

User Manual

Wall Mounted Ductless Split Air Conditioner/ Heat Pump

Climate 5000 Series



WARNING:

All repairs, maintenance and relocation of this unit must be performed by a qualified service technician. Inappropriate repairs can lead to serious injury or product failure.

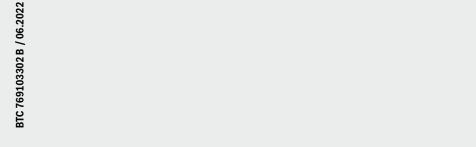








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1 Key to Symbols and Safety Instructions

1.1 Key to Symbols

Warnings



Warnings in this document are identified by a warning triangle printed against a grey background.

Keywords at the start of a warning indicate the type and seriousness of the ensuing risk if measures to prevent the risk are not taken.

The following keywords are defined and can be used in this document:

- ► **DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.
- WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION indicates a hazardous situation which, if not avoided, could result in minor to moderate injury.
- ▶ **NOTICE** is used to address practices not related to personal injury.

Important information



This symbol indicates important information where there is no risk to people or property.

1.2 Safety

Please read safety precautions before installation



Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.



WARNING: ELECTRICL HAZARD

- Installation must be performed by qualified personnel only.
 Inappropriate installation may cause water leakage, electric shock, or fire.
- All repairs, maintenance and relocation of this unit must beperformed by a qualified service technician.
 Inappropriaterepairs can lead to serious injury or product failure.



WARNING: FOR PRODUCT USE

- If an abnormal situation arises (like a burning smell), immediately turn off the unit and pull the power plug. Call your dealer for instructions to avoid electric shock, fire or injury.
- Do not insert fingers, rods or other objects into the air inlet or outlet. This may cause injury, since the fan may be rotating at high speeds.
- Do not use flammable sprays such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.
- ► Do not operate the air conditioner in places near or around combustible gases. Emitted gas may collect around the unit and cause fire or an explosion.
- Do not operate the air conditioner in a wet room (e.g., bathroom or laundry room). This can cause electrical shock and cause the product to deteriorate.
- Do not expose your body directly to cool air for a prolonged period of time.
- ► 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 supervisionor 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.



WARNING:

► This product can expose you to chemicals including Lead and Lead components, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.bessels. P65Warnings.ca.gov.





WARNING: ELECTRICAL HAZARD

- Only use the specified power cord. If the power cord is damaged, it must be replaced by an equivalent power cord type.
- Keep power plug clean. Remove any dust or grime that accumulates on or around the plug. Dirty plugs can cause fire or electric shock.
- Do not pull power cord to unplug the unit. Hold the plug firmly and pull it from the outlet. Pulling directly on the cord can damage it, which can lead to fire or electric shock.
- Do not use an extension cord, manually extend the power cord, or connect other appliances to the same outlet as the air conditioner. Poor electrical connections, poor insulation, and insufficient voltage can cause fire or electric shock.



WARNING: ELECTRICAL HAZARD

- ► Turn off the device and pull the plug before cleaning. Failure to do so can cause electrical shock.
- Do not clean the air conditioner with excessive amounts of water
- Do not clean the air conditioner with combustible cleaning agents. Combustible cleaning agents can cause fire or deformation to the equipment.



CAUTION: ELECTRICAL SHOCK/PROPERTY DAMAGE

- If the air conditioner is used together with burners or other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.
- ► Turn off the air conditioner and unplug the unit if you are not going to use it for a long time.
- ► Turn off and unplug the unit during storms.
- Make sure that water condensation can drain unhindered from the unit.
- ► Do not operate the air conditioner with wet hands. This may cause electric shock.
- ► Do not use device for any other purpose than its intended
- ► Do not climb onto or place objects on top of the outdoor unit
- Do not allow the air conditioner to operate for long periods of time with doors or windows open, or if the humidity is very high.



Illustrations in this manual are for explanatory purposes. The actual shape of your indoor unit may be slightly different. The actual shape shall prevail.



