



PDW45E

Countertop Dishwasher

Owner's Manual

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

Thank you for purchasing this Koldfront product. We are glad you chose us. We believe that your purchase of this product opens a relationship between you and Koldfront. We will provide the customer support needed to nurture that relationship.

This manual contains important information regarding the proper installation, use and maintenance of your product. Following this manual will ensure that your product will work at its peak performance and efficiency.

Please save the original product packaging in case you need to safely transport your product.

For Your Records:

Please write down the model number and serial number below for future reference. Both numbers are located on the ratings label- which is usually on the back of your unit- and are needed to obtain warranty service. You may also want to staple your receipt to this manual as it is the proof of your purchase, and is also needed for service under your warranty.

Model Number: _____

Serial Number: _____

Date of Purchase: _____

To better serve you, please do the following before contacting customer service:

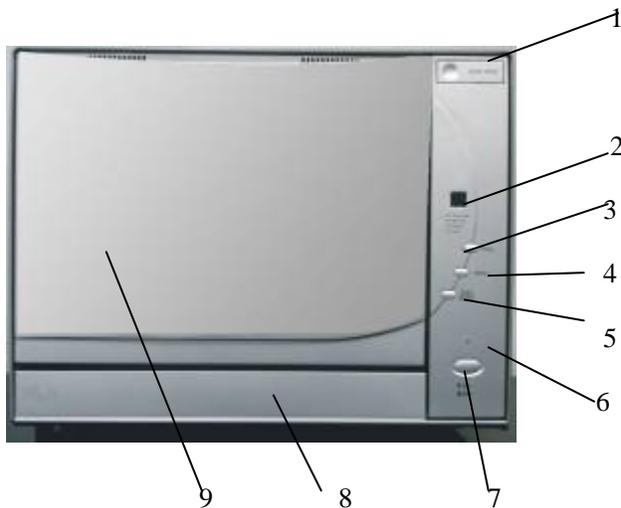
- If you received a damaged product, immediately contact the dealer that sold you the product.
- Read and follow this instruction manual carefully to help you install, use and maintain your product.
- Read the troubleshooting section of this manual as it will help you diagnose and solve common issues.
- Visit us on the web at <http://www.edgestar.com> for product guides, additional troubleshooting resources and up-to-date information. If you need service, our friendly customer service representatives are available via email at service@edgestar.com or by telephone at **1 (866) 319-5473**.

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Components

Front view



Note that your dishwasher may vary slightly in appearance from this unit. The functionality should be the same.

Back view



Inside view



- | | | |
|-------------------------|----------------------|--|
| 1. Door lock button | 6. Power light | 11. Filter assembly |
| 2. Digital LED display | 7. Power button | 12. Rinse aid dispenser |
| 3. Program button | 8. Lower front panel | 13. Water inlet connection (Inlet valve) |
| 4. Start/pause button | 9. Door | 14. Drain hose connection |
| 5. Delayed start button | 10. Spray arm | 15. Power Cord |

Important Safety Instructions

WARNING

When using your dishwasher, follow basic safety precautions, including the following:

- Please read the installation and operating instructions carefully before using the dishwasher for the first time.
- These instructions contain very important information with regard to installation, use and maintenance of your dishwasher.
- The manufacturer will not be responsible for problems caused by ignoring these safety and cautionary instructions.
- This dishwasher is designed for normal household use.
- Do not use the dishwasher for industrial and commercial use, or any other purpose.
- This dishwasher must be plugged directly into a grounded electrical outlet (Do not use an extension cable or cord.)
- Only suitable household utensils should be placed in the dishwasher. (Please avoid utensils that are not heat-resistant, are decorated metal, etc.)
- Keep detergents away from children.
- If your hot water temperature in your pipes exceeds 149°F adjust the your home's water heater setting. If your hot water temperature exceeds 149°F, the dishwasher must be connected to a cold water source.
- Do not use any kinds of solvents in your dishwasher. They may cause an explosion or fire.
- Do not spray water into the appliance. This may cause the failure of electrical parts or electric shock.
- Do not push down or sit on the door when the door is opened. This may cause deformation of the door or a risk of personal injury.
- Do not use dishwasher detergent for hand washing. Dishwasher detergent should be used for dishwashers only.
- If the power supply cord is damaged, it must be replaced by a technician, service agent or a similarly qualified person.
- This appliance should be positioned so that the plug is accessible.
- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.
- Dishwasher detergents are strongly alkaline. They can be extremely dangerous if swallowed. Avoid contact with skin and eyes and keep children away from the dishwasher when the door is open. Check that the detergent receptacle is empty after completion of the wash cycle.
- Connect the dishwasher to your water source using new hoses. Old hoses should not be re-used.

