

CMV DC Inverter Indoor Unit Installation and User's Manual

Applied models:

External appearance	Cooing capacity	External appearance	Cooing capacity
Compact four-way cassette unit	2200W 2800W 3600W 4500W	Four-way cassette unit	5600W 7100W 8000W 9000W 10000W 11200W 12500W 14000W 16000W
Low ESP ducted unit	2200W 2800W 3200W 3600W 4500W 5600W 7100W	Standard ESP ducted unit and High ESP ducted unit 7.1kW~ 9.0kW	7100W 8000W 9000W 10000W 12000W 15000W
High ESP ducted unit 10.0kW~ 15.0kW and Full fresh air unit 14.0kW	10000W 12000W 14000W 15000W	High ESP ducted unit 20.0kW~ 28.0kW and Full fresh air unit 22.4kW、28.0kW	20000W 22400W 25000W 28000W
Floor-ceiling unit	4500W 5600W 7100W 8000W 9000W 11200W 14000W 16000W	Wall-mounted unit	2200W 2800W 3600W 4500W 5100W 5600W 7100W
Short ducted unit	2200W 2800W 3600W 4500W 5600W 7100W		

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.

Addition to the user manual:

The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. The appliance shall be installed in accordance with national wiring regulations.

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- 1. Before use, please read this Manual carefully, and correctly operate according to this Manual.
- 2. Special attention shall be paid to the meanings of the following two logos:

AWarning: It means that disoperation may cause casualties or serious damage.

Attention: It means that disoperation may cause personal injuries or property damages.

Please read the host labels carefully. If any anomaly is found, such as abnormal noise, odor, smoke, temperature rise, electricity leakage and fire, please cut off the power supply immediately and timely contact the local service center or dealer of our company, but never attempt to any unauthorized repair. If necessary, immediately contact your local fire protection and emergency services.

Correct Disposal of this product

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Attention

- Before installation, check whether all power sources conform to the requirements on the nameplate and make sure of the power supply safety.
- Before use, check and confirm whether the electric wires, drain pipes and tubes are firmly connected to prevent water leakage, refrigerant leakage, electric shock, fire or other accidents.
- The power supply socket must be equipped with ground wire to ensure the air conditioner could be effectively grounded through the power socket and avoid electric shocks. Never connect the ground wire onto the gas pipes, water pipes, lightning rods or phone wires.
- Once started, never shut down the air conditioner within 5 minutes' running, or it will affect the compressor oil return.
- Never let kids operate the air conditioner.
- Never operate the air conditioner if your hand is wet.
- While cleaning the air conditioner or replacing the air filter, please cut off the power supply at first.
- If idle for long, please cut off the power supply.
- Never step on or place any object on the air conditioner.
- Power on for leakage test after installation.

Warning

- Please contact our authorized service center for installation. Improper installation may result in water leakage, electric shocks, fires and other accidents.
- Never put sticks or other objects into the air inlet and outlet.
- Do use within the required voltage and frequency with protection devices equipped accordingly. Never use any copper wire to replace the fuse to avoid failures or fires.
- The air conditioner shall have its ground wire firmly connected with that of the power source.
- While cleaning, never splash water onto the air conditioner, in order to avoid failures or electric shocks.
- Never have the indoor or outdoor unit inlet or outlet blocked to avoid impact on the performance of the air conditioner and prevent failures.
- If idle for long, disconnect the power supply to ensure safety and save energy.
- When restarted after a long-term shutdown, do carefully check whether the air conditioner and its power lines are normal. If the power lines are damaged or need replacing due to other reasons, please contact our after-sales service staff or authorized repair professionals to avoid electric shocks, overheating, fires or other accidents.
- Never place any water container on the air conditioner to avoid electric shocks due to water immersion.
- After a long-term use, please confirm whether the mounting platform is worn, and if worn, the air conditioner may fall to cause casualties.
- Never operate the switch if your hand is wet to avoid electric shocks.
- In time of repair, stop the air conditioner with the power supply cut off, or the high-speed rotation of the internal wind turbines may lead to injuries.
- Never use any other fuse beyond the capacity regulated in this Manual. Never use any iron
 or copper wire to avoid failures, fires and other consequences. Do use the special circuit
 under the rated voltage for air conditioners.

1-1 Electrical safety requirements

- 1) Wiring work must be done by formally qualified electricians.
- 2) All wiring work must meet the electrical safety specifications.

3) The air conditioner must be well grounded, namely, the air conditioner must have its main switch reliably grounded.

