

# **Service Manual**

Models:GWH09ABA-K6DNA1B GWH09ABA-K6DNC8B GWH12ABA-K6DNA1B GWH12ABA-K6DNC8B (Refrigerant R32)

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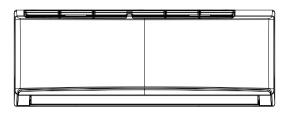
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# Part | : Technical Information

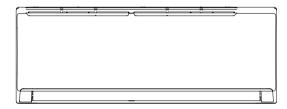
# 1. Summary

**Indoor Unit** 

GWH09ABA-K6DNA1B/I GWH12ABA-K6DNA1B/I

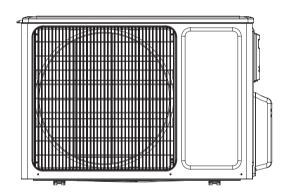


GWH09ABA-K6DNC8B/I GWH12ABA-K6DNC8B/I



**Outdoor Unit** 

GWH09ABA-K6DNA1B/O GWH12ABA-K6DNA1B/O



**Remote Controller** 

YAG1FB1(WiFi)



# 2. Specifications

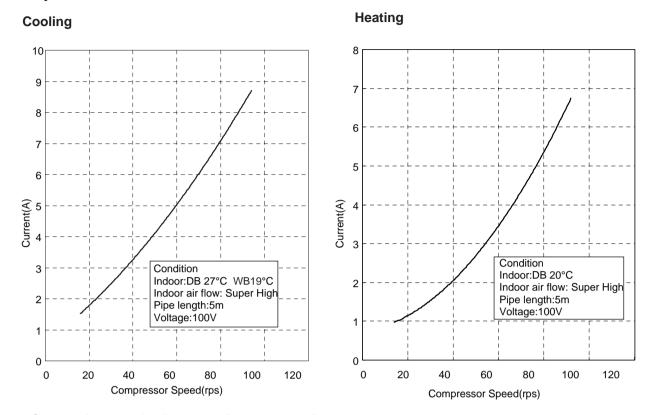
# 2.1 Specification Sheet

Parameter		Unit	Value		
Model	Model		GWH09ABA-K6DNA1B	GWH12ABA-K6DNA1B	
Model			GWH09ABA-K6DNC8B	GWH12ABA-K6DNC8B	
Product Code			CB482000800	CB482000900	
			CB472000600	CB472000500	
Power	Rated Voltage	$V\sim$	100	100	
Supply	Rated Frequency	Hz	50/60	50/60	
Phases			1	1	
Power Sup	pply Mode		Outdoor	Outdoor	
	apacity(Min~Max)	W	2500(1000~4200)	3500(1000~4000)	
	apacity(Min~Max)	W	3200(550~5000)	3800(600~4800)	
Cooling Po	ower Input(Min~Max)	W	463(200~1400)	722(200~1250)	
Heating Po	ower Input(Min~Max)	W	667(170~1500)	783(180~1400)	
Cooling Cu	urrent Input	Α	2.65	3.5	
Heating Cu	urrent Input	Α	3.2	3.6	
Rated Inpu		W	1500	1400	
Rated Curi		Α	6.0	6.0	
	ting Current	Α	6.65	6.5	
	olume(SH/H/MH/M/ML/L/SL)	m³/h	830/750/700/620/540/450/370	950/780/700/620/540/450/300	
	ying Volume	L/h	0.8	0.8	
EER	,g	W/W	5.4	4.85	
COP		W/W	4.8	4.85	
SEER		W/W	/	/	
HSPF		W/W	, ,	/	
Application	Δrea	m <sup>2</sup>	12-18	16-24	
тррпоапог			GWH09ABA-K6DNA1B/I	GWH12ABA-K6DNA1B/I	
	Indoor Unit Model		GWH09ABA-K6DNC8B/I	GWH12ABA-K6DNC8B/I	
			CB482N00800	CB482N00900	
	Indoor Unit Product Code		CB472N00600	CB472N00500	
	Fan Type		Cross-flow	Cross-flow	
	Fan Diameter Length(DXL)	mm	Ф107X620	Ф107X620	
			1200/1050/1000/900/800/700/600/	1300/1100/1000/900/800/700/600/	
	Cooling Speed(SH/H/MH/M/ML/L/SL)	r/min	500	500	
	Heating Speed(SH/H/MH/M/ML/L/SL)	r/min	1200/1050/1000/950/850/800/700/-	1300/1100/1000/950/850/800/700/-	
	Fan Motor Power Output	W	15	15	
	Fan Motor RLA	Α	0.3	0.3	
	Fan Motor Capacitor	μF	/	/	
1	Evaporator Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube	
Indoor	Evaporator Pipe Diameter	mm	Ф5	Ф5	
Unit	Evaporator Row-fin Gap	mm	2-1.3	2-1.3	
	Evaporator Coil Length (LXDXW)	mm	633X22.8X343	633X22.8X343	
	Swing Motor Model		MP24AN	MP24AN	
	Swing Motor Power Output		1.5	1.5	
	Fuse Current		3.15	3.15	
	Sound Pressure Level (SH/H/MH/M/ML/L/SL)	dB (A)	43/40/38/34/32/26/19	45/40/38/35/32/26/19	
Sound Power Level(SH/H/MH/M/ML/L/SL)		dB (A)	53/50/48/44/42/36/29	55/50/48/45/42/36/19	
	` '				
	Dimension (WXHXD)	mm	798X295X222	798X295X222	
	Dimension of Carton Box (LXWXH)	mm	843X354X282	843X354X282	
	Dimension of Package(LXWXH)	mm	848X370X293	848X370X293	
	Net Weight	kg	10	10.5	
Gross Weight		kg	11.5	12	