WARNING

Instructions below advise about a risk of fire, electric shock, or injury to persons.

Electrical Instructions:

An electrical supply of 120 volts AC only, 60Hz is required. Make sure that a suitable electrical outlet is located close to the dishwasher. **For your personal safety, the appliance must be grounded.**

Installation Instructions

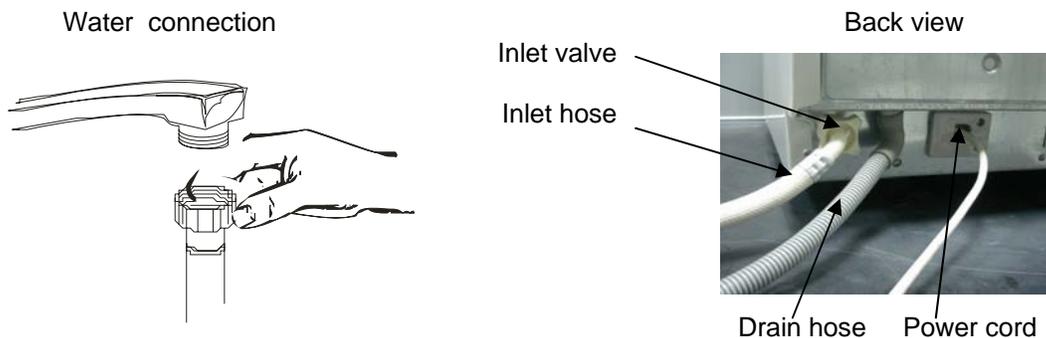
Remove All Packing Materials Carefully

1. The water inlet hose from the machine terminates in a $\frac{3}{4}$ " female connector. Connect the hose to $\frac{3}{4}$ " male connector. We suggest that your water outlet have a stopcock close by in the pipe. It is best to connect the machine to a hot water supply, but a cold water supply will also suffice. Connect the straight connector from the inlet hose to the water supply securely. Connect the other end (bent connector) to the water inlet valve at the back of the dishwasher cabinet. Do not over-tighten the hose connections – this may damage the threads.

Note: If you so desire, you may connect the water inlet hose on to the kitchen sink tap. Connect the water supply hose to a threaded $\frac{3}{4}$ " quick-connect adapter and make sure that it is fastened tightly in place.

2. Prepare the drain hose so that it is hooked at the end furthest from the dishwasher. Use the supplied plastic U-bend fitting provided for this purpose. The end of this should be dropped into a drainage standpipe, the maximum height of which should be no more than 6" above the base of the dishwasher. To allow for an air gap around the end of the drain hose, the diameter of the standpipe should be at least 30 mm. Connect the other end of the drain hose (L shaped) to the drain port connection at the back of the dishwasher cabinet. Tighten the drain hose end on to the drain port using the metal clip included in the package.

Note: You may also drain this dishwasher into a sink- just make sure that the drain line is secure- so that water does not leak onto your counter or floor.



3. Turn on the water supply and check for leaks. If leaks are located, immediately shut off the water supply and check the hose connections. Tighten the connections if necessary.
4. If for any reason you are unable to stop the leak yourself please seek advice from a qualified plumber.
5. Make sure there is an electrical outlet within easy reach of the machine. The power cord is about 83" long.
6. The dishwasher must be installed on a solid, level surface.
7. To level the dishwasher, adjust the 4 leveling legs (feet) under the dishwasher. Unscrew them to make them longer. Screw them in tighter to make them shorter.

