



**AP310**

**Portable Air Conditioner**

**Owner's Manual**

This owner's manual provides instructions on safe installation, use, and maintenance. Please read it carefully and save it for reference.



<http://www.edgestar.com>

# Table of Contents

<b>Table of Contents</b>	<b>1</b>
<b>Thank You</b>	<b>2</b>
<b>Energy Saving Tips</b>	<b>2</b>
<b>Notes</b>	<b>2</b>
<b>Technical Specifications</b>	<b>3</b>
<b>Safety Precautions</b>	<b>4</b>
<b>Parts and Accessories</b>	<b>6</b>
-Parts	6
-Accessories	7
<b>Installation</b>	<b>7</b>
-Exhaust Hose Installation	8
-Window Installation	9
-Wall Installation	10
<b>Operation</b>	<b>10</b>
-Control Panel	10
-Remote Control	12
-Modes	12
-Water Drainage	13
<b>Maintenance</b>	<b>14</b>
- Filter	15
-Cleaning the Exterior	15
-Long Term Storage	16
<b>Troubleshooting</b>	<b>17</b>
<b>Circuit Diagram</b>	<b>19</b>
<b>Limited Warranty</b>	<b>20</b>

## **Thank You**

Thank you for purchasing an EdgeStar portable air conditioner. It should provide you with years of reliable cooling. Among other features, this versatile unit exhausts all the condensate that it extracts from your air. Additionally, this portable air conditioner features auto restart. If power to the unit is interrupted, the unit “remembers” its previous settings when power is restored.

In order to properly use all features of this portable air conditioner, please read this owner’s manual prior to use and store the owner’s manual for future reference. It is also a good idea to save the box and packaging for this portable air conditioner for off-season storage.

## **Energy Saving Tips**

1. Use the portable air conditioner for the recommended room size. Rooms that are too small can cause the unit to short cycle and work inefficiently. Rooms that are too large will never cool completely.
2. Be careful not to obstruct the air flow coming out of the portable air conditioner. A powerful, unobstructed airflow is crucial for optimum cooling.
3. Keep blinds and curtains closed during the sunniest part of the day.
4. Clean the pre-filter often.
5. Close your fireplace damper, floor grills, and wall grills to prevent cool air from escaping.
6. Avoid opening doors frequently.
7. Note that each additional person in room adds between 100-150 BTU of heat, so the more people in a room, the more cooling capacity is required.
8. Set the portable air conditioner to maximum cooling and high speed airflow when you first start it up, and then adjust the unit to a comfortable setting.
9. To provide cooling to a room, this portable air conditioner must always be used with its exhaust hose attached.

## **Notes**

The portable air conditioner must be plugged into an appropriate power outlet. Refer to the rating label on the back of the unit for more information.

The portable air conditioner is a compressor-driven cooling system. The air conditioner has an anti-overheating safety feature that delays the compressor from starting for three minutes after the air conditioner turns on or when a mode change is made. If the compressor does not immediately start, it is likely because of this feature.

To protect the compressor from overheating or freezing, it will only operate when the ambient temperature is between 64° and 100°F.

In the Cooling or Dehumidifying modes the exhaust hose must be used.

When switching into the Cooling mode, cooling may be temporarily delayed as the unit cools down.

## Technical Specifications

Model	AP310SS
Electrical Power Supply	115 Volts / 60 Hertz
Rated Power Consumption During Cooling	See Label on Unit
Dehumidification Capacity	38 Pints per 24 Hours
Refrigerant	R22
Refrigerant Load	500g
Fan Speeds	3
Airflow (H/M/L)	200/170/150 cfm
Noise Level	52dB(A)
Dimensions (HxWxD)	31"x14"x13.82"
Net Weight	55 Pounds
Timer	0.5-24 hours

### Notes:

- 1) The above data were obtained in the following conditions:  
Cooling conditions: Dry bulb/Wet bulb: 95/75°F according to European standard EN14511-2004
- 2) Operating limits for cooling:  
Maximum ambient conditions: Dry bulb/Wet bulb: 100/80°F  
Minimum ambient conditions: Dry bulb/Wet bulb: 64/57°F