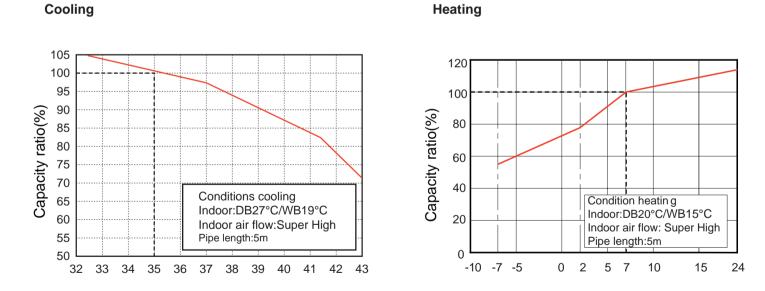
	Outdoor Unit Model		GWH09ABA-K6DNA1B/O	GWH12ABA-K6DNA1B/O
	Outdoor Unit Product Code		CB482W00800	CB482W00900
			Shanghai Hitachi Electrical	Shanghai Hitachi Electrical
	Compressor Manufacturer		Appliances CO., LTD	Appliances CO., LTD
	Compressor Model		GSD102UKQA6JH6G	GSD102UKQA6JH6G
	Compressor Oil		RM-LP56EG / equivalent	A68HES-H
	Compressor Type		Rotary	Rotary
	Compressor LRA.	Α	29	29
	Compressor RLA	А	2.63	2.67
	Compressor Power Input	W	695	665
	Compressor Overload Protector		4CYC00851/KSD301/HPC- 115/95-UI	/
	Throttling Method		Electron expansion valve	Capillary Sub-assy
	Set Temperature Range	°C	16~30	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~48	-15~48
	Heating Operation Ambient Temperature Range	°C	-15~24	-15~24
	Condenser Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Ф7.94	Ф7.94
	Condenser Rows-fin Gap	mm	2.5-1.4	2.5-1.4
	Condenser Coil Length (LXDXW)	mm	733X57X550	783X57X550
Outdoor	Fan Motor Speed	rpm	900	900
Unit	Fan Motor Power Output	W	30	30
	Fan Motor RLA	Α	0.15	0.15
	Fan Motor Capacitor	μF	/	/
	Outdoor Unit Air Flow Volume	m <sup>3</sup> /h	2400	2400
	Fan Type		Axial-flow	Axial-flow
	Fan Diameter	mm	Ф438	Ф438
	Defrosting Method		Automatic Defrosting	Automatic Defrosting
	Climate Type		T1	T1
	Isolation		I	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)	53/-/-	52/-/-
	Sound Power Level (H/M/L)	dB (A)	63/-/-	62/-/-
	Dimension(WXHXD)	mm	899X378X596	899X378X596
	Dimension of Carton Box (LXWXH)	mm	945X417X630	945X417X630
	Dimension of Package(LXWXH)	mm	948X420X645	948X420X645
	Net Weight	kg	38	38
	Gross Weight	kg	41	41
	Refrigerant		R32	R32
	Refrigerant Charge	kg	1.05	1.13
	Connection Pipe Length	m	5	5
	Connection Pipe Gas Additional Charge	g/m	20	20
Connection	Outer Diameter Liquid Pipe	mm	Ф6	Ф6
Connection Pipe	Outer Diameter Gas Pipe	mm	Ф9.52	Ф9.52
ripe	Max Distance Height	m	10	10
	Max Distance Length	m	15	20
	Note: The connection pipe applies metric of	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



# 2.4 Cooling and Heating Data Sheet in Rated Frequency

#### Cooling:

condit	cooling ion(°C) /WB)	Model	Pressure of gas pipe connecting indoor and outdoor unit	temperati	outlet pipe ure of heat anger	Fan speed of indoor unit	Fan speed of outdoor unit	Compressor frequency (Hz)
Indoor	Outdoor		P (MPa)	T1 (°C)	T2 (°C)			(112)
27/19	35/24	09/12K	0.9 to 1.1	12 to 14	75 to 37	Super High	High	52

#### Heating:

conditi	heating ion(°C) /WB)	Model	Pressure of gas pipe connecting indoor and outdoor unit	temperati	outlet pipe ure of heat anger	Fan speed of indoor unit	Fan speed of outdoor unit	Compressor frequency (Hz)
Indoor	Outdoor		P (MPa)	T1 (°C)	T2 (°C)			(112)
20/-	7/6	09/12K	2.2 to 2.4	70 to 35	2 to 4	Super High	High	65

#### Instruction:

T1: Inlet and outlet pipe temperature of evaporator

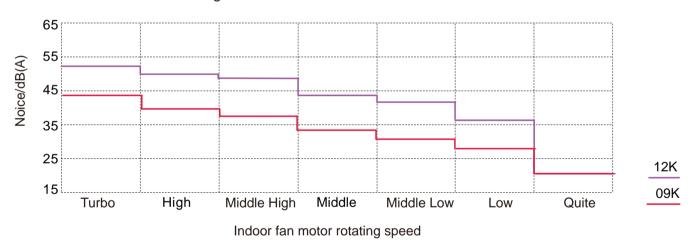
T2: Inlet and outlet pipe temperature of condenser

P: Pressure at the side of big valve

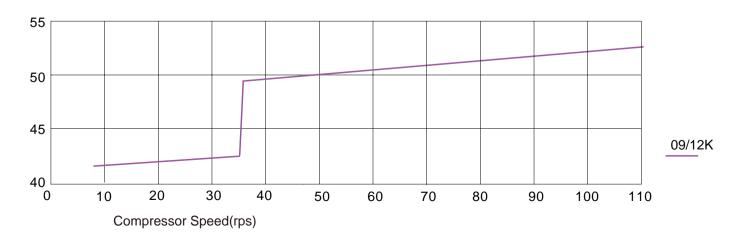
Connection pipe length: 5 m.

