of box, to facilitate maintenance later removed.

3. Disassembly of the wire controller



After the completion of the installation, confirm there is no abnormality for the commissioning, and deliver the instruction to customers for storage.

Note:

- It may cause the rear cover deformed if the screw is tightened too much.
- It is necessary to reserve a certain length for the connecting cable of the wire controller during the installation, so as to take down the wire controller for the maintenance.

PREPARATIONS FOR INSTALLATION



CAUTION

The installation of the unit has to be carried out by the professional installation operator. Improper installation of the unit may cause water leakage, an electric shock or fires .

3. 1 Installation sites for the indoor unit

- ① Please install the indoor unit in the spacious places where the air blown out by the indoor unit can reach every corner of the room as quickly as possible and also can provide the space to maintain the indoor unit .
- ② Make sure that the air inlet and the outlet of the indoor unit should not be blocked, nor be affected by the adjacent heat and the hydrosphere.
- ③ It should be installed in a clean place where there is little oil gas and little of steam.
- ④ It should not be installed in a place where there is the inflammable gas .
- ⑤ It should be never installed at the place beside the equipments with high frequency, such as the high frequency electric welding machine.
- ⑥ It should never be installed in these places where the fire alarm is near.
- ⑦ It should never be installed in these places where there are full of acid solvent .

INSTALLATION OF THE UNIT

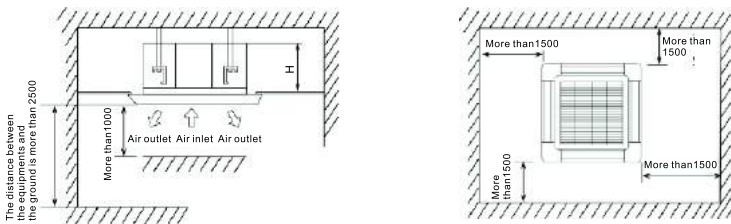
4. 1 Install Indoor unit

4. 1. 1 Installation place

When the temperature of the ceiling inside is higher than 30°C, and RH is higher than 80%, More than 10mm heat insulation materials, such as fiber glass cotton or froth polyethylene should be slicked on the casing of the unit. (if the thickness of the heat insulation materials is more than 10mm, the extra part should be folded up and placed in the opening of the ceiling).

- The indoor unit can be installed on the ceiling with the height of 2.5~2.5mm.
- When installing the indoor unit, the lifting screw will be used and make sure installation foundation is firm enough to support the unit, otherwise, please take some measurings to reinforce it prior to installation. The hole pitch has been marked on in the installation paper matrix, please refer to those specification and find out the places where the reinforcing measures should be taken.
- Make sure there is no obstacles in the place where is 1meter away from the air outlet.

Installation space unit: mm

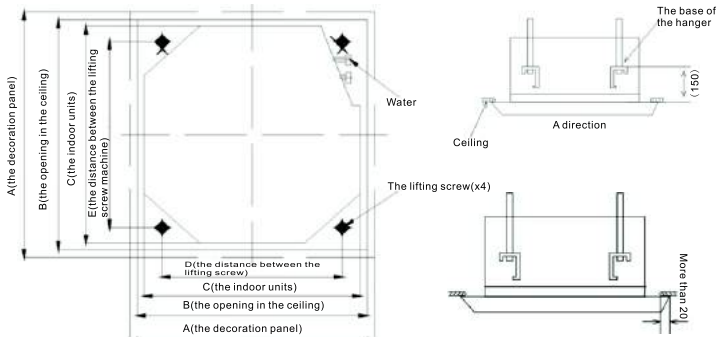


Installation dimension unit: mm

Model	Dimensions(H)
WECS003,WECS004,WECS005	260
WECS006,WECS008	230
WECS009,WECS010	285

4. 1. 2 Installation procedures for indoor units

- The position relationship between the opening in the ceiling, the unit and the lifting screw



unit: mm

Model	Dimensions(H)				
	A	B	C	D	E
WECS003,WECS004,WECS005	650	610	580	528	528
WECS006,WECS008,WECS009,WECS010	950	890	840	680	780

NOTE:

