

# PACIFIC COAST CHILLER

DIGITAL  
LED



CL-  
280  
CHILLER

1  
YEAR  
WARRANTY

PACIFIC COAST IMPORTS  
P.O. BOX 378  
WOODBURN, OR 97071  
PH: 503-982-6700  
FAX: 503-982-0760  
[www.pacificcoastimports.com](http://www.pacificcoastimports.com)

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# PACIFIC COAST CHILLER

**1 YEAR WARRANTY**

• HIGH QUALITY, DURABLE, AND COMPLETELY ENCLOSED CHILLER UNITS WITH DIGITAL CONTROL DISPLAY.

• TITANIUM HEAT EXCHANGER FOR MAXIMUM EFFICIENCY AND CORROSION RESISTANCE.

• THESE UNITS ARE THE HIGHEST QUALITY, MOST EFFICIENT UNITS ON THE MARKET TODAY!



**DIGITAL LED**

MODEL	HP	POWER	WEIGHT	LENGTH"	WIDTH"	HEIGHT"	FLOW GPM MIN/MAX	BTU	AMPS	TANK SIZE 10" x 30"
CL-280	1/10	110V	31 lbs.	12	12	13.5	500/1000	1,200	2.8	90... 45...
CL-300	1/10	110V	35 lbs.	14	11.5	17	600/1000	1,200	2.3	90... 45...
CL-450	1/8	110V	35 lbs.	14	11.5	17	600/1000	2600	3.4	125... 80...
CL-450	1/4	110V	40 lbs.	14	11.5	17	600/1000	3000	5.8	180... 100...
CL-450	1/4	220V	40 lbs.	14	11.5	17	600/1000	3000	2.9	180... 100...
CL-300, CL-450 AND CL-650 COME WITH HEATER CONTROL ADDITION										
C-050	1/2	110V	66 lbs.	19	15	15	750/1000	6,000	9.9	450... 240...
C-050	1/2	220V	66 lbs.	19	15	15	750/1000	6,000	4.9	450... 240...
C-1000	1	110V	128 lbs.	21	19	15	1000/1500	12,000	18	1200... 750...
C-1000	1	220V	128 lbs.	21	19	15	1000/1500	12,000	9	1200... 750...
C-2500	2	220V	150 lbs.	24	21	21	2000	24,000	22	NOT RATED
C-3000	3	220V	202 lbs.	28.5	20	27.5	3000	36,000	26	NOT RATED

Thank you for choosing a Micro Compact Chiller from Pacific Coast Imports, Inc. The leading technology, excellent testing methods and use of high quality components, make it an outstanding product. Its ABS casing and reliable, safe and easy operation make it the best choice for aquarists world wide.

## WARRANTY

• MUST MAIL IN OR REGISTER ONLINE WITHIN 15 DAYS OR WARRANTY IS VOID.

### PACIFIC COAST IMPORTS LIMITED WARRANTY

This warranty covers all defects in workmanship or materials in the mechanical and Electrical parts, arising under normal usage and care for a period of 12 months from the date of purchase. You must provide a valid proof-of-purchase to render warranty services. A valid proof-of-purchase is a receipt specifying the item, date purchased and cost of item.

This warranty covers the original retail purchaser. During the applicable warranty period within normal use, we will repair or replace, at our discretion, any mechanical or electrical parts which prove defective, or replace the unit with comparable model.

To obtain service under warranty, call 503-982-6700.

### THIS LIMITED WARRANTY DOES NOT COVER:

- All freight charges incurred for repair.
- Damages from improper installation.
- Anything other than manufacturers defects.
- Damages from misuse, abuse, accident, alteration, lack of proper care and maintenance, or incorrect current or voltage.
- Damages from service from any unauthorized service personnel.

### IMPORTANT NOTICE:

PLEASE DO NOT RETURN TO THE VENDOR.

If you have any problems with the unit, contact Pacific Coast Imports for service. PHONE: 503-982-6700 or support@pacificcoastimports.com

Please read operating instructions before using this product.

PLEASE KEEP ORIGINAL BOX AND PACKAGING MATERIALS IN THE EVENT SERVICE IS REQUIRED.

Model # \_\_\_\_\_ Date of Purchase \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Phone ( ) \_\_\_\_\_

Name, address and phone number of where you purchased this product: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# PACIFIC COAST CHILLER



Visit Our Website To See Our Other High Quality Products!  
[www.pacificcoastimports.com](http://www.pacificcoastimports.com)

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### IMPORTANT:

Examine the chiller to be sure there is no damage to the unit from shipping. If damage has occurred, please contact where you purchased the unit immediately. Please take a moment to fill out the warranty information sheet attached to these instructions and make a photocopy for your records, or you may fill out the warranty information on our website at: [www.pacificcoastimports.com](http://www.pacificcoastimports.com).