### 2.5 Noise Curve

Indoor side noise when blowing

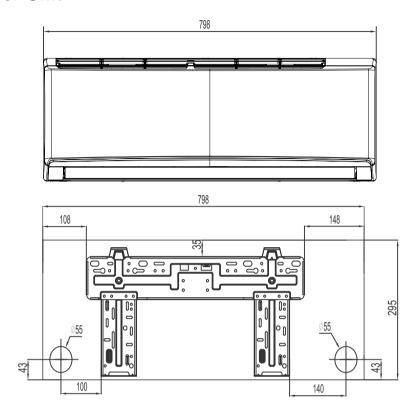


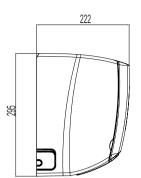
### Outdoor side noise when Compressor speed changed



# 3. Outline Dimension Diagram

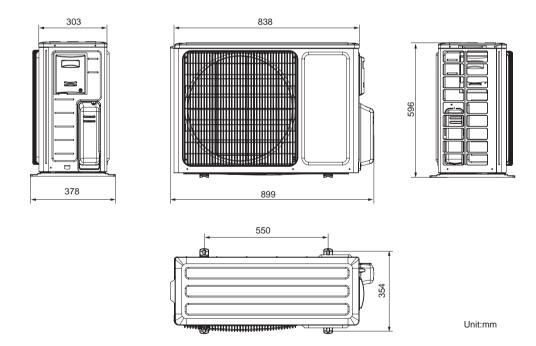
# 3.1 Indoor Unit



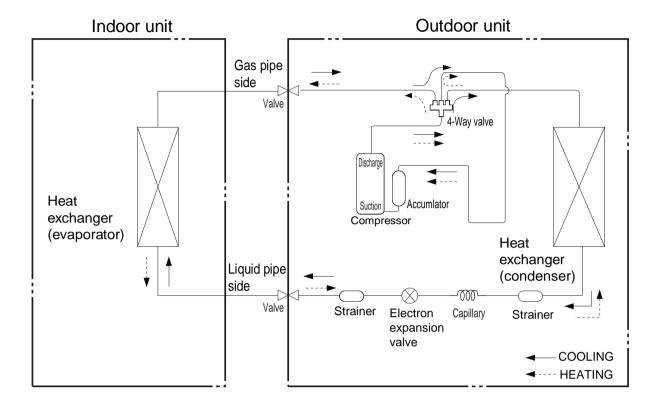


Unit:mm

# 3.2 Outdoor Unit



# 4. Refrigerant System Diagram



Connection pipe specification: Liquid pipe:1/4" (6mm) Gas pipe:3/8" (9.52mm)

# 5. Electrical Part

## 5.1 Wiring Diagram

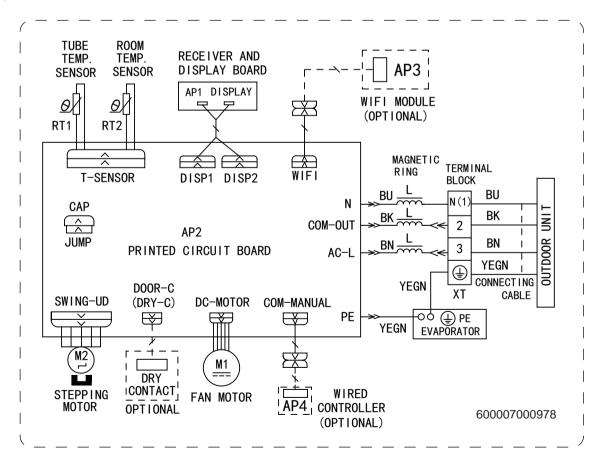
#### Instruction

Symbol	Symbol Color	Symbol	Symbol Color	Symbol	Name	
WH	White	GN	Green CAP Jumper cap		Jumper cap	
YE	Yellow	BN	Brown	COMP	Compressor	
RD	Red	BU	Blue		Grounding wire	
YEGN	Yellow/Green	BK	Black	/	/	
VT	Violet	OG	Orange	/	/	

Note: Jumper cap is used to determine fan speed and the swing angle of horizontal lover for this model.