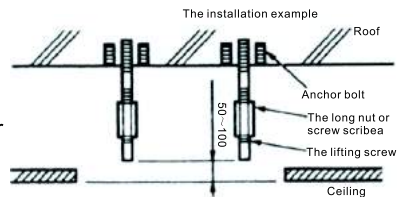
- ① The dimensions of the opening of the ceiling marked by the star symbol can surpass 910mm, but the overlap sections of the ceiling and the decoration panel should be more than 20 mm.
 - ② As for existing ceiling, a proper opening for installation should be dig
 - a. On the installation paper-matrix, you can get the detailed information about the dimensions of the opening of the ceiling.
 - b. Before installation, please finish the installation of all ducts and the connection of the all power lines, once the installation has finished, the ducts and the power lines can be connected with the indoor units immediately.
 - c. The opening in the ceiling can reinforce the ceiling and prevent the ceiling from vibrating.
- The installation of the lifting screw(using the W3/8 M10 bolt)
- ① In order to support the unit, the ground anchor bolts are needed for existing ceiling and as for new built house and ceiling, however, buried anchor bolts or other parts (supplied in the field site) .
 - ② And then adjust the distance between anchor bolts and the ceiling.

4. 1. 3 Installation for indoor units

unit: mm

■ When there is no installation position in the ceiling board

- ① Attach the base of the hanger on the lifting screw, the nuts and washers are used in two ends of hanger base to firmly fix the base. Besides, the washer positioning board is used to prevent the washer from falling off.
- ② As for the dimensions of the opening of the ceiling, please refer to the installation paper-matrix or consult the constructor or the carpenter.



NOTE: all the parts above mentioned will be supplied at the installation site

The installation paper-matrix is fixed on the unit with three screws and on the paper-matrix, the central position of the opening in the ceiling has been marked out . The corner of the water drainage groove at the water outlet of the duct is also fixed by screws.

- ③ Adjust the unit to the correct installation position.
- ④ Check whether the unit is in the horizontal level.

Because the indoor unit has inside water drainage switch and float switch. Check the four corners of the units separately to make sure that the four corners are in the horizontal level by using the level gauge or the polythene duct filled with water (if the unit inclines to the reverse direction to the flow of condensation water, it may lead to the float switch out of work and result in water dropping).

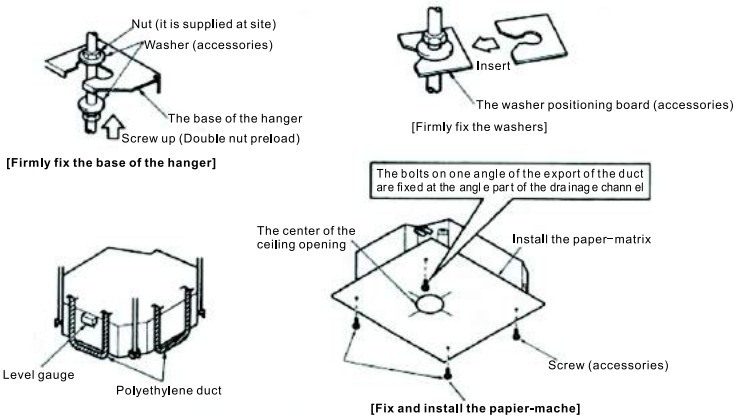
- ⑤ Remove the washer positioning board and fasten the nut .
- ⑥ Remove the installation paper-matrix.

■ When there is installation position in the ceiling board

- ① Temporary installation of the indoor unit

Attach the base of the hanger on the lifting screw, the nuts and washers are used in two ends of hanger base to firmly fix the base. Besides, the washer positioning board is used to prevent the washer from falling off.

- ② Adjust the position and the height of the unit
- ③ Carry on the operation procedure of ④ and ⑤ steps above ;



4. 1. 4 Install the panel



CAUTION

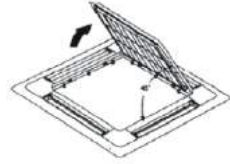
- Never keep the panel facing the ground nor again the wall or on protuberant objects.
- Never crash or strike the swing plate in case of breakdown.