4) The air conditioner must be provided with separate power supply according with the rated parameter value.

2-1 Four-way cassette type



Figure 2.1







2. Air conditioner part name and functions

2-3 Low static pressure ducted type



Figure 2.3

2-4 Standard static pressure ducted type and High static pressure ducted type 7.1kW ${\sim}9.0kW$



Figure 2.4

2-5 High static pressure ducted type 10.0kW~15.0kW



Figure 2.5

2-6 Full fresh air type 14.0kW



Figure 2.6

2-7 Full fresh air type 22.4kW $_{\rm \sim}$ 28.0kW and High static pressure ducted type 20.0kW $_{\rm \sim}$ 28.0kW



2. Air conditioner part name and functions

2-8 Wall-mounted type



Figure 2.8

2-9 Floor-ceiling type



Figure 2.9

3. Use instructions

3-1 Use of remote controller

The frequency conversion Wall-mounted type (standard), Floor-ceiling type (standard), Four-way cassette type (standard), Full fresh air type (optional) and ducted type (optional) have the remote controller use (Specifications: smart universal type) introduced as follows:

The smart universal remote controllers (compatible to line controllers or lamp panels respectively)

The following remote controller "Swing" button, "High wind" button, "Lamp" button and "Purifier" button apply to special new models but not to ordinary ones.

A Warning

- Never put the remote controller close to such heat sources as electric blankets or heating furnaces.
- Never put the remote controller at the place subject to direct sunlight.
- Be careful not to have it fall, or it may be damaged.
- Never have any obstacle between the signal receiver and the remote controller of the air conditioner to avoid impact on signal transmission and receiving.
- Never have water and other liquids splashed on the remote controller.

3. Use instructions

Attention: If the remote controller fails, please replace with new batteries and try again, but if it fails again, please contact the seller or our authorized service center.



• If the signal is correctly received, the air conditioner will "beep".

3-1-1 Meanings of remote controller symbols

1) This controller is applicable to: ordinary air conditioners except for high-end ones.

2) This controller has its appearance following ELF remote controllers equipped with 13 buttons, and its LCD screen adopts that of the original ELF LCD screen, with the mask screen printing changed from the original economic screen printing to the lamp button screen printing (The mask needs changing due to elimination of the economic function).

3) The LCD displays and masks are introduced as follows: The "Function Options" button corresponds to the masks below: "auto, refrigeration, dehumidification, heating and ventilation"; The "Sleep, Lamp, High wind, Purification and Lock" buttons correspond to the masks below: "Sleep, Lamp, High wind, Purification and Lock"; such functions as temperature regulation, speed regulation, wind swing, wind direction and timing are displayed with the icons on the LCD screen, specifically as shown below:

•Temperature display: DO to displays the temperature, with the temperature range of 16-32°C.

•Speed display: •Speed displays the fan speed, the static • indicates low fan speed, the static • indicates the moderate fan speed, the static • indicates the high fan speed and the dynamic • indicates the automatic fan speed.

•Swing display: (displays the outward swing, the static c indicates the fixed swing, the static (indicates the natural swing, and the dynamic (indicates the automatic swing.

•Damper display: \bigcirc Indicates the status of outward wind swing, the static \bigcirc indicates the swing stop and the dynamic \bigcirc indicates the wind swing. When \diamondsuit is dynamically displayed vertically and horizontally, it indicates the three-dimensional wind.

3-1-2 Remote controller functions

In time of initial power-on, the remote controller is in its idle state. Press the "On/Off" button to have the remote controller into its automatic mode. Press the "Mode" button, and the remote controller will switch "Auto" \rightarrow "Refrigeration" \rightarrow "Dehumidification" \rightarrow "Heating" \rightarrow "Air Ventilation" \rightarrow "Auto". If the remote controller is in its "Off" state, only such buttons as "On/Off", "TIMER", "Purification", "Lamp" and "Lock" are valid, but if other buttons are pressed, there is no display. In case of the "Off" state, press the "On/Off" and "TIMER" buttons to set the setting state of other buttons (based on the setting requirements in different modes).

1. Auto mode

1) "Running On/Off" button: Press this button to switch "On" \rightarrow "Off" \rightarrow "On". In time of initial power-on from "Off" \rightarrow "On", other button settings will follow the default settings. If not initial power-on from "Off" \rightarrow "On", such functions as lamp, purification, sleep, high wind and timer will be canceled after shutdown. Other button settings will follow the settings before "Off".

2) "-" button: Press "-", and the display screen still shows 25°C unchanged.