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## STRUCTURE & TECHNOLOGY FEATURES:

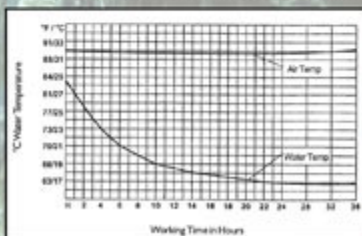
1. Unique & creative design with ABS casing proven to be safe and reliable.
2. Use of National & Mitsubishi compressors provide economy & durability.
3. Thermal converter is made of pure titanium pipe, which has excellent corrosion resistance, is suitable for refrigerating both fresh and saltwater.
4. Intelligent control system, precise display and easy operation.
5. Wide cooling range, ideal working condition under 34°C / 93°F water temperature.
6. The air filter prevents the chiller from being affected by dirt, thus keeping it in good condition for heat diffusion. The air filter can be easily disassembled for cleaning.
7. The water inlet and outlet rotate 360° and are easily attached to the machine.

## TECHNICAL INFORMATION:

MODEL	CL-280
POWER	1/10HP
VOLTAGE	110V/60HZ
REFRIGERANT	R134A
REQUIRED PUMP OUTFLOW	500g/Hr
REFRIGERATING CAPACITY	280w
RECOMMENDED TANK SIZE	<100Gal
WEIGHT	31lbs.
DIMENSIONS	12"x 12"x 13"

**NOTE:** Do not reduce temperature to lower than 4°C or 40°F.

### CL-280 PERFORMANCE CURVES



This performance curve was obtained through test conditions using 40 gallons water volume and 265 GPH flow capacity.

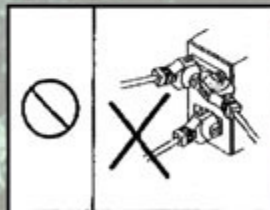
## MAINTENANCE:

1. Unplug all power supplies.
2. Remove the shroud and blow air through radiator fins.
3. Clean fan motor to free any dirt or debris. Oil with Lithium Oil, if corroded use WD-40 first.
4. If you have any questions, please call Pacific Coast Imports, Inc. technical support at 503-982-6700 or e-mail: support@pacificcoastimports.com.

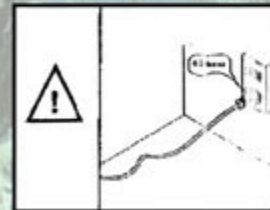
## IMPORTANT REGULAR MAINTENANCE REQUIRED!

1. In humid or salty environments the electric fan motor must be lubricated with oil bimonthly.

## IMPORTANT PICTURES:



A dedicated socket to the machine is necessary. Do not share socket with other power consumption appliances.



The socket and cable connector must be able to safely maintain a current which is 4-5 times higher than the normal operating current.

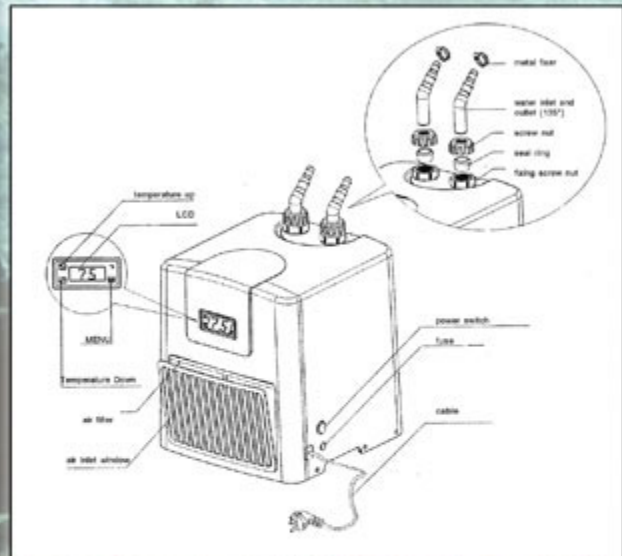
## TROUBLESHOOTING:

1. If the fuse blows, unplug the power and replace with a spare fuse.  
**IMPORTANT:** Use factory fuses ONLY. Do not use after market fuses. The fuse is a safety device, if it blows you might have an installation error.
  - Check the water flow.
  - Make sure the exhaust is properly ventilated.
  - If problems persist, contact a service tech at support@pacificcoastimports.com or call (503)982-6700.
2. If the air and water temperature are too high, this will result in extra-high pressure inside the machine and the compressor, the machine will stop protectively. If this occurs, please move the machine to a well ventilated area and the chiller will begin to operate again.
3. If the display does not function or the machine does not work, please check whether the plug is connected firmly, if there is a broken fuse, or if the fuse tube needs replacing.  
**\*Do not plug into surge protector or extension cord.**
4. If there is difference between the temperature indicated on the digital display and the actual water temperature, you can adjust the temperature by following the steps below:
  - (1) Press "SET" for ten seconds, then "d" will appear onto the digital display, press "set" again, only once, and Pd will appear indicating that the calibration function is in a ready state.
  - (2) Press "▲" (increase) or "▼" (reduce) until the number displayed equals the difference in water temperature.  
"Pd" = Actual water temperature displayed water temperature.
  - (3) After your operation is stopped for ten seconds, the digital display will show actual water temperature.

## IMPORTANT: MAINTENANCE

5. In humid environments the electric fan motor must be lubricated with oil bimonthly.
6. If something unusual happens to the machine under normal operation, please do not disassemble the machine. Contact Pacific Coast Imports, Inc. technical support at 503-982-6700, or e-mail us at: support@pacificcoastimports.com.

## COMPONENTS AND USAGE:



- (1) After water has cycled for five minutes, connect the power supply then the water temperature of the tank will be indicated on the digital display.
- (2) Press "SET" button to set desired temp.
- (3) Press "+" (increase) or "-" (reduce) to adjust water temperature, that is, to set water temperature.
- (4) The machine begins working after three minute delay. The chiller will shut off when it reaches set point.
- (5) If you need to heat up the tank, please connect a heater to the special socket on the side of the machine, and follow steps 2 & 3 to increase the set temperature. When the set temperature is 2° higher than the original water temperature of the reservoir, the "External heater" light will turn on, and the heater will begin working.

**NOTE:** A short cycle may occur if off cycle is not long enough. Unit must be off for at least 10 minutes before restarting. If a short cycle occurs, increase flow on chiller unit.

## OPERATING INSTRUCTIONS (INSTALLING INLET & OUTLET):

1. Take out accessories necessary for water inlet & outlet.



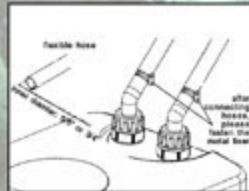
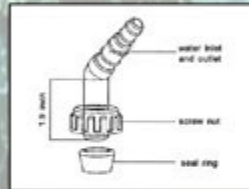
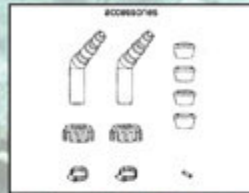
2. Assemble water inlet & outlet.



3. Attach water inlet and outlet to the chiller.
















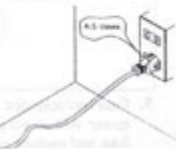


4. Connect external flexible hose..



## CAUTIONS (2):

	<p>Please do not connect power before final installation; do not disassemble the casing when the machine is operating. When power is on, do not place your hand or body near the operating units.</p>	<p>The head of the circulating water pump should not exceed 20'; otherwise, leakage or other damage may occur.</p>
	<p>The quantity of circulating water must be in compliance with the data shown on the technical information table; otherwise, the cooling capacity will be affected.</p>	<p>Before circulating water enters the machine, it should be filtered to prevent sediment from influencing the heat transferring.</p>
	<p>The installation location must be level and even in order to avoid any shaking or vibration.</p>	<p>Disconnect power before cleaning the tank.</p>
	<p>The front air inlet window should be kept 12" away from other objects and the back heat exhaust window no less than 24" from other surfaces. Please refer to the installation section.</p>	<p>Make sure your hands are completely dry when plugging in the power supply.</p>

## CAUTIONS (1):

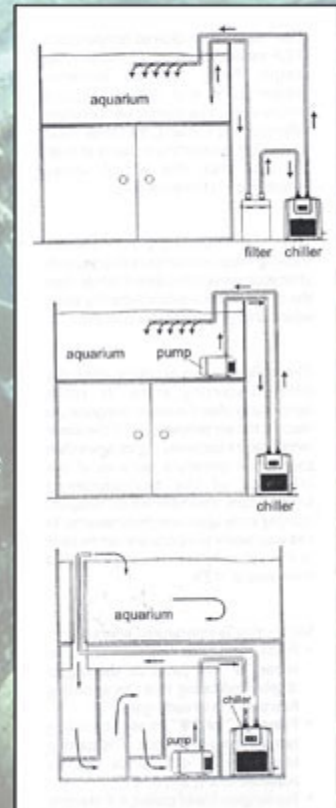
	<p>The cable plug, power switch, socket and LCD operating plate must be kept dry.</p> 	 <p>The machine must be installed by skilled technicians.</p> 
	<p>Use the power which is grounded and offers protection against electricity leakage.</p> 	 <p>The chiller MUST NOT be placed upside-down or at a slant, which may damage the machine. If it is positioned incorrectly, please return to a level position and do not turn it on for 20 minutes.</p> 
	<p>A dedicated socket to the machine is necessary. Do not share socket with other power consumption appliances.</p> 	 <p>DO NOT expose the machine to the sun or rain or locate it on a damp floor, or any area that is easily flooded or splashed by water or other liquids.</p> 
	<p>The socket and cable connector must be able to safely maintain a current which is 4 to 5 times higher than the normal operating current.</p> 	 <p>There MUST NOT be any heat source near the location of the machine.</p> 