2 Unit Specifications and Features

2.1 Unit Parts

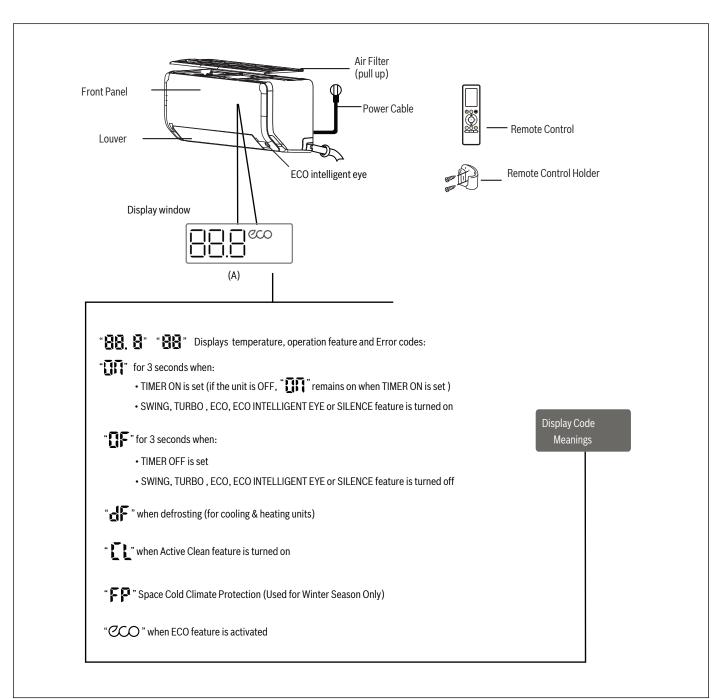


Figure 1



2.2 Achieving Optimal Performance



When your air conditioner is used outside of the following temperature ranges, certain safety protection features may activate and cause the unit to disable.

Optimal performance for the COOL, HEAT, and DRY modes can be achieved in the following temperature ranges. When your air conditioner is used outside of these ranges, certain safety protection features will activate and cause the unit to perform less than optimally.

Optimal performance temperature ranges

		COOL mode	HEAT mode	DRY mode
Room Temperature		17°C - 32°C	0°C - 30°C	10°C - 32°C
Nooni tempera	ature	63ºF - 90ºF	32ºF - 86ºF	50°F - 90°F
	Regular (9K ~ 24K)	-25°C - 50°C	-25°C - 30°C	0°C - 50°C
		-13ºF - 122ºF	-13ºF - 86ºF	32ºF - 122ºF
Outdoor	Max Performance (9K ~ 24K)	-30°C - 50°C	-30°C - 30°C	0°C - 50°C
Temperature		-22ºF - 122ºF	-22ºF - 86ºF	32ºF - 122ºF
	LCAC (30K, 36K)	-15°C - 50°C	-15°C - 30°C	0°C - 50°C
		5ºF - 122ºF	5ºF - 86ºF	32ºF - 122ºF

Table 1



When the outside temperature is below 0°C (32°F), we strongly recommend keeping the unit plugged in at all times to ensure smooth ongoing performance. A base pan heater is used in the outdoor unit to prevent ice build-up. Ice may build up if the unit is unplugged.

To further optimize the performance of your unit, do the following:

- ► Keep doors and windows closed.
- ▶ Limit energy usage by using TIMER ON and TIMER OFF functions.
- ▶ Do not block air inlets or outlets.
- Regularly inspect and clean air filters.

2.3 Other Features

► Auto-Restart

If the unit loses power, it will automatically restart with the prior settings once power has been restored.

Louver Angle Memory

When turning on your unit, the louver will automatically resume its former angle.

▶ Refrigerant Leakage Detection

The indoor unit will automatically display "ELOC" when it detects refrigerant leakage.

Active Clean Function

The Active Clean Technology washes away dust, mold, and grease that may cause odors when it adheres to the heat exchanger by automatically freezing and then rapidly thawing the frost. A "pi-pi" sound will be heard. The Active clean operation is used to produce more condensed water to improve the cleaning effect, and the cold air will blow out. After cleaning,

the internal wind wheel then keeps operating with hot air to blow-dry the evaporator, thus preventing the growth of mold and keeping the inside clean. — When this function is turned on, the indoor unit display window appears "CL", after 20 to 45 minutes, the unit will turn off automatically and cancel Active Clean function.

► ECO Intelligent (Single Zone Only)

The system is controlled intelligently under Intelligent eye mode. It can detect the people's activities in the room. In cooling/Heating/Auto mode, when you are away for 30 minutes, the unit will automatically lower the frequency to save energy. And the unit will automatically start and resume operation if sensing human activity again.

► Humidity Control (Single Zone Only)

The unit is able to increase the comfortable level by lowering humidity in your home. The unit offers a better temperature and humidity control solution in the dry mode, the room temperature can be maintained accurately as set temperature while the moisture is being removed.



The Intelligent Eye and Humidity Control feature may not be available in all configurations.

▶ Sleep Operation

The SLEEP function is used to decrease energy use while you sleep (and don't need the same temperature settings to stay comfortable). This function can only be activated via remote control. And the Sleep function is not available in FAN or DRY mode.