■ Take down the return air grill from decoration p

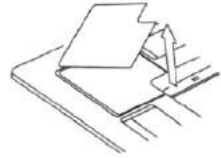
- ① Press the button of the return air grill, and then lift one end of the button (Refer to the left figure)



- ② Draw the grill up to an angle of about 45° , and remove it (Refer to the right figure)

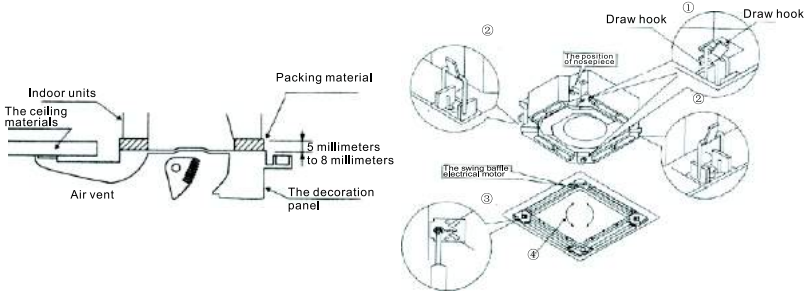


- **Remove the seal cover at the four corners**
(Draw the seal cover out , Refer to the right figure)



■ **Install the panel**

- ① Align the swing motor on the panel to the tubing joints of the body properly.
(Refer to the following figure)
- ② Hang the draw hooks opposite to swing motor of the decoration panel on the hooks of the indoor unit. (Refer to the following figure)
- ③⑥ Then hang the other two panel hooks onto corresponding hangers of the body.
(Refer to the following figure)
- ④ Screw the four hexagonal screws under the draw hook into approximately 5mm.
(the panel will raise along with it)
- ⑤ Screw up the screws so that the thickness of the air-proof materials between the panel and the indoor unit reduces to 5 ~ 8mm.



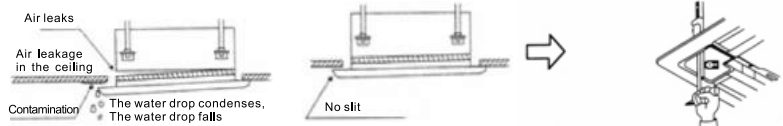
CAUTION

Do not coil the wiring of the swing motor into the seal sponge.

If the screwing is too loose, it will cause following faults. Therefore, screw up the screw again to the stated requirement.

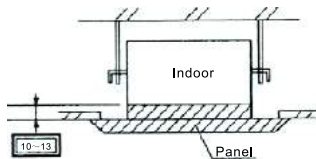
After finishing twisting the screw, if there is still slit between the ceiling and the decoration panel, please readjust the height of indoor unit.

When indoor unit is located in the horizontal position but the drain water can not be drained out, please adjust the height of the indoor unit through the angle hole on the decoration panel.



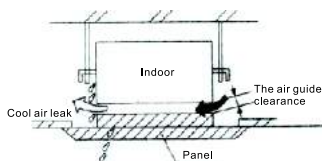
■ Lifting height of the indoor unit

Please adjust the lifting height of the indoor unit as the right figure:



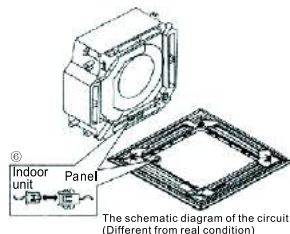
① If there is slit between indoor unit and panel, it will be harmful as the following:

- a. Condensation will be generated outside (ceiling inside) and inside the product because of the air in the ceiling or the gas leakage from the ceiling.
- b. The horizontal leaf blade will condensate, the water will splash and condensation will be generated in the machine because of air current blowing out disorderly.



② The circuitry of the decoration panel (please see the right figure)

- a. The connector of the wire of the swing electrical motor should be properly attached (located on decoration panel)
- b. If unconnected, then the swing plate will not act
- c. Insure that the wire of the swing electrical motor is not trapped between indoor unit and the decoration panel.



4. 1. 5 Install return air grill and close cover

■ Install the return air grill

Following the opposite installing steps with "4. 1. 4 Install the panel" to carry on the installment. Rotating the return air grill, it may be installed in 4 directions.

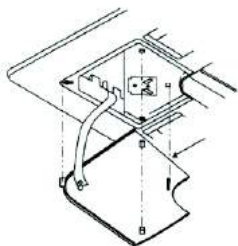
If needing to adjust the installment direction of the return air grill, or users put forward new requirement, installment direction can be changed.



