

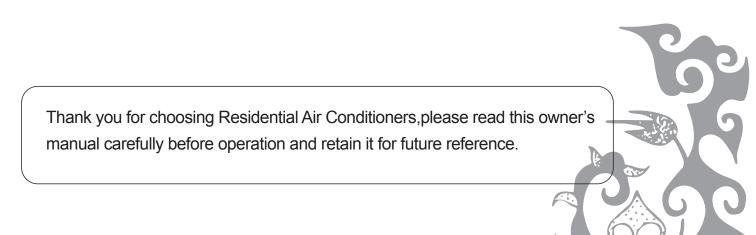


Console Type Air Conditioner

Owner's Manual Residential Air Conditioners



MODEL: GEH09AA-K3DNA1A GEH12AA-K3DNA1A GEH18AA-K3DNA1A



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Thank you for selecting our products

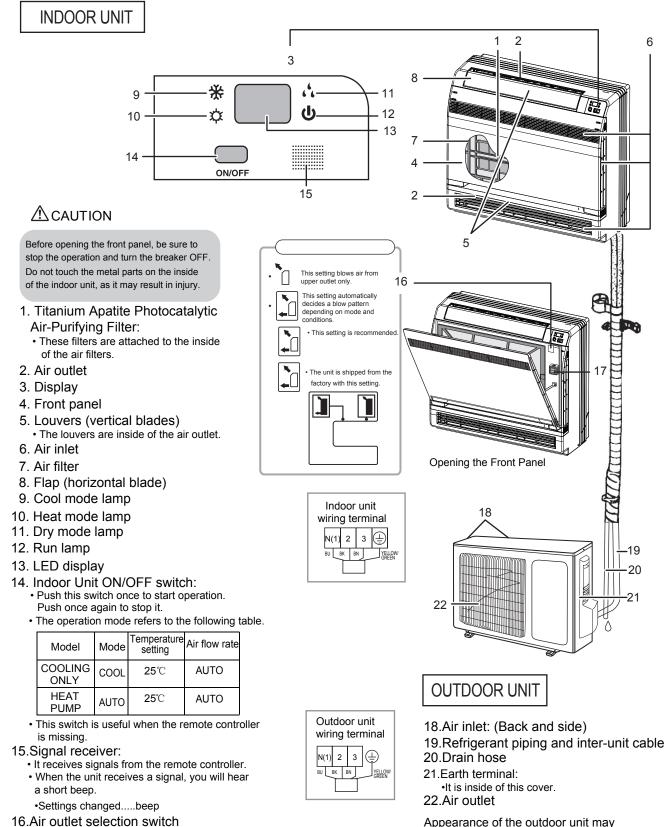
One of the benefits awaiting you with our room air conditioner is not only comfort of life but also good health. This operation instruction brings you the many omfort and technological features your unit has to offer. In addition, it provides you vital information about maintenance, service and economical operating. Take the next few minutes to discover how to get your comfort and economy of the operation from your new room air conditioner.

The figures in this manual may be different with the material objects, please refer to the material objects for reference.

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

External static pressures at the appliance was tested is 0 Pa Fuse link: T250 V; 3.15 A

Part names and their functions



Appearance of the outdoor unit may differ from some models.

NOTE:

17.Room temperature sensor:

It senses the air temperature around the unit.

If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
 The appliance shall be installed in accordance with national wiring regulations.

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③ An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.

Remote Controller Description



1 ON/OFF

Press it to start or stop operation.

- 2 : Press it to decrease temperature setting.
- 3 + : Press it to increase temperature setting.
- 4 MODE Press it to select operation mode (AUTO/COOL/DRY/FAN/HEAT).
- 5 FAN Press it to set fan speed.
- 6 SWING Press it set swing angle.
- 7 I FEEL
- 8 **ネ**/*紀* Press it to set HEALTH or AIR function.
- 9 SLEEP
- 10 TEMP
- 11 QUIET Press it to set QUIET function.
- 12 CLOCK Press it set clock.
- 13 T-ON T-OFF Press it to set auto-off/auto-on timer.
- 14 TURBO
- 15 LIGHT Press it to turn on/off the light.
- 16 X-FAN