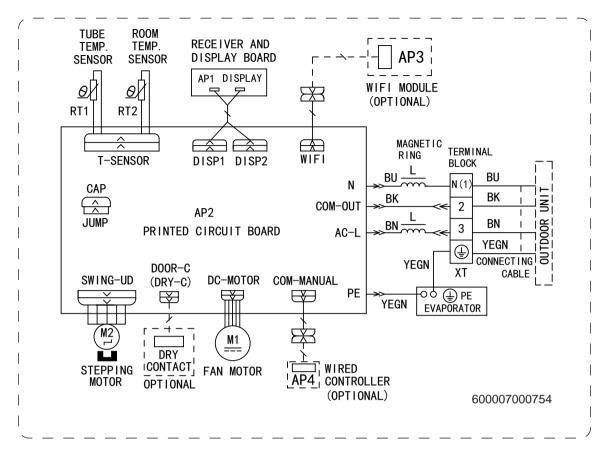
#### • Indoor Unit

09K



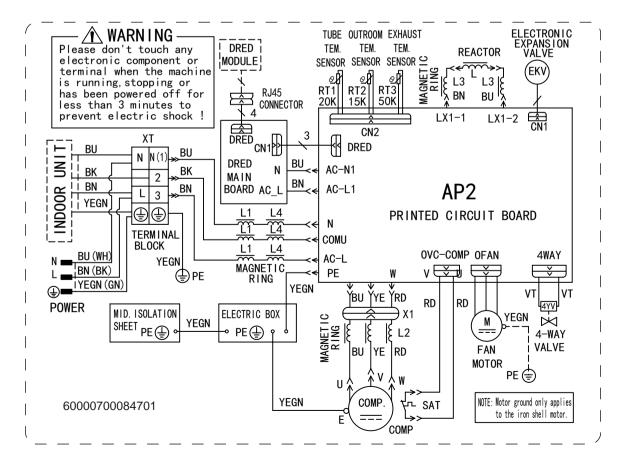
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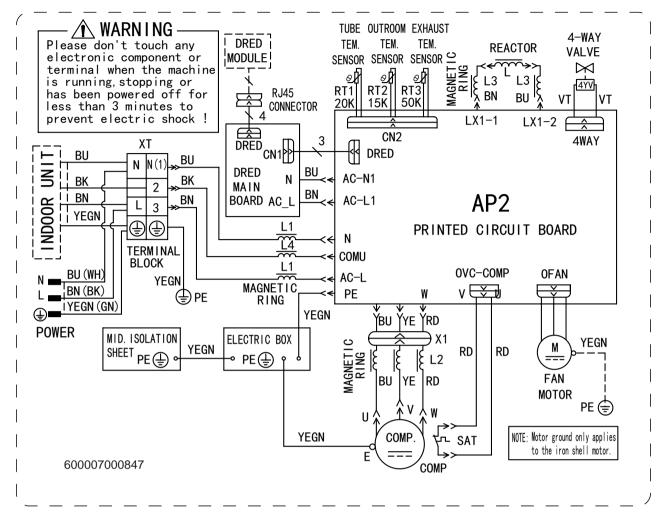
12K



#### Outdoor Unit

09K



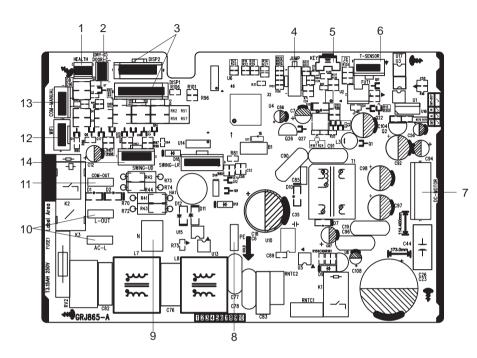


These circuit diagrams are subject to change without notice, please refer to the one supplied with the unit.

# **5.2 PCB Printed Diagram**

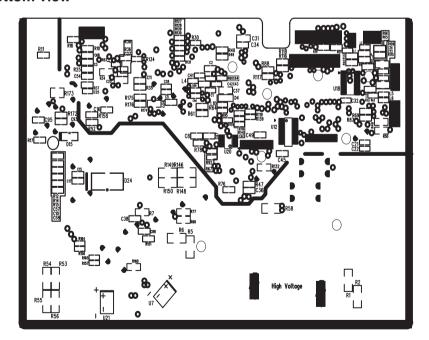
### **Indoor Unit**

# • Top view



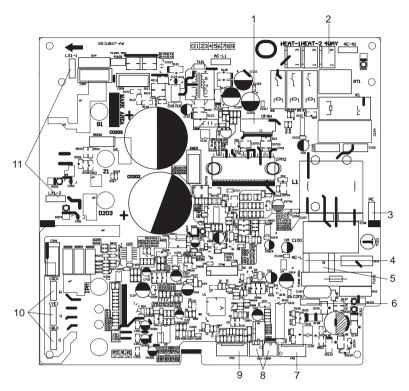
No.	Name
1	Interface of health function(only for the model with this function)
2	Interface of dry contact(only for the model with this function)
3	Display interface
4	Jump cap
5	Auto button
6	Terminal for tube and ambient temperature sensor
7	DC fan interface
8	Grounding wire
9	Neutral wire
10	Interface of live wire
11	Communication interface
12	WIFI
13	Interface of wired controller
14	Up&down swing interface

### Bottom view



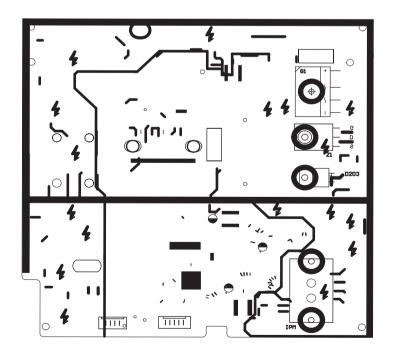
## **Outdoor Unit**

# • Top view



No.	Name
1	Terminal of outdoor fan
2	Interface of 4-way valve
3	Grounding wire
4	Live wire
5	Neutral wire
6	Communication interface
7	Interface of electronic expansion valve
8	Overload interface of compressor
9	Interface of temperature sensor
10	Compressor three phase input interface
11	Reactor wiring terminal

# • Bottom view

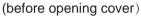


12 <u>Technical Information</u>

# 6. Function and Control

### **6.1 Remote Controller Introduction**





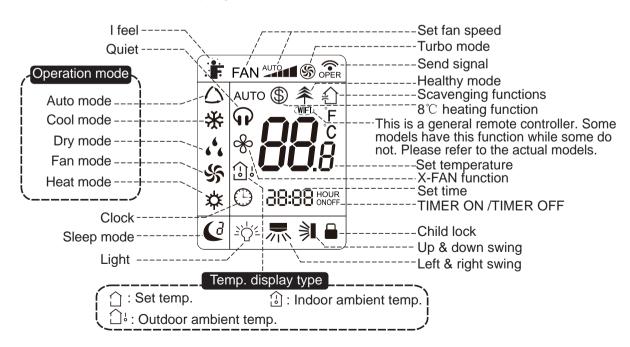


(after opening cover)