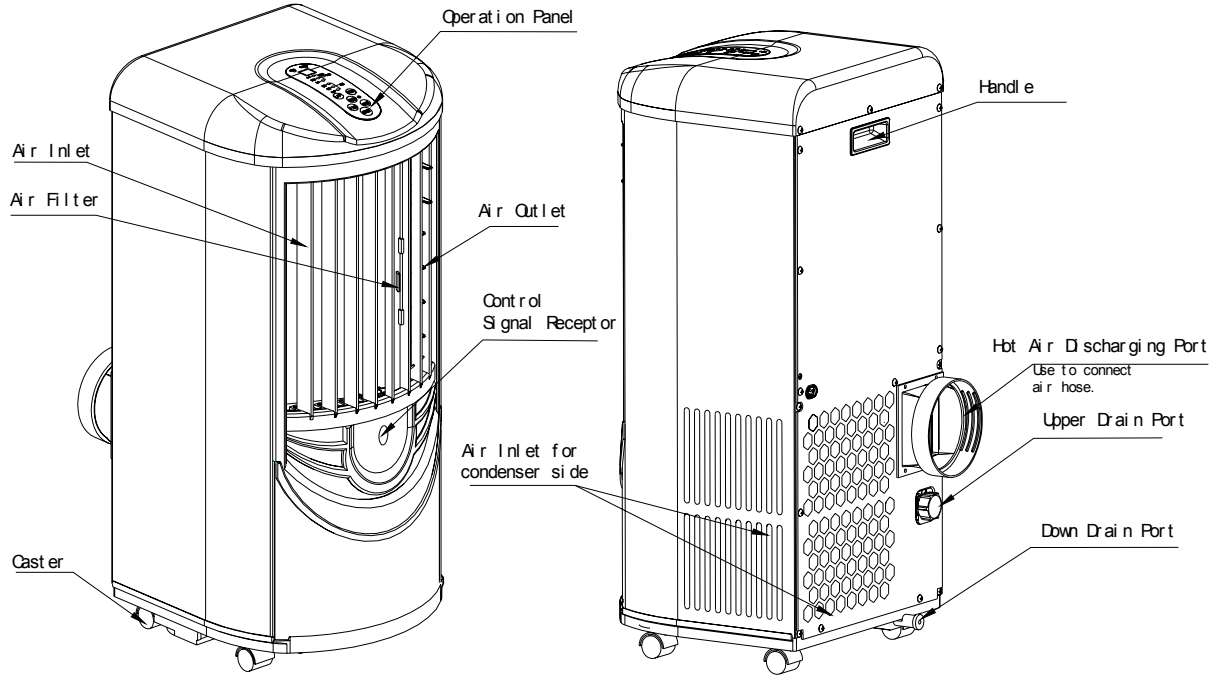
# **Safety Precautions**

1. Do not insert anything into the grill (Fig. A.)
2. Make sure all children are properly supervised around this portable air conditioner (Fig. B.)
3. Do not use an excessively wet cloth or industrial solvents to clean this unit (Fig. C.)
4. Do not damage the power cord (Fig. D.)
5. Do not use the portable air conditioner in the presence of flammable substances or vapors such as alcohol, insecticides, gas, etc (Fig. D.)
6. Do not yank on the power cord or place it near a source of heat. If the electric cord is damaged, it must be replaced by an authorized service agent (Fig. D.)
7. Transport the portable air conditioner in an upright position only. If the unit is tipped over, make sure it stands upright for at least 3 hours prior to turning it on.
8. Always place the unit on a level surface.
9. In order to cool, the hot air from the exhaust port in the rear of the portable air conditioner must be exhausted outside the room.

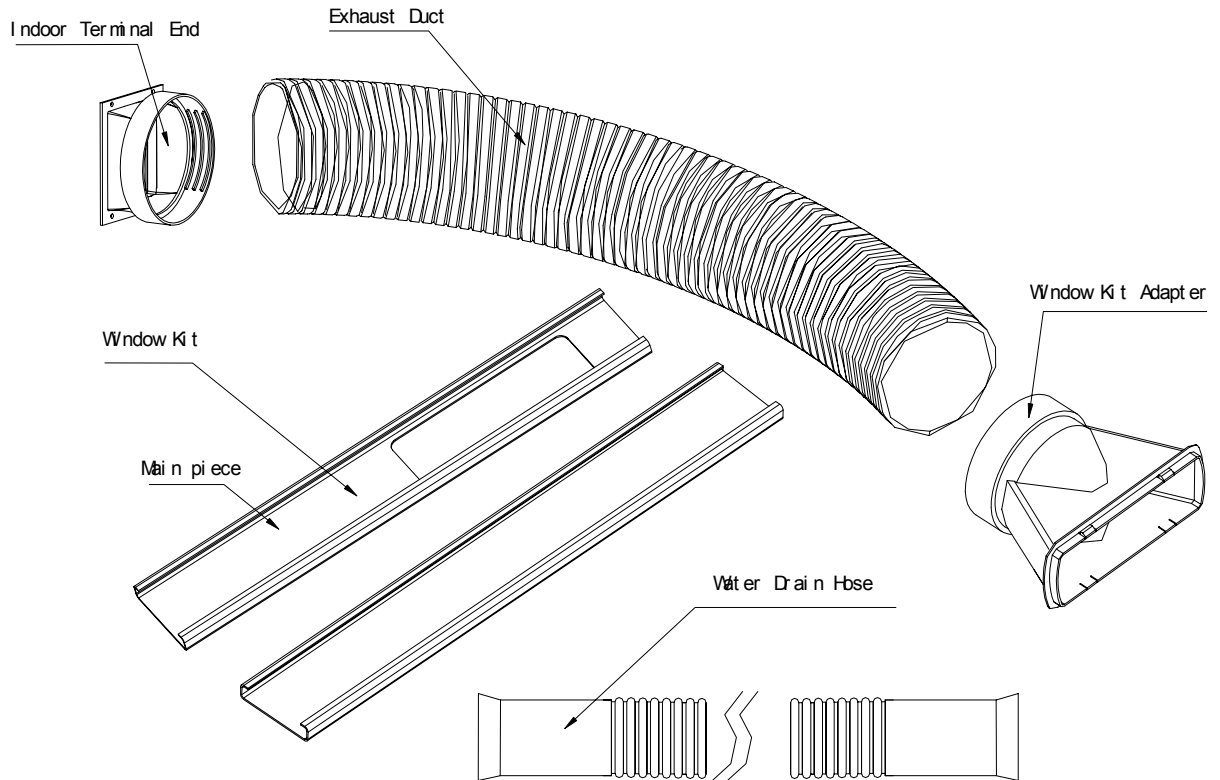
10. Make sure the portable air conditioner is connected to a grounded power outlet.
11. This portable air conditioner is designed to operate in an ambient temperature of 64°-100° F.
12. This portable air conditioner has been designed for residential use.
13. Always turn the portable air conditioner off before unplugging it.
14. Do not use this portable air conditioner for functions other than those described in this owner's manual.
15. Do not tilt the portable air conditioner.
16. Do not cover or obstruct the intake or outlet grills.
17. Do not use the portable air conditioner in a wet room- such as a bathroom or laundry room- to avoid the possibility of shock.
18. Do not bend or crush the exhaust hose while in use.
19. Do not sit on, or place articles on, the portable air conditioner.
20. Do not touch the portable air conditioner with wet or damp hands.
21. Do not let chemical substances come into contact with the portable air conditioner.
22. Do not use the plug to start or stop the unit.
23. Always use the control panel to start or stop the portable air conditioner.
24. Always allow for air flow around the portable air conditioner of at least 20".
25. Always turn off the portable air conditioner when not in use.
26. Always turn the portable air conditioner off and unplug it after use, before cleaning, before carrying out maintenance, and before moving it.
27. If the electrical socket is different from the plug, have a professionally qualified electrician replace the socket with a suitable one. Do not use adapter plugs, multiple sockets, or extension cords.
28. The filter must be used at all times. When removing the filter for cleaning, turn off the unit and unplug it.

