

WALL FAN COIL UNIT

OPERATING AND INSTALLATING INSTRUCTIONS



FP-34BM

FP-51BM

FP-68BM

FP-85BM

FP-102BM

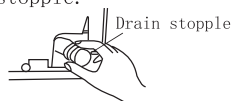
FP-136BM

To use this unit correctly and safely, be sure to read this instruction manual before use and installation.

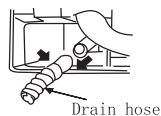
CONTENTS

SAFETY PRECAUTIONS	1
NAME OF EACH PART	2
NAME AND FUNCTION OF EACH BUTTON OF REMOTE CONTROLLER.....	6
USE METHOD OF REMOTE CONTROLLER AND AUTO OPERATION	7
COOL,HEAT,DRY,FAN OPERATION	8
MAKING RATIONAL USE AND MAINTENANCE	9
BEFORE CONTACTING THE SERVICEMAN.....	10
CLEANING OF THE AIR FILTER AND DEODORIZING FILTER	11
SAFETY RULES	12
WHEN YOU THINK THAT TROUBLE HAS OCCURED	13
INSTALLATION PLACE	14
INSTALLING THE INDOOR UNIT.....	15
INSTALLATION CHART	16

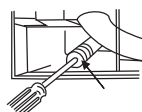
1. Remove the drain stopple.



2. Remove the drainage hose.



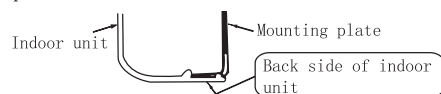
3. Insert the drain stopple into the drain hole on the left side of the indoor unit.



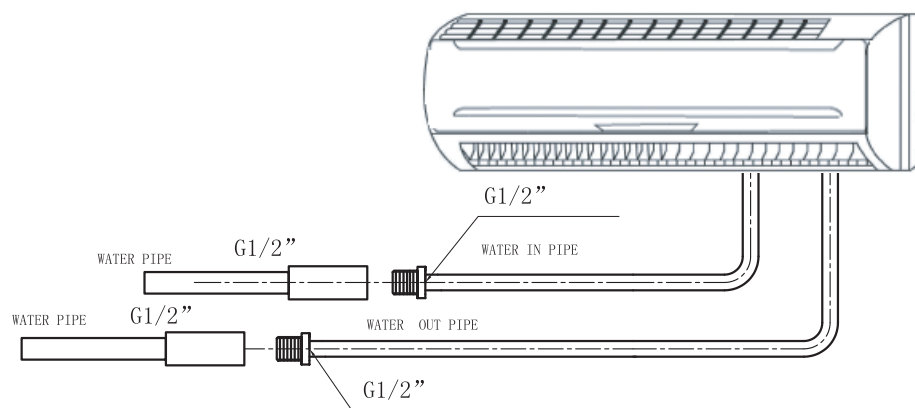
4. Insert the drain hose into the drain hole on the right side of the indoor unit.



5. Installing the indoor unit on the mounting plate.



INSTALLATION CHART



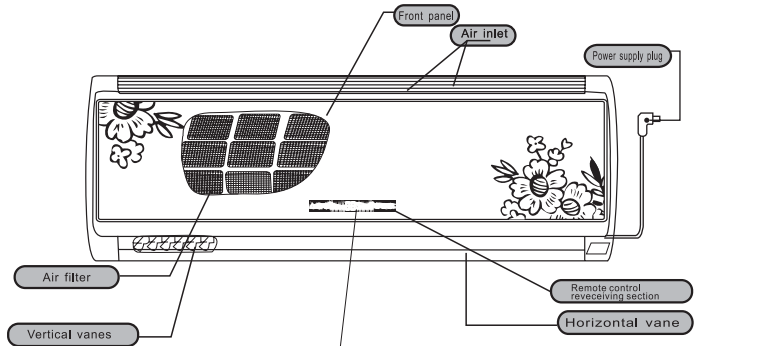
SAFETY PRECAUTIONS

Before using the unit, carefully read these "safety precautions" for safety purpose.

