



SERVICE MANUAL

[G-TECH SERIES]

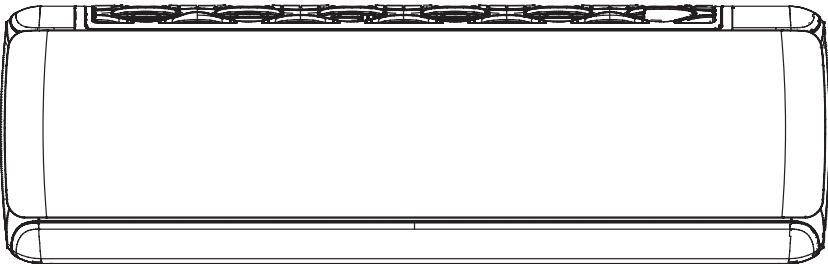
GWH12AEC-K6DNA1A (WIFI)
(GWH12AEC-K6DNA1A/I + GWH12AEC-K6DNA1A/O)

Part I : Technical Information

1. Summary

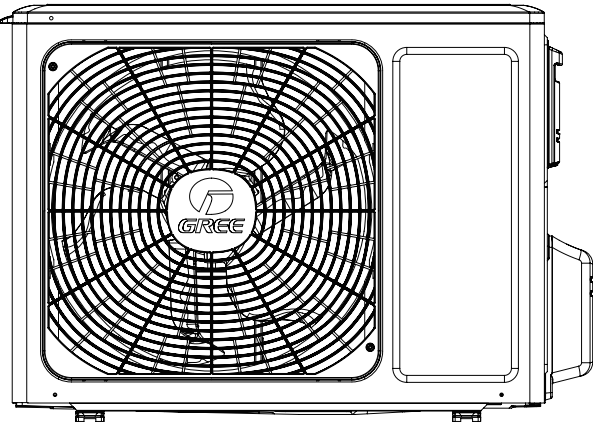
Indoor Unit:

GWH09AEC-K6DNA1A/I
GWH12AEC-K6DNA1A/I



Outdoor Unit:

GWH09AEC-K6DNA1A/O
GWH12AEC-K6DNA1A/O



Remote Controller:

YAU1FB



No	Model	Product code	Indoor model	Indoor product code	Outdoor model	Outdoor product code	Remote Controller
1	GWH09AEC-K6DNA1A	CB370000300	GWH09AEC-K6DNA1A/I	CB370N00300	GWH09AEC-K6DNA1A/O	CB370W00300	YAU1FB
2		CB370000301				CB370W00301	
3	GWH12AEC-K6DNA1A	CB370000400	GWH12AEC-K6DNA1A/I	CB370N00400	GWH12AEC-K6DNA1A/O	CB370W00400	
4		CB370000401				CB370W00401	

Model			GWH09AEC-K6DNA1A	GWH09AEC-K6DNA1A
Product Code			CB370000300	CB370000301
Power Supply	Rated Voltage	V~	220-240	220-240
	Rated Frequency	Hz	50/60	50
	Phases		1	1
Power Supply Mode			Outdoor	Outdoor
Cooling Capacity		W	2700	2700
Heating Capacity		W	3200	3200
Cooling Power Input		W	600	600
Heating Power Input		W	715	715
Cooling Current Input		A	2.8	2.8
Heating Current Input		A	3.3	3.3
Rated Input		W	1650	1650
Rated Cooling Current		A	6.4	6.4
Rated Heating Current		A	6.5	6.5
Air Flow Volume(SS/H/MH/M/ML/L/SL/SM)		m³/h	735/663/607/509/471/359/200/150	735/663/607/509/471/359/200/150
Dehumidifying Volume		L/h	0.8	0.8
EER		W/W	4.5	4.5
COP		W/W	4.48	4.48
SEER		W/W	8.5	8.5
SCOP(Average/Warmer/Colder)		W/W	4.6/5.5/3.8	4.6/5.5/3.8
Application Area		m²	12-18	12-18
Indoor Unit	Model		GWH09AEC-K6DNA1A/I	GWH09AEC-K6DNA1A/I
	Product Code		CB370N00300	CB370N00300
	Fan Type		Cross-flow	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ98X633	Φ98X633
	Cooling Speed	r/min	1300/1150/1050/950/800/600/550/500	1300/1150/1050/950/800/600/550/500
	Heating Speed	r/min	1300/1150/1050/950/900/850/800/-	1300/1150/1050/950/900/850/800/-
	Fan Motor Power Output	W	10	10
	Fan Motor RLA	A	0.09	0.09
	Fan Motor Capacitor	μF	/	/
	Evaporator Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5	Φ5
	Evaporator Row-fin Gap	mm	2-1.4	2-1.4
	Evaporator Coil Length (LXDXW)	mm	634X22.8X304.8	634X22.8X304.8
	Swing Motor Model		MP35CN/MP30AS/MP20AC	MP35CN/MP30AS/MP20AC
	Swing Motor Power Output	W	2.5/2.5/1.5	2.5/2.5/1.5
	Fuse Current	A	3.15	3.15
	Sound Pressure Level	dB (A)	Cooling:43/39/36/33/28/22/21/20 Heating:43/39/36/33/32/30/28/-	Cooling:43/39/36/33/28/22/21/20 Heating:43/39/36/33/32/30/28/-
	Sound Power Level	dB (A)	Cooling:57/53/50/47/42/36/35/34 Heating:57/53/50/47/46/44/42/-	Cooling:57/53/50/47/42/36/35/34 Heating:57/53/50/47/46/44/42/-
	Dimension (WXHXD)	mm	945X293X225	945X293X225
	Dimension of Carton Box (LXWXH)	mm	1032X381X310	1032X381X310
	Dimension of Package (LXWXH)	mm	1035X384X325	1035X384X325
	Net Weight	kg	14	14
	Gross Weight	kg	17	17

Outdoor Unit	Outdoor Unit Model		GWH09AEC-K6DNA1A/O	GWH09AEC-K6DNA1A/O
	Outdoor Unit Product Code		CB370W00300	CB370W00301
	Compressor Manufacturer		ZHUHAI LANDA COMPRESSOR CO., LTD	ZHUHAI LANDA COMPRESSOR CO., LTD
	Compressor Model		QXF-A102zE190C	QXF-A102zE190C
	Compressor Oil		FW68DA	FW68DA
	Compressor Type		Rotary	Rotary
	Compressor LRA	A	20	20
	Compressor RLA	A	7.9	7.9
	Compressor Power Input	W	1230	1230
	Compressor Overload Protector		/	/
	Throttling Method		Electron expansion valve	Electron expansion valve
	Set Temperature Range	°C	16~30	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43	-15~43
	Heating Operation Ambient Temperature Range	°C	-22~24	-15~24
	Condenser Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7	Φ7
	Condenser Rows-fin Gap	mm	2-1.4	2-1.4
	Condenser Coil Length (LXD _X W)	mm	742X38.1X550	742X38.1X550
	Fan Motor Speed	rpm	900	900
	Fan Motor Power Output	W	30	30
	Fan Motor RLA	A	0.36	0.36
	Fan Motor Capacitor	μF	/	/
	Outdoor Unit Air Flow Volume	m ³ /h	2200	2200
	Fan Type		Axial-flow	Axial-flow
	Fan Diameter	mm	Φ438	Φ438
	Defrosting Method		/	/
	Climate Type		T1	T1
	Isolation		I	
	Moisture Protection		IPX4	IPX4
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3	4.3
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5	2.5
	Sound Pressure Level (H/M/L)	dB (A)	52/-/-	52/-/-
	Sound Power Level (H/M/L)	dB (A)	62/-/-	62/-/-
	Dimension(WXHXD)	mm	848X596X320	848X596X320
	Dimension of Carton Box (LXWXH)	mm	878X360X630	878X360X630
	Dimension of Package(LXWXH)	mm	881X363X645	881X363X645
	Net Weight	kg	33.5	33.5
	Gross Weight	kg	36.5	36.5
	Refrigerant		R32	R32
	Refrigerant Charge	kg	0.7	0.7
Connection Pipe	Connection Pipe Length	m	5	5
	Connection Pipe Gas Additional Charge	g/m	16	16
	Outer Diameter Liquid Pipe	mm	Φ6	Φ6
	Outer Diameter Gas Pipe	mm	Φ9.52	Φ9.52
	Max Distance Height	m	10	10
	Max Distance Length	m	15	15
Note: The connection pipe applies metric diameter.				