- 1 ON/OFF button
- 2 FAN button
- 3 MODE button
- 4 +/- button
- 5 TURBO button
- 7 🔰 button
- 8 CLOCK button
- 9 TIMER ON/ TIMER OFF button
- 10 TEMP button
- 11 辛/ 幻 button
- 12 I FEEL button
- 13 LIGHT button
- 14 WiFi button
- 15 QUIET button
- 16 SLEEP button

- 1 ON/OFF button
- 2 FAN button
- 3 MODE button
- 4 +/- button

# Introduction for icons on display screen



#### Introduction for buttons on remote controller

#### Note:

- •This is a general use remote controller, it could be used for the air conditioners with multifunction;
  For some function, which the model don'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 indictor 🖰 " is ON (red indicator).
- 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 controllerwill blink once and the air conditioner will give out a "de" sound, which means the signal has been sent to the air conditioner.
- Under off status, set temperature and clock icon will be displayed on the displayof remote controller (If timer on, timer off and light functions are set, the corre-sponding icons will be displayed on the display of remote controller at the same time); Under on status, the display will show the corresponding set function icons.
- 0.1°C temperature setting is only available for remote controller.

#### 1.ON/OFF button

Press this button, the unit will be turned on, press it once more, the unit will be turn-ed off. Sleepfunction will be canceled, while unit off.

#### 2.Fan button

Press this button, Auto, Low, Medium-low, Medium, Medium-high, High speed can be circularlyselected.

After powered on, Auto fan speed is default. Under DRY mode, Low fan speed only can be set up.



#### Note:

- It's Low fan speed under Dry mode.
- X-FAN function Hold fan speed button for 2s in COOL or DRY mode, the icon " is displayed and the indoor fan will continue operation for a few minutes in order to dry the indoor uniev en though you have turned off the unit. After energization, X-FAN OFF is defaulted.

X-FAN is not available in AUTO, FAN or HEAT mode.

This function indicates that moisture on evaporator of indoor unit will be blowed after the unit is stopped to avoid mould.

- Having set X- FAN function on: After turning off the unit by pressing ON/OFF button indoor fan will continue running for a few minutes. at low speed. In this period, Hold fan speed button for 2s to stop indoor fan directly.
- Having set X- FAN function off: After turning off the unit by pressing ON/OFFbutton, the complete unit will be off directly.

#### 3.MODE button

Press this button, Auto, Cool, Dry, Fan, Heat mode can be selected circularly. Auto mode is default while power on. Under Heat mode, the initial value is  $28^{\circ}\text{C}$  (82 °F) Under other modes, the initial value is  $25^{\circ}\text{C}$  (77 °F).

(only for cooling and heating unit. As for cooling only unit, it won't have any action when it receives the signal of heating operation.)

#### 4.+/- button

Press " + " or " - " button once increase or decrease set temperature 0.1°C(°F). Holding " + " or " - "button, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly.

When setting TIMER ON, TIMER OFF or CLOCK, press " + " or " - " button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF buttons)

When setting TIMER ON, TIMER OFF or CLOCK, press " + " or " - " button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF buttons)

#### 5.TURBO button

Under Cool or Heat mode, press this button can turn on or turn off the Turbo function. After the Turbo function turned on, the signal of Turbo will display. The signal will be automatically cancelled if changing the mode or fan speed.

#### 🛲 button

Press this button to set left & right swing angle cycling as below:

is only available for some models.

• This function is only available for some models.

#### 7. 🔰 button

Press this button to set swing angle, which circularly changes as below:

This remote controller is universal. If it receives threes kinds of following status, the swing angle will remain original.

If guide louver is stopped when it is swinging up and down, it will remian its present position.

indicates guide louver swings back and forth in the five places, as shown in the figure.

#### 8.CLOCK button

Press this button, the clock can be set up, signal Oblink and display. Within 5 seconds, the value can be adjusted by pressing

+ or - button, if continuously press this button for 2 seconds above, in every 0.5 seconds, the value on ten place of Minutewill be increased 1.

During blinking, repress the Clock button or Confirm button, signal \(\text{\text{will}}\) will be constantly displayed and it denotes the setting succeeded.

After powered on, 12:00 is defaulted to display and signal will be display. signal will be displayed. If there is signal be displayed that denotes the current time value is Clock value, otherwise is Timer value.

#### 9.TIMER ON/TIMER OFF button

- Timer On setting: Sign al "ON" will blink and display, signal will conceal, the num-erical section will become the timer on setting status. During 5 seconds blink, by pressing + or button to adjust the time value of numerical section, every press of that button, the value will be increased or decreased 1 minute. Hold pressing + or button, 2 seconds later, it quickly change, the way of change is: During the initial 2.5 seconds, ten numbers change in the one place of minute, then the one place is constant, ten numbers change in the tens place of minute at 2.5 seconds speed and carry. During 5s blink, press the Timer button, the timer setting succeeds. The Timer On has been set up, repress the timer button, the Timer On will be canceled .Before setting the Timer,
- •One press this key to enter into TIMER OFF setup, in which case the TIMER OFF icon will blink. The method of setting is the sameas for TIMER ON. 10.TEMP button
- Press this button, you can see indoor set temperature, indoor ambient temperature or outdoor ambient temperature on indoor unit's display. The setting on remote co-ntroller is selected circularly as below:



• When selecting " "with remote controller or no display, temperature indicator onindoor unit displays set temperature; When selecting " "with remote controller, temperature indicator on indoor unit displays indoor ambient temperature; When selecting " " "with remote controller, temperature indicator on indoor unit displays outdoor ambient temperature. 3s later it will return to the setting temprature or it depends on the other received signal within 3s.