# Parts and Accessories

## 1) Parts



## 2) Accessories



## Installation

When you use this portable air conditioner as an air conditioner or a dehumidifier, the hot air should be exhausted out of the room. When the unit is operating in fan-only mode, no exhaust is required. You do not need to hookup the window kit and hot air exhaust hose when you use the unit as a fan.

If you use this portable air conditioner in cooling mode without venting the exhaust outside the room you are cooling, the net temperature in the room will rise, but the unit will still cool the area directly in front of its louvers.

This portable air conditioner ships with the accessories for two primary types of installation: window installation (standard double-hung windows) and wall installation.



## 1) Exhaust Hose Installation

The exhaust hose must be installed onto the unit before any further installation can occur.

- a) Pull out about 6" of one end of the exhaust hose.
- b) Screw the exhaust connector onto the exhaust hose in a clockwise motion.
- c) Snap the exhaust connector into place in the back of the unit.

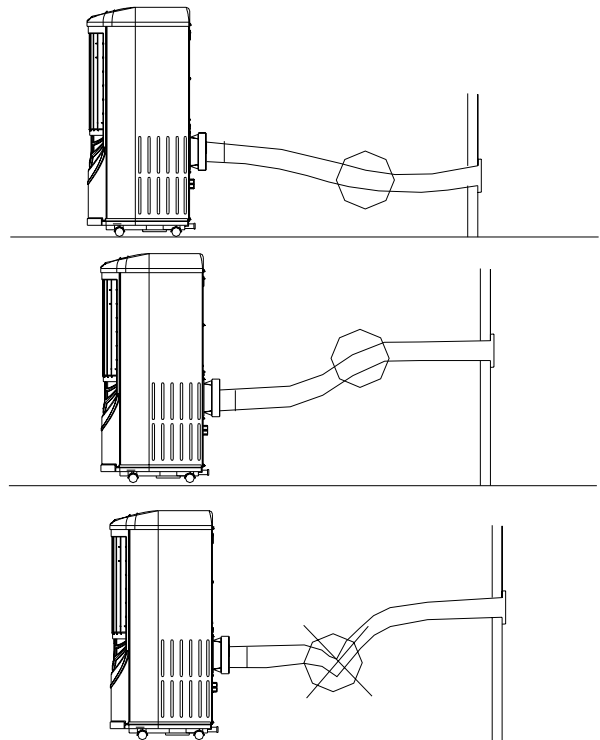
See below for a few notes about exhaust hose installation:

### Note:

#### Mounting the exhaust hose

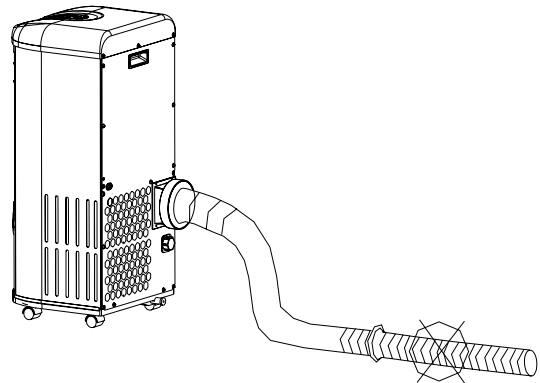
The supplied exhaust hose can be extended from 16 inches to 63 inches long for mounting. For best operation, use the shortest, straightest possible configuration.

Avoid kinks in the hose, which may drastically reduce the cooling power of this unit.