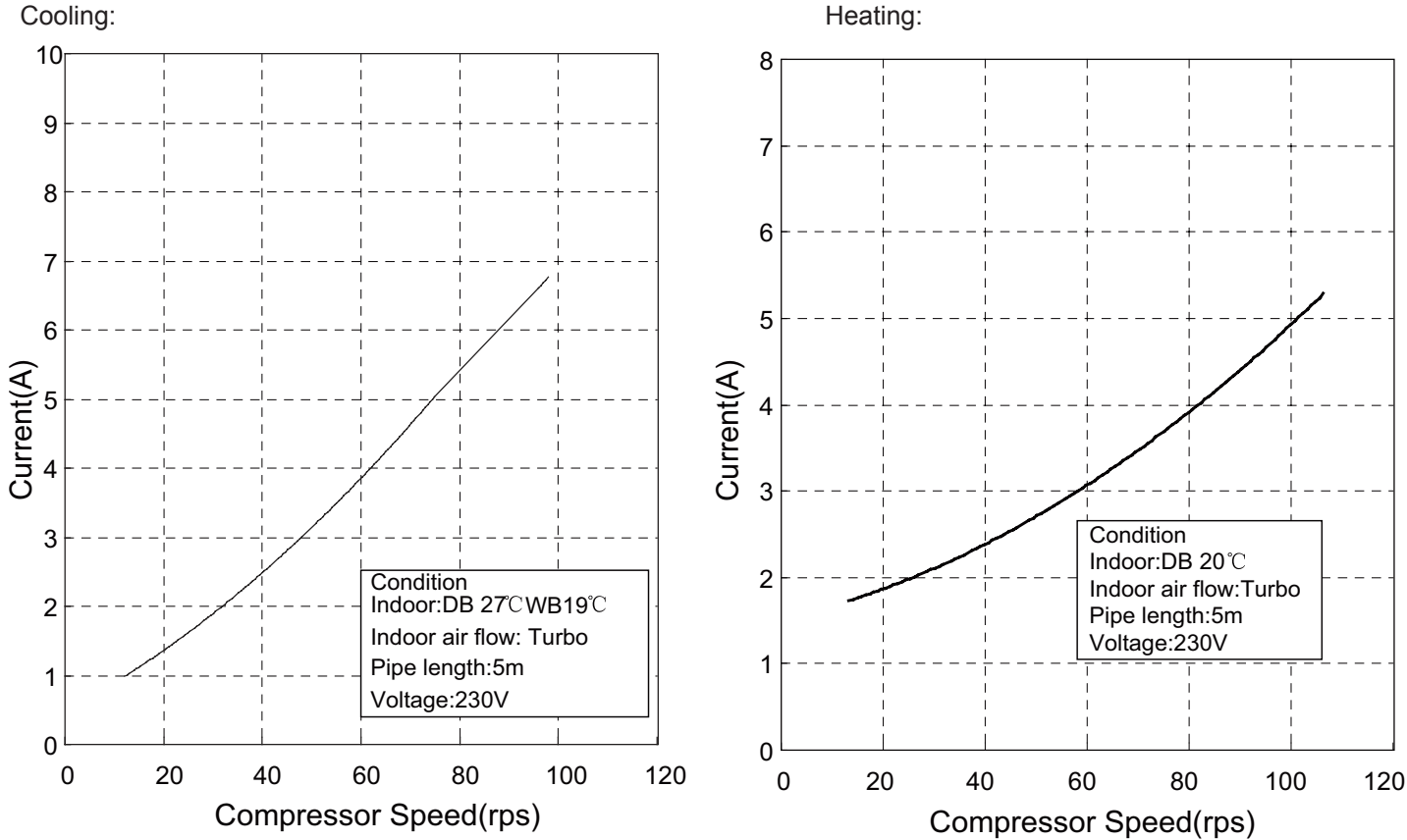
The above data is subject to change without notice. Please refer to the nameplate of the unit.

Model			GWH12AEC-K6DNA1A	GWH12AEC-K6DNA1A
Product Code			CB370000400	CB370000401
Power Supply	Rated Voltage	V~	220-240	220-240
	Rated Frequency	Hz	50/60	50/60
	Phases		1	1
Power Supply Mode			Outdoor	Outdoor
Cooling Capacity		W	3500	3500
Heating Capacity		W	3810	3810
Cooling Power Input		W	875	875
Heating Power Input		W	952	952
Cooling Current Input		A	4	4
Heating Current Input		A	4.3	4.3
Rated Input		W	1650	1650
Rated Cooling Current		A	6.8	6.8
Rated Heating Current		A	7.5	7.5
Air Flow Volume(SS/H/MH/M/ML/L/SL/SM)		m ³ /h	750/650/600/510/470/360/200/150	750/650/600/510/470/360/200/150
Dehumidifying Volume		L/h	1.4	1.4
EER		W/W	4.0	4.0
COP		W/W	4.0	4.0
SEER		W/W	8.5	8.5
SCOP(Average/Warmer/Colder)		W/W	4.6/5.5/3.5	4.6/5.5/3.5
Application Area		m ²	16-24	16-24
Indoor Unit	Model		GWH12AEC-K6DNA1A/I	GWH12AEC-K6DNA1A/I
	Product Code		CB370N00400	CB370N00400
	Fan Type		Cross-flow	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ98X633	Φ98X633
	Cooling Speed	r/min	1350/1200/1100/1000/850/600/550/500	1350/1200/1100/1000/850/600/550/500
	Heating Speed	r/min	1350/1200/1120/1050/950/800/750/-	1350/1200/1120/1050/950/800/750/-
	Fan Motor Power Output	W	10	10
	Fan Motor RLA	A	0.09	0.09
	Fan Motor Capacitor	μF	/	/
	Evaporator Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5	Φ5
	Evaporator Row-fin Gap	mm	2-1.4	2-1.4
	Evaporator Coil Length (LXDXW)	mm	634X22.8X304.8	634X22.8X304.8
	Swing Motor Model		MP35CN/MP30AS/MP20AC	MP35CN/MP30AS/MP20AC
	Swing Motor Power Output	W	2.5/2.5/1.5	2.5/2.5/1.5
	Fuse Current	A	3.15	3.15
	Sound Pressure Level	dB (A)	Cooling:43/39/36/33/28/22/21/20 Heating:43/40/37/35/32/27/26/-	Cooling:43/39/36/33/28/22/21/20 Heating:43/40/37/35/32/27/26/-
	Sound Power Level	dB (A)	Cooling:58/53/50/47/42/36/35/34 Heating:58/54/51/49/46/41/40/-	Cooling:58/53/50/47/42/36/35/34 Heating:58/54/51/49/46/41/40/-
	Dimension (WXHXD)	mm	945X293X225	945X293X225
	Dimension of Carton Box (LXWXH)	mm	1032X381X310	1032X381X310
	Dimension of Package (LXWXH)	mm	1035X384X325	1035X384X325
	Net Weight	kg	14	14
	Gross Weight	kg	17	17

Outdoor Unit	Outdoor Unit Model		GWH12AEC-K6DNA1A/O	GWH12AEC-K6DNA1A/O
	Outdoor Unit Product Code		CB370W00400	CB370W00401
	Compressor Manufacturer		ZHUHAI LANDA COMPRESSOR CO., LTD	ZHUHAI LANDA COMPRESSOR CO., LTD
	Compressor Model		QXF-A102zE190C	QXF-A102zE190C
	Compressor Oil		FW68DA	FW68DA
	Compressor Type		Rotary	Rotary
	Compressor LRA.	A	20	20
	Compressor RLA	A	7.9	7.9
	Compressor Power Input	W	1230	1230
	Compressor Overload Protector		/	/
	Throttling Method		Electron expansion valve	Electron expansion valve
	Set Temperature Range	°C	16~30	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43	-15~43
	Heating Operation Ambient Temperature Range	°C	-22~24	-15~24
	Condenser Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7.94	Φ7.94
	Condenser Rows-fin Gap	mm	2-1.4	2-1.4
	Condenser Coil Length (LXD _{XW})	mm	734X38.1X550	742X38.1X550
	Fan Motor Speed	rpm	900	900
	Fan Motor Power Output	W	30	30
	Fan Motor RLA	A	0.36	0.36
	Fan Motor Capacitor	μF	/	/
	Outdoor Unit Air Flow Volume	m ³ /h	2200	2200
	Fan Type		Axial-flow	Axial-flow
	Fan Diameter	mm	Φ438	Φ438
	Defrosting Method		/	/
	Climate Type		T1	T1
	Isolation		I	
	Moisture Protection		IPX4	IPX4
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3	4.3
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5	2.5
	Sound Pressure Level (H/M/L)	dB (A)	52/-/-	52/-/-
	Sound Power Level (H/M/L)	dB (A)	62/-/-	62/-/-
	Dimension(WXHXD)	mm	848X596X320	848X596X320
	Dimension of Carton Box (LXWXH)	mm	878X360X630	878X360X630
	Dimension of Package(LXWXH)	mm	881X363X645	881X363X645
	Net Weight	kg	33.5	33.5
	Gross Weight	kg	36.5	36.5
	Refrigerant		R32	R32
	Refrigerant Charge	kg	0.8	0.8
Connection Pipe	Connection Pipe Length	m	5	5
	Connection Pipe Gas Additional Charge	g/m	16	16
	Outer Diameter Liquid Pipe	mm	Φ6	Φ6
	Outer Diameter Gas Pipe	mm	Φ9.52	Φ9.52
	Max Distance Height	m	10	10
	Max Distance Length	m	15	15
Note: The connection pipe applies metric diameter.				

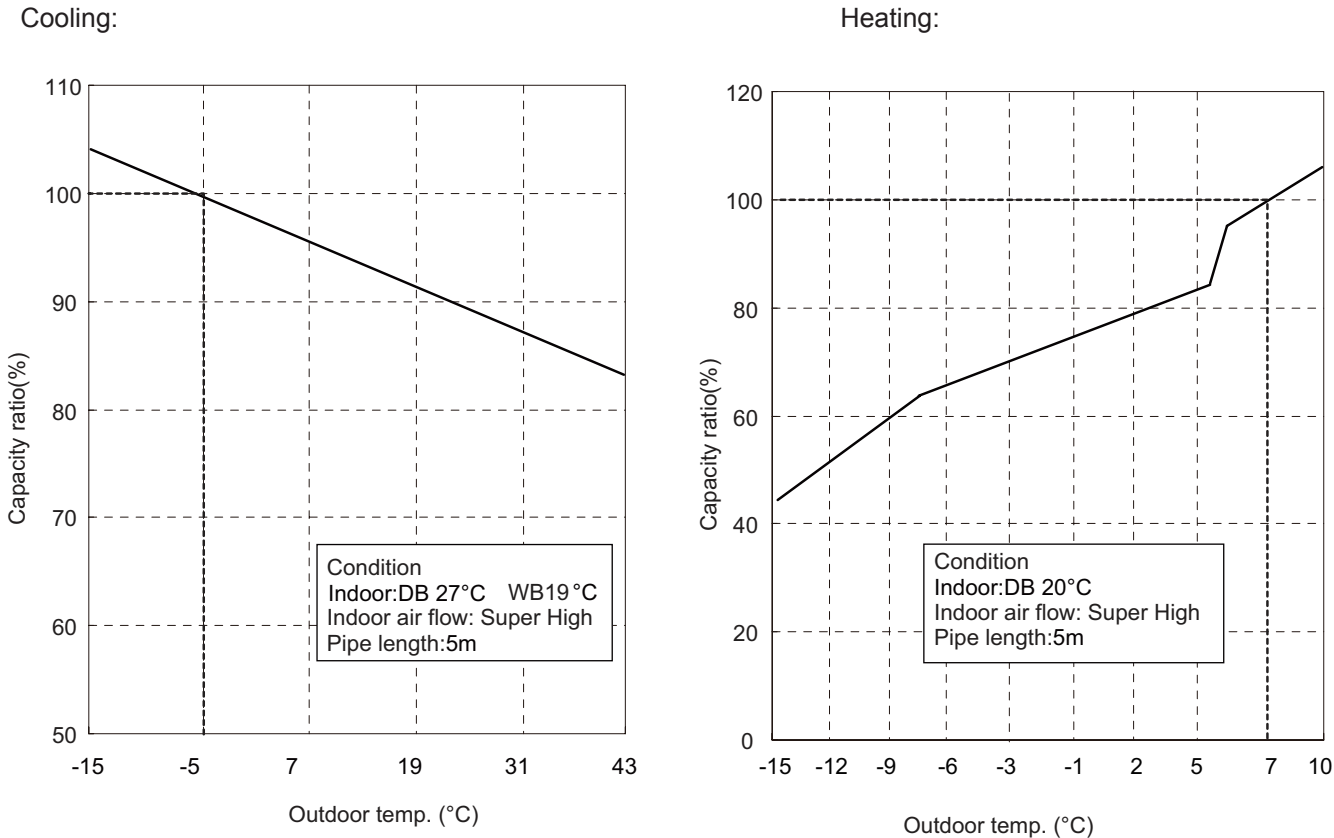
The above data is subject to change without notice. Please refer to the nameplate of the unit.