3) "+" button: Press "+", and the display screen still shows 25°C unchanged.

4) "Swing" button: (Outer damper) it shall be in its "Swing" state by default. Press this button to switch "Swing Wind", "Fixed Wind", "Natural Wind" and "Swing Wind".

5) "Wind Direction" button: (Inner damper) it shall be in its "Swing" state by default. Press this button to switch "Swing Wind", "Stop" and "Swing Wind".

6) "Fan Speed" button: It shall be in its "Automatic Wind" state by default. Press this button to switch "Automatic Wind", "High Wind", "Moderate Wind", "Low Wind" and "Automatic Wind".

7) "TIMER" button: It shall be in its "No Timing" state by default. Press this button to set the timer by 1 hour, respectively 1H, 2H, ..., 24H, Cancel and 1H. In the "Off" state, press the "TIMER" button to set the "On" time, the remote controller displays the running state before "Off" (In case of initial power-on, it will enter the default state of the auto mode), and the timer displays 1H. Press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "Off" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. In the "On" state, press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "Off" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. After the timer function is set, decrease every 1 hour until the "On" or "Off" time, and simultaneously disables the timer display. If the "Mode" button is pressed in time of "Timing", the "Timing" will not be cancelled. (Note: When the "TIMER" is actuated, press any other button, for example, the "Swing Wind" button, and the timing signal will be sent out.)

8) "High Wind" button: It shall be in the state of "No High Wind" by default, and in the "Auto" mode, the "High Wind" button has no effect. (Press the "High Wind" button, and there is no display or code sending)

9) "Sleep" button: It shall be in the "No Sleep" state by default, press the "Sleep" button to switch "Sleep" \rightarrow "Sleep Cancel" \rightarrow "Sleep". If it is in the state of "Sleep", the "Sleep" will not be cancelled after the mode is switched. (Note: If the air conditioner is running in its low fan speed and the speed can be adjustable, press the "Sleep" button again to cancel sleep and come back to the running state

before sleep setting. The "Sleep" button can be used to shut off the screen, namely, shut off the multiple-color screen in split air conditioners but the backlight in the package chillers.)

10) "Lock" button: It shall be in the "Unlocking" state by default, press this button and the remote controller will switch "Lock" \rightarrow "Unlock" \rightarrow "Lock". When the "Lock" button is actuated, all buttons except for the "Lock" button on the remote controller have no effect. (Note: When the "Lock" button is actuated, the package remote controller and air conditioner operation panel will have all the buttons locked automatically, but automatically unlocked when this button is pressed again. In split air conditioners, only remote controller will be locked, instead of the emergency button, but the main board will have response.)

11) "Lamp" button: It shall be in the "No Lamp Display" state by default, press this button and the remote controller will switch "Lamp Display" \rightarrow "Lamp Display Cancel" \rightarrow "Lamp Display". If the "Lamp Display" is actuated, the "Lamp Display" will not be cancelled after the "Mode" button is pressed. Press this button when the remote controller is in its "Off" state, and the remote controller will switch "Lamp Display" \rightarrow "Lamp Display".

12) "Purification" button: It shall be in the "No Purification" state by default, press this button and the remote controller will switch "Purification" \rightarrow "Purification Cancel" \rightarrow "Purification" . If the "Purification" is actuated, the "Purification" will not be cancelled after the "Mode" button is pressed. Press this button when the remote controller is in its "Off" state, and the remote controller will switch "Purification" \rightarrow "Purification" and the remote controller will switch "Purification" and "Purificati





Attention

- Never use new and old batteries together.
- The remote controller should have its batteries taken out when idle for long.
- In general conditions, the dry batteries meeting the JIS or IES standard can have the service life of 6-12 months, but if beyond the service time or not meeting the above specifications, the dry batteries may be subject to leakage and may even disable the remote controller operations.
- The "recommended service life" is marked on batteries, but the actual service time may be shorter.

2. "Cooling" mode

1) "Running On/ Off" button: Press this button and the remote controller will switch "On" \rightarrow "Off" \rightarrow "On". After shutdown, it will cancel such functions as "Lamp", "Purification", "Sleep", "High Wind" or "Timing".

2) "-" button: The set temperature will have 1°C decreased once this button is pressed, and the Celsius models will decrease progressively from " $32^{\circ}C \rightarrow 31^{\circ}C \rightarrow ... \rightarrow 17^{\circ}C \rightarrow 16^{\circ}C$ ";

3) "+" button: The set temperature will have 1°C increased once this button is pressed, and the Celsius models will increase progressively from " $16^{\circ}C \rightarrow 17^{\circ}C \rightarrow ... \rightarrow 31^{\circ}C \rightarrow 32^{\circ}C$ ";

4) "Swing" button: Press this button to switch "Swing" \rightarrow "Fixed Wind" \rightarrow "Natural Wind" \rightarrow "Swing".