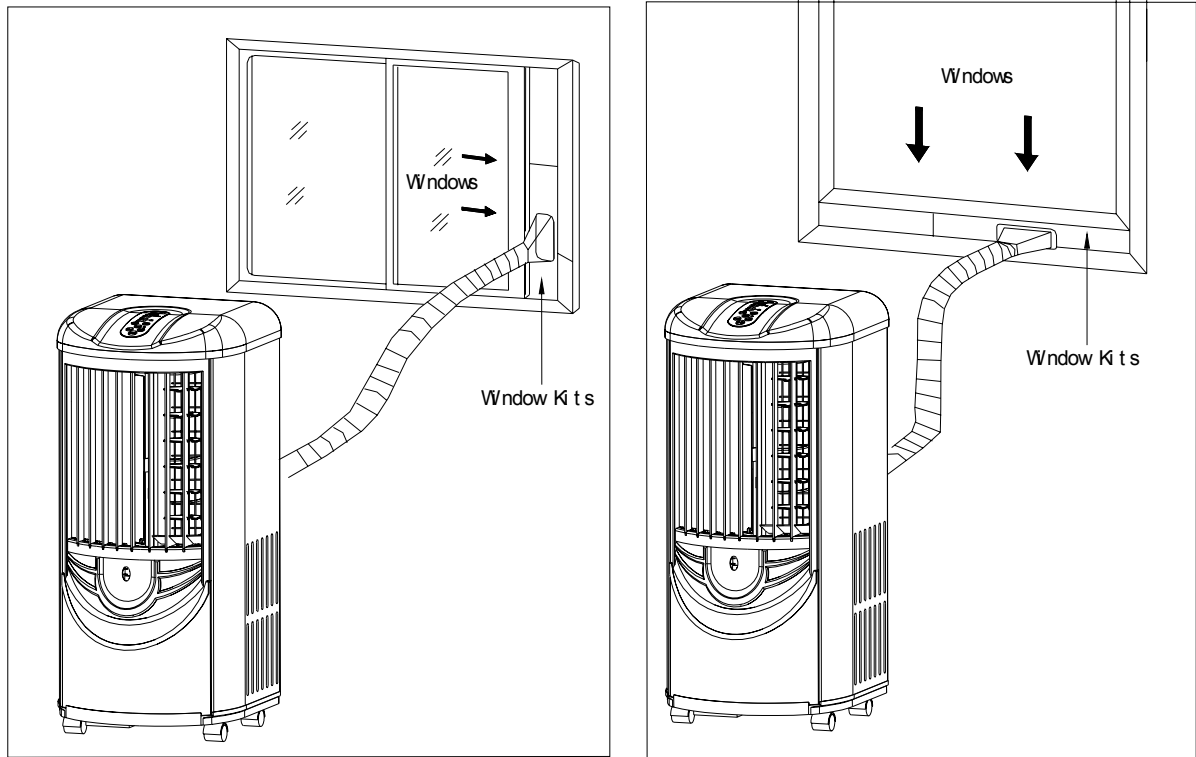


### Warning!

The length of the exhaust hose supplied with this unit is specially designed for it. Do not extend it lest the unit malfunction.



## 2) Window Installation



- a) Make sure the exhaust hose is properly installed onto the portable air conditioner as described above.
- b) Pull out about 6" of the free end of the exhaust hose and install the window kit adapter onto the exhaust hose by screwing it on in a clockwise manner.
- c) Open your window about 5".
- d) Adjust the length of the window kit to the same width (or length) of the window. If necessary, the window kit can be cut to size.
- e) Place the window kit in your window, with the exhaust hole as near as possible to the portable air conditioner.
- f) Close the window on the window kit. For long-term installation or to make the window kit more stable, you may want to screw the window kit into your window frame.
- g) Adjust the length of the exhaust hose and mount the window kit adapter to the window kit.

### Notes:

These installation instructions can also be followed for sliding door installation (a longer window kit will be required).

Installation as detailed above will not allow the window to be properly closed or locked *while the window kit is in place*. Be sure to take appropriate security measures.

### 3) Wall Installation

- a) Make sure the exhaust hose is properly installed onto the portable air conditioner as described above.
- b) Make a hole of 5 1/8" diameter in your wall.
- c) Position the portable air conditioner near the hole.
- d) Feed as much exhaust hose as is needed through the hole.

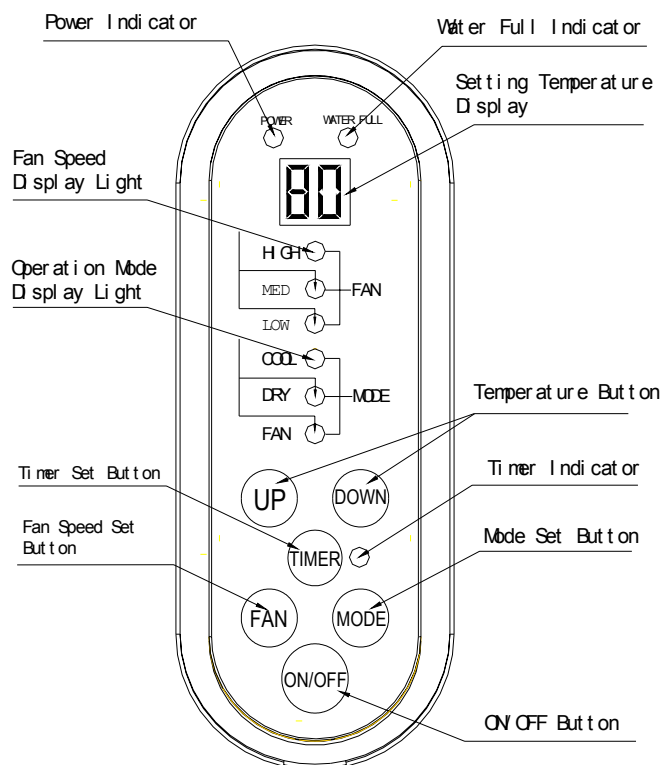
Notes:

Be sure to cover the hole when it is not being used by the portable air conditioner.

Be sure to have a qualified person make the hole to avoid the possibility of injury or of unintended damage to your room.