2.2 Operation Characteristic Curve



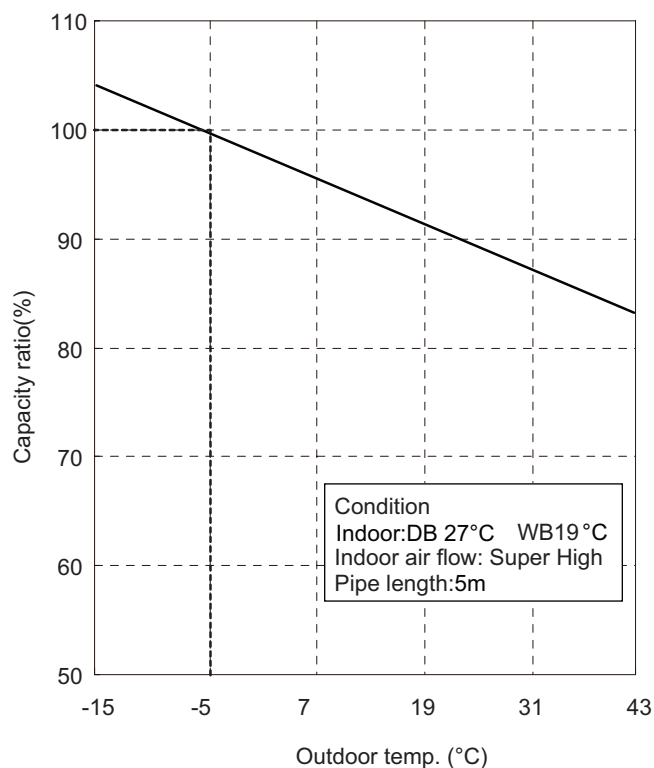
2.3 Capacity Variation Ratio According to Temperature

Heating operation ambient temperature range is -15°C~24°C

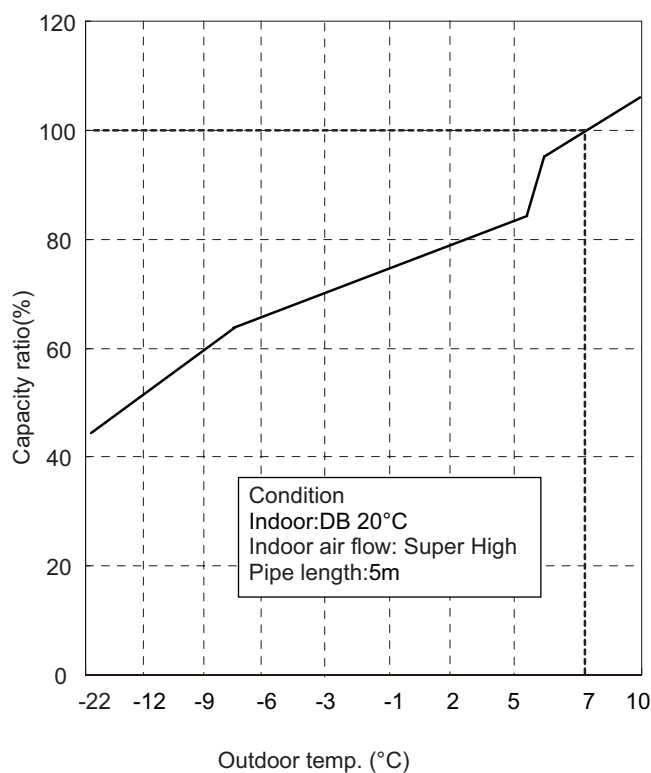


Heating operation ambient temperature range is -22°C~24°C

Cooling:



Heating:



2.4 Cooling and Heating Data Sheet in Rated Frequency

Cooling:

Rated cooling condition(°C) (DB/WB)		Model	Pressure of gas pipe connecting indoor and outdoor unit	Inlet and outlet pipe temperature of heat exchanger		Fan speed of indoor unit	Fan speed of outdoor unit	Compressor revolution (rps)
Indoor	Outdoor			T1 (°C)	T2 (°C)			
27/19	35/24	09K	0.8 ~ 1.1	12 to 15	65 to 38	TURBO	High	49

Heating:

Rated cooling condition(°C) (DB/WB)		Model	Pressure of gas pipe connecting indoor and outdoor unit	Inlet and outlet pipe temperature of heat exchanger		Fan speed of indoor unit	Fan speed of outdoor unit	Compressor revolution (rps)
Indoor	Outdoor			T1 (°C)	T2 (°C)			
20/-	7/6	09K	2.8 ~ 3.2	35 to 63	2 to 5	TURBO	High	59

Instruction:

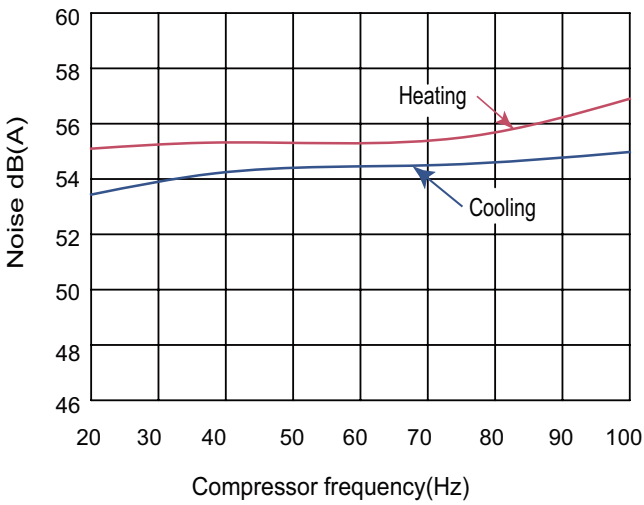
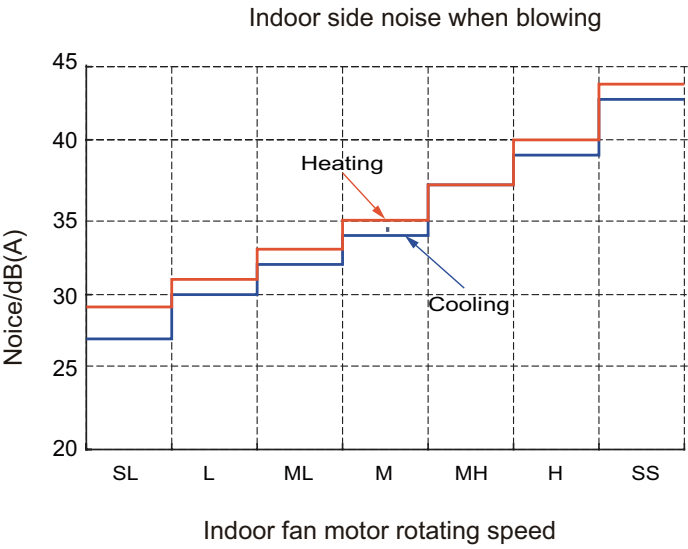
T1: Inlet and outlet pipe temperature of evaporator

T2: Inlet and outlet pipe temperature of condenser

P: Pressure at the side of big valve

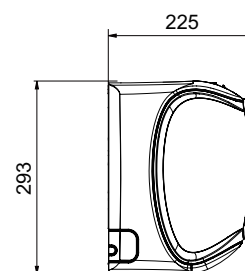
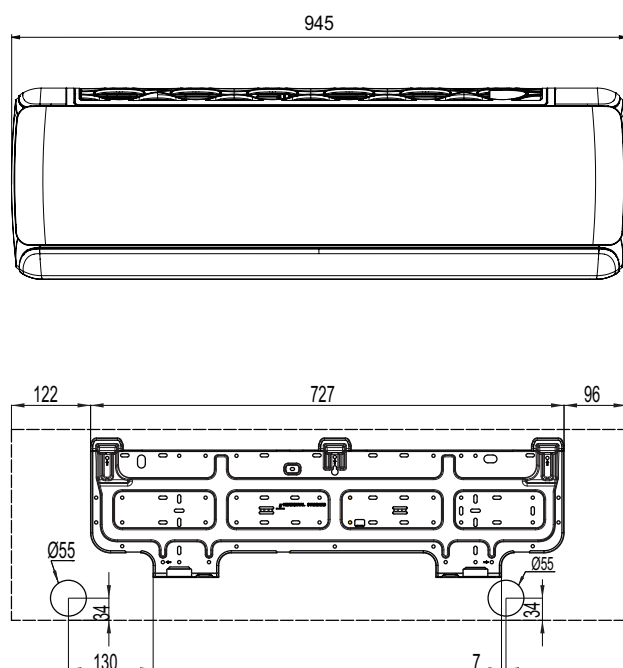
Connection pipe length: 5m.