5) "Wind Direction" button: Press this button to switch "Swing" \rightarrow "Stop" \rightarrow "Swing" .

6) "Fan Speed" button: Press this button to switch "Auto Wind" \rightarrow "High Wind" \rightarrow "Moderate Wind" \rightarrow "Low Wind" \rightarrow "Auto Wind".

3. Use instructions

7) "TIMER" button: Press this button to set the timer by 1 hour, respectively 1H, 2H, ..., 24H, Cancel and 1H. In the "Off" state, press the "TIMER" button to set the "On" time, the remote controller displays the running state before "Off" (In case of initial power-on, it will enter the default state of the auto mode), and the timer displays 1H. Press the "TIMER" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. In the "On" state, press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "Off" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. In the "On" state, press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "Off" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. After the timer function is set, decrease every 1 hour until the "On" or "Off" time, and simultaneously disables the timer display. If the "Mode" button is pressed in time of "Timing", the "Timing" will not be cancelled. (Note: When the "TIMER" is actuated, press any other button, for example, the "Swing Wind" button, and the timing signal will be sent out.)

8) "High Wind" button: Press this button, and the remote controller will switch "High Wind" \rightarrow "Cancel" \rightarrow "High Wind". When the "High Wind" button is actuated, it will display the fan speed, but the "High Wind" will be cancelled after the mode is converted and if it is set as sleep running, then the "High Wind"running will be cancelled. (Note: In the "High Wind"mode, the air conditioner has its fan speed set as "High Wind". At this time, the remote controller can have the fan speed set, but it will have no effect on the air conditioner.)

9) "Sleep" button: Press the "Sleep" button to switch "Sleep" \rightarrow "Sleep Cancel" \rightarrow "Sleep". If it is in the state of "Sleep", the "Sleep" will not be cancelled after the mode is switched. Set the "High Wind" running to cancel the "Sleep" running.

10) "Lock" button: Press this button and the remote controller will switch "Lock" \rightarrow "Unlock" \rightarrow "Lock". When the "Lock" button is actuated, all buttons except for the "Lock" button on the remote controller have no effect. (Note: When the "Lock" button is actuated, the package remote controller and air conditioner operation panel will have all the buttons locked automatically, but automatically unlocked when this button is pressed again. In split air conditioners, only remote controller will be locked, instead of the emergency button, but the main board will have response.)

11) "Lamp" button: Press this button and the remote controller will switch "Lamp Display" \rightarrow "Lamp Display Cancel" \rightarrow "Lamp Display". If the "Lamp Display" is actuated, the "Lamp Display" will not be cancelled after the "Mode" button is pressed.

12) "Purification" button: Press this button and the remote controller will switch "Purification" \rightarrow "Purification Cancel" \rightarrow "Purification". If the "Purification" is actuated, the "Purification" will not be cancelled after the "Mode" button is pressed.

3. "Dehumidification" mode:

1) "Running On/Off" button: Press this button and the remote controller will switch "On" \rightarrow "Off" \rightarrow "On". After shutdown, such functions as lamp, purification, sleep, high wind and timer will be canceled. In time of "Off" \rightarrow "On", other button settings will follow the settings before "Off".

2) "-" button: Press "-", and the display screen still shows 25°C unchanged.

3) "+" button: Press "+", and the display screen still shows 25°C unchanged.

4) "Swing" button: In the mode of dehumidification, the swing wind is set as "Fixed Wind" and can' t be adjusted.

5) "Wind Direction" button: Press this button to switch "Swing Wind" \rightarrow "Stop" \rightarrow "Swing Wind".

6) "Fan Speed" button: In the mode of dehumidification, the fan speed is set as "Low Wind" and can' t be adjusted.

7) "TIMER" button: Press this button to set the timer by 1 hour, respectively 1H, 2H, ..., 24H, Cancel and 1H. In the "Off" state, press the "TIMER" button to set the "On" time, the remote controller displays the running state before "Off" (In case of initial power-on, it will enter the default state of the auto mode), and the timer displays 1H. Press the "TIMER" button again to repeat 2H ... 24H, Cancel, 1H, 2H ... in order. In the "On" state, press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "Off" button again to repeat 2H ... 24H, Cancel, 1H, 2H... in order. After the timer function is set, decrease every 1 hour until the "On" or "Off" time, and simultaneously disable the timer display. If the "Mode" button is pressed in time of "Timing", the "Timing" will not be cancelled.