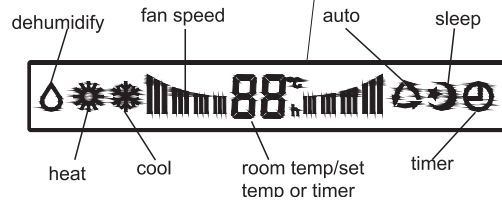
WARNING	
Do not connect using branched outlet or an extension cord, and do not attach many loads to one electric outlet.	Do not apply an insecticide or flammable spray.
When an abnormality (smell of burning .etc) occurs, stop the unit, and disconnect the power plug or turn off the breaker.	Do not operate for a long time in high humidity, eg. leaving a door or window open.
Do not scratch or process the power cord, etc.	When the unit is not going to be used for a long time, disconnect the power supply.
Do not pull the power cord.	Applying grounding. Do not connect a earth wire to a gas pipe, water pipe, etc.
Cut off the power supply before cleaning.	Do not clean the air conditioner with water.
Do not operate switches with wet hands.	
Do not put a pet or house plant in the airflow from air conditioner.	

INDOOR UNIT (Panel HC)

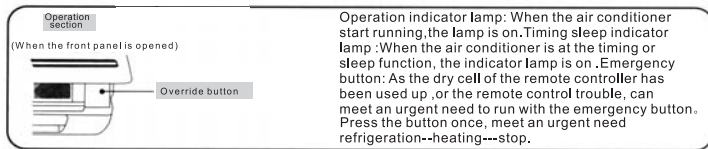
⚠ Please turn off the power before open the air-inlet grill



PANEL DISPLAY OF THE INDOOR UNIT



Control the wind direction
Please adjust the vertical vane with hands before operating, otherwise because the horizontal vane is swing automatically may injure your finger.

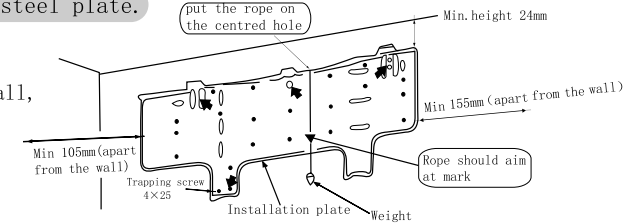


Display details on the indoor unit

- Display section of indoor unit have timer and operation signal lamp
- Setting timer on or off, Timer signal lamp lights
- When a/c is turned on, operation signal lamp lights.
- When signal lamp twinkles, a/c may has malfunction or during defrosting or during protecting function of preventing cool wind.

1. Mounting the installation steel plate.

Selecting the structure part (eg. a column, etc.) on the wall, and mounting the installation plate horizontally.

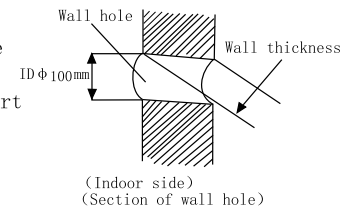


To prevent slight vibration from the installation plate, the holes marked ← must be anchored and the holes marked → may be anchored by all means.

- If the bolts embedded in the concret wall are used, mount the installation plate using 11×20、11×26 ellipsoidal holes which distance is about 450mm. If the embedded bolts are too long, use short ones in the market.

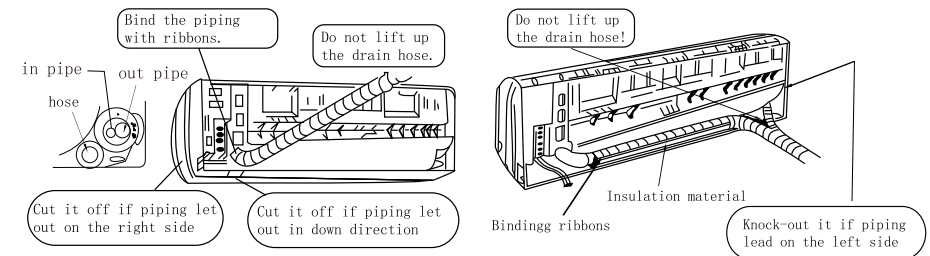
2. Making hole on the wall

- Identify the position of the hole. The height should be lower than the below edge of the indoor unit.
- Drill 100mm diameter hole using a driller and then insert the wall-socket.