2.5 Noise Curve



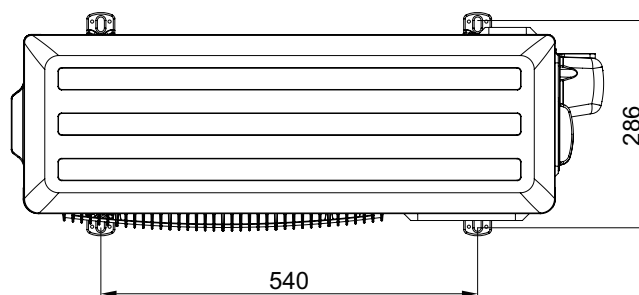
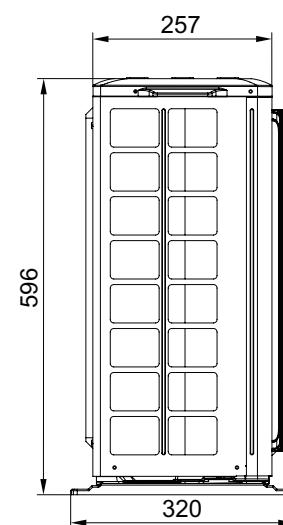
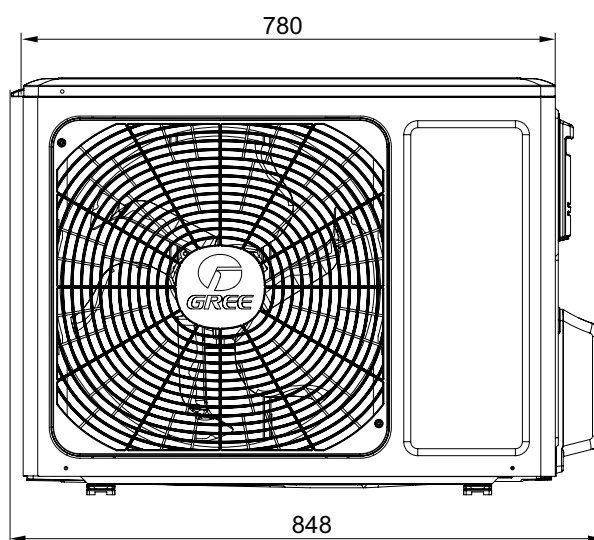
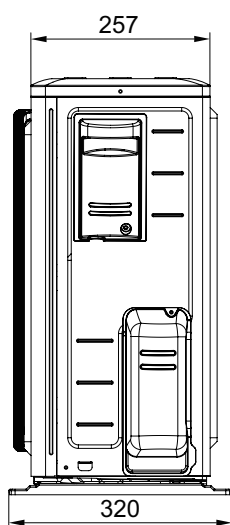
3. Outline Dimension Diagram

3.1 Indoor Unit



Unit:mm

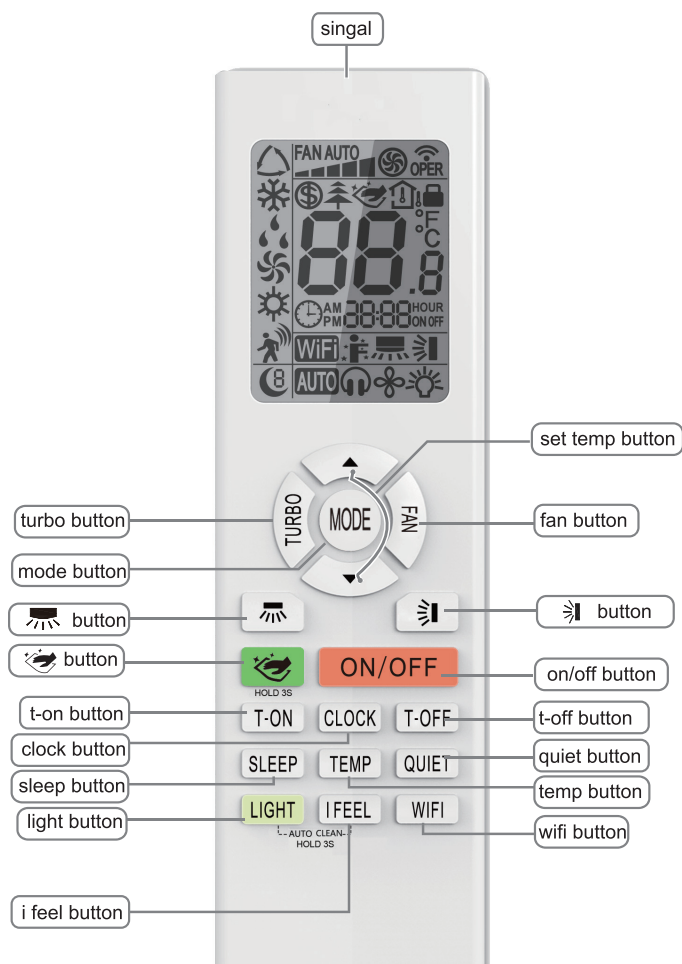
3.2 Outdoor Unit



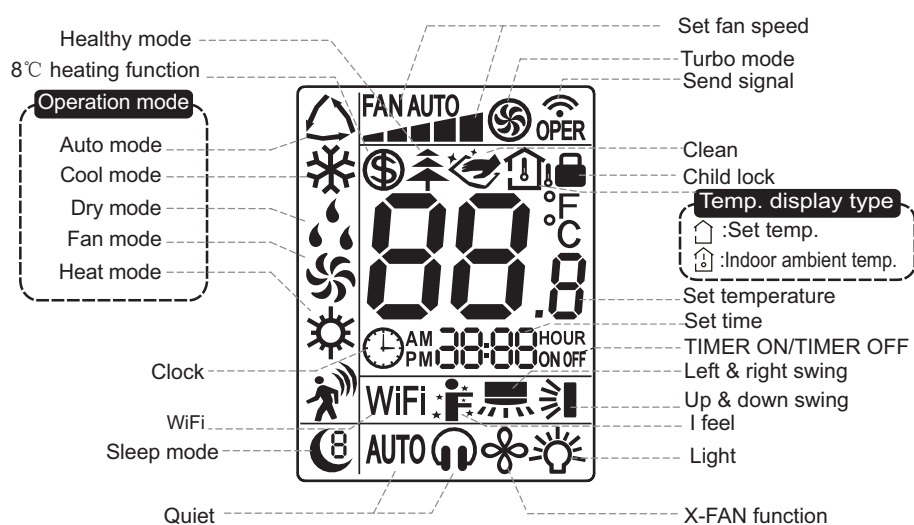
Unit:mm

6. Function and Control

6.1 Remote Controller Introduction



Introduction for icons on display screen



Note:

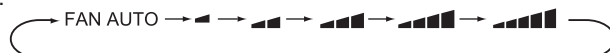
- This is a general use remote controller, it could be used for the air conditioners with multifunction; For some function, which the model doesn't have, if press the corresponding button on the remote controller that the unit will keep the original running status.
- After putting through the power, the air conditioner will give out a sound. Operation indicator "⏻" is ON (red indicator, the colour is different for different models). After that, you can operate the air conditioner by using remote controller.
- Under on status, pressing the button on the remote controller, the signal icon "📶" on the display of remote controller will blink once and the air conditioner will give out a "de" sound, which means the signal has been sent to the air conditioner.

1.ON/OFF

Press this button to turn on the unit. Press this button again to turn off the unit.

2.FAN

Press this button can select fan speed, it can be selected circularly as below:



Under dry mode, fan speed can't be adjusted.

3.▼/▲

Press "▲" or "▼" button once increase or decrease set temperature 0.5 °C.

Holding "▲" or "▼" button, 2s later, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly.

4.MODE

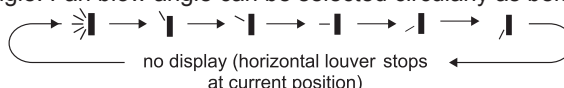
Press this button to select your required operation mode.



Note: Only for models with heating function.

5.↕ SWING

Press this button can select up & down angle. Fan blow angle can be selected circularly as below:



When selecting "↕", air conditioner is blowing fan automatically. Horizontal louver will automatically swing up & down at maximum angle.

When selecting "┘", "┐", "└", "┌", "┘", "┐", "└", "┌", air conditioner is blowing fan at fixed position. Horizontal louver will stop at the fixed position.

Hold "↕" button above 2s to set your required swing angle, When reaching your required angle, release the button.

6. LIGHT

Press this button to turn off display light on indoor unit. "💡" icon on remote controller disappears, Press this button again to turn on display light. "💡" icon is displayed.

7.↔ SWING

Press this button can select left & right swing angle. Fan blow angle can be selected circularly as below:



Press this button continuously more than 2s, the main unit will swing back and forth from left to right, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.

Under swing left and right mode, when the status is switched from off to ↔, if press this button again 2s later, ↔ status will switch to off status directly; if press this button again within 2s, the change of swing status will also depend on the circulation sequence stated above.

This function is only available for some model.

8.TURBO

Under COOL or HEAT mode, press this button to turn to quick COOL or quick HEAT mode. "⚡" icon is displayed on remote controller.

Press this button again to exit turbo function and "⚡" icon will disappear.

If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temp. approaches the preset temp. as soon as possible.

9.QUIET

Press this button, the Quiet status is under the Auto Quiet mode (display "Auto 🤫") and Quiet mode (display "🤫") and Quiet OFF (there is no signal displayed), after powered on, the Quiet OFF is defaulted.

10.SLEEP

Under COOL or HEAT mode, press this button, can select Sleep 1 (), Sleep 2 (), Sleep 3 () and cancel the Sleep, circulate between these, after electrified, Sleep Cancel is defaulted.

Sleep 1 is Sleep mode 1, in Cool modes; sleep status after run for one hour, the main unit setting temperature will increase 1°C, two hours, setting temperature increased 2, then the unit will run at this setting temperature; In Heat mode: sleep status after run for one hour, the setting temperature will decrease 1°C, two hours, setting temperature will decrease 2°C, then the unit will run at this setting temperature.

Sleep 2 is sleep mode 2, that is air conditioner will run according to the presetting a group of sleep temperature curve.