1

	(Remote Controller Description)			
1	ON/OFF :			
	Press this button to turn on the unit .Press this button again to turn off the unit.			
2 —:				
	Press this button to decrease set temperature. Holding it down above 2 seconds rapidly			
_	decreases set temperature. In AUTO mode, set temperature is not adjustable.			
3	+:			
_	Press this button to increase set temperature.Holding it down above 2 seconds rapidly increases set temperature. In AUTO mode, set temperature is not adjustable.			
4	MODE :			
	Each time you press this button, a mode is selected in a sequence that goes from AUTO, COOL, DRY, FAN, and HEAT *, as the following:			
	AUTO ▶ COOL ▶ DRY ▶ FAN ▶HEAT *			
	*Note:Only for models with heating function.			
	After energization, AUTO mode is defaulted. In AUTO mode, the set temperature will not be displayed on the LED of the indoor, and the unit will automatically select the suitable operation mode in accordance with the room temperature to make indoor room comfortable.			
5	FAN			
	This button is used for setting Fan Speed in the sequence that goes from AUTO, ,			
	, and , and to and then back to Auto.			
	Low speed Low-Medium speed Medium speed			
	Medium-High speed			
6	SWING:			
Press this button to set up & down swing angle, which circularly changes as below:				
	;} + ` + ~ +- +, ^ ○FF + 2 + ; + +			
	○ [↑] ← ╧╢ ← ╤╢ ← ╭╢ ←			
	This remote controller is universal . If any command \Rightarrow , \Rightarrow or $=$ is sent out,			
	the unit will carry out the command as i			
	indicates the guide louver swings as: $\begin{bmatrix} & & \\ & & & \\ & & & $			
7	I FEEL:			
	Press this button to turn on I FEEL function. The unit automatically adjust temperature according to the sensed temperature. Press this button again to cancel I FEEL function.			

8 추/ 幻

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 "? Press the button for the second time to start healthy and scavenging functions simultaneously; LCD displays "? and "? 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 "? . Press this button again to repeat the operation above.

9 SLEEP:

- Press this button, can select Sleep 1 ((1), Sleep 2 (2), Sleep 3 (3) and cancel the Sleep, circulate between these, after electrified, Sleep Cancel is defaulted.
- Sleep 1 is Sleep mode 1, in Cool, Dehumidify modes: sleep status after run for one hour, the main unit setting temperature will increase 1 °C, 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.
- Sleep 3- the sleep curve setting under Sleep mode by DIY:

(1) Under Sleep 3 mode, press "Turbo" button for a long time, remote control enters into user individuation sleep setting status, at this time, the time of remote control will display "1 hour ", 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 "Trubo "button for confirmation;

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

(4) Repeat the above step (2) \sim (3) operation, until 8 hours temperature setting finished, sleep curve setting finished, at this time, the remote control 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 within10s, there is no button pressed, the sleep curve setting within10s, 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, "Timer"button or "Sleep" button, the sleep curve setting or enquiry status will guit similarly.

10 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, 5s later or within 5s, it receives other remote control signal that will return to display the setting temperature. If the users haven't set up the temperature displaying status, that will display the setting temperature.

4

11 QUIET:

Press this button, the Quiet status is under the Auto Quiet mode (display " \mathbf{p} " and "Auto" signal) and Quiet mode (display " \mathbf{p} " singal) and Quiet OFF (there is no signal of " \mathbf{p} " displayed), after powered on, the Quiet OFF is defaulted. Note: the Quiet function cannot be set up in Fan and Dry mode;Under the Quiet mode (Display " \mathbf{p} " signal), the fan speed is not available.

12 CLOCK :

Press CLOCK button, blinking \bigcirc . 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 \bigcirc will be constantly displayed.

13 T-ON T-OFF:

Press T-ON button to initiate the auto-ON timer. To cancel the auto-timer program, simply press this button again.

After press of this button, () disappears and "ON "blinks .00:00 is displayed for ON time setting. Within 5 seconds, press + or - button to adjust the time value. Every press of either button changes the time setting by 1 minute. Holding down either button rapidly changes the time setting by 1 minute and then 10 minutes. Within 5 Seconds after setting, press TIMER ON button to confirm.

Press T-OFF button to initiate the auto-off timer. To cancel the auto-timer program, simply press the button again.TIMER OFF setting is the same as TIMER ON.

14 TURBO:

Press this button to activate / deactivate the Turbo function which enables the unit to reach the preset temperature in the shortest time. In COOL mode, the unit will blow strong cooling air at super high fan speed. In HEAT mode, the unit will blow strong heating air at super high fan speed.