CAUTION

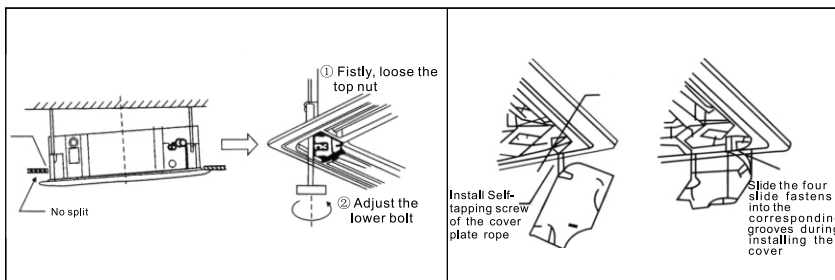
Do not coil the wiring of the swing motor into the return air grill when installing.

- Fix the close cover on the panel (refer to the following figure)



Insert the four pins on the close cover into the corresponding hole on the decoration panel before installation.

- Put the return air grill on the panel and then connect the swing motor on panel and lead connectors of control box to the corresponding joints of the main body;
- Install return air grill according to the opposite steps for removing the grill.
- Reinstall the installation cover plate
- Fix the rope of the installation cover plate with screws on the bolts of the installation cover plate (please refer to the lower right figure)
- Push gently the installation cover plate into the panel.

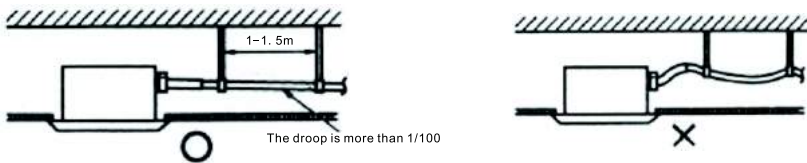


4.2 Install the drain pipe

Make sure that there is enough space to install drain pipes and the diameter of the drain pipes should be no less than the diameter of the connection duct.

- In case of condensate water accumulation and make sure water drainage expedite, please keep the drain pipe as short as possible and its droop more than 1%.
- If the droop of drainage hose cannot meet the requirement, the lifting duct should be installed.

- Keep the interval between hangers range from 1 to 1.5 meters to prevent the drainage hose from bending.

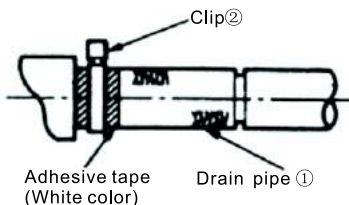


- Use Drain hose ① and Clip ② (Attachment).

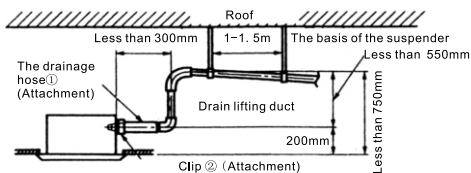
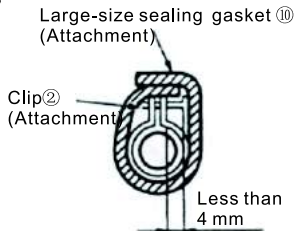
Insert the drain hose into the drain faucet to the white adhesive tape and then screw down the clip so that the distance between the bolt head and hose is less than 4 mm.

- In case of water leakage for dewing ,please take some heat-insulated measures for the indoor drain hose and the drain faucet.

- Drain faucet
Carry on heat insulation operation for the clip and drain pipe with Large-size sealing gasket ⑩



- Drain pipe in the room;



■ Notes of the drain lifting duct

1. The installation height of the drain lifting duct is less than 550mm ;
2. Keep the lifting duct with the unit in vertical and the distance less than 300 mm.