8) "High Wind" button: In the mode of dehumidification, the "High Wind" button has no effect.

9) "Sleep" button: Press the "Sleep" button to switch "Sleep" \rightarrow "Sleep Cancel" \rightarrow "Sleep". If it is in the state of "Sleep", the "Sleep" will not be cancelled after the mode is switched.

10) "Lock" button: Press this button and the remote controller will switch "Lock" \rightarrow "Unlock" \rightarrow "Lock". When the "Lock" button is actuated, all buttons except for the "Lock" button on the remote controller have no effect.

11) "Lamp" button: Press this button and the remote controller will switch "Lamp Display" \rightarrow "Lamp Display Cancel" \rightarrow "Lamp Display". If the "Lamp Display" is actuated, the "Lamp Display" will not be cancelled after the "Mode" button is pressed.

12) "Purification" button: Press this button and the remote controller will switch "Purification" \rightarrow "Purification Cancel" \rightarrow "Purification". If the "Purification" is actuated, the "Purification" will not be cancelled after the "Mode" button is pressed.

4. "Heating" mode:

1) "Running On/ Off" button: Press this button and the remote controller will switch "On" \rightarrow "Off" \rightarrow "On". After shutdown, it will cancel such functions as "Lamp", "Purification", "Sleep", "High Wind" or "Timing". In time of "Off" \rightarrow "On", other button settings will follow the settings before "Off".

2) "-" button: The set temperature will have 1°C decreased once this button is pressed, and the Celsius models will decrease progressively from " $32^{\circ}C \rightarrow 31^{\circ}C \rightarrow ... \rightarrow 17^{\circ}C \rightarrow 16^{\circ}C$ ";

3) "+" button: The set temperature will have 1°C increased once this button is pressed, and the Celsius models will increase progressively from " $16^{\circ}C \rightarrow 17^{\circ}C \rightarrow ... \rightarrow 31^{\circ}C \rightarrow 32^{\circ}C$ ";

4) "Swing" button: Press this button to switch "Swing" \rightarrow "Fixed Wind" \rightarrow "Natural Wind" \rightarrow "Swing".

5) "Wind Direction" button: Press this button to switch "Swing" \rightarrow "Stop" \rightarrow "Swing".

6) "Fan Speed" button: Press this button to switch "Auto Wind" \rightarrow "High Wind" \rightarrow "Moderate Wind" \rightarrow "Low Wind" \rightarrow "Auto Wind".

7) "TIMER" button: Press this button to set the timer by 1 hour, respectively 1H, 2H, ..., 24H, Cancel and 1H. In the "Off" state, press the "TIMER" button to set the "On" time, the remote controller displays the running state before "Off" (In case of initial power-on, it will enter the default state of the auto mode), and the timer displays 1H. Press the "TIMER" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. In the "Off" button again to repeat 2H ... 24H, Cancel, 1H. Press the "Off" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. After the timer displays 1H. Press the "Off" time, and simultaneously disable the timer display. If the "Mode" button is pressed in time of "Timing", the "Timing" will not be cancelled.

8) "High Wind" button: Press this button, and the remote controller will switch "High Wind" \rightarrow "Cancel" \rightarrow "High Wind". When the "High Wind" button is actuated, it will not display the fan speed, but the "High Wind" will be cancelled after the mode is converted and if it is set as sleep running, then the "High Wind" running will be cancelled.

9) "Sleep" button: Press the "Sleep" button to switch "Sleep" \rightarrow "Sleep Cancel" \rightarrow "Sleep". If it is in the state of "Sleep", the "Sleep" will not be cancelled after the mode is switched. Set the "High Wind" running to cancel the "Sleep" running.

10) "Lock" button: Press this button and the remote controller will switch "Lock" \rightarrow "Unlock" \rightarrow "Lock". When the "Lock" button is actuated, all buttons except for the "Lock" button on the remote controller have no effect.

11) "Lamp" button: Press this button and the remote controller will switch "Lamp Display" \rightarrow "Lamp Display Cancel" \rightarrow "Lamp Display". If the "Lamp Display" is actuated, the "Lamp Display" will not be cancelled after the "Mode" button is pressed.

12) "Purification" button: Press this button and the remote controller will switch "Purification" \rightarrow "Purification Cancel" \rightarrow "Purification". If the "Purification" is actuated, the "Purification" will not be cancelled after the "Mode" button is pressed.