15 LIGHT:

Press LIGHT button to turn on the display's light and press this button again to turn off the display's light. If the light is turned on , 0 is displayed. If the light is turned off, 0 disappears.

16 X-FAN:

Pressing X-FAN button in COOL or DRY mode, the icon $\frac{1}{2}$ is displayed and the indoor fan will continue operation for 10 minutes in order to dry the indoor unit even 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.

17 Combination of "+" and "-" buttons: About lock

Press "+ " and "-" buttons simultaneously to lock or unlock the keypad. If the remote controller is locked, is displayed. In this case, pressing any button, is blinks three times.

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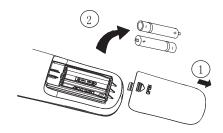
- 18 Combination of "MODE" and "-" buttons : About switch between Fahrenheit and centigrade At unit OFF, press "MODE" and "-" buttons simultaneously to switch between $^{\circ}C$ and $^{\circ}F$.
- 19 Combination of "TEMP " and "CLOCK" buttons : About Energy-saving Function Press "TEMP" and "CLOCK" simultaneously in COOL mode to start energy-saving function. Nixie tube on the remote controller displays "SE". Repeat the operation to quit the function.
- 20 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 quit the function.
- 21 About Back-lighting Function The unit lights for 4s when energizing for the first time, and 3s for later press.

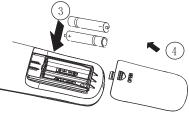
Replacement of Batteries

- 1. Remove the battery cover plate from the rear of the remote controller.
 - (As shown in the figure)
- 2. Take out the old batteries.
- 3.Insert two new AAA1.5V dry batteries, and pay attention to the polarity.
- 4. Reinstall the battery cover plate.

★ Notes:

- When replacing the batteries, do not use old or different types of batteries, otherwise, it may cause malfunction.
- If the remote controller will not be used for a long time, please remove batteries to prevent batteries from leaking.
- The operation should be performed in its receiving range.
- It should be kept 1m away from the TV set or stereo sound sets.
- If the remote controller does not operate normally, please take the batteries out and reinsert them after 30 seconds. If it still can't operate properly, replace the batteries.





Sketch map for replacing batteries

String

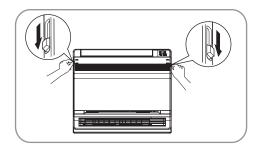


Maintenance

Before inspection and maintenance of the unit. PLEASE set power switch to "OFF" to cut off the power supply.

3.1 Units

- Indoor unit, Outdoor unit and Remote controller
 - 1. Wipe them with dry soft cloth.
- Front panel
 - 1. Open the front panel.
 - Slide the two stoppers on the left and right sides inward until they click.

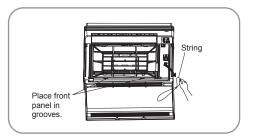


2. Remove the front panel.

- Remove the string.
- Allowing the front panel to fall forward will enable you to remove it.
- 3. Clean the front panel.
 - Wipe it with a soft cloth soaked in water.
 - Only neutral detergent may be used.
 - In case of washing the front panel with water, dry it with cloth, dry it up in the shade after washing.

4. Attach the front panel.

- Insert the front panel into the grooves of the unit (3 places).
- Attach the string to the right, inner-side of the front grille.
- Close the panel slowly.



CAUTION

- Don't touch the metal parts of the indoor unit. If you touch those parts, this may cause an injury.
- When removing or attaching the front panel, use a robust and stable stool and watch your steps carefully.
- When removing or attaching the front panel, support the panel securely with hand to prevent it from falling.
- For cleaning, do not use hot water above 40°C, benzine, gasoline, thinner, nor other volatile oils, polishing compound, scrubbing brushes, nor other hand stuff.
- After cleaning, make sure that the front panel is securely fixed.

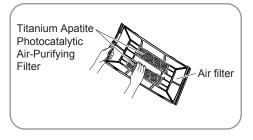
3.2 Filters

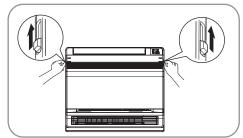
- 1. Open the front panel.
- 2. Remove the air filter.
 - Press the claws on the right and left of the air filter down slightly, then pull upward.
- 3. Take off the Titanium Apatite Photocatalytic Air-Purifying Filter.
 - Hold the tabs of the frame, and remove the claws in 4 places.