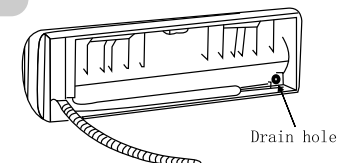
3. Refrigerant and drainage piping work

- According to the requirement of installation locations, the refrigerant and drainage piping can be let out in left, right, down or rear directions.
- Wrap the refrigerant inlet and outlet piping of heat exchanger, together with drainage with binding ribbons.
- Make sure to put the drainage piping under the refrigerant piping.



4. Changing the direction of the drainage piping

- If the drainage piping is to be led from the left side, modification of the direction should be done. Otherwise, it will cause water leakage.



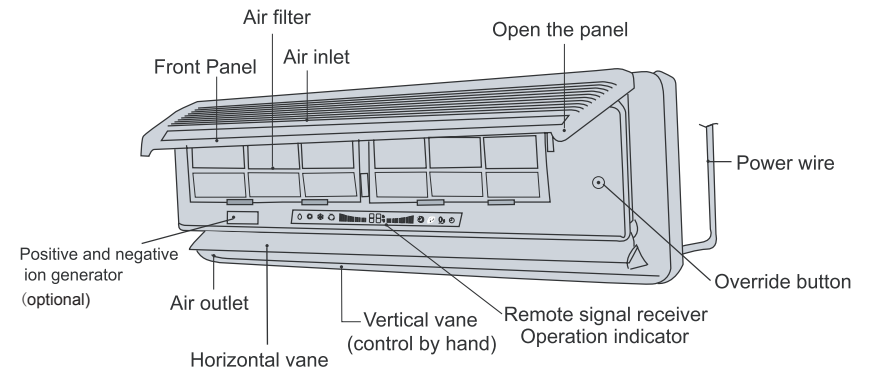
INSTALLATION PLACE

Selecting the indoor unit installation location

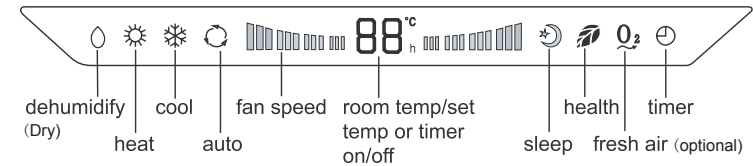
- Install in a location where the air inlet and outlet are not blocked.
- Install in a location where the outflow air will reach all the room.
- Install on a strong wall to prevent the effect of vibration.
- Avoid a location where direct sunlight may reach.
- Install in a location where drain water may flow out from the unit.
- Keep 1m or more away from the TV set and radio to prevent picture distortion or noise.
- To prevent the effect of a fluorescent lamp or incandescent lamp, keep them away as far as possible. Otherwise, the remote control signal may not be received.
- Install in a location where the air cleaning filter can be installed or removed freely.

NAME OF EACH PART

INDOOR UNIT (Panel XF)