Press the SLEEP button when you are ready to go to sleep. When in COOL mode, the unit will increase the temperature by 1°C (2°F) after 1 hour, and will increase an additional 1°C (2°F) after another hour. When in HEAT mode, the unit will decrease the temperature by 1°C (2°F) after 1 hour, and will decrease an additional 1°C (2°F) after another hour.

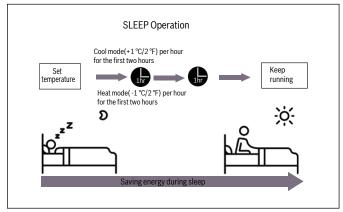


Figure 2



For a detailed explanation of your unit's advanced functionality (such as TURBO mode and its self-cleaning functions), refer to the Remote Control Manual.



For multi-split air conditioners, the following functions are not available: Active clean function, Silence feature, Refrigerant leakage detection function and Eco feature.



2.4 Setting Angle of Air Flow

Setting vertical angle of air flow

While the unit is on, use the SWING button to set the direction (vertical angle) of airflow.

- The horizontal louver will swing up and down automatically when pressing Swing button. Press again to make it stop.
- 2. Keep pressing this button more than 2 seconds, the vertical louver swing function is activated. Press it again to stop the automatic function.
- If continue to press the SWING button, five different airflow directions can be set. The louver can be move at a certain range each time you press the button. Press the button until the direction you prefer is reached.

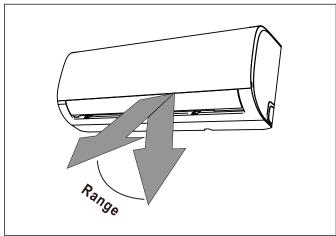


Figure 3

NOTICE:

 Do not keep louver at too vertical an angle for long periods of time. This can cause water condensation to drip from the unit

Setting horizontal angle of air flow

While the unit is on, use the SWING button to set the direction (horizontal angle) of airflow $\,$

- 1. The horizontal louver will swing up and down automatically when pressing Swing button.
- 2. Press again to make it stop.

Louver angles

When using COOL or DRY mode, do not set louver at too vertical an angle for long periods of time. This can cause water to condense on the louver blade, which will drip from the unit.

When using COOL or HEAT mode, setting the louver at too vertical an angle can reduce the performance of the unit due to restricted air flow.

Do not move louver by hand. This will cause the louver to become out of sync. If this occurs, turn off the unit and unplug it for a few seconds, then restart the unit. This will reset the louver.



3 Manual Operation (Without Remote)

3.1 How to Operate Your Unit Without the Remote Control

In the event that your remote control fails to work, your unit can be operated manually with the MANUAL CONTROL button located on the indoor unit. Note that manual operation is not a long-term solution, and that operating the unit with your remote control is strongly recommended.



Unit must be turned off before manual operation.

To operate your unit manually:

- 1. Open the front panel of the indoor unit.
- 2. Locate the MANUAL CONTROL button on the right-hand side of the unit.
- Press the MANUAL CONTROL button one time to activate FORCED AUTO mode. In this mode, the unit will keep running with the temperature set point fixed at 75°F (24°C).
- Press the MANUAL CONTROL button again to activate FORCED COOLING mode. In this mode, the unit will stay at the forced cooling mode for 30 minutes and change to the force auto mode.
- 5. Press the MANUAL CONTROL button a third time to turn the unit off.
- 6. Close the front panel.

NOTICE:

The manual button is intended for testing purposes and emergency operation only. Please do not use this function unless the remote is lost and it is absolutely necessary. To restore regular operation, use the remote control to activate the unit.

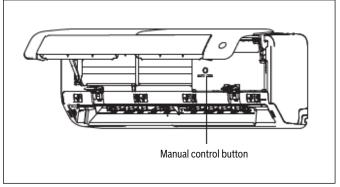


Figure 4



4 Care and Maintenance

4.1 Cleaning Precautions



CAUTION:

- Any maintenance and cleaning of outdoor unit must be performed by qualified service personnel only.
- Any unit repairs must be performed by qualified service personnel only.
- Only use a soft, dry cloth to wipe the unit clean. If the unit is especially dirty, you can use a cloth soaked in warm water to wipe it clean.



CAUTION: ELECTRICAL HAZARD

Always turn off your air conditioner system and disconnect its power supply before cleaning or maintenance.