5. "Ventilation" mode:

1) "Running On/ Off" button: Press this button and the remote controller will switch "On" \rightarrow "Off" \rightarrow "On". After shutdown, it will cancel such functions as "Lamp", "Purification", "Sleep", "High Wind" or "Timing". In time of "Off" \rightarrow "On", other button settings will follow the settings before "Off".

2) "-" button: The set temperature will have 1°C decreased once this button is pressed, and the Celsius models will decrease progressively from " $32^{\circ}C \rightarrow 31^{\circ}C \rightarrow ... \rightarrow 17^{\circ}C \rightarrow 16^{\circ}C$ ";

3) "+" button: The set temperature will have 1°C increased once this button is pressed, and the Celsius models will increase progressively from " $16^{\circ}C \rightarrow 17^{\circ}C \rightarrow ... \rightarrow 31^{\circ}C \rightarrow 32^{\circ}C$ ";

4) "Swing" button: Press this button to switch "Swing" \rightarrow "Fixed Wind" \rightarrow "Natural Wind" \rightarrow "Swing".

5) "Wind Direction" button: Press this button to switch "Swing" \rightarrow "Stop" \rightarrow "Swing".

6) "Fan Speed" button: Press this button to switch "Auto Wind" \rightarrow "High Wind" \rightarrow "Moderate Wind" \rightarrow "Low Wind" \rightarrow "Auto Wind".

7) "TIMER" button: Press this button to set the timer by 1 hour, respectively 1H, 2H, ..., 24H, Cancel and 1H. In the "Off" state, press the "TIMER" button to set the "On" time, the remote controller displays the running state before "Off" (In case of initial power-on, it will enter the default state of the auto mode), and the timer displays 1H. Press the "TIMER" button again to repeat 2H ... 24H, Cancel, 1H, ... in order. In the "On" state, press the "TIMER" button to set the "Off" time, and the timer displays 1H. Press the "Off" button again to repeat 2H ... 24H, Cancel, 1H, ... in order.

8) "High Wind" button: Press this button, and the "High Wind" button will have no effect.

9) "Sleep" button: Press the "Sleep" button to switch "Sleep" \rightarrow "Sleep Cancel" \rightarrow "Sleep". If it is in the state of "Sleep", the "Sleep" will not be cancelled after the mode is switched.

10) "Lock" button: Press this button and the remote controller will switch "Lock" \rightarrow "Unlock" \rightarrow "Lock". When the "Lock" button is actuated, all buttons except for the "Lock" button on the remote controller have no effect.

11) "Lamp" button: Press this button and the remote controller will switch "Lamp Display" \rightarrow "Lamp Display Cancel" \rightarrow "Lamp Display". If the "Lamp Display" is actuated, the "Lamp Display" will not be cancelled after the "Mode" button is pressed.

12) "Purification" button: Press this button and the remote controller will switch "Purification" \rightarrow "Purification Cancel" \rightarrow "Purification". If the "Purification" is actuated, the "Purification" will not be cancelled after the "Mode" button is pressed.

3-1-3 Battery replacement

1) The air conditioner can't receive the signals sent from the remote controller, and the remote controller has its screen blurring. It indicates that the battery is depleted and needs replacing.

2) Remove the rear cover, and take out the old batteries. In time of battery replacement, please note the "+" and "-" marks on the battery.

3) Close the rear cover and set the current time. Confirm whether it displays the information of 0:00 a.m.

3-2 Remote controller use

This remote controller undertakes to communicate with the system control main board by controlling the system operation state through buttons and displaying the working status of the whole system on the LCD.





(Optional)

Operation and Instruction:

"ON/OFF" Button:

Control the On/Off status of the system.

"MODE" Button:

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 \rightarrow Refrigeration \rightarrow Dehumidification \rightarrow Heating \rightarrow Ventilation \rightarrow Auto Mode

"TEMP+" and "TEMP-" Button:

1) Boot state, press "TEMP+" and "TEMP-" Button, increase/decrease the setting temperature,

Refrigeration, Dehumidification, Ventilation and Heating mode Scope of temperature setting: 16 $^{\circ}$ C ~ 32 $^{\circ}$ C. The setting temperature do not adjust in Auto Mode.

2) Press the" TEMP+ "and " TEMP- " 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 "TEMP+" and "TEMP-" Button again simultaneously.

"TIMER" Button:

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.

"FAN" Button:

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 → Medium speed → Low speed → Auto wind

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



"SWING" Button:

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.