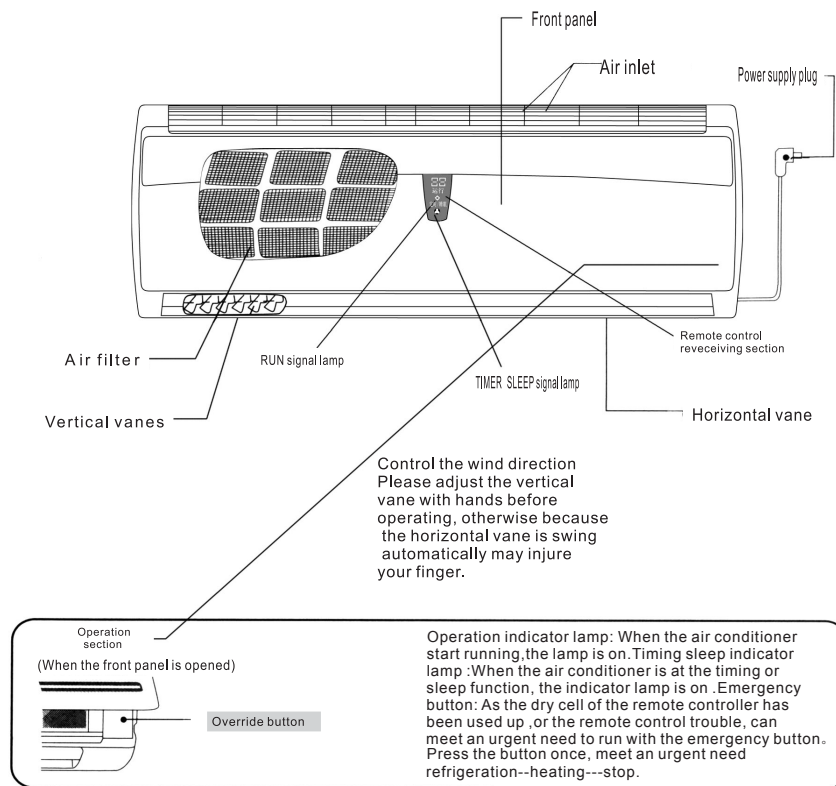
PANEL DISPLAY OF THE INDOOR UNIT



Display details on the indoor unit

- Display section of indoor unit has timer and operation signal lamps.
- Setting TIMER ON or TIMER OFF, Timer signal lamp lights.
- When unit is turned on, operation signal lamp "RUN" lights.
- When operation signal lamp "RUN" twinkles, air conditioner may have malfunction.

NDOOR UNIT (Panel F)



Display details on the indoor unit

- Display section of indoor unit have timer and operation signal lamp
- Setting timer on or off, Timer signal lamp lights
- When a/c is turned on, operation signal lamp lights.
- When signal lamp twinkles, a/c may has malfunction or during defrosting or during protecting function of preventing cool wind.

1. Room air smells funny.

The fan coil unit sucks an odor adhering a wall, carpet, furniture, cloth, etc. and blow it out with air.



2. Fan stops during the DRY operation

If water condensing to the heat exchanger evaporates again, the humidity increases. To prevent this, fan operation of the indoor unit stops when the room temperature has dropped sufficiently.



3. Water flowing sound is heard during operation.

This is the sound of refrigerant flowing inside the fan coil unit.



4. Fog flows out during COOL operation

The indoor warm air is cooled when the room temperature and the humidity is high, fog is formed. When the room temperature and humidity reduce, fog will disappear.



5. A mechanical sound is heard from the indoor unit.

This is the sound of the switch turning ON/OFF the fan or compressor.

6. The remote control signal cannot be received.

When the direct sunlight or strong lamplight shines on the remote control receiving section of indoor unit, the remote control signal may not be received. Shelter from the direct sunlight or turn down the lamplight.



7. Airflow direction is changed during operation.

When the fan coil unit is operated in the COOL or DRY mode, if the operation continues with air blowing down for 1 hour, the direction is automatically set to level to prevent condensed water from dropping. In the heating operation, if the output air temperature is too low or when defrosting is done, the horizontal vane position is automatically set to horizontal.



8. Frost adheres to the vertical vanes.

If the unit operates in high humidity for a long time, water may condense on the vertical vanes and drip.

Even if the above items are checked, when the air-conditioner does not recover from the trouble, stop using it and consult the service dealer or the manufacturer telling the product type and the failure details.

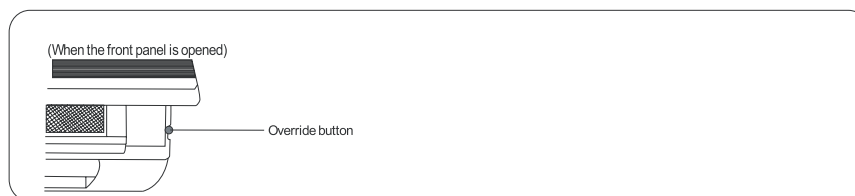
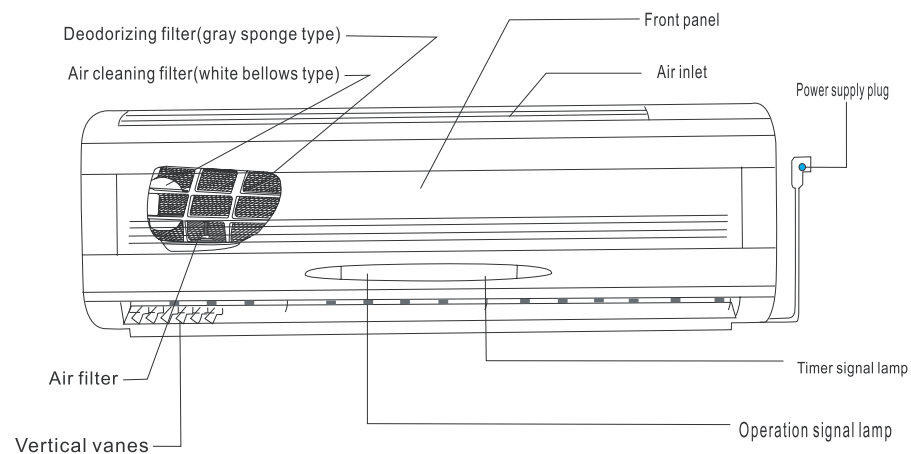
SAFETY RULES