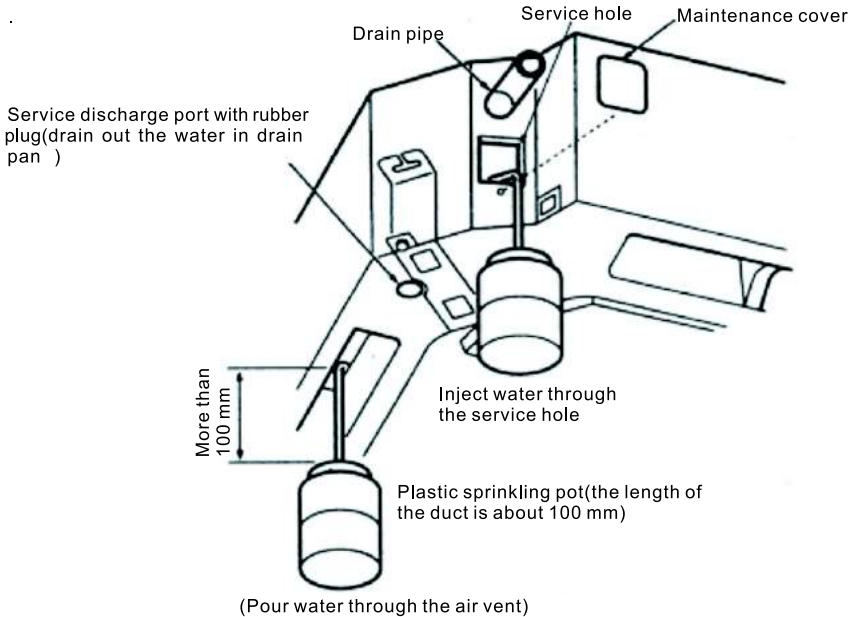
CAUTION

- In case of water leakage, please don't drag the drain pipe violently;
- Please install the drainpipes according to the following steps if several drain pipes are converged in one drain pipe.



- **Step one** Choose the proper join drain pipe according to the running capacity of the unit.
- **Step two** After the installation of the drain duct, inject 2000ml water into the air vent or the service port, and then check whether the drainage is free ;
- **Step three** After the installation of the circuit , check the drainage condition during cooling operation, as for the details, please refer to "TEST OPERATION".

Water injection sketch figure



TEST OPERATION

5. 1 Test Run

1. Test run shall be carried out after completion of all installation;

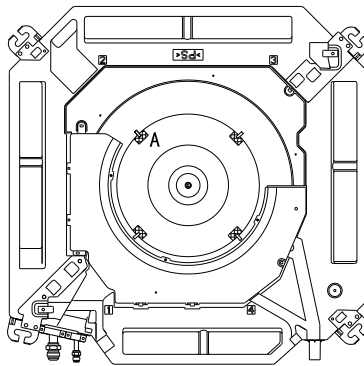
2. Before test run, confirm the following:

- Whether the unit is installed correctly;
- Whether the piping and wiring are correct;
- Whether draining is smooth;
- Whether the heat insulation is complete;
- Whether the ground wire is connected correctly;
- Whether the voltage is in compliance with the rated voltage;
- Whether barrier exists in the air inlet or outlet of the unit.

3. Test Run

Control the operation of unit with remote controller.

- Whether the remote controller switch is normal;
- Whether the functions of the remote controller are normal;
- Whether the vane is moving normally;
- Whether the room temperature regulation is normal;
- Whether the indication lamps are normal;
- Whether the manual RUN switch is normal;
- Whether the draining is normal;
- Open the air inlet grille to check whether water leakage exists, especially the place of drain plug;
- Whether vibration and abnormal sound is heard in operation.



CAUTION

Be sure to remove the four wind wheel absorber blocks (A) and the fixing tape before test running!

MAINTENANCE AND UPKEEP

6. 1 Clean the air filter

If the air filter is blocked, it will reduce the air circulation amount and affect the effect of the cooling air and the warm air ; What' s worse, it will lead to the air conditioner break down. Therefore, please clean the air filter at least once every two weeks during long time usage.

If the unit will is idle for a long time, the air filter should be cleaned before starting the unit.

6. 1. 1 The cleaning procedures of the air filter

- Dismantle the air filter
- Clean the filter with the dust collector or water
- If the filter is cleaned with water, place it in a shady and cool place to dry.



CAUTION

-
- In case of fading or deformation of the filter, never clean it with the hot water of which the temperature is higher than 50°C ;
 - Never dry the strainer by a fire, otherwise, it may catch fire.
-

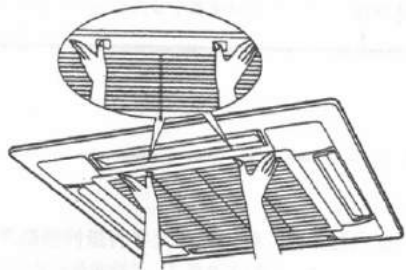
When you clean or upkeep the unit, firstly , you must turn off the power supply of the unit and pull out the power plug. And the cleaning or maintenance should be operated by professional personnel.