"26℃/CHECK" Button:

1) Short press this button, Enter a state of energy saving of 26 °C, namely the setting temperature is 26 °C. 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 "TEMP+" and "TEMP-" 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.

3-3 Air direction adjustment

According to the characteristics of cold air sinking and hot air rising, please adjust the air-out direction of the air guide in time of cooling and heating to improve the cooling and heating effects.

Attention

- In the horizontal air-out state, the heating operation will lead to larger temperature difference in the room.
- In case of the cooling operation, the air guide should have its horizontal air-out state selected.
- In the horizontal air-out state, the cooling operation will lead to condensation on the surfaces of the air-outlet and air guide

3-3-1 Four-way cassette type

① In the cooling operation, the air guide should be ②In the heating operation, the air guide should be kept at horizontal air-out operation.

kept at downward air-out operation.





③ When using the panel equipped with automatic swing air guide, press the "Swing" button, and the outlet air guide will automatically swing to get better cooling and heating effect.

3-3-2 Ducted type

When the air-outlet parts (optional) are used, please adjust as follows.

① In the cooling operation (Figure a)

To have the whole room better cooled, please adjust the air guide to the horizontal air-out operation.

②In the heating operation (Figure b)

To have the whole room better heated, please adjust the air guide to the downward air-out operation.





Figure a

Figure b

3-3-3 Wall-mounted type

Up-down air adjustment:

① In the automatic swing state

Press the "Swing" button, and the horizontal air guide will swing up and down to expand air supply.



2 When automatic swing is not available.

If the horizontal air guide is fixed in operation, please adjust the air-out direction of the air guide in time of cooling and heating to improve the cooling and heating effects.

③In the cooling operation

To have the whole room better cooled, please adjust the air guide to the horizontal air-out state.



④In the heating operation

To have the whole room better heated, please adjust the air guide to the downward air-out state.



Attention

- In time of cooling operation under the horizontal air-out state, the shell and the horizontal air guide surface sometimes may have water dripping.
- In time of heating operation under the horizontal air-out state, there may be larger indoor temperature difference.
- Never drive the horizontal air guide directly by hand to avoid failures, and the horizontal air guide shall have its direction switched by the "Swing" switch on the remote controller.

3-3-4 Floor-ceiling type

Air direction adjustment:

① In time of auto swing

Press the "Swing" button, (displays the state of outward swing wind, the static indicates the fixed swing wind, the static (indicates the natural swing wind, and the dynamic (indicates the automatic swing wind.

2 When automatic swing wind is not available

If the horizontal air guide is fixed in operation, please adjust the air-out direction of the air guide in time of cooling and heating to improve the cooling and heating effects.



③In the cooling operation

To have the whole room better cooled, please adjust the air guide to the horizontal air-out state.



4 In the heating operation

To have the whole room better heated, please adjust the air guide to the downward air-out state.



3-4 Optimal operation

Pay attention to the following items to ensure the optimal operation of the system with the specific operation methods referring to the corresponding contents.

1) Adjust the airflow direction appropriately to avoid directly blowing the persons in the room. In time of cooling operation, please adjust the air guide to the horizontal air-out state in order to have the whole room better cooled; and in the heating operation, please adjust the air guide to the downward air-out state in order to have the room floor better heated.

2) Set the temperature appropriately to obtain a comfortable environment and avoid excessive heat or cold.

3) In the cooling operation, the curtains or blinds should be used to prevent direct sunlight indoors.

4) Please close the doors and windows to avoid the indoor-outdoor air convection and obtain a better refrigerating or heating effect.

5) Please well set the predetermined running time via the "Timer" button on the remote controller.

6) Never put any object near the air inlet or outlet. Otherwise, it will reduce the efficiency of the air conditioner and even have the system stop running.

7) If the air filter screen is blocked, the cooling or heating effect will be worsened, so it needs washing once every two weeks.

8) For rational use of the air conditioner, it should be operating in the conditions as designated (See the outdoor unit use instructions for details).





Attention

- The air conditioner installation shall comply with the local regulations of Room Air Conditioner Installation.
- While the air conditioner is remounted at a new place or moved to another place, it should be mounted properly by professional installation technical personnel according to the provided *Installation Instructions* and never by the user himself.
- Inappropriate installation of the air conditioner may result in electric shocks or fires.

4. Installation

4-1 User instructions

1) The user should provide the qualified power supply (with the voltage within 90%-110% of the rated value) consistent with the nameplate label of this air conditioner.