- Do not use chemicals or chemically treated cloths to clean the unit
- Do not use benzene, paint thinner, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.
- Do not use water hotter than 40°C (104°F) to clean the front panel. This can cause the panel to deform or become discolored.

4.2 Cleaning Your Air Filter

NOTICE:

► Do not touch air freshening filter for at least 10 minutes after turning off the unit.



CAUTION: ELECTRICAL HAZARD

- Before changing the filter or cleaning, turn off the unit and disconnect its power supply.
- ► When removing filter, do not touch metal parts in the unit. The sharp metal edges can cut you.
- Do not use water to clean the inside of the indoor or outdoor unit. This can destroy insulation and cause electrical shock.
- Do not expose filter to direct sunlight when drying. This can shrink the filter.

A clogged air filter can reduce the cooling efficiency of your unit, can also make the air flow irregular and too much noisy, so please clean the air filter as often as necessary. Once the abnormal noise of air flow is heard, please clean the air filter immediately.

- 1. The air filter is on the top of the air conditioner.
- Hold both side of the top filter in the place marked with "PULL", then pull it upwards.

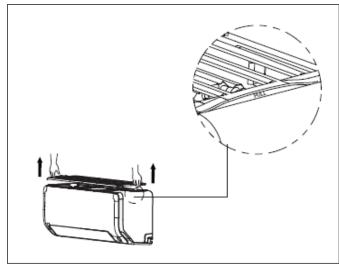


Figure 5

If your filter has small air freshening filters, unclip them from the larger filter.
 Clean these air freshening filters with a hand-held vacuum.

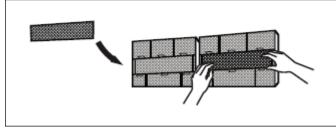


Figure 6

- Clean the large air filter with warm, soapy water. Be sure to use a mild detergent.
- 5. Rinse the filter with fresh water, then shake off excess water.

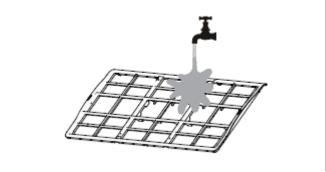


Figure 7

- 6. Dry it in a cool, dry place, and refrain from exposing it to direct sunlight.
- 7. Slide the air filter back into the indoor unit.
- 8. Close the front panel of the indoor unit.



4.3 Air Filter Reminders (Optional)

Air Filter Cleaning Reminder

- After 240 hours of use, the display window on the indoor unit will flash "CL." This is a reminder to clean your filter. After 15 seconds, the unit will revert to its previous display.
- To reset the reminder, press the LED button on your remote control 4 times, or press the MANUAL CONTROL button 3 times. If you don't reset the reminder, the "CL" indicator will flash again when you restart the unit.

Air Filter Replacement Reminder

- ► After 2,880 hours of use, the display window on the indoor unit will flash "nF." This is a reminder to replace your filter. After 15 seconds, the unit will revert to its previous display.
- To reset the reminder, press the LED button on your remote control 4 times, or press the MANUAL CONTROL button 3 times. If you don't reset the reminder, the "nF" indicator will flash again when you restart the unit.

Consult your local dealer for replacement filters.

4.4 Maintenance - Long Periods of Non-Use

If you plan not to use your air conditioner for an extended period of time, do the following:

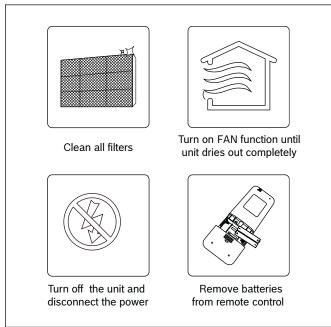


Figure 8

4.5 Maintenance - Pre-Season Inspection

After long periods of non-use, or before periods of frequent use, do the following:

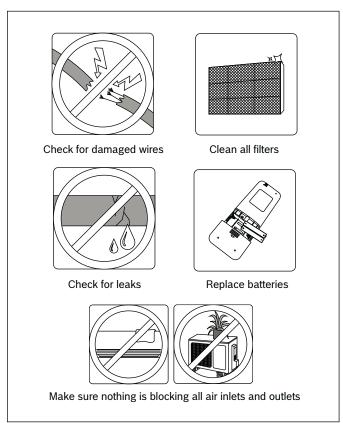


Figure 9



5 Troubleshooting



CAUTION: SYSTEM MALFUNCTION

If ANY of the following conditions occurs, turn off unit immediately!