Attention: When displaying the outdoor ambient, the displaying range is  $0-60^{\circ}$ C When it goes beyond the range,it keeps the threshold data (the smallest— $0^{\circ}$ C and the largest  $60^{\circ}$ C). Warm tips: When operating buttons on the cover please make sure the cover is closed completely.

Note: Outdoor temperature display is not available for some models. At that time, indoor unit receives " 🕥 " signal, while it displays indoor set temperature.

#### 11季/幻 hutton

Press this button to achieve the on and off of healthy and scavenging functions in operation status. Press this button for the first time to start scavenging function; LCD displays "\(\Delta\)" . Press the button for the second time to start healthy and sc-avenging functions simultaneously; LCD displays "\(\Delta\)" and "\(\Righta\)". Press this button for the third time to quit healthy and scavenging functions simultaneously. Press the button for the fourth time to start healthy function; LCD display "\(\Righta\)". Press this button again to repeat the operation above.

NOTE: This function is applicable to partial of models.

#### 12.I FEEL button

Press this button once, to turn on the I FEEL function, then the figure of "I FEEL" will be displayed, after every press of other function button, every 200ms to send I FEEL once, after this function started, the remote controller will send temperature to the main un it in every 10 minutes. When repress this button, this function will be turned off.

Press this button at unit On or Off status. Light On and Light Off can be set up. After powered on, Light On is defaulted.

#### 14 WiFi buttor

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

This function is only available for some models.

#### 15.QUIET button

Press this button, the Quiet status is under the Auto Quiet mode (display " $\Omega$ " and "Auto" signal) and Quiet mode (display " $\Omega$ " signal) and Quiet OFF (there is no signal of " $\Omega$ " displayed), after powered on, the Quiet OFF is defaulted. Under the Quiet mode (Display " $\Omega$ " signal).

The Quiet function is only available for some models.

#### 16.SLEEP button

- Press this button, can select Sleep 1 ( 🗘 ), Sleep 2 ( 🛂 ), Sleep 3 ( 🐧 and cancel the Sleep, circulate between these, after electrified, Sleep Cancel is de-faulted.
- 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, 2 hours, setting temperature increased 2 °C, 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, 2 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.
   In Cool mode:
- (1) When setting the initial temperature 16 °C-23 °C, after turned on Sleep function, the temperature will be increased 1 °C in every hour, after 3 °C the temperature will be maintained, after 7hours, the temperature will be decreased 1 °C, after that the unit will keep on running under this temperature;
- (2) When setting the initial temperature 24°C-27°C, after turned on Sleep function, the temperature will be increased 1°C in every hour, after 2°C the temperature will be maintained, after 7hours, the temperature will be decreased 1°C, after that the unit will keep on running under this temperature;
- (3) When setting the initial temperature 28°C-29°C, after turned on Sleep function, the temperature will be increased 1°C in every hour, after 1°C the temperature will be maintained, after 7hours, the temperature will be decreased 1°C, after that the unit will keep on running under this temperature;
- (4) When setting the initial temperature 30 °C, under this temperature setting, after 7hours, the temperature will be decreased 1 °C, after that the unit will keep on running under this temperature;

#### In Heat mode

- (1) Under the initial presetting temperature  $16\,^{\circ}\mathrm{C}$ , it will run under this setting tem- perature all along.
- (2) Under the initial presetting temperature 17℃-20℃, after Sleep function started up, the temperature will decrease 1℃ in every hour, after 1℃ decreased, this temperature will be maintained.
- (3) Under the initial presetting temperature 21°C -27°C, after Sleep function started up, the temperature will decrease 1°C in every hour, after 2°C decreased, this temperature will be maintained.
- (4) Under the initial presetting temperature 28℃-30℃, after Sleep function started up, the temperature will decrease 1℃ in every hour, after 3℃ decreased, this temperature will be maintained.
- 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 en- ters into user individuation sleep setting status, at this time, the time of remote controller will display "1hour", the setting temperature "88" will display the corr-esponding 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 "Trubo" button for confirmation;
- (3) At this time, 1hour will be automatically increased at the timer postion on theremote controller, (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;

#### Introduction for special function

#### About AUTO RUN

When AUTO RUN mode is selected, the unit will be in accordance with the room temp, automatically to select the suitable running method and to make ambient comfortable.

#### About turbo function

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

#### About lock

Press + and - buttons simultaneously to lock or unlock the keyboard. If the remote co-ntroller is locked, the icon will be displayed on it, in which case, press any button, the mark will flicker for three times. If the keyboard is unlocked, the mark will disappear.

#### About swing up and down

- 1. Press swing up and down button continuously more than 2s, the m ain unit will swingbackand forth from up to down, and then loosen the button, the unit will stop swing and present position of guide louver will be kept immediately.
- 2. Under swing up and down mode, when the status is switched from off to again 2s later, status will switch to off status directly; If press this button again 2s later, status will switch to off status directly; If press this button again 2s, the change of swing status will also depend on the circulation seque- nce stated above.

#### About swing left and right

- 1. Press swing left and right 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 swing and present position of guide louver will be kept immediately.
- 2. 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.