Water Pressure

The machine can be used with a hot water supply or cold water supply. A hot water supply is preferred.

For best operating results, incoming water pressure should be between 0.03 ~ 1Mpa. The incoming water supply for the dishwasher is monitored by a 'low water pressure switch', so if the water pressure is too low (or if there is no water supplied to the machine), the dishwasher will stop.

For Best Results:

Your dishwasher cleans by spraying a mixture of hot clean water and detergent (under pressure) against the soiled surface of dishes. The water is pumped through a rotating spray arm, drained through a filter removing food and soiled particles and then pumped back through the spray arm.

Soiled water is pumped out and replaced with clean water at the end of each cycle. For best cleaning results, the water temperature must be at least 131°F. To prevent dishwasher damage, the temperature of the incoming water supply should not exceed 149°F.

NOTE: "Hard water" will adversely affect the wash performance of your dishwasher. Hard water will also contribute to "lime" (white filmy substance) deposits and/or "scaling" on the stainless steel surface of the dishwasher tub and the heater element (located in the sump underneath the removable filter screen). To minimize the above conditions, we recommend periodically rinsing the inside of the dishwasher (while empty) with 1 cup of white vinegar (at least once a week).

Disconnecting the Dishwasher

- Turn off the water supply at the stopcock.
- Disconnect the power supply cord.
- Disconnect the inlet hose assembly from the water supply. When the dishwasher is not in use, you can store the hose on the hang bracket located on the rear wall of the dishwasher cabinet.
- Appliances that are being thrown away should be made unusable. Pull off the plug and make the door lock and latch unusable

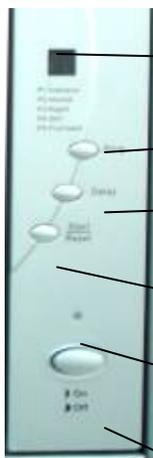
! Important!

Once you open the water supply line, (even if it is closed immediately thereafter) the water inlet hose will be pressurized. This means there may be some water splashed out when the hose is disconnected. Take the necessary precautions.

! Caution!

Do not let children disconnect (or use, unsupervised) the dishwasher. Close supervision of children is always important around appliances.

Control panel and the LED display



1. Digital LED display window : Displays washing program indicators, error codes
2. Program button : Press the button to select the washing program
3. Delayed start button: : Press this button to set the number of delayed hours for the beginning of the washing cycle. You can delay the start of washing up to 24 hours. Each press on this button delays the start by one hour.
4. Start/pause button : Press this button to start or pause the dishwasher. Once pressed, one of the programs will blink. 10 seconds later, the cycle starts.
5. Power light : This light comes on when the unit is on.
6. Power button : Turns the unit on or off

Loading Your Dishwasher

- 4 Dinner Plates
- 4 Soup Plates
- 4 Dessert dish
- 4 Saucers
- 4 Cups
- 4 Tea spoons
- 1 Oval platter
- 1 Small serving dish
- 1 Dish
- 4 Glasses
- 4 Soup Spoons
- 4 Forks
- 4 Knives
- 4 Dessert Spoons
- 2 Serving Spoons
- 1 Serving Fork
- 1 Gravy ladle



The dishwasher is designed to receive a standard 4 piece plate setting consisting of the above.

NOTE: for ease of loading/unloading large size dinner plates from the dish rack it may be necessary to (temporarily) remove the cutlery basket. When loading/unloading is complete, return the cutlery basket to its original position.

Preparing Your Dishes for Washing

Scrub off all solid food particles from the dishes.

- Remove excessive quantities of oil or grease.
- Empty any liquids from glasses and cups.
- NOTE: Dishes with dried-on foods are more difficult to wash and may not come clean in a normal wash cycle.
- Arrange all items with recessed or curved sections on a slant to drain water away.

When loading items to be washed:

- Load sharp items so that they are not likely to damage the door seal.
- Load sharp knives with the handles up to reduce the risk of cut-type injuries
- Do not load plastic items unless they are “dishwasher safe”.