Sleep 3-the sleep curve setting under Sleep mode by DIY;

(1) Under Sleep 3 mode, press "Turbo" button for a long time, remote controller enters into user individuation sleep setting status, at this time, the time of remote controller will display "1hour", the setting temperature "88" will display the corresponding temperature of last setting sleep curve and blink (The first entering will display according to the initial curve setting value of original factory);

(2) Adjust "▲" and "▼" button, could change the corresponding setting temperature, after adjusted, press "Turbo" button for confirmation;

(3) At this time, 1hour will be automatically increased at the timer position on the remote control, (that are "2hours" or "3hours" or "8hours"), the place of setting temperature "88" will display the corresponding temperature of last setting sleep curve and blink;

(4) Repeat the above step (2)~(3) operation, until 8 hours temperature setting finished, sleep, curve setting finished, at this time, the remote controller will resume the original timer display; temperature display will resume to original setting temperature.

Sleep3- the sleep curve setting under Sleep mode by DIY could be inquired:

The user could accord to sleep curve setting method to inquire the presetting sleep curve, enter into user individuation sleep setting status, but do not change the temperature, press "Turbo" button directly for confirmation. Note: In the above presetting or enquiry procedure, if continuously within 10s, there is no button pressed, the sleep curve setting within 10s, there is no button pressed, the sleep curve setting status will be automatically quit and resume to display the original displaying. In the presetting or enquiry procedure, press "ON/OFF" button, "Mode" button, "Sleep" button, the sleep curve setting or enquiry status will quit similarly.

11.TEMP

Press this button, could select displaying the indoor setting temperature or indoor ambient temperature. When the indoor unit firstly power on it will display the setting temperature, if the temperature's displaying status is changed from other status to , displays the ambient temperature, 3s later or within 3s, it receives other remote controller signal that will return to display the setting temperature.

12.I FEEL

Press this button to turn on I FEEL function.  icon is displayed on remote controller. The unit automatically adjust temperature according to the sensed temperature. Press this button again to cancel I FEEL function.  icon will disappear.

13.T-ON/T-OFF

T-ON button

"T-ON" button can set the time for timer on. After pressing this button,  icon disappears and the word "ON" on remote controller blinks. Press "▲" or "▼" button to adjust T-ON setting.

After each pressing "▲" or "▼" button, T-ON setting will increase or decrease 1min. Hold "▲" or "▼" button, 2s later, the time will change quickly until reaching your required time. Press "T-ON" to confirm it. The word "ON" will stop blinking.  icon resumes displaying.

Cancel T-ON: Under the condition that T-ON is started up, press "T-ON" button to cancel it.

T-OFF button

"T-OFF" button can set the time for timer off. After pressing this button,  icon disappears and the word "OFF" on remote controller blinks. Press "▲" or "▼" button to adjust T-OFF setting.

After each pressing "▲" or "▼" button, T-OFF setting will increase or decrease 1min. Hold "▲" or "▼" button, 2s later, the time will change quickly until reaching your required time. Press "T-OFF" word "OFF" will stop blinking.  icon resumes displaying.

Cancel T-OFF. Under the condition that T-OFF is started up, press "T-OFF" button to cancel it.

Note:

Under on and off status, you can set T-OFF or T-ON simultaneously. Before setting T-ON or T-OFF, please adjust the clock time. After starting up T-ON or T-OFF, set the constant circulating valid. After that, air conditioner will be turned on or turned off according to setting time. ON/OFF button has no effect on setting. If you don't need this function, please use remote controller to cancel it.

13.WIFI

Press " WiFi " button to turn on or turn off WiFi function. When WiFi function is turned on, the " WiFi " icon will be displayed on remote controller; Under status of remote controller off, press " MODE " and " WiFi " buttons simultaneously for 1s, WiFi module will restore to factory default setting.

14.

Under unit off, press this button and hold for 3s to open the air guide louver, icon is displayed in indoor unit. When air guide louver is open to the maximum, and  icon was disappear, you could clean the unit. Cancel the cleaning: Press and hold for 3s to reset the air guide louver. If you press the power button directly, the unit will be turned on.

15.CLOCK button

Press CLOCK button, blinking. Within 5 seconds, pressing  or button adjusts the present time. Holding down either button above 2 seconds increases or decreases the time by 1 minute every 0.5 second and then by 10 minutes every 0.5 second. During blinking after setting , press CLOCK button again to confirm the setting, and then will be constantly displayed.

16.Energy-saving function

Under cooling mode, press "TEMP" and "CLOCK" buttons simultaneously to start up or turn off energy-saving function. When energy-saving function is started up, "SE" will be shown on remote controller, and air conditioner will adjust the set temperature automatically according to ex-factory setting to reach to the best energy-saving effect.

Press "TEMP" and "CLOCK" buttons simultaneously again to exit energy-saving function.

Note:

Under energy-saving function, fan speed is defaulted at auto speed and it can't be adjusted.

Under energy-saving function, set temperature can't be adjusted. Press "TURBO" button and the remote controller won't send signal.

Sleep function and energy-saving function can't operate at the same time. If energy-saving function has been set under cooling mode, press sleep button will cancel energy-saving function. If sleep function has been set under cooling mode, start up the energy-saving function will cancel sleep function.

17. 8°C Heating function

Press "TEMP" and "CLOCK" simultaneously in HEAT mode to start 8°C Heating Function. Nixie tube on the remote controller displays " " and a selected temperature of "8°C". (46°F if Fahrenheit is adopted). Repeat the operation to quit the function.

18.Child lock function

Press "+" and "-" buttons simultaneously can turn on or turn off child lock function. When child lock function is started up, " " icon will be displayed on remote controller. If operate remote controller, " " icon will flash three times, while remote controller won't send signal.

19.Switchover function for temperature display

After turning off the unit by remote controller, press " " button and "MODE" button simultaneously to switch between °C and °F .

20.Cancel filterclean reminding

If the dual-8 nixie tube is flashing to display, it reminds the user to clean the filter. Press MODE and TEMP buttons simultaneously to cancel this reminding.

21.Auto clean

Under unit off, press the "LIGHT" and "IFEEL" buttons simultaneously for 3 seconds to turn the internal cleaning on or off. When the internal cleaning is turned on, the remote control displays "CL" .(This function is applicable to partial of models)

If "H1" is displayed on the remote controller while it's not operated by the professional person/after-sales person, it belongs to the misoperation.

Please operate it as below to cancel it.Under the OFF status of remote controller, hold the Mode button for 5s to cancel "H1" display.

Note:

- If remote controller displays "H1", it belongs to the normal function reminder. If the unit is defrosting under heating mode, it operates according to H1 defrosting mode. "H1" won't be displayed on the panel of indoor unit;
- Once you set H1 mode, if you turn off unit by remote controller, H1 will display 3 times on the remote controller and then disappear;
- Also, when you set H1 mode, when you change to heating mode, H1 will display 3 times on the remote controller and then disappear.

NOTICE:

During operation, point the remote control signal sender at the receiving window on indoor unit.

The distance between signal sender and receiving window should be no more than 8m, and there should be no obstacles between them.

Signal may be interfered easily in the room where there is fluorescent lamp or wireless telephone; remote controller should be close to indoor unit during operation.

Replace new batteries of the same model when replacement is required.

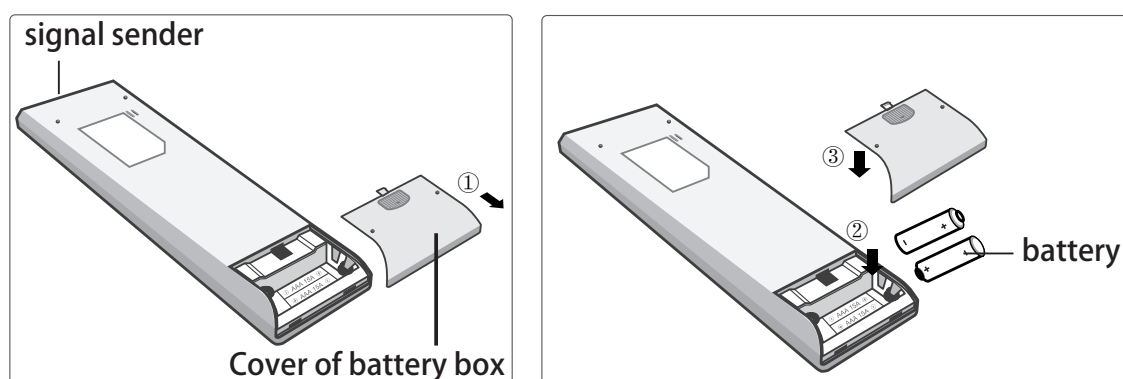
When you don't use remote controller for a long time, please take out the batteries.

If the display on remote controller is fuzzy or there's no display, please replace batteries.

1. Press the back side of remote controller marked with "OPEN", as shown in the fig, and then push out the cover of battery box along the arrow direction.

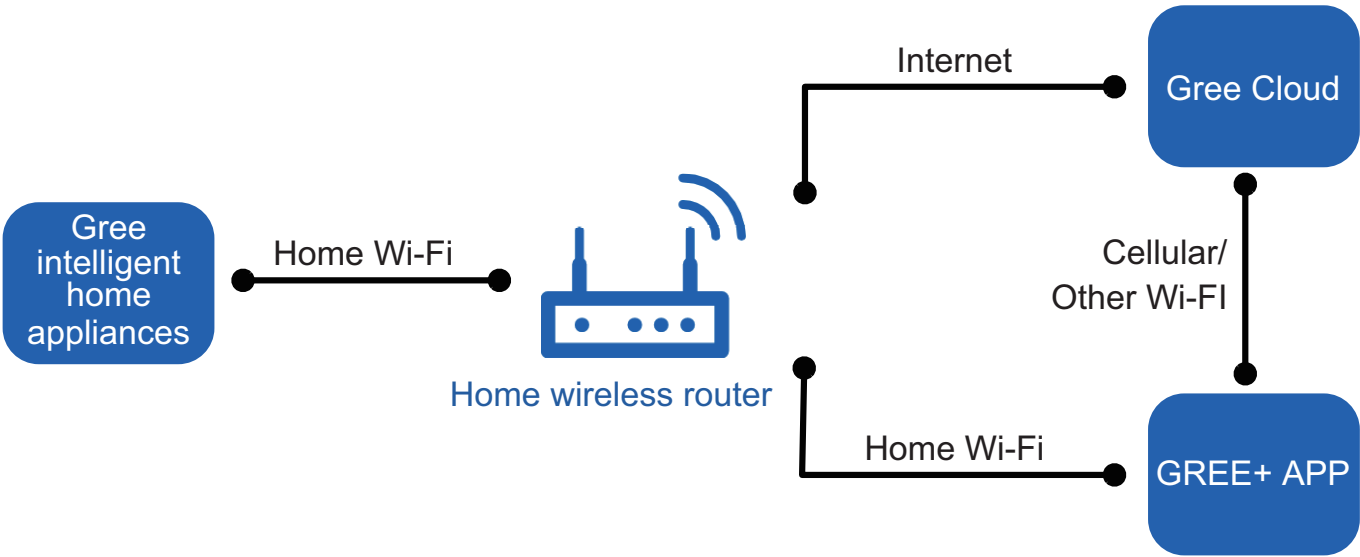
2. Replace two 7# (AAA 1.5V) dry batteries, and make sure the position of "+" polar and "-" polar are correct.