Before installing the unit, carefully read these "safety rules" and install correctly. Since these cautionary items shown here are very important for safety, be sure to observe them.

- The customer should not install the unit by themselves. If this is done incorrectly, it may cause a fire, electric shock, injury by dropping of the unit, water leakage etc.
- Installation should be done according to the installation instructions.
- Drainage piping and refrigerant piping connection work refer to the installation descriptions.
- After installation, check that if there is any refrigerant leakage place/point.
- Do not connect using branched outlet or an extension cord and do not attach many loads to one electric outlet.
- Install the unit in the place which can support fairly weight.
- Apply grounding
Do not connect a grounding wire to a gas pipe, water pipe, lightening rod or ground wire of a telephone.
- Do not install the unit where flammable gas could leak.
- Install an earth leakage breaker depending on the place where the air conditioner is to be installed(humid place, etc.)

NAME OF EACH PART

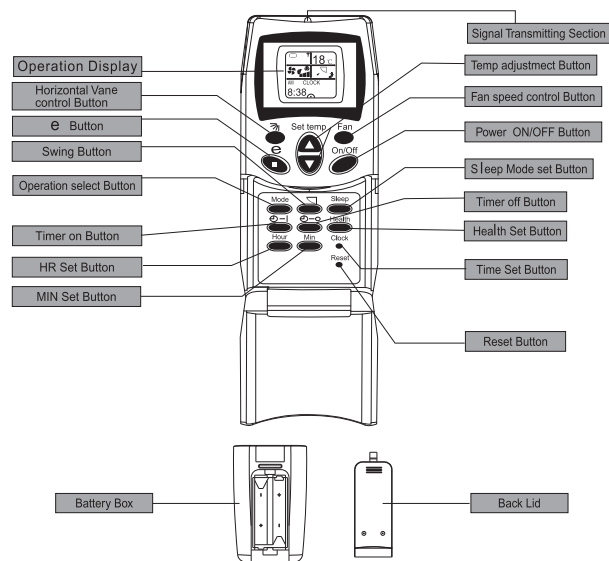
INDOOR UNIT (Panel XC)



Display details on the indoor unit

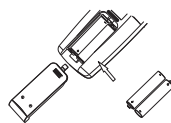
- Display section of indoor unit has timer and operation signal lamps.
- Setting TIMER ON or TIMER OFF, Timer signal lamp lights.
- When unit is turned on, operation signal lamp "RUN" lights.
- When operation signal lamp "RUN" twinkles, air conditioner may has malfunction.

NAME AND FUNCTION OF EACH BUTTON OF REMOTE CONTROLLER



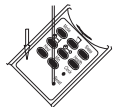
Set Remote Controller Clock

1. Remove the back lid and insert two batteries



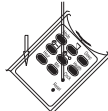
Do not confuse (+) and (-)

2. Reset button



Press it by sharp object

3. Clock set button



Press it by sharp object

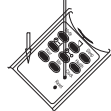
Warning

- The batteries must be removed from the appliance before it is scrapped and that they are disposed.
- The range that the signal can reach is about 6 metres of safely. One or two beeps will be heard after the unit receiving the signal.
- When the signal does not operate the indoor unit, or the display becomes dim, replace the 2 batteries with new ones of the same type.
- Use the remote controller carefully. If it is dropped, thrown or gets wet, it may not operate.
- Do not use rechargeable batteries.