## Operation

### 1) Control Panel



1)  : On/Off Button

Turns the unit on or off.

2)  : Mode Button

Selects the mode: Dehumidifying, Cooling, or Fan-only.

3)  : Fan Speed Button

Switches between low and high fan speeds.

4)  or : Temperature / Time Buttons



These buttons are used to adjust the thermostat setting up or down, or to adjust the time setting when using the timer.

NOTE: The temperature can be displayed in Celsius or Fahrenheit. To change from one scale to another, press and hold the On/Off button for 20 seconds.

5) : Timer Button



Used to set or cancel the timer. The timer has two functions. When the unit is off, the “On Timer” can be used to turn the unit on after a set time. When the unit is on, the “Off Timer” can be used to turn the unit off after a set time.

**How to set the Off Timer:**

When the unit is on, press the Timer button. “3” will flash in the timer display and the timer indicator will light up. Press the “” or “” buttons while the number is flashing to select the time delay. You may set the unit to turn off in as little as 1 hour or as much as 24 hours, in 1 hour increments. 10 seconds after you last press the Temperature / Time buttons, the timer display will stop flashing.

As time passes, the time in the timer display will decrease in 1 hour increments. When the timer display reaches 0, the unit will turn off.

**How to set the On Timer:**

When the unit is off (but plugged in), press the Timer button. “3” will flash in the timer display and the timer indicator will light up. Press the “” or “” buttons while the number is flashing to select the time delay. You may set the unit to turn on in as little as 1 hour or as much as 24 hours, in 1 hour increments. The unit will start up using the last settings it was on when it was turned off.

As time passes, the time in the timer display will decrease in 1 hour increments. When the timer display reaches 0, the unit will turn on.

**How to alter the time on the timer after it has been set:**

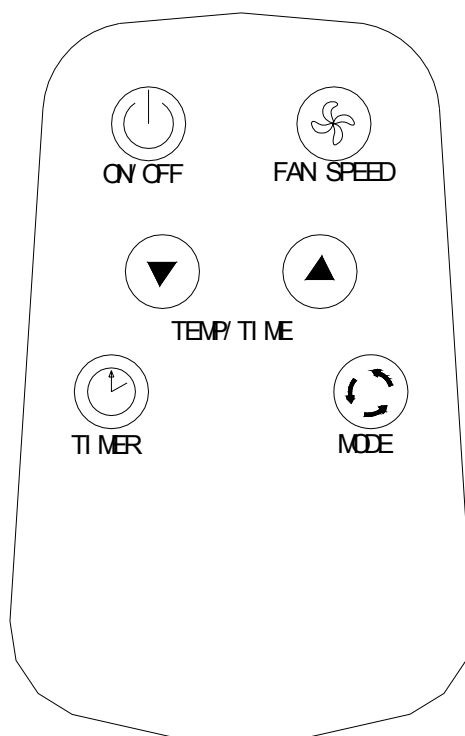
When the timer is set (in either mode), press the timer button again. The time in the timer display will begin to blink. While it is blinking, you can adjust the time using the Temperature / Time buttons. 10 seconds after you last press the Temperature / Time buttons, the timer display will stop flashing.

**How to cancel the timer:**

When the timer is set (in either mode), press the timer button again. The time in the

timer display will begin to blink. While it is blinking, press the timer button again. The time will disappear from the Timer Display and an “F” will be displayed. The timer has now been cancelled.

## 2) Remote Control



The six buttons on the remote control are same as the six buttons on the control panel of the main unit. See the control panel section above for an explanation of how to use the buttons.

The remote control uses a lithium battery model CR2025. The battery must be installed prior to using the remote control.

## 3) Modes

### Dehumidifying

- 1) Plug the power cord into a power outlet.
- 2) Turn on the unit.
- 3) Press the Mode button until the LED next to “Dry” lights up.

During the Dehumidifying mode, the unit will condense water out of the air and exhaust it through the exhaust hose. The ambient temperature in the room will probably drop by a few degrees while using the Dehumidifying mode.

Notes:

The fan always runs on low speed while in the Dehumidifying mode.

If you do not use the exhaust hose in Dehumidifying mode, you must manually drain the water from the unit. Additionally, the ambient temperature in the room will

probably rise by a few degrees (if you do not use the exhaust hose.)  
The Dehumidifying mode will not work in temperatures below 64°F.

### **Cooling**

- 1) Plug the power cord into a power outlet.
- 2) Turn on the unit.
- 3) Press the Mode button until the icon LED next to “Cool” lights up.
- 4) Select the fan speed by using the Fan button.
- 5) Set the thermostat using the Temperature / Time buttons. The thermostat is adjustable between 64°F and 90°F in one degree increments.

Cooling mode cools and dehumidifies your air. If the ambient temperature drops below the temperature you selected, the compressor turns off and the unit functions with the fan only. When the temperature rises above the temperature you selected, the compressor turns on again.

Note:

The exhaust hose must be used in Cooling mode in order to cool a room.

### **Fan-only**

- 1) Plug the power cord into a power outlet.
- 2) Turn on the unit.
- 3) Press the Mode button until the LED next to “Fan” lights up.
- 4) Select the fan speed by using the Fan button.

Fan-only mode is used to circulate the air in your room. No temperature setting is needed.

Note:

Fan-only mode does not require that the exhaust hose be attached.