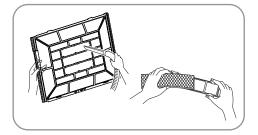


Maintenance

- 4. Clean or replace each filter. See figure.
- 5. Set the air filter and Titanium Apatite Photocatalytic Air-Purifying Filter as they were and close the front panel.
 - Operation without air filters may result in troubles as dust will accumulate inside the indoor unit.
- 6. Wash the air filters with water or clean them with vacuum cleaner.
 - · If the dust does not come off easily, wash them with neutral detergent thinned with lukewarm water, then dry them up in the shade.
 - It is recommended to clean the air filters every week.





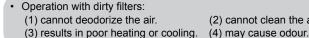


3.3 Titanium Apatite Photocatalytic Air-Purifying Filter

The Titanium Apatite Photocatalytic Air-Purifying Filter can be renewed by washing it with water once every 6 months. We recommend replacing it once every 3 years.

- Maintenance
- 1. Vacuum dusts, and soak in warm water or water for about 10 to 15 minutes if dirt is heavy.
- 2. Do not remove filter from frame when washing with water.
- 3. After washing, shake off remaining water and dry in the shade.
- 4. Since the material is made out of paper, do not wring out the filter when removing water from it.
- Replacement
 - Remove the tabs on the filter frame and replace with a new filter.
 - · Dispose of the old filter as flammable waste.
 - Dispose of the old filter as flammable waste.

NOTE



(2) cannot clean the air.

Check

Check that the base, stand and other fittings of the outdoor unit are not decayed or corroded.

Check that nothing blocks the air inlets and the outlets of the indoor unit and the outdoor unit.

Check that the drain comes smoothly out of the drain hose during COOL or DRY operation.

• If no drain water is seen, water may be leaking from the indoor unit. Stop operation and consult the service shop if this is the case.

3.4 Before a long idle period

- 1. Operate the "FAN only" for several hours on a fine day to dry out the inside.
 - Press "MODE" button and select "FAN" operation.
 - Press "ON/OFF" button and start operation.
- 2. After operation stops, turn off the breaker for the room air conditioner.
- 3. Clean the air filters and set them again.
- 4. Take out batteries from the remote controller.

NOTE

• When a multi outdoor unit is connected, make sure the heating operation is not used at the other room befure you use the fan operation.

※ Working temperature range				
	Indoor sideDB/WB(°C)	Outdoor sideDB/WB(°C)		
Maximum cooling	32/23	43/-		
Minimum cooling	21/15	10/-		
Maximum heating	27/	24/18		
Minimum heating	20/	-15/-		

The operating temperature range (outdoor temperature) for cooling unit is $10^{\circ}C \sim 43^{\circ}C$; for cooling and heating unit is $-15^{\circ}C \sim 43^{\circ}C$.

Working principle and special functions for cooling

Principle:

Air conditioner absorbs heat in the room and transmit to outdoor and discharged, so that indoor ambient temperature decreased, its cooling capacity will increase or decrease by outdoor ambient temperature.

Anti-freezing function:

If the unit is running in COOL mode and in low temperature, there will be frost formed on the heat exchanger, when indoor heat exchanger temperature decreased below 0° C, the indoor unit microcomputer will stop compressor running and protect the unit.

Working principle and special functions for heating

Principle:

- * Air conditioner absorbs heat from outdoor and transmits to indoor, in this way to increase room temperature. This is the heat pump heating principle, its heating capacity will be reduced due to outdoor temperature decrease.
- * If outdoor temperature becomes very low, please operate with other heating equipments.

Defrosting:

- * When outdoor temperature is low but high humidity, after a long while running, frost will form on outdoor unit, that will effect the heating effect, at this time, the auto defrosting function will act, the heat running will stop for 8-10mins.
- * During the auto defrosting, the fan motors of indoor unit and outdoor unit will stop.
- * During the defrosting, the indoor indicator flashes(or display "H1"), the outdoor unit may emit vapor, This is due to the defrosting, it isn't malfunction.
- * After defrosting finished, the heating will recover automatically.