4. Press the buttons HR and MIN to set the current time. Press HR button each time, the time adds 1 hour, Press MIN button each time, time adds 1 minute



5. Press clock set button again



Press it by sharp object

Operate automatically

According to the room temperature when the operation starts, the operation mode is automatically selected between COOL, DRY and HEAT. However, when operation is started again within 2 hours after the operation is stopped, the same operation mode before it is stopped is selected.

Room temperature when started	operation mode
About 25℃ or higher	COOL
About 20℃-25℃	DRY
About 20℃ or lower	HEAT FAN

To start operation

1. The signal transmitting section of the controller should be pointed at the receiving section.
2. Press the ON/OFF to start air-conditioner
3. To select the Auto mode, each time the button is pressed, the operation mode is changed in sequence from: AUTO---COOL---DRY---HEAT

To stop operation

Press the ON/OFF button

While too warm or too cool

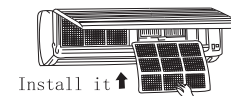
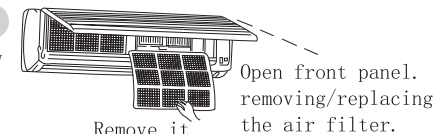
When about 3-15 min passes, after operation start, if you feel slightly warm or cool.

1. Press the TOO COOL button to raise the temperature. One press raises the temperature by about 1℃
2. Press the TOO WARM button to lower the temperature. One press lowers the temperature by about 1℃

CLEANING OF THE AIR FILTER AND DEODORIZING FILTER

Cleaning the air filter (about every 2 weeks)

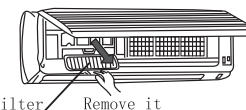
1. Open front panel to the position as shown below and remove the air filter. (The position of the front panel should not be opened to horizontal level. Otherwise the front panel may drop down).
2. Clean dirt from the air filter using a vacuum cleaner or by washing with water. If dirt is conspicuous, wash with a solution of detergent in lukewarm water (below 40℃).
3. Dry well in the shade after washing with water. Do not expose the air filter to direct sunlight or heat from fire when drying it.
4. Install the air filter and close the front panel.



Cleaning and replacement of the deodorizing filter (OPTION)

Cleaning about once every 2 weeks and replacement about once every year.

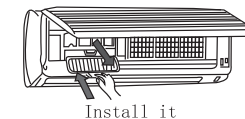
1. Remove the air filter then remove the deodorizing filter. (gray sponge type)
2. Soak the deodorizing filter together with frame in lukewarm water for about 15 minutes. If dirt is conspicuous, use a solution of detergent in lukewarm water. Dry well in the shade after washing with water/lukewarm water.



CAUTION

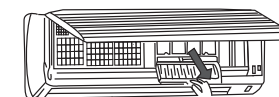
- The deodorizing filter is harmless to humans. However, to keep its effect, be sure to hold the frame and do not touch the surface of the filter with your hands.
- Do not use a scrubbing brush or sponge. It may damage the surface of the filter. Do not use a chlorine detergent.

3. Install the deodorizing filter (gray sponge type) then install the air filter.



Air filter replacement (OPTION)

Replace about once every 6 months. Refer the section "Deodorizing filter replacement". Remove the air filter first then remove the air deodorizing filter. While in installation, install a new air filter first then install the deodorizing filter.



Deodorizing filter and air filter

- When the air filter is blocked, it may cause condensed water in the air outlet due to the reducing of cleaning capacity.
- The air filter is disposable. If the colour of the cleaning filter turns to brown, replace it with a new one. Customers can buy these filters in the nearby stores.
- When the colour of the deodorizing filter is not restored even if the filter is washed following the procedure above or when the deodorizing filter becomes brown, replace soon.
- The deodorizing filter and the air filter used in this series products are interchangeable with the ones used in similar products (optional)

BEFORE CONTACTING THE SERVICEMAN

The fan coil unit cannot be operated.

- 1.If the power plug is connected. If the switch is turned on and fuse is not blown. If the leakage breaker is not turned off.
- 2.If the power source is cut off or not.
- 3.The fan coil unit is kept stopped during operation. After the power is tested, pressing the ON/OFF button again.
- 4.The ON timer is not set.