## **4) Water Drainage**

All air conditioners dehumidify the air as they cool. This portable air conditioner is designed to evaporate and exhaust this condensed water (sometimes called condensate). When using the Cooling or Dehumidifying modes under extremely humid conditions, the internal water tray may fill completely. If this happens, the Water Level indicator on the control panel will light and the compressor will shut off (so that no water is spilled on the floor.) The unit will continue operating and exhausting water until the water level lowers. Then the compressor will turn back on and the unit will begin cooling as normal.

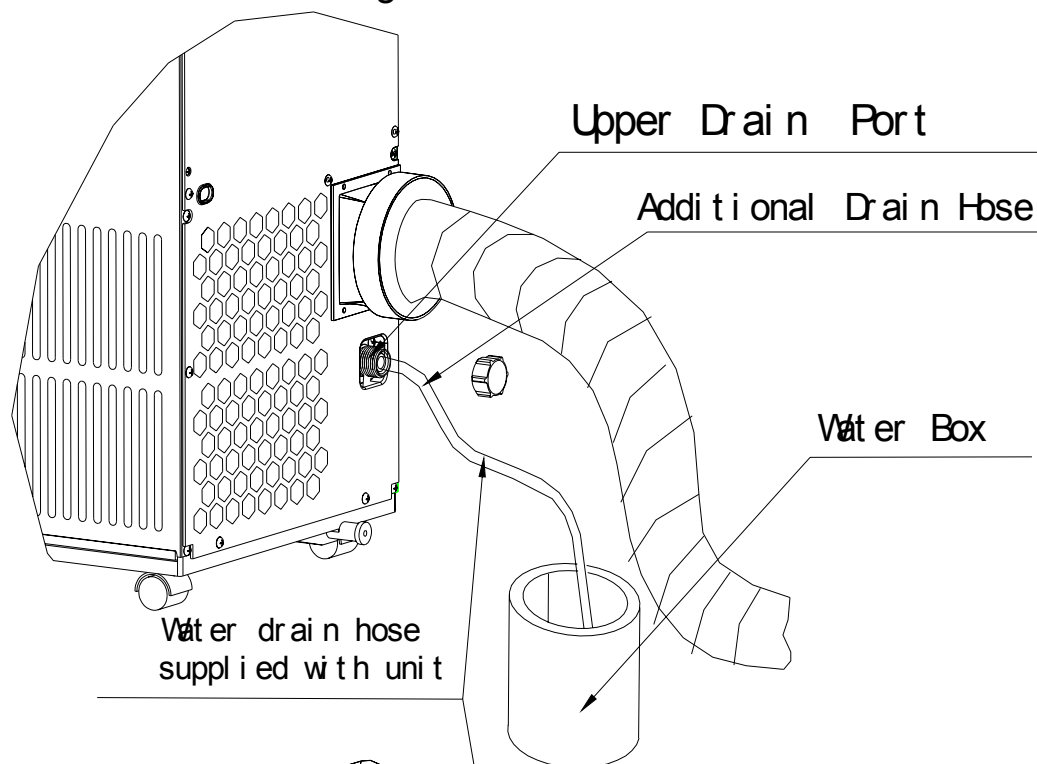
If you want to begin cooling or dehumidifying right away without waiting for the unit to dispose of the excess condensate itself, you may manually drain the unit.

### **Manual Drainage**

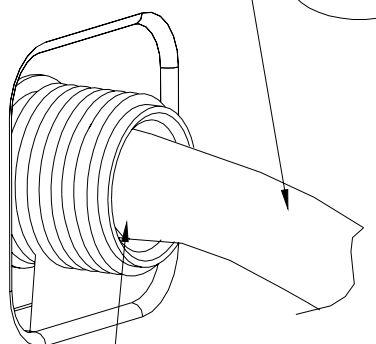
Turn the unit off. Unscrew the cap from the upper drain port. Connect a drain hose to the upper drain port (one is included with this unit, or you may use a garden hose.) Put the other end of the drain hose in a bucket. Turn the unit back on. The internal drain

pump will pump water into the bucket. When the flow of water stops, you can turn off the portable air conditioner. Remove the drain hose and reinstall the drain cap. The unit will now be almost completely drained. If you were draining the unit to allow it to continue cooling or dehumidifying, simply turn the unit back on to the settings you want.

Using the water drain hose supplied with unit, which is about six feet long.



How to install the hose



The end of the hose should cover the inner port and inside the screw connector.

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## Maintenance

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Make sure the unit is turned off and unplugged before performing any maintenance.

Do not immerse the unit in water or other liquids.

Do not pour liquids into the unit.

Some parts may have sharp edges. Be careful to avoid cutting yourself.

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## **1) Filter**

This portable air conditioner has a washable pre-filter that filters contaminants out of the air. This pre-filter should be cleaned about once every two weeks or as needed. If it becomes clogged with dust, the efficiency of the unit will be lowered.

- 1) Remove the filter from the filter compartment in the front of the portable air conditioner.
- 2) Wash the filter by immersing it in warm water and lightly scrubbing it with a gentle soap. Do not put the filter in water warmer than 104°F.
- 3) Rinse the filter thoroughly and dry it. The filter must be completely dry before it can be put back into the portable air conditioner.
- 4) Once the filter is completely dry, reinsert it into the unit.