- ▶ The power cord is damaged or abnormally warm
- ► You smell a burning odor
- ► The unit emits loud or abnormal sounds
- ► A power fuse blows or the circuit breaker frequently trips
- ▶ Water or other objects fall into or out of the unit

DO NOT ATTEMPT TO FIX THESE YOURSELF! CONTACT A QUALIFIED SERVICE PERSON IMMEDIATELY.

5.1 Common Issues

The following problems are not a malfunction and in most situations will not require repairs.

Issue	Possible Causes
Unit does not turn on when pressing ON/OFF button	The Unit has a 3-minute protection feature that prevents the unit from overloading. The unit cannot be restarted within three minutes of being turned off.
The indoor unit emits white mist	In humid regions, a large temperature difference between the room's air and the conditioned air can cause white mist.
The unit changes from COOL/HEAT mode to FAN mode	The unit may change its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating in the previously selected mode again.
The unit changes from COOL/ near mode to Paivinode	The set temperature has been reached, at which point the unit turns off the compressor. The unit will continue operating when the temperature fluctuates again.
The indoor unit makes noises	A rushing air sound may occur when the louver resets its position.
The induor drift makes noises	A squeaking sound may occur after running the unit in HEAT mode due to expansion & contraction of the unit's plastic parts.
Both the indoor and outdoor units emit white mist	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.
	Low hissing sound during operation: This is normal and is caused by refrigerant gas flowing through both indoor and outdoor units.
Both the indoor unit and outdoor unit make noises	Low hissing sound when the system starts, has just stopped running, or is defrosting: This noise is normal and is caused by the refrigerant gas stopping or changing direction.
	Squeaking sound: Normal expansion and contraction of plastic and metal parts caused by temperature changes during operation can cause squeaking noises.
The outdoor unit makes noises	The unit will make different sounds based on its current operating mode.
Dust is emitted from either the indoor or outdoor unit	The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned on. This can be mitigated by covering the unit during long periods of inactivity.
The fan of the outdoor unit does not operate	During operation, the fan speed is controlled to optimize product operation.
Operation is erratic, unpredictable, or unit is unresponsive	Interference from cell phone towers and remote boosters may cause the unit to malfunction. In this case, try the following: Disconnect the power, then reconnect. Press ON/OFF button on remote control to restart operation.
The unit emits a bad odor	The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operations.
	The unit's filters have become moldy and should be cleaned.

Table 2



If a problem persists, contact a local dealer or a qualified service provider. Provide them with a detailed description of the unit malfunction as well as your model number and unit serial number.



5.1 Display Codes (Indoor Unit)

Display*	Information
dF	Defrost
CL	Filter cleaning reminder (power on display for 15 seconds)
CL	Active clean
nF	Filter replacement reminder (power on display for 15 seconds)
FP	Heating in room temperature under 8°C (46°F)
FC	Forced cooling
RP	AP mode of WiFi connection (not available in the US market)
CP	Remote switched off
FH 00/EH 0R	Indoor unit EEPROM parameter error
EL OI	Indoor/outdoor unit communication error
EH 05	Zero-crossing signal detection error
EH 03	The indoor fan speed is operating outside of the normal range
EC SI	Outdoor unit EEPROM parameter error
EC 58	Condenser coil temperature sensor T3 is in open circuit or has short circuited
EC 53	Outdoor room temperature sensor T4 is in open circuit or has short circuited
EC S4	Compressor discharge temperature sensor TP is in open circuit or has short circuited
EC S6	Evaporator coil outlet temperature sensor T2B is in open circuit or has short circuited(for free-match indoor units)
EH 60	Indoor room temperature sensor T1 is in open circuit or has short circuited
EH 61	Evaporator coil middle temperature sensor T2 is in open circuit or has short circuited
ECOI	The outdoor fan speed is operating outside of the normal range
ЕН ОЬ	Indoor PCB/Display board communication error
EL OC	Refrigerant leakage detection
PC 00	IPM malfunction or IGBT over-strong current protection
PC 01	Over voltage or over low voltage protection

Table 3

 $^{{}^{*}\}mathit{The}$ error codes are four digits, displayed two at a time on the LED



6 Disposal Guidelines

Components

Many parts in the Air Conditioner can be fully recycled in the end of the product life. Contact your city authorities for information about the disposal of recyclable products.

Refrigerant

At the end of the service life of this appliance and prior to it's environmental disposal, a person qualified to work with refrigerant circuits must recover the refrigerant from within the sealed system.



CAUTION: CONTAINS REFRIGERANT

- ► Improper disposal of this appliance endangers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.
- ► Disposing of this product correctly will help ensure that the waste undergoes the necessary treatment, recovery and recycling.

NOTES:

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