Cannot be cooled or heated sufficiently

- 1.The temperature setting is correct. The set temperature should be lower than room temperature in COOL mode. While in HEAT mode, the set temperature should be higher than room temperature.
- 2.If the door is open or persons are too many or too many electric heaters bring too much heat.
- 3.Air filter is not dirty.

Display of remote controller does not appear. The remote control signal cannot be received

- 1.The batteries are exhausted.
- 2.The polarity(+) (-)of the batteries is confused.




⚠ CAUTION

When thunder is heard, stop operation and pull out the power plug or turn off the switch. Otherwise the electrical parts may be damaged. In a weak radio wave area, when the fan coil unit is operated, noise may be generated in SW radio reception. The remote control signal may not be received in a room with an electronic type fluorescent lamp is used.

Even if the above items are checked, when the fan coil unit does not recover from the trouble, stop using it and contact the service dealer or the manufacturer telling the product type and the failure details.

USE METHOD OF REMOTE CONTROLLER AND AUTO OPERATION



To Select The "Cool", "DRY", "HEAT", "FAN" ,"ON/OFF" Mode

1. Press the ON/OFF button to start machine
2. Select the operation mode by pressing the MODE. Each time this button is pressed, the operation mode is changed in sequence, from "AUTO → COOL → DRY → HEAT" (Example) To select the cool operation mode, press MODE button continuously until "cool" is displayed on the display screen.
3. Press the  button to select the fan speed
4. Press the  button to select air blowing direction
5. Press the  button to stop machine.

Note

1. Once the operation mode has been selected, the same operation mode will start after the ON/OFF button pressed on



When the set temperature is to be changed

To lower the temperature, Press the  button, One press lowers the temperature by about 1℃
To raise the temperature, Press the  button, One press raise the temperature by about 1℃

IN "DRY" Operation

1. In "DRY" operation, the fan speed cannot be changed
2. The room temperature is slightly lowered in this operation mode, The "DRY" function cannot be done when room temperature is 13℃ or lower

Air Flow Velocity Adjustment

1. Press the button  to adjust the air flow velocity, Each time the button is pressed, Fan speed is changed as follows: AUTO → LOW → MEDIUM → HIGH
2. To adjust the up/down fan, please press the button , Each time press the button on position of " — → ↗
→ ↘ / → | → ↻ "









1. In daily time, please select swing.
2. When "Cool" or "Dry", please select the position of " — ↗ " and "HEAT" select to " / | " Position

Note: To change the horizontal direction of the air flow. Adjust the vertical vanes manually before operation starts. Since the horizontal vane moves automatically your fingers may be caught.

OVERRIDE OPERATION

Each time the switch is pressed, the unit alternates between the override COOL mode, HEAT mode and STOP mode.

To set timer on/off function

Press the timer on button , the  appears in the display and begins to glitter. It will last 1 min, to inform you that you can start to set the timer on  function. Press the timer on button again, the function will be cancelled. When the unit is on, press the timer off button, or press the timer on  button first to set the timer on, then press the timer off button, the  appears in the display and begins to glitter, and it will last 1 min, to inform you that you can start to set the timer off function. Press the timer off button again, the function will be cancelled. Press the  and  button to set timer on and timer off function which you need. Each press of the , the set time will raise by 1 hour. Each press of the , the set time will raise by 10 mins.

To use the timer on/off function together.

Press the timer on button to set the timer on function first, and then press the timer off button to set the timer off function. At the time, the timer on/off functions are used together.
→ Stands the operation order of the timer on/off function.

NOTE:

- 1、 Before setting the timer on/off function, please confirm whether the electronic clock is set right or not.
- 2、 If the current time is the time of the timer on/off, and the state of the machine is the same as the requirement of the time set, the operating mode will not change.
- 3、 The remote controller has the function of setting daily recycle of timer on/off function (everyday set the timer on/off function rotatively.), and setting weekly recycle of timer on/off function (operate the timer on/off function rotatively from Monday to Friday, and stop the unit on Saturday and Sunday). Some other air-conditioners may not have this function, and will not be informed.
- 4、 In the stop state, Press the "Temperature +" and "temperature -" at the same time, to set and cancel the weekly display state easily.