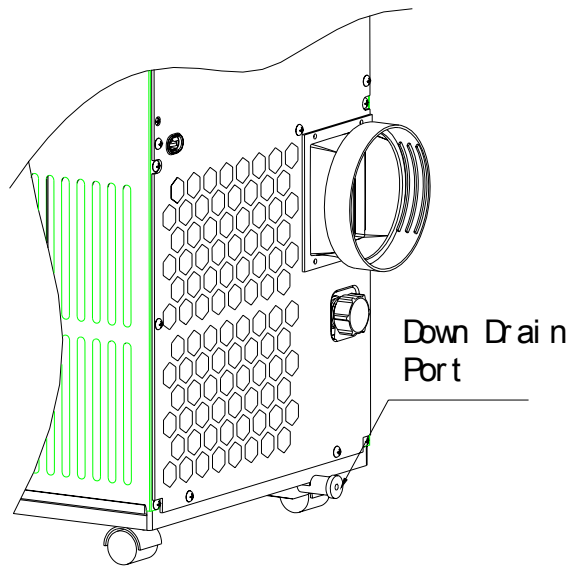
## **2) Cleaning the Exterior**

Wipe the plastic parts with a slightly damp cloth to clean them.

Use stainless steel cleaner to clean the stainless steel panels.



### 3) Long Term Storage



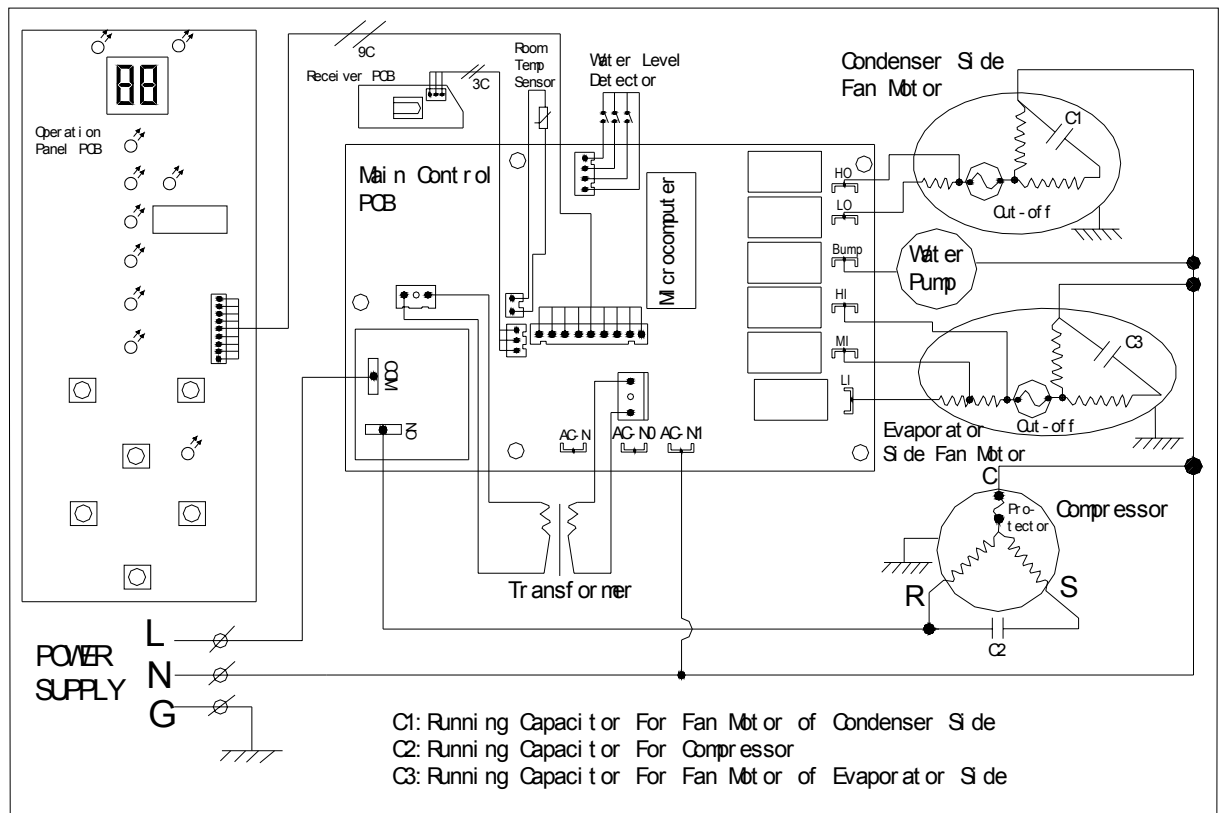
- 1) On a warm day, run the unit in Fan-only mode for a few hours to exhaust all condensate and to completely dry out the interior.
- 2) Turn off the unit and unplug it.
- 3) Empty any residual condensate water by unplugging the lower drain port and allowing any water accumulated there to drain out. Reinstall the rubber stopper after doing this.
- 4) Detach the exhaust hose and collapse it to its smallest size.
- 5) Take out the filter. Clean and dry it (see the instructions above), and reinstall it.
- 6) Cover the portable air conditioner to protect it from dust. It is generally a good idea to store the unit in its original box and packaging.
- 7) Store the unit in a cool, dry place. Do not stack heavy things on top of it.