2) The power supply line should be equipped with such protection devices as leakage protector or air switch with the capacity 15 times greater than the maximum current value of the air conditioner.

3) Do use the special lines and the effective grounded socket matching the included plug of the air conditioner. Such plug has been well grounded, so never change at will.

4) Please use the fuse or circuit breaker specified in the Installation Instructions.

5) Wiring work must be completed by qualified electricians and shall comply with the safety requirements.

6) The air conditioner should be well grounded, namely, the air conditioner main switch should have reliable grounding.

7) If necessay, the power line replacement should be completed by professionals from our local customer service center or authorized service center.

8)The indoor units except floor and ceilong type shall be installed at the height of 2.5m above.

4-2 Mounting position

4-2-1 The air-conditioner shall not be mounted at the following places.

1) Never mount the air-conditioner only 1 meter away from the television, stereo record player or radio, or the noise from the air conditioner will have impact on the operation of such electrical equipment.

2) Never mount the air conditioner near the high-frequency machines (commercial sewing machines or massage machines), or the air conditioner may fail.

3) Never mount the air conditioner at damp places greatly subject to heavy oil gas, vapor, soot or corrosive gas.

- 4) Never mount the air conditioner at the places rich in salt, for example, the seaside.
- 5) Never mount the air conditioner at the places where a large amount of engine oil is being used.
- 6) Never mount the air conditioner at the places rich in sulfur gas, for example, hot springs.
- 7) Never mount the air conditioner in a vessel or mobile crane.

4-2-2 Refer to the *Mounting Manual* for specific requirements.

Attention

- Mount the air conditioner firmly, or abnormal noise and vibration may appear.
- The outdoor units should be mounted where the running noise and exhausted air has no impact on neighbors.



5. Service and maintenance

5-1 Confirmation before operation

- 1) Confirm whether the grounding line is broken or shedding.
- 2) Confirm whether the air dust filter is mounted.
- 3) Turn on the power switch 12 hours before running.

5-2 Maintenance instructions

Before the repair and maintenance, the air conditioner must be shut down with the power plug disconnected.

Note:

1) Never insolate the air filter in the sun or bake it beside the fire, or use hot water (40°C above) for cleaning in order to avoid deformation.

2) If the air filter is clogged by dust or other substances, the cooling / heating capacity may drop, while the running noise and power consumption may increase, so the air filter should be regularly cleaned every two weeks (as regulated).

5-2-1 Cleaning instructions

- 1) Disconnect the air conditioner power before cleaning.
- 2) Use soft cloth to wipe off the dust on the air conditioner.
- 3) Never clean the air conditioner with the volatile oil, gasoline, diluent or putty powder.
- 4) Please use household neutral detergent to clean the fingerprints or oil dirts.
- 5) Never flush with water.
- 1. Filter cleaning

Gently pat or use a vacuum cleaner for cleaning. If the filter is seriously contaminated, clean it with water containing a small amount of neutral detergent and remount it after cleaned and dried.

- 2 Filter detachment
 - a. Wall-mounted air conditioner

Gently press the air return grille lower ends, and pull it sideway towards you until you can feel the resistance; after the grille is opened, push it downward, then press its lower ends, and it can be closed. Seize the grille switch and pull out towards A, then pull out the filter towards B, and the air filter can be detached. The blower fan coil air conditioners also can follow the same method to remove the air return outlets and filters for cleaning according to the specific situations.



b. Roof-mounted air conditioners

Gently press the air return grille lower ends, seize the grille switch and pull out towards A, then pull out the filter towards B, and the air filter can be detached for cleaning.

5-2-2 Before use seasons

- 1) Check whether the indoor and outdoor units have their air outlets blocked.
- 2) Check whether the mounting base is subject to corrosion or rust.

3) Check whether the power lines and ground lines are in normal conditions.

- 4) Check whether the air filter is clean enough.
- 5) Connect the power supply.
- 6) Mount the battery in the remote controller.



Screening

5. Service and maintenance

5-2-3 After use seasons

1) Please "disconnect" the air conditioner power and pull out the power plug.

After shutdown, the air conditioner will consume the power of about 5W. For safety and energy saving, please pull out the power plug during non-use seasons.

- 2) Please properly clean, maintain and mount the air filter and other parts.
- 3) Clean the indoor and outdoor units.

Attention

For the electric aided heating air conditioner, the electric heating elements are fixed between the indoor unit fan and the heat exchanger with screws, with the minimum clearance of 12mm away from the combustible surface. Users shall never disassemble and repair such parts to avoid fires or other risks.

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