6. 1. 2 The cleaning methods of the indoor unit

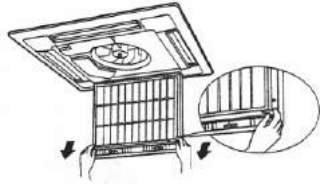
- Wipe the outside of the unit with a clean and soft dry cloth
- Use the neutral domestics cleanser agent(such as clean agent) to clean any oil contamination or the fingerprint

6. 2 Dismantle the return air grill and the air filter

■ Open the return air grill: Press the two buttons, and pull them downwards slowly as indicated in the right figure (when closing the return air grill, follow the same operation steps):



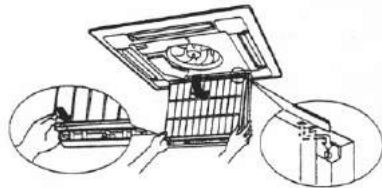
■ Dismantle the air filter net: hold on the draw hook of the air filter and pull it along the lower inclined side to take out the strainer as indicated in the right figure:



■ Take out the return air grill: Open the return air grill at the angle 45 ° and then lift it up and take it out, just like the right figure.



■ Install the air filter and the return air grill after cleaning them according to the opposed operation steps above, as indicated in the right figure.



6. 3 Set indoor temperature

In the cooling mode, It is comfortable when the temperature difference varies in 5°C between the indoor temperature and the outdoor temperature varies in 5°C . If the indoor temperature is too low , it will not only do harm to your health but also consume more electric energy: For example, it will reduce 10% energy consuming by increasing 1 °C of setting temperature in cooling mode.

6. 4 Away from the heat source

When the air conditioner is operating in cooling mode , you should close the curtain to ward off the sunlight ; Besides close the windows and doors and don't open the door in too short time if not necessary.

6. 5 Ventilate and exchange air of the room

You will feel more comfortable if you open the windows at a regular interval to let the fresh air into the room.

6. 6 Maintenance after a long stop period

(eg. at the beginning of the season)

- Check whether the installation of the outdoor unit and the connection of the grounding lines and power cables are all in good condition.
- Check and remove everything that might be blocking inlet and outlet vents of indoor units and outdoor units.
- Check whether the air strainer is installed in the right place.

6. 7 Maintenance before a long stop period

(eg. at the end of the season)

- Turn on the air conditioner and let it run in FAN operation for about 3 or 4 hours in order to dry the interior of the units.
- Turn off the air conditioner and cut off its special power supply .
- Clean air filters and casings of indoor units.
- Take out the batteries of the remote controller and put away the remote controller.
- Cover the units with a protective cover to prevent the duct from coming into the unit.

TROUBLESHOOTING

7. 1 Malfunction analysis

When air conditioner goes wrong before you contact the servicing department, please read the following contents, it will help you save much more time and energy.

Problems	Phenomena	Causes	Solution
Air conditioner fails to run	Press "ON/OFF" key on the remote controller, no "beep" sound comes from the indoor unit and the RUN light is off	Power failure	Press "ON/OFF" key after comeback of power
		Power switch is off.	Turn on power supply
		Fuse of power switch may have burned.	Replace the fuse
		The creepage switch is off	Turn on the creepage switch
		The remote controller is working out of the function range	Operate the remote controller in the function range of the remote controller
		Batteries of remote controller exhausted (Information on the screen darken)	Replace them with new batteries
After starting up, the air conditioner will stop working in a short time	Remote controller indicates that the air conditioner is working	Air inlet or outlet of the indoor unit are blocked	Eliminate all dirties and make air smooth.
		The air filter is dirt	Clean the filter
Air flow is normal but the air blew out is not cool or warm	Remote controller indicates that the air conditioner is working	Temperature is not set correctly, too high in COOL mode or too low in HEAT mode	Set the temperature properly.
		The air filter net has been blocked with dust or dirt	Clean the ail filter net
		Air inlet or outlet of the indoor unit are blocked	Eliminate all dirties and make air smooth.
		Doors and windows are open	Close doors and windows

Once the air conditioner break down for power failure , it can start only by pressing "ON/OFF" key on the remote controller even if the power restores.

7.2 Self-fault diagnostic function

Our company will provide convenient service to our customers, and install all kinds of judgment systems, which can display the unnormal function of the unit .