# Troubleshooting

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
The portable air conditioner does not turn on	There was a power failure	Restore the power supply
	The plug is not correctly inserted into the socket	Insert the plug correctly into the socket
	The automatic switch, line fuse, or breaker has been tripped	Flip the switch, change the fuse, or turn the breaker back on. Also note that you may have too many appliances drawing power on one circuit, so you may need to move some onto another circuit
	The power supply voltage is too low	Move the unit onto another circuit with the correct voltage
	The power cord is damaged	Call for service. Only authorized service man should replace damaged plugs
	The LCDI plug for the unit is tripped	Press the Reset button on the portable air conditioner's plug
The unit turns on, but the compressor does not turn on- the fan runs, but there is no cooling	The room temperature is outside of the operational tolerances of the unit	This unit is designed to work in ambient temperatures of 64°F to 100°F
	The Cooling mode is not on	Press the Mode button until the Cooling icon is shown on the control panel
	The compressor has not turned on yet because of its time delay	Give the compressor 3 minutes to turn on after the Cooling mode has been selected
	The set temperature is too high	Reset the temperature lower
	The internal water reservoir is full	Check the water level indicator on the control panel. If it is lit, either manually drain the water or allow the unit to exhaust the water itself. Then cooling will resume
The air coming out of the unit is not very cold, or the airflow volume is weak	The filter is dirty or obstructed	Clean the filter
	The air intake is obstructed	Make sure there is at least 20" of clearance from the air intake (on the front of the unit)
	The exhaust duct is too long	Make the exhaust duct as short as possible

	The exhaust is obstructed	Check the exhaust duct. Remove any obstructions
	The unit is set in dehumidifying mode	Set the unit in cooling mode
	The unit is set to low fan speed	Set the unit to high fan speed
The unit has worked for a long time, but the room is not cold enough	Windows or doors are open	Close all windows and doors into the room when the unit is cooling
	There are too many people in the room	You may need additional cooling or another air conditioner
	There is direct sunshine into the room	Close curtains and blinds. Try to minimize the amount of direct sunlight into the room
	The room is a kitchen, with many heat-producing appliances	You may need additional cooling or another air conditioner
	There is a server in the room	You may need additional cooling or another air conditioner
	The room is too large	You may need additional cooling or another air conditioner
	There are many electrical appliances in the room	You may need additional cooling or another air conditioner
	The room is not well insulated	You may need additional cooling or another air conditioner, or you may need to add insulation
The unit is very noisy	The unit is not level	Make sure the unit is level
	The compressor is bad	Call for service
	The floor underneath the unit is uneven	Move the unit to a location with a level, even floor
The unit is leaking water onto the floor	The rubber drain stoppers are not installed	Install the rubber drain stoppers
	The unit was tilted, or is not level	Make use the unit remains level
The evaporator coils freeze up	The unit is unable to work as efficiently as it needs to	Make sure the exhaust hose is not over-extended or kinked, that the filter is clean, and that nothing is obstructing any of the air inlets
	The ambient temperature is too cold	Use the unit only when the ambient temperature warms up
The unit shows an error code beginning with "E"	Various factors	Call for service
Other issues	Various factors	Call for service

# Circuit Diagram



## **Limited Warranty**

This EdgeStar product is warranted to be free from defective workmanship and materials for the first year following the date of original purchase. Replacement parts will be supplied free of charge for the first year following the date of original purchase. Labor will be performed free of charge for the first 90 days following the date of original purchase.

### WHAT IS COVERED:

This warranty applies to the original purchaser only, and only covers defects in workmanship experienced during operation of the product under normal service, maintenance, and usage conditions. This warranty applies to the purchase and use of this product in residential settings within the United States of America.

### WHAT IS NOT COVERED:

The following limitations apply to the coverage of this warranty:

Optional accessories, attachments, and appearance items are excluded from warranty coverage, as is shipping damage, and any damage caused by improper voltage or any other misuse, including abnormal service, handling, or usage.

This warranty does not cover normal wear and tear on parts or replacement of parts designed to be replaced, e.g. filters, etc.

This warranty does not cover service trips to deliver, pick-up, repair, or install the product, or to instruct in proper usage of the product.

Damages or operating problems resulting from abuse, operation outside environmental specifications, uses contrary to instructions provided in the owner's manual, accidents, vermin, fire, flood, improper installation, unauthorized service, acts of God, unauthorized installation or modification, or commercial use are excluded from warranty coverage.

This warranty does not cover labor incurred 91 days or more after the date of original purchase.

This warranty does not cover use of EdgeStar products in commercial settings.

### DESCRIPTION OF WARRANTY SERVICE:

All defective product components covered by this warranty will be repaired or replaced, at EdgeStar's option, free of charge on a mail-in basis to EdgeStar's authorized repair facility during the first 90 days from the date of original purchase.

All defective product components covered by this warranty will be repaired or replaced, at EdgeStar's option, on a mail-in basis to EdgeStar's authorized repair facility during the time period beginning on the 91<sup>st</sup> day from the date of original purchase and ending one year from the date of original purchase. During this time period, parts will be supplied free of charge, but labor charges will apply.

All replacement parts and units will be new, remanufactured, or refurbished.

All products and components replaced by EdgeStar under warranty service become the property of EdgeStar.

### OBTAINING WARRANTY SERVICE:

Contact EdgeStar for troubleshooting assistance and warranty service authorization at 1-866-319-5473. Please have your order receipt available to confirm the date of purchase.

Once an EdgeStar authorized representative has confirmed that your product is eligible for warranty service, the product must be returned to an EdgeStar authorized repair facility.

The purchaser is solely responsible for prepaying all shipping related costs to and from the repair facility.

EdgeStar is not responsible for damage resulting from shipper mishandling or improper packaging. Do not return defective product to the place of purchase.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. NEITHER THE MANUFACTURER NOR ITS DISTRIBUTORS SHALL BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY NATURE, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, OR ANY OTHER DAMAGE WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.



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