3. Reinstall the cover of battery box.



6.2 GREE+ App Operation Manual

Control Flow Chart



Operating Systems

Requirement for User's smart phone:



iOS system

Support iOS7.0 and above version



Android system

Support Android 4.4 and above version

Download and installation

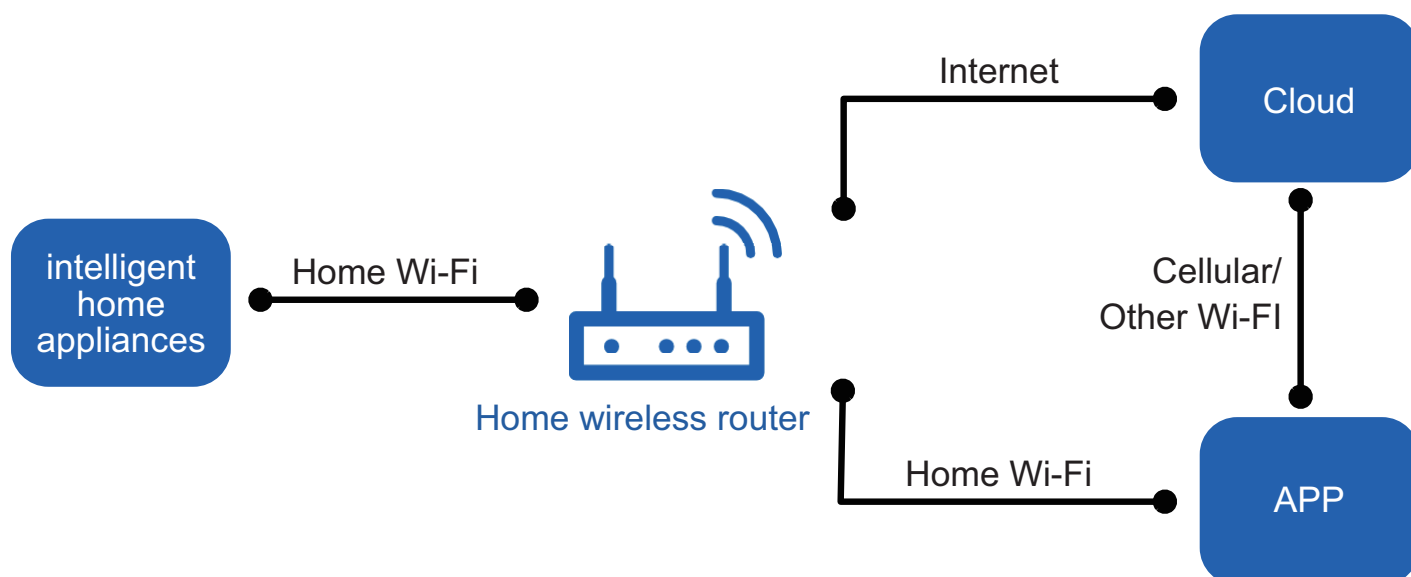


GREE+ App Download Linkage

Scan the QR code or search "GREE+" in the application market to download and install it. When "GREE+" App is installed, register the account and add the device to achieve long-distance control and LAN control of Gree smart home appliances. For more information, please refer to "Help" in App.

6.3 Ewpe Smart App Operation Manual

Control Flow Chart



Operating Systems

Requirement for User's smart phone:



iOS system
Support iOS7.0 and
above version



Android system
Support Android 4.4 and
above version

Download and installation



App Download Linkage

Scan the QR code or search "Ewpe Smart" in the application market to download and install it. When "Ewpe Smart" App is installed, register the account and add the device to achieve long-distance control and LAN control of smart home appliances.

For more information, please refer to "Help" in App.

6.4 Brief Description of Modes and Functions

1. Temperature Parameters

- ◆ Indoor preset temperature (T_{preset})
- ◆ Indoor ambient temperature ($T_{\text{amb.}}$)

2. Basic Functions

Once energized, in no case should the compressor be restarted within less than 3 minutes. In the situation that memory function is available, for the first energization, if the compressor is at stop before de-energization, the compressor will be started without a 3-minute lag; if the compressor is in operation before de-energization, the compressor will be started with a 3-minute lag; and once started, the compressor will not be stopped within 6 minutes regardless of changes in room temperature.

(1) Cooling Mode

① The condition and process of cooling

If $T_{\text{amb.}} \geq T_{\text{preset}}$ cooling mode will act, the compressor and outdoor fan will run, and the indoor fan will run at the set speed.

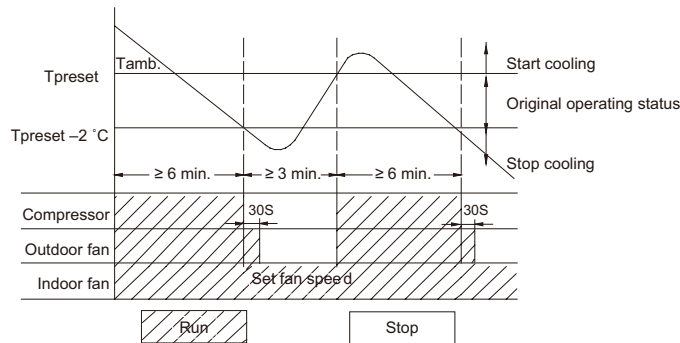
If $T_{\text{amb.}} \leq T_{\text{preset}} - 2^{\circ}\text{C}(3.6^{\circ}\text{F})$, the compressor will stop, the outdoor fan will delay 30 seconds to stop, and the indoor fan will run at the set speed.

If $T_{\text{preset}} - 2^{\circ}\text{C}(3.6^{\circ}\text{F}) < T_{\text{amb.}} < T_{\text{preset}}$, the unit will keep running in the previous mode.

When $0 \leq T_{\text{preset}} - T_{\text{amb.}} < 2^{\circ}\text{C}(3.6^{\circ}\text{F})$, if indoor fan speed is high, it will turn to medium fan speed; if indoor fan speed is medium or low, it will keep the same; (this condition will be valid only when the compressor is operating); if indoor fan speed is super high, it will keep the same;

When $T_{\text{amb.}} - T_{\text{preset}} \geq 1^{\circ}\text{C}(1.8^{\circ}\text{F})$, the fan speed will return to set fan speed;

In this mode, the reversal valve will not be powered on and the temperature setting range is $16 \sim 30^{\circ}\text{C}(68 \sim 86^{\circ}\text{F})$.



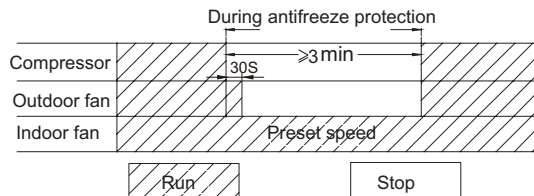
② Protection function

◆ Overcurrent protection

If total current is high, the compressor will run in limited frequency. If total current is too high, the compressor will stop, the outdoor fan will delay 30 seconds to stop, indoor unit will display E5 and out door yellow light will blink 5 times.

◆ Antifreezing protection

When the antifreezing protection is detected, the compressor will stop, the outdoor fan will stop after 30 seconds, and the indoor fan and swing motor will keep running in the original mode. When antifreezing protection is eliminated and the compressor has stopped for 3 minutes, the compressor will resume running in the original mode.



(2) Dehumidifying Mode

① Working conditions and process of dehumidifying

If $T_{\text{amb.}} > T_{\text{preset}}$, the unit will enter cooling and dehumidifying mode, in which case the compressor and the outdoor fan will operate and the indoor fan will run at low speed.

If $T_{\text{preset}} - 2^{\circ}\text{C}(3.6^{\circ}\text{F}) \leq T_{\text{amb.}} \leq T_{\text{preset}}$, the compressor remains at its original operation state.

If $T_{\text{amb.}} < T_{\text{preset}} - 2^{\circ}\text{C}(3.6^{\circ}\text{F})$, the compressor will stop, the outdoor fan will stop with a time lag of 30s, and the indoor fan will operate at low speed.

② Protection function

Protection is the same as that under the cooling mode.

(3) Heating Mode

① The condition and process of heating

If $T_{\text{amb.}} \leq T_{\text{preset}} + 2^{\circ}\text{C}(3.6^{\circ}\text{F})$, heating mode will act, the compressor, outdoor fan and reversal valve will run, the indoor fan will delay 3min to stop at the latest

If $T_{\text{preset}} + 2^{\circ}\text{C}(3.6^{\circ}\text{F}) < T_{\text{amb.}} < T_{\text{preset}} + 5^{\circ}\text{C}(9^{\circ}\text{F})$, the unit will keep running in the original mode.

If $T_{\text{amb.}} \geq T_{\text{preset}} + 5^{\circ}\text{C}(9^{\circ}\text{F})$, the compressor will stop, the outdoor fan will delay 30s to stop and indoor fan will blow 60s at low speed, the fan speed cannot be shifted within blow residual heat.