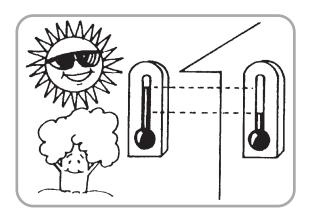
Anti-cool wind function:

In Heat mode, the following three kinds of status, if indoor heat exchanger hasn't achieve certain temperature that indoor fan motor will not start, in this way to prevent blowing cool wind (within 3mins):

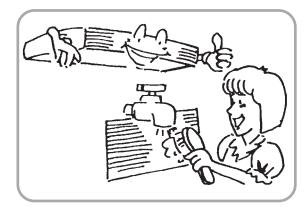
- 1. Heat operation just startedup. 2. After Auto defrosting operation is finished.
- 3. Heating under low temperature.

The climate type of this unit is according to the nameplate.

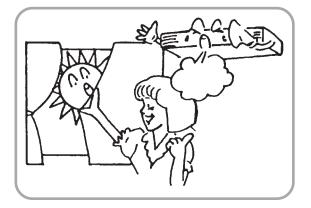
• The temperature should not be set lower than what you need. This would result to increase energy cost.



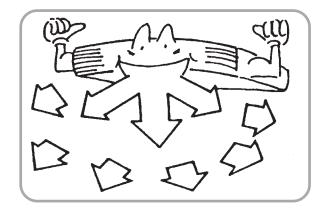
Clean the air filter every week for higher efficiency.



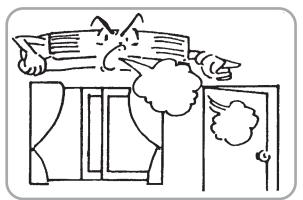
 Draw close curtains or close glass windows when cooling to prevent heat load from sun light which may cause more electricity cost.



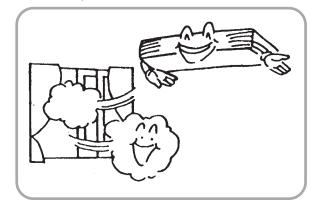
• To distribute cool air through out the room, adjust air flow direction as shown by the arrows (see picture) to diffuse cool air.



 Close window and door while operating the unit to prevent leakage of cooled air to save energy.



In case of ineffective ventilation, open the window to ventilate the room air once in a while but not too long since cooled air will be uselessly drained out.

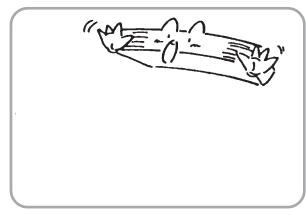




Check electrical system (voltage and frequency). Use the proper power supply indicated on the unit to operate the airconditioner and only fuses with specified capacity. Do not use pieces of wire instead of fuse.



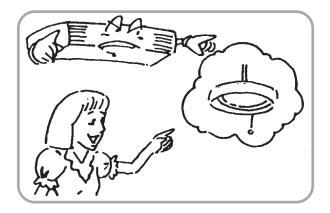
 Do not insert objects into the air inlet or outlet when the airconditioner is running as it may cause damage or personal injury. Also pay special attention when children are around.



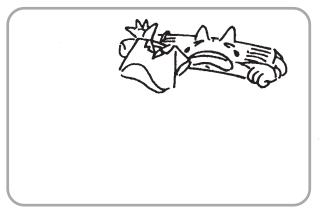
• Do not channel the air flow directly at people, especially infants, aged persons, or patients.



 Turn off the airconditioner if, while running, electricity interference occurs. If the unit is not to be used for a long time, cut off the power supply main switch.



 Do not locate any obstacle against the air flow direction of indoor and outdoor unit. Inefficient performance or malfunction may result.



 Do not locate a heater or any other heat source close to the unit. The heat may deform plastic parts.





Check the following before contact the service man. You may find the solution to your problems. After checking, if it still does not operate, please contact your local dealer.

PROBLEM	CAUSES
No operation	 Check if eletrical wire is damaged & check if breaker switch is still on. Check if the power supply is in order.
	 Check if the timer switch is on or not.
The air conditioner runs but	Check if the preset temperature is too high.
does not cool enough.	Check if the sunlight shines directly into the room.
	Check if the door and window are opened.
	Check if there is anything obstructing the air discharge.
	 Check if the exhaust fan still operates.
	• Check if the air filter is dirty or clogged.
Vapor or mist fume coming out of the unit while running.	 Hot air in the room mixes with cool air. This causes smoke fume.
Inoperative	Loosened or disconnected wire between the unit and the
remote control.	display.
	Check if the batteries are inserted in correct directions
	Check if the batteries are exhaused or not.