#### About switch between Fahrenheit and Centigrade

Under status of unit off, press MODE and - buttons simultaneously to switch  $\,{}^\circ\!\mathrm{C}\,$  and  $\,{}^\circ\!\mathrm{F}\,\cdot$ 

#### Combination of "TEMP" and "CLOCK" buttons:

#### About Energy - saving Function

Press "TEMP" and "CLOCK" simultaneously in COOL mode to start energy-saving function. Nixie tube on the remote controller displays "SE". Repeat the operation to quit the function

#### Combination of "TEMP" and "CLOCK" buttons:

#### About 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 guit the function.

#### **About Quiet function**

When quiet function is selected:

- 1. Under cooling mode: indoor fan operates at notch 4 speed. 10 minutes later or when indoor ambient temperature 28 °C, indoor fan will operate at notch 2 speed or quiet mode according to the comparison between indoor ambinet temperature and set tem-perature.
- 2. Under heating mode: indoor fan operates at notch 3 speed or quiet mode according to the comparison between indoor ambient temperature and set temperature.
- 3. Under dry, fan mode: indoor fan operates at quiet mode.
- 4. Under auto mode: the indoor fan operates at the auto quiet mode according to actual cooling, heating or fan mode.

#### About Sleep function

Under the Fan 、 Dry and Auto mode, the Sleep function cannot be set up, Select and enter into any kind of Sleep mode, the Quiet function will be attached and stared, different Quiet status could be optional and turned off.

#### Operation guide

#### General operation

- After powered on, press ON/OFF button, the unit will start to run. (Note: When it is powered on, the guide louver of main unit will close automatically.)
- Press MODE button, select desired running mode.
- 3. Pressing + or button, to set the desired temperature.
- Pressing FAN button, set fan speed, can select AUTO FAN, LOW, MEDIUM-LOW, MEDIUM, MEDIUM-HIGH and HIGH.
- 5. Pressing and tutton, to select the swing.

#### Optional operation

- 1. Press SLEEP button, to set sleep.
- Press TIMER ON and TIMER OFF button, can set the scheduled timer on or timer off.
- Press LIGHT button, to control the on and off of the displaying part of the unit (This function may be not available for some units).
- Press TURBO button, can realize the ON and OFF of TURBO function.

Cover of battery box



#### Replacement of batteries in remote controller

- Press the back side of remote controller marked with "
   ", 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.

#### 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.

#### **Emergency operation**

If remote controller is lost or damaged, please use auxiliary button to turn on or turn off the air conditioner. The operation in details are as below:

As shown in the fig. Open panel, press aux. button to turn on or turn off the air conditioner. When the air conditioner is turned on, it will operate under

Use insulated object to press the auto button

**⚠WARNING**:



aux, button

## 6.2 Operation of Smart Control (Smart Phone, Tablet PC) For Gree

#### **Operation Instructions**

#### Download and install APP

Scan the following QR code with your smart phone and download Wifi Smart.



Install the APP according to its guidance. When successfully installed, your smart phone homepage will show this icon User of IOS system can search for the Gree Smart in Apple store to download the Apple version APP.



#### Configuration

NOTE: Select either the original configuration or AP configuration according to the APP functions.

1.Original configuration

Before operation, please finish the following configuration in order to realize Wifi control and the connection between air conditioner and intelligent device.

(1). Short-distance control setting for air conditioner using Wifi hotspot

Step 1: Air conditioner Wifi is set in AP mode in factory. You can search the air conditioner Wifi hotspot through your smart phone. The name of Wifi hotspot is the last 8 numbers of the air conditioner mac address. Password is 12345678.







Step 2: Open APP and the screen will show the air conditioner that you just connected. Tap the name of this air conditioner on your phone to enter and realize short-distance control, as shown below. Please refer to "Functions introduction" for specific control methods.





NOTE: One AC can be controlled by 4 smart phones in maximum at the same time.

(2). Short-distance and long-distance control setting for air conditioner connecting with router

Step 1: Under short-distance control, return to the homepage "Home Control". Tap + t the top right corner of the homepage "Device".

Select "Add device" and enter the page of "Add device". Tap "Manual configuration" and enter the page "Manual configuration". Step 2: Select the correct network name and enter the password. Select the server (The server setting here must keep the same as the server setting in "Settings" mentioned below. Otherwise, remote control will fail.), then tap the button "Add device" for configuration. At this time, "Configuring" is displayed on the APP. The buzzer in the indoor unit will give out a sound when configuration succeeds.



### 2.AP configuration

4 steps of configuration

Step 1: Enter homepage "Device", and then tap \_\_\_\_ at the top right corner.

Select "Add device" and enter the page "Add device". Tap "Manual Configuration".





Step 2: Tap "Next" in the First Step.



Step 3: Select the wireless network of air conditioner. APP will show the password 12345678 (default password of the network of air conditioner). Then tap "Next"; select the name of home Wifi router, then enter the correct password and select a server.





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Step 4: If configuration is successful, a window will pop up and read "Configuration succeeded". Then configuration is completed.



NOTE: After configuration is completed, the air conditioner hot spot connected to your phone will disAPPear. You should reconnect your phone to the home Wifi router to realize long-distance control.

The above configuration only needs one phone. Other types of phones shall install this APP, connect with the air conditioner hot spot or wireless router of Wifi air conditioner. When connection is done, open the APP to use short-distance operation to control the air conditioner and then you can use the long-distance control.

#### **Functions introduction**

1.User registration

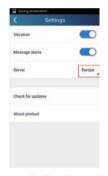
Purpose: To realize long-distance control

Operation instruction: For the first time login, you have to register a new username. If you already have a username, skip the registration step and enter email address and password on the "Login Page" to log in. If password is forgotton, you can reset the password.

Operation steps:

(1) Select the sever address





(2) Account login: Slide the page "Device", and enter the page "Menu" on the left. Tap "Login" to enter the page "Register username". New user must first register a username. Tap "Register".





(3) Enter your email address. Wait until you receive the verification code. Enter the code and then tap "OK" to log in.



(4) If password is forgotten, you can reset the password with your email address.

Tap "Forgot password" and enter the page "Forgot password". Tap "Get verification code" to get an email verification code. Enter a new

password and tap "OK" to log in.