- Do not load glasses over the dish rack pins. Glasses loaded over dish rack pins are not properly supported and are likely to get damaged.
- Items with wooden or bone handles and items joined together with glue are unsuitable as they cannot resist hot water.
- Do not touch the heating element during or immediately after use.
- Do not operate your dishwasher unless all enclosure panels are properly in place.
- Do not tamper with the controls.
- Do not abuse, sit on, or stand on the open door or dish-rack of the dishwasher. The machine may topple over.
- Protect the cables and hoses from high temperatures.
- To reduce the risk of injury, do not allow children to operate or play with the dishwasher.

Detergent and Rinse Aid Use



The indentation for the detergent

Use only detergent specifically made for use in dishwashers, as other types can cause over-sudsing. If your detergent is old and/or lumpy, throw it away. Old detergent loses its washing power. Lumpy detergent won't dissolve.

Please put the detergent in the indentation on the inner side of the door.

How much detergent to use

That depends if your water is 'hard' or 'soft'. Generally, hard water requires more detergent to get dishes clean while soft water requires less detergent. The recessed detergent indentation located on the inside door panel will hold approximately 12g of detergent. Follow the detergent manufacturer's guidelines for appropriate detergent quantity.

Using a Rinse Aid

Add the rinse aid into this dispenser.



You can help prevent unsightly spots on dishes and glassware and reduce drying time by using a rinse aid. A rinse aid is specially formulated to rinse away food and detergent residue that can be left behind on your dishes. Used regularly, a rinse aid will automatically provide you with cleaner dishes every time you wash.

To fill the rinse aid dispenser, unscrew the dispenser cap located on the inner door (or on the back of the tub, depending on your model). Add the rinse aid slowly into the dispenser until it just reaches the bottom of the filling cap inside the dispenser opening. Then replace the cap.

Operating Instructions

To operate the dishwasher:

Make sure the inlet and drain hoses are correctly and securely connected.

1. Push the door release button to open the door.
2. Check to make sure that the filter (bottom of the machine, above the heating element) is in the right position.
3. Place the dishes on the dish rack and the cutlery inside the cutlery basket.
4. Check to make sure that the rotating spray arm can turn freely all the way around. If necessary, remove any obstacles.
5. Fill the detergent in the recessed area on inner door panel. (12g maximum).
6. Close the door securely
7. Open the water supply.
8. Push the power (on/off) button.
 - **Button pushed in = power on**
 - **Button pushed in = power off**
9. The LED display and the power light will illuminate indicating the machine is receiving power. Select the desired program by press the program button. The LED will display the washing code you select. The LED will display the default washing mode when it receives power.
 - **P1= Intensive Wash**
 - **P2=Normal Wash**
 - **P3=Rapid Wash**
 - **P4= Eco Wash**
 - **P5=Pre-Wash**
10. Press the start/pause key to start. The LED will flash the program selected and the washing status during operation.
11. At the end of the cycle the dishwasher will stop running, the LED will stop flashing, and the dishwasher will beep. The LED will turn to black (off) when the machine does not run or operate for 10 minutes or more. The power light will remain illuminated until the power (on/off) button is switched off.
12. The dishwasher is designed to stop if the door is opened accidentally during operation.

13. You can select another program during operation by pressing the start/pause key first, then pressing the program key to the desired program, and pressing the pause/start key again to start the new program.
14. After washing, dishes should be allowed to cool down for about 15 minutes so they are not too hot to handle. Dishes will cool more quickly if the door is opened slightly.
15. After unloading the dishwasher, remove the filter, clean off any bits of food, and put the filter back into place.

NOTE: At the beginning of each cycle, the dishwasher always starts in the “drain” mode. This is because the drain pump always retains a small amount of water (in the sump) from the previous cycle. This is necessary to keep the pump primed. Therefore, do not be alarmed if you see a small amount of water being pumped out of the drain hose prior to the start of the regular wash cycle. This is normal.