Fault codes table(1)

Faults	LED flashing conditions	Digital display	Instruction
Probe of Room temp. sensor goes wrong	TIMER lamp flashes at the speed of 5 Hz	E2	The system will recover normal operation once faults are eliminated
Probe of Evaporator sensor goes wrong	RUN lamp flashes at the speed of 5 Hz	E3	
Probe of Condenser sensor goes wrong	Defrost lamp flashes at the speed of 5 Hz	E5	
Water fulfilled protection	Warning light flashes at the speed of 5 Hz	F5	
Outdoor unit protection	Both defrost lamp and warning light flash at the speed of 5 Hz	F2	
Communication fault	Both RUN lamp and defrost lamp flash at the speed of 5 Hz	E1	The display should be cleared up by manual
EEPROM Communication fault	Both RUN lamp and TIMER lamp flash at the speed of 5 Hz	P6	Recovered after blackout
Forced cooling indication	Both RUN lamp and warning light flash at the speed of 5 Hz	No	The display will be cleared up after exiting the operating mode.
Anti-cold wind indication in heating mode	Defrosting preheating is ON	P1	The display will be cleared up after exiting the operating mode.

Following cases are not air conditioner troubles

1. Sometimes, air conditioner may give off odours, for the unit can absorb the smell of rooms, furniture, cigarettes, makeup, etc., and then emit it again.
2. A continuous low hissing sound is heard when the system is in operation. This is the sound of refrigerant gas flowing through both indoor and outdoor units.
3. When starting up or stopping the air conditioner, you can hear “cracking” sound from the air conditioner, this sound is produced by the contraction or the expansion of the structural part of the air conditioner, which is caused by temperature change

7. 3 The choice of the dial code

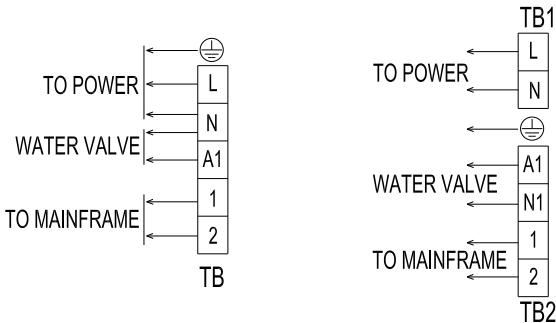
SW1 DIP switch setting:		
1#	2#	Model
ON	ON	Ceiling Cassette Unit(For big panel type)
ON	OFF	Ceiling Cassette Unit(For small panel type)
4#		Model
ON		Ceiling Cassette Unit(For digital display lamp panel)
OFF		Ceiling Cassette Unit(For 4LED lamp panel)
SW2 DIP switch setting:		
1#	ON: Cooling &Heating type	OFF: Cooling only type
2#	ON: With Non-volatile Memory	OFF: Without Non-volatile Memory
3#	ON: Room temp. sensor T1 for Wire controller	OFF: Room temp. sensor T1 for Electric control panel
NOTE:Keep the test pitch in short circuit to enter rapid inspection mode.Normal mode is not in short circuit.		

ELECTRIC WIRING

8. 1 Electric wiring precaution

- Wiring construction must conform to National Wiring Norm;
- The air-conditioner should apply special power supply and set leakage protective switch. The rated operation current of the switch should be no less than 1.5–3 times of the rated operation current of the unit(The actual value of rated current of the unit is list on its nameplate and the one in this manual is just for a reference) ;
- Make sure unit voltage and select proper wires prior to wiring;
- Wiring construction and connections of other individual parts must be conducted by the professional technicians according to the circuit diagram attached on the unit.
- Please pay attention to marks at the terminal in case of wrong connection.
- In case of grave accidents, never mistake the signal terminal of indoor units with the one of outdoor units;
- Please tighten screws to avoid of wires drop according to the wiring diagram.
- Install equipments with the auxiliary electric heater outside the evaporator and keep them 5cm away from the flammable;
- Make sure there is enough space for electric devices installation and the minimum allowable distance between devices;

8. 2 Power wiring diagram



WECS003,WECS004,WECS005

WECS006,WECS008,WECS009,WECS010

Note: The arrangement diagram is only for signal wire and power line. For wiring, please refer to power wiring diagram.

8. 3 Cables wiring construction of indoor units

- Take down the cover of indoor electric control box;
- Connect power cables and signal wires to the corresponding terminals according to Power Wiring Diagram above;
- Open the cord cleat and then fix power cables and signal wires on the board of the cord cleat;
- Fix on the electric control box