Set the comfortable sleep mode function





- 1、 the machine is on.
- 2、 press the sleep button  to enter the operation of sleep mode function.

Sleep function

- 1、 the fan motor indoor changes to the low speed.
- 2、 In cool operation, each hour the temperature will raise by 1°C, but the changing range is only 2°C.
- 3、 In heat operation, each hour the temperature will lower by 1°C, but the changing range is only 2°C.
- 4、 In dry operation, the room temperature often does not change.

To cancel the Sleep mode function

You can cancel the sleep mode function by selecting one way below.

- 1、 Press the sleep mode  set button again
- 2、 Press the on/off button  or stop the machine automatically.
- 3、 Press the mode button  to change the mode.
- 4、 Press the fan speed button  to change the fan speed.

"e" button Function:

Press "e" button one time, the unit goes on "AUTO" function MODE SWING, FAN SPEED. Press it again, the same function works. Press "ON/OFF" or "MODE" button to cancel "e" Function

The Night Light Function

The button ON/OFF has night light indication

NOTE:

- 1、 This remote controller is new type produced by Shanghai Shuanglu Company. If the instruction of this remote controller has difference from the object, please confirm by the instruction.
- 2、 If this remote controller is used together with the cabinet type, please press "□" button two times, then the mode is the current mode.
- 3、 The button "□" and "⌂" of portable air-conditioner does not work.
- 4、 This remote controller does not set anion function.

Making rational use of the unit

In order to increase the efficiency of the operation and considering your health, we recommend you to make rational use of the unit as follows.

COOL For effective cooling



Close the windows and pull down blinds. Sunshine is reduced and cooling efficiency increases.



Paste a heat shield film (available) on the window. Heat entering the room is reduced.

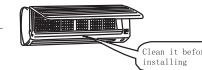
When the air conditioner is not going to be used for a long time

- Perform FAN operation for 3 or 4 hours to dry the inside of the air conditioner.
- Remove the batteries from the remote controller.
- Disconnect the power plug.



Preparation and maintenance when the air conditioner is to be used again

- Clean the air filter and install it in the indoor unit.
- Check that the air inlet and outlet of the indoor unit are not blocked.
- Connect the power plug.



Maintenance in use seasons

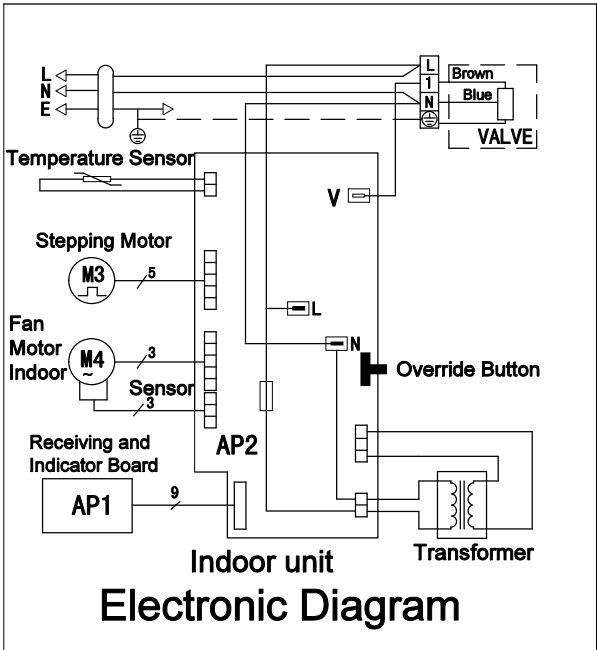
Meanwhile the unit should be cleaned regularly for maintenance.

- Turn off power supply before cleaning.
- Clean the indoor unit using soft dry cloth. If the unit is very dirty, use a solution of detergent in lukewarm water first, then clean it again using soft cloth dipped into clean water.
- Cleaning the air filter regularly. (Details refer to the section of "Cleaning the air filter")

CAUTION

- Do not operate the fan coil unit without the air filter installed in.
- Do not use gasoline, benzene, polishing powder and detergent or hot water (40°C or more) to clean the fan coil unit.

Two way valve connection



Three way valve connection