Program Summary/Selection

Intensive Wash

Water Temperature: Wash129/Rinse264°F
 Program Duration + Heating Time: 125minutes
 Water Consumption: 11 quarts

Normal wash::

Water Temperature: Wash125/Rinse152°F
 Program Duration + Heating Time: 130 minutes
 Water Consumption: 11 quarts

Rapid wash:

Water Temperature: Wash120/Rinse130°F
 Program Duration + Heating Time: 70minutes
 Water Consumption: 10 quarts

Eco Wash:

Water Temperature: Wash129/Rinse264°F
 Programme Duration + Heating Time: 120 minutes
 Water Consumption: 11 quarts

Pre-Wash :

Water Temperature: Incoming Water Supply
 Programme Duration Time: 12 minutes
 Water Consumption: 5.7 quarts

(Note: the washing time may vary according to the incoming water temperature and the ambient temperature).

Technical Data and Troubleshooting

Technical data

Power input	1160W
Outer dimensions (HxWxD)	17.1"x18.9"x22.5"
Weight	50 pounds
Max. Water Consumption	2.75 gallons
Water pressure	0.03~1MPa
Controls	Digital
Detergent dosage	12g

Power input	1160W
Outer dimensions (HxWxD)	17.1x18.9"x22.5"
Weight	50 pounds
Max. Water Consumption	2.75 gallons
Water pressure	0.03~1MPa
Controls	Digital
Detergent dosage	12g

Error codes

Your dishwasher has an error code display function. If the appliance malfunctions, an error code will often be shown in the LED display.

CODE	MEANS	POSSIBLE PROBLEM
E1	Abnormally long water fill time	Low water pressure
E2	Abnormally long water drain time	The drain line is too long or rises too high
E3	Abnormally long water heat time	Incoming water temperature too cold, water heater malfunction, or water heater sensor malfunction
E4	Internal water level too high	Water pressure too high, or drain malfunction

Troubleshooting

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Dishwasher will not start	<ul style="list-style-type: none"> * Dishwasher not receiving electrical power. * Door is unlatched. * Dishwasher not level. 	<ul style="list-style-type: none"> * Check electrical connection or fuse/circuit breaker. * Close and latch door. * Level unit.
Dishes not clean	<ul style="list-style-type: none"> * Improper loading * Spray arm not rotating freely * Not enough detergent and/or improper detergent being used. * Improperly prepared dishes. * Water inlet hose kinked/bent due to improper installation. * The filter is out of place 	<ul style="list-style-type: none"> * Arrange dishes so spray action reaches all surfaces. * Do not overload dishwasher. * Check spray arm to make sure nothing (i.e. cutlery) is obstructing spray arm rotation. * Check if filter screen has become dislodged and is obstructing spray arm rotation. * Use more dishwasher detergent * Do not use detergent that is hard or cracked. * Use only a recommended dishwasher detergent. * Excess food and liquids should be removed from dishes before loading. * Eliminate kink or bend from Inlet hose. * Make sure the filter is in the correct position
Chipped or broken glassware	<ul style="list-style-type: none"> * Improper loading of dishes. 	<ul style="list-style-type: none"> * Do not overload the dish rack. Load glasses on the bottom rack only,
Water remains in bottom	<ul style="list-style-type: none"> * A small amount of water (in sump area) is normal. * Excessive amount of water; cycle not completed. 	<ul style="list-style-type: none"> * This is necessary to keep the pump primed and is drained automatically at the beginning of each cycle. * Allow dishwasher to complete full cycle.

Limited Warranty

This product is warranted by Richlund Ventures 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 the product in a commercial setting.

DESCRIPTION OF WARRANTY SERVICE:

All defective product components covered by this warranty will be repaired or replaced, at Richlund Ventures' option, free of charge on a mail-in basis to Richlund Ventures' 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 Richlund Ventures' option, on a mail-in basis to Richlund Ventures' authorized repair facility during the time period beginning on the 91st 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 Richlund Ventures under warranty service become the property of Richlund Ventures.

OBTAINING WARRANTY SERVICE:

Contact Richlund Ventures 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 a Richlund Ventures authorized representative has confirmed that your product is eligible for warranty service, the product must be returned to a Richlund Ventures authorized repair facility.

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

Richlund Ventures 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.

Koldfront

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