#### 2.Personal settings

Purpose: Set name (device name, preset name, etc.) and images (device image) in order to identify a user easily.

#### (1) Set device name

After quick configuration, a list of controllable smart devices will be generated. Default name for air conditioner is the last 8 numbers of the air conditioner mac address.



Step 1: Tap and hold "a0b417ac" to enter the page "Edit device". Tap "Image" to select the source of image. Select from "Default images" or "Take photo" or "Choose from photos" and save an image.



Step 2: Tap "Name" to change device name. Save it and the new device name will be shown. Enable button "Lock device" to lock the device so that other smart phones can't search the device. Tap "Temp unit" to change the temperature unit.



Step 3: Tap "Firmware update" to upgrade the firmware of the device. Tap"1.8" the device will upgraded auto.



(2) Set preset name

Step 1: Tap at the top right corner of the homepage "Device". Select "Add preset" and enter the page "Preset edit".



Step 2: Choose the time. Tap "Name". As shown in the picture, its name is "baby room". For timer type, select "On". Then select the repeating days. Save the setting of preset name.



(3) Set device image

Please refer to step 1 in 2(1)

3. Control functions

(1) Common control functions: General control on the operation of smart devices (On/Off, temperature, fan speed, mode, etc.) and the setting of advanced functions (air exchange, dry, health, light, sleep, energy saving upper limit).

Step 1: General control

Enter the homepage "Home control" first. Take "babyroom"as an example.



Tap "babyroom" and enter the page of air conditioner control. Tap (b) to turn on the control switch.





Tap + or - to increase or decrease temperature. Tap \*\*Cool\* to change working mode. Tap adjustment.



to enter the page of fan speed



Tap \_\_\_ and go around the circle to adjust fan speed.





Step 2: Advanced settings

Tap 💮 to enter advanced settings. You may select "Air", "Dry", "Health", "Light", "Sleep" or "Energy saving".





(2) Advanced control functions: Set scene; Preset; Link; Infrared control (only APPlicable to smart phones with infrared emitter) Set scene: Preset the operation of several smart devices by one tap.

On the page "Home control", tap the image of "Home control" to enter the page "Edit scene".



Tap "Add scene" and edit the scene name, for example, "Back home". Add execution devices.

Tap to add commands. On the page "Select execution device", select the air conditioner named "babyroom". Then select "ON" or "OFF".





Continue to select the next execution device as instructed above. Tap oset the interval.





Tap "Save". Tap the scene picture displayed on homepage "Device" to send the command. Then the scene "Back home" will be in execution. You may view the execution condition of the scene.

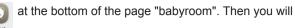


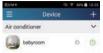


(3) Preset includes single-device preset and multi-device preset

Single-device preset: This can preset a certain device to be On/Off at a specific time.

On the homepage "Device", take air conditioner "babyroom" as an example. Tap enter the page "Preset edit".







Slide up and down to set the time. If you need to synchronize the time, tap " synchronize". If such "Hint" interface doesn't show up, please skip this operation procedure.





Tap "Name" to customize the preset name.

Preset device can't be selected and it will default to "babyroom". Select "On" for the timer type. Select repeating days to complete the preset.



Multi-device preset: This can preset multiple devices to execute a command at a specific time.

Please refer to the instructions as how to set preset time, name, timer type and repeating days for a single device.

Tap "Preset device" to select one or more devices. Then return to the page "Device".



(4) Link(This function is APPlicable to some models)

Select a master device. When the environment satisfies the parameters as set in the master device, slave devices will execute commands to realize devices linkage.

Step 1: Set the parameters of master device (Select master device, select environment parameters, select master device status).

Tap at the top right corner of the homepage "Device". Select "Link" and enter the page "Add linkage". Tap "Device/Param" to enter the page "Select device". Take "baby room" as an example. Tap "babyroom".





Enter the page "Select environment parameters".



Tap "Temperature" to enter the page "Select temperature parameter". Slide up or down to adjust temperature. Tap "Upper limit" or "Lower limit".

Tap "Mode" and "On/Off" to select the status of master device. Then tap "Save".





Step 2: Set time parameter for linkage. Tap "Time parameter" to enter the page "Set time". Slide setting time.



rightwards to turn on the





Tap "Execution time"; then tap "Start" and "Stop" to set start time and stop time respectively. Tap "OK" at the top right corner to save the setting.





Tap the days below "Repeat" to select the repeating days. Then tap "Save".



Step 3: Select "Execute command"

Tap "Execute command" and enter the page "Select device".



Tap the name of device that you want to control. Tap "ON" or "OFF" and then tap "Save" to complete the linkage.





Tap "Save" and then repeat the above steps to set linkage of several scenes.

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(5) Infrared control (only APPlicable to smart phones with infrared emitter).

Function: Smart phone can be used as a remote controller.

Tap at the top right corner of the homepage "Device". Select "Infrared" and enter the page "Remote controller". Tap slide up to enter the page of advanced functions.







to turn on the device. Tap to select mode. Tap saving", "Sleep" etc. to set advanced functions.



to adjust fan speed and swing angle. Tap "Health", "Energy

Tap "Sleep" to enter the page "Sleep". You can select "Traditional sleep", "Expert sleep" or "DIY sleep". Tap "DIY sleep" and then tap the left and right arrows to set sleep time. Tap up and down arrows to adjust temperature at a specific sleep time.





#### 4.Menu functions

Menu functions (Share, Set, History, Feedback)

(1) Share: To share quick configuration information and unit's information, including local export and local import.

For local import, you just need to tap "Local import" and wait for the data download.

Local export

Step 1: Export local data to another smart phone.

Enter "Menu" on the left side and tap "Share" to enter the page "Share". Then tap "Local export".