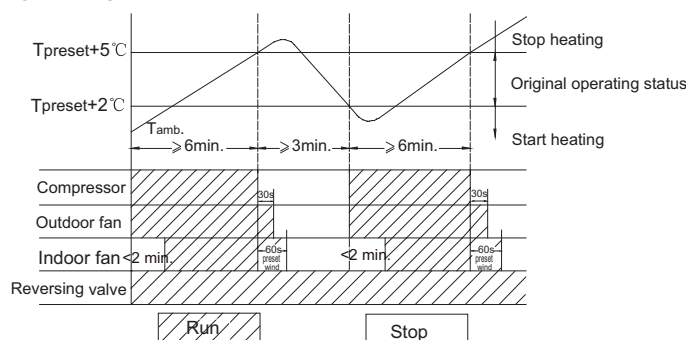
◆ In this mode, the temperature setting range is $16 \sim 30^{\circ}\text{C}(68 \sim 86^{\circ}\text{F})$.

◆ The air conditioner will adjust the running frequency of the compressor automatically according to the change of ambient temperature.

◆ When the unit is turned off in heating mode, or switched to other mode from heating mode, the four-way valve will be powered off after the compressor stops.

◆ When compressor is running (not including each malfunction and protection):

- When outdoor ambient temperature $\geq 20^{\circ}\text{C}$ (68°F) and indoor fan speed is low or medium, the fan speed will turn to high; if indoor fan speed is high or super high, it will keep the same.
- When outdoor ambient temperature $\leq 18^{\circ}\text{C}$ (64.4°F), the fan speed will resume set fan speed.
- When $18^{\circ}\text{C} < \text{outdoor ambient temperature} < 20^{\circ}\text{C}$ (68°F), it will run at present fan speed (set fan speed or high fan speed); but when first exiting cold air prevention after entering heating mode, it will run in set fan speed.



② Condition and process of defrost

When duration of successive heating operation is more than 45 minutes, or accumulated heating time more than 90 minutes, and one of the following conditions is reached, the unit will enter the defrost mode after 3 minutes.

- (1) $T_{\text{outdoor ambient}} > 5^{\circ}\text{C}$ (41°F), $T_{\text{outdoor tube}} \leq -2^{\circ}\text{C}$ (28.4°F);
 - (2) $-2^{\circ}\text{C} \leq T_{\text{outdoor ambient}} < 5^{\circ}\text{C}$ (41°F), $T_{\text{outdoor tube}} \leq -6^{\circ}\text{C}$ (21.2°F);
 - (3) $-5^{\circ}\text{C} \leq T_{\text{outdoor ambient}} < -2^{\circ}\text{C}$ (28.4°F), $T_{\text{outdoor tube}} \leq -8^{\circ}\text{C}$ (17.6°F);
 - (4) $-10^{\circ}\text{C} \leq T_{\text{outdoor ambient}} < -5^{\circ}\text{C}$ (23°F), $T_{\text{outdoor tube}} - T_{\text{compensatory}} \leq (T_{\text{outdoor ambient}} - 3^{\circ}\text{C})$ (5.4°F);
 - (5) $T_{\text{outdoor ambient}} < -10^{\circ}\text{C}$ (14°F), $T_{\text{outdoor tube}} - T_{\text{compensatory}} \leq (T_{\text{outdoor ambient}} - 3^{\circ}\text{C})$ (5.4°F))
- (after energizing, $T_{\text{compensatory}} = 0^{\circ}\text{C}$ (32°F) during the first defrosting; if it is not the first defrosting, $T_{\text{compensatory}}$ is confirmed by $T_{\text{outdoor tube}}$ of quitting last defrosting: a. when $T_{\text{outdoor tube}} > 2^{\circ}\text{C}$ (35.6°F), $T_{\text{compensatory}} = 0^{\circ}\text{C}$ (32°F); b. when $T_{\text{outdoor tube}} \leq 2^{\circ}\text{C}$ (35.6°F), $T_{\text{compensatory}} = 3^{\circ}\text{C}$ (37.4°F))

At that time, the indoor fan stops and the compressor stops, and after 30 seconds the outer fan will stop, and then after 30 seconds, the four-way valve will stop. After 30 seconds, the compressor is initiated for raising the frequency to defrost frequency. When the compressor has operated under defrost mode for 7.5 minutes, or $T_{\text{outdoor ambient}} \geq 10^{\circ}\text{C}$, the compressor will be converted to 46Hz operation. After 30 seconds, the compressor will stop. And after another 30 seconds, the four-way valve will be opened, and after 60 seconds, the compressor and the outer fan will be started, the indoor fan will run under preset cold air prevention conditions, and H1 will be displayed at temperature display area on the display panel. Defrost frequency is 85Hz.

③ Protection

◆ Cold air prevention

The unit is started under heating mode (the compressor is ON):

- ① In the case of $T_{\text{indoor amb.}} < 24^{\circ}\text{C}$ (75.2°F): if $T_{\text{tube}} \leq 40^{\circ}\text{C}$ (104°F) and the indoor fan is at stop state, the indoor fan will begin to run at low speed with a time lag of 2 minutes. Within 2 minutes, if $T_{\text{tube}} > 40^{\circ}\text{C}$ (104°F), the indoor fan also will run at low speed; and after 1-minute operation at low speed, the indoor fan will be converted to operation at preset speed. Within 1-minute low speed operation or 2-minute nonoperation, if $T_{\text{tube}} > 42^{\circ}\text{C}$ (107.6°F), the fan will run at present speed.
- ② In the case of $T_{\text{indoor amb.}} \geq 24^{\circ}\text{C}$ (75.2°F): if $T_{\text{tube}} \leq 42^{\circ}\text{C}$ (107.6°F), the indoor fan will run at low speed, and after one minute, the indoor fan will be converted to preset speed. Within one-minute low speed operation, if $T_{\text{tube}} > 42^{\circ}\text{C}$ (107.6°F), the indoor fan will be converted to preset speed.

Note: $T_{\text{indoor amb.}}$ indicated in ① and ② refers to, under initially heating mode, the indoor ambient temperature before the command to start the compressor is performed according to the program, or after the unit is withdrawn from defrost, the indoor ambient temperature before the defrost symbol is cleared.

(5) Fan Mode

Under the mode, the indoor fan will run at preset speed and the compressor, the outdoor fan, the four-way valve and the electric heater will stop.

Under the mode, temperature can be set within a range of $16 \sim 30^{\circ}\text{C}$ ($60.8 \sim 86^{\circ}\text{F}$).

(6) AUTO Mode

① Operation way of AUTO mode

- When $T_{\text{ambient}} \geq 26^{\circ}\text{C}$ (78.8°F), it will run in cooling mode. The implied set temperature is 25°C (77°F) (note: the set temperature sending to outdoor unit is 25°C (77°F)).
- For heating and cooling unit, when $T_{\text{ambient}} \leq 22^{\circ}\text{C}$ (71.6°F), it will run in heating mode. The implied set temperature is 20°C (68°F); for cooling only unit, when $T_{\text{ambient}} \leq 22^{\circ}\text{C}$ (71.6°F), it will run in fan mode and the displayed set temperature is 25°C (77°F).

c. For heating and cooling unit, when $22^{\circ}\text{C}(71.6^{\circ}\text{F}) < T_{\text{indoor ambient}} < 26^{\circ}\text{C}(78.8^{\circ}\text{F})$ (for cooling only unit, $22^{\circ}\text{C}(71.6^{\circ}\text{F}) < T_{\text{indoor ambient}} < 26^{\circ}\text{C}(78.8^{\circ}\text{F})$), it will keep the original running mode. If the unit is energized for the first time, it will run in fan mode.

② Protection

- In cooling operation, protection is the same as that under the cooling mode;
- In heating operation, protection is the same as that under the heating mode;
- When ambient temperature changes, operation mode will be converted preferentially. Once started, the compressor will remain unchanged for at least 6 minutes.

(7) Common Protection Functions and Fault Display under COOL, HEAT, DRY and AUTO Modes

① Overload protection

T_{tube} : measured temperature of outdoor heat exchanger under cooling mode; and measured temperature of indoor heat exchanger under heating mode.

1) Cooling overload

- If $T_{\text{tube}} \leq 52^{\circ}\text{C}(125.6^{\circ}\text{F})$, the unit will return to its original operation state.
- If $T_{\text{tube}} \geq 55^{\circ}\text{C}(131^{\circ}\text{F})$, frequency rise is not allowed.
- If $T_{\text{tube}} \geq 58^{\circ}\text{C}(136.4^{\circ}\text{F})$, the compressor will run at reduced frequency.
- If $T_{\text{tube}} \geq 62^{\circ}\text{C}(143.6^{\circ}\text{F})$, the compressor will stop and the indoor fan will run at preset speed.

2) Heating overload

- If $T_{\text{tube}} \leq 50^{\circ}\text{C}(122^{\circ}\text{F})$, the unit will return to its original operation state.
- If $T_{\text{tube}} \geq 53^{\circ}\text{C}(127.4^{\circ}\text{F})$, frequency rise is not allowed.
- If $T_{\text{tube}} \geq 56^{\circ}\text{C}(132.8^{\circ}\text{F})$, the compressor will run at reduced frequency.
- If $T_{\text{tube}} \geq 60^{\circ}\text{C}(140^{\circ}\text{F})$, the compressor will stop and the indoor fan will blow residue heat and then stop.

② Exhaust temperature protection of compressor

If exhaust temperature $\geq 98^{\circ}\text{C}(208.4^{\circ}\text{F})$, frequency is not allowed to rise.

If exhaust temperature $\geq 103^{\circ}\text{C}(217.4^{\circ}\text{F})$, the compressor will run at reduced frequency.

If exhaust temperature $\geq 110^{\circ}\text{C}(230^{\circ}\text{F})$, the compressor will stop.

If exhaust temperature $\leq 90^{\circ}\text{C}(194^{\circ}\text{F})$, and the compressor has stayed at stop for at least 3 minutes, the compressor will resume its operation.

③ Communication fault

If the unit fails to receive correct signals for durative 3 minutes, communication fault can be justified and the whole system will stop.

④ Module protection

Under module protection mode, the compressor will stop. When the compressor remains at stop for at least 3 minutes, the compressor will resume its operation. If module protection occurs six times in succession, the compressor will not be started again.

⑤ Overload protection

If temperature sensed by the overload sensor is over 115, the compressor will stop and the outdoor fan will stop with a time lag of 30 seconds. If temperature is below 95, the overload protection will be relieved.