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## OPERATING INSTRUCTIONS (INSTALLING CHILLER):

Before using the chiller, please check the following:

1. Check whether the water inlet, outlet and hoses are connected firmly; make sure there is no leakage.
2. Make sure the circulating water can run normally without any blockage.
3. Make sure the power voltage & frequency are in accordance with the data on the label on the back of the chiller. 110V is the correct voltage of the unit.



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## TEMPERATURE ADJUSTMENT:

1. Plug chiller in and turn it on. Power switch light will come on and LCD operating plate will show water temperature.



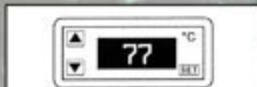
2. Press "SET" to set desired temperature (if C/F model, must be in C mode to set temp). Press "+" to increase temperature and "-" to reduce temperature. The starting temperature difference is 2°F, that is, the chiller must start at set temperature that is at least 2°F less than the actual water temperature in the aquarium.



3. The LCD operating plate resumes showing water temperature two seconds after your set-up operation finishes, then the chiller enters a delayed-starting state, which always last for 2-3 minutes.

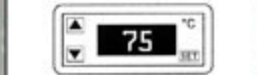


4. The chiller begins working after the delayed-starting state. It stops temporarily after the water temperature reaches the set temperature. If the water temperature becomes higher again than the set temperature because of the influence of the environmental temperature, the chiller enters delayed-starting state again and then restarts. In this way, water temperature can be kept in the set temperature range with a tolerance of <math>\pm 2^\circ\text{F}</math>.



**NOTE:** A short cycle may occur if off cycle is not long enough. Unit must be off for at least 10 minutes before restarting. If a short cycle occurs, increase flow on chiller.

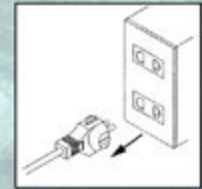
5. Set Starting Temperature Difference:
  - Press "SET" for ten seconds. The letter "d" will jump on the digital display indicating that the adjusting function is in a ready state.
  - Press "+" or "-" to adjust starting temperature difference. The starting temperature difference can be adjusted to 2°F, 3°F, or 4°F.
  - For longest life of chiller, 4°F starting difference is recommended.



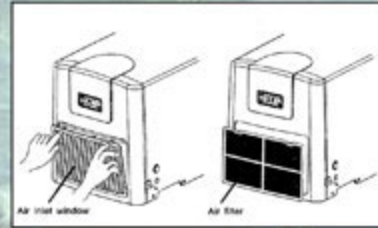
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## FILTER CLEANING:

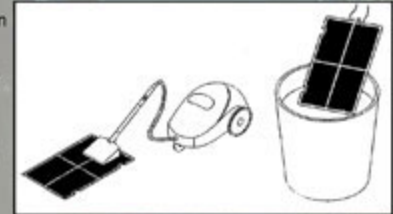
For proper operation the filter needs cleaning at least once every month. Accumulated dirt weakens its heat exhaust effect. **DISCONNECT POWER FIRST!**



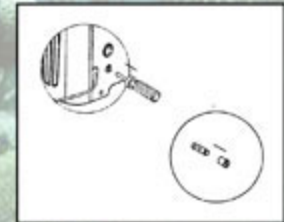
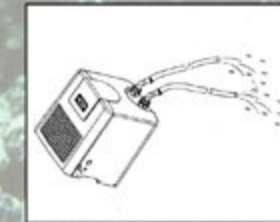
1. Disconnect power to filter.



2. Gently press "PUSH" on the left and right sides of the air inlet window to open and then remove air filter.



3. Clean filter by washing with clean water or with a vacuum.



4. If the chiller is not in use, drain any water in the pipes and store in a safe place.

5. Fuse replacement: Remove the cover with a screwdriver, change fuse and replace cover. Fuse size is 10amp/110volt.

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