⑥ DC bus voltage protection

If voltage on the DC bus is below 150V or over 420V, the compressor will stop and the outdoor fan will stop with a time lag of 30 seconds. When voltage on the DC bus returns to its normal value and the compressor has stayed at stop for at least 3 minutes, the compressor will resume its operation.

⑦ Faults of temperature sensors

Designation of sensors	Faults
Indoor ambient temperature	The sensor is detected to be open-circuited or short-circuited for successive 5 seconds
Indoor tube temperature	The sensor is detected to be open-circuited or short-circuited for successive 5 seconds
Outdoor ambient temperature	The sensor is detected to be open-circuited or short-circuited for successive 30 seconds
Outdoor tube temperature	The sensor is detected to be open-circuited or short-circuited for successive 30 seconds, and no detection is performed within 10 minutes after defrost begins.
Exhaust	After the compressor has operated for 3 minutes, the sensor is detected to be open-circuited or short-circuited for successive 30 seconds.
Overload	After the compressor has operated for 3 minutes, the sensor is detected to be open-circuited or short-circuited for successive 30 seconds.

3. Other Controls

(1) ON/OFF

Press the remote button ON/OFF: the on-off state will be changed once each time you press the button.

(2) Mode Selection:

Press the remote button MODE, then select and show in the following ways: AUTO, COOL, DRY, FAN, HEAT, AUTO.

(3) Temperature Setting Option Button

Each time you press the remote button TEMP+ or TEMP-, the setting temperature will be up or down by $1^{\circ}\text{C}(1.8^{\circ}\text{F})$. Regulating Range: $16(60.8^{\circ}\text{F}) \sim 30^{\circ}\text{C}(86^{\circ}\text{F})$, the button is useless under the AUTO mode.

(4) Time Switch

You should start and stop the machine according to the setting time by remote control.

(5) SLEEP State Control

1. In cooling mode:

1.1 When the initial set temperature is 16-23°C(60.8~73.4°F), the temperature will rise 1°C(1.8°F) by every hour after sleep function is set; the temperature will not change after rising 3°C(5.4°F); after running for 7 hours, the temperature will decrease 1°C(1.8°F) and it will not change after that.

1.2 When the initial set temperature is 24-27°C(75.2~80.6°F), the temperature will rise 1°C(1.8°F) by every hour after sleep function is set; the temperature will not change after rising 2°C(3.6°F); after running for 7 hours, the temperature will decrease 1°C(1.8°F) and it will not change after that.

1.3 When the initial set temperature is 28-29°C(82.4~84.2°F), the temperature will rise 1°C(1.8°F) by every hour after sleep function is set; the temperature will not change after rising 1°C(1.8°F); after running for 7 hours, the temperature will decrease 1°C(1.8°F) and it will not change after that.

1.4 When the initial set temperature is 30°C(86°F), the unit will keep on running at this temperature; after running for 7 hours, the temperature will decrease 1°C(1.8°F) and it will not change after that.

Relationship between set temperature and running time:

Initial Temp.	Running time(T)							
0(start)	1	2	3	4	5	6	7	8
16	17	18	19	19	19	19	18	18
17	18	19	20	20	20	20	19	19
18	19	20	21	21	21	21	20	20
19	20	21	22	22	22	22	21	21
20	21	22	23	23	23	23	22	22
21	22	23	24	24	24	24	23	23
22	23	24	25	25	25	25	24	24
23	24	25	26	26	26	26	25	25
24	25	26	26	26	26	26	25	25
25	26	27	27	27	27	27	26	26
26	27	28	28	28	28	28	27	27
27	28	29	29	29	29	29	28	28
28	29	29	29	29	29	29	28	28
29	30	30	30	30	30	30	29	29
30	30	30	30	30	30	30	29	29

2. In heating mode:

2.1 When the initial set temperature is 16°C(60.8°F), the unit will keep on running at this temperature;

2.2 When the initial set temperature is 17-20°C(62.6~68°F), the temperature will decrease 1°C(1.8°F) by every hour after sleep function is set; the temperature will not change after decreasing 1°C(1.8°F);

2.3 When the initial set temperature is 21-27°C(69.8~80.6°F), the temperature will decrease 1°C(1.8°F) by every hour after sleep function is set; the temperature will not change after decreasing 2°C(3.6°F);

2.4 When the initial set temperature is 28-30°C(82.4~86°F), the temperature will decrease 1°C(1.8°F) by every hour after sleep function is set; the temperature will not change after decreasing 3°C(5.4°F);

Relationship between set temperature and running time:

Initial Temp.	Running time(T)							
0(start)	1	2	3	4	5	6	7	8
16	16	16	16	16	16	16	16	16
17	16	16	16	16	16	16	16	16
18	17	17	17	17	17	17	17	17
19	18	18	18	18	18	18	18	18
20	19	19	19	19	19	19	19	19
21	20	19	19	19	19	19	19	19
22	21	20	20	20	20	20	20	20
23	22	21	21	21	21	21	21	21
24	23	22	22	22	22	22	22	22
25	24	23	23	23	23	23	23	23
26	25	24	24	24	24	24	24	24
27	26	25	25	25	25	25	25	25
28	27	26	25	25	25	25	25	25
29	28	27	26	26	26	26	26	26
30	29	28	27	27	27	27	27	27

(6) Indoor Fan Control

Indoor fan could be set at ultra-high, high, medium, low speed by wireless remote controller and operated as that speed.

Auto fan speed could be set as well, indoor fan will operate under auto fan speed as following:

1. Under heating mode: auto speed under heating or auto heating mode:

- When $T_{amb.} \leq T_{preset} + 1^{\circ}\text{C}(1.8^{\circ}\text{F})$, indoor fan will operate at high speed;
- When $T_{preset} + 1^{\circ}\text{C}(1.8^{\circ}\text{F}) < T_{amb.} < T_{preset} + 3^{\circ}\text{C}(5.4^{\circ}\text{F})$, indoor fan will operate at medium speed;
- When $T_{amb.} \geq T_{preset} + 3^{\circ}\text{C}(5.4^{\circ}\text{F})$, indoor fan will operate at low speed;

There should be at least 180s operation time during switchover of each speed.

2. Under cooling mode: auto speed under cooling or auto cooling mode:

- When $T_{amb.} \geq T_{preset} + 2^{\circ}\text{C}(3.6^{\circ}\text{F})$, indoor fan will operate at high speed;
- When $T_{preset} < T_{amb.} < T_{preset} + 2^{\circ}\text{C}(3.6^{\circ}\text{F})$, indoor fan will operate at medium speed;
- When $T_{amb.} \leq T_{preset}$, indoor fan will operate at low speed

There should be at least 210s operation time during switchover of each speed.

(7) Buzzer Control

The buzzer will send a "Di" sound when the air conditioner is powered up or received the information sent by the remote control or there is a button input, the single tube cooler doesn't receive the remote control ON signal under the mode of heating mode.

(8) Auto button

If the controller is on, it will stop by pressing the button, and if the controller is off, it will be automatic running state by pressing the button, swing on and light on, and the main unit will run based on the remote control if there is remote control order.

(9) Up-and-Down Swinging Control

When power on, the up-and-down motor will firstly move the air deflector to 0 counter-clockwise, close the air outlet.

After starting the machine, if you don't set the swinging function on, heating mode and auto-heating mode, the up-and-down air deflector will move to D clockwise; under other modes, the up-and-down air deflector will move to L1. If you set the swinging function when you start the machine, then the wind blade will swing between L and D. The air deflector has 7 swinging states: Location L, Location A, Location B, Location C,

Location D, Location L to Location D, stop at any location between L~D (the included angle between L~D is the same).

The air deflector will be closed at 0 Location, and the swinging is effectual only on condition that setting the swinging order and the inner fan is running. The indoor fan and compressor may get the power when air deflector is on the default location.

(10) Display

① Operation pattern and mode pattern display

All the display patterns will display for a time when the power on, the operation indication pattern will display in red under standby status. When the machine is start by remote control, the indication pattern will light and display the current operation mode (the mode light includes: Cooling, heating and dehumidify). If you close the light key, all the display patterns will close.

② Double-8 display

According to the different setting of remote control, the nixie light may display the current temperature (the temperature scope is from $16^{\circ}\text{C}(60.8^{\circ}\text{F})$ to $30^{\circ}\text{C}(86^{\circ}\text{F})$) and indoor ambient temperature. The set temperature displayed in auto cooling and fan mode is $25^{\circ}\text{C}(77^{\circ}\text{F})$ and the set temperature displayed in auto heating mode is $20^{\circ}\text{C}(68^{\circ}\text{F})$. Under heating mode, nixie tube displays H1 or heating indicator is off 0.5s and blinks 10s in defrosting. (If you set the fahrenheit temperature display, the nixie light will display according to fahrenheit temperature)(11)

Protection function and failure display

E2: Freeze-proofing protection E4: Exhausting protection E5: Overcurrent protection E6: Communication failure

F1: Indoor ambient sensor start and short circuit (continuously measured failure in 5s)

F2: Indoor evaporator sensor start and short circuit (continuously measured failure in 5s)

F3: Outdoor ambient sensor start and short circuit (continuously measured failure in 30s)

F4: Outdoor condenser sensor start and short circuit (continuously measured failure in 30s, and don't measure within 10 minutes after defrosted)

F5: Outdoor exhausting sensor start and short circuit (continuously measured failure in 30s after the compressor operated 3 minutes)

H3: Overload protection of compressor H5: Module protection PH: High-voltage protection PL: Low-voltage protection

P1: Nominal cooling and heating test P2: Maximum cooling and heating test

P3: Medium cooling and heating test P0: Minimum cooling and heating test

(12) Drying Function

You may start or stop the drying function under the modes of cooling and dehumidify at the starting status (The modes of automatism, heating and air supply do not have drying function). When you start the drying function, after stop the machine by pressing the switch button, you should keep running the inner fans for 2 minutes under low air damper (The swing will operate as the D1 status within 2 minutes, and other load is stopped), then stop the entire machine; When you stop the drying function, press the switch button will stop the machine directly. When you start the drying function, operating the drying button will stop the inner fans and close the guide louver.

(13) Memory Function

When interrupting the power supply memory content: mode, swing function, light, set temperature and wind speed.

After interrupted the power supply, the machine will start when recovering the power according to the memory content automatically.

