

MERMAID MARINE

Dehumidifier

&

Dehumidifier – XL



**MERMAID MFG. OF SW FL, INC.
2651 PARK WINDSOR DRIVE
SUITE 203
FORT MYERS, FL 33901
239-418-0535-P
239-418-0538-F
<http://www.mmair.com>**

OPERATIONS MANUAL AND SPECIFICATIONS

Congratulations! You are now the proud owner of one of Mermaid Manufacturing's full stainless-steel dehumidifiers! Whether it's the standard dehumidifier (DP) or the Dehumidifier – XL (DP-XL) you should expect many years of quiet, hassle free operation with your new Mermaid product.

Mermaid's dehumidifiers are designed to control moisture anywhere a energy efficient dehumidifier is desired. These products incorporate a free-flow evaporator pan that can discharge water directly into a sink, shower, or other drainage fixture.

KEY BENEFITS OF THE STANDARD DP INCLUDE:

- ✓ Low power consumption – 3.5amps on 110v (1.75 on 220v)
 - ✓ Reliable, environmentally safe refrigeration system
- ✓ Stainless steel cabinet to withstand the toughest environments
 - ✓ Adjustable electronic humidistat control
- ✓ Approximately 175 cubic feet of air movement per minute
 - ✓ Dehumidification for approximately 250-350 cubic feet
 - ✓ Small compact cabinet design and weight – only 36 lbs
- ✓ Available in 115VAC/60HZ or 220VAC 50/60HZ models

KEY BENEFITS OF THE DP - XL INCLUDE:

- ✓ Power consumption – 4.5amps on 110v
- ✓ Approximately 450 cubic feet of air movement per minute
 - ✓ Dehumidification of 1000 cubic feet

ACTUAL OPERATION OF DP & DP-XL

Consider the dehumidifier as nothing more than a small air conditioning unit. The system is wired so that the evaporator fan runs all the circulated air through the unit and across the humidistat. The circulation fan is controlled by the compressor operation. Ensure that the power cord is plugged into a GFI outlet.

The unit will automatically come on once plugged in. It is factory preset to a 30% humidity level. If you wish a higher or lower level, push the "SET" and then the "UP" or "Down" arrows. Press "SET" again to exit the adjustment mode. In using the dehumidifier in a "wood" environment, it may be advisable to operate between the 40% and 60% (Relative Humidity) level. The unit will automatically shut off when reached its RH setting. However, it is not abnormal, under high humidity conditions, to have the unit continually operate. This is not detrimental to the operation of the unit. Mermaid has designed the unit to be operable 24-hours a day, 7-days a week.

Press "RST" to turn unit on. Push and hold "RST" for three seconds to turn unit off.

The unit has an upper and lower limit settings that is factory preset to 5%. To change this setting press the "SET" and the "UP" or "DOWN" until "HS" or "LS" is displayed. "HS" is the upper limit and "LS" is the lower limit. For best performance, it is recommended that that you leave the unit at the factory settings, but in certain circumstances you may wish to change the limits.

The unit does have a humidity calibration function that is factory preset to zero. When there is a deviation between the unit's measuring humidity and the actual standard humidity, use the humidity calibration function to make the units measurements value consistent with the standard humidity. If the standard humidity is 30% and unit shows 31%, we would set the calibration value to a minus 1%. If the standard humidity is 30% and the unit shows 29%, we would set the calibration value to a positive 1%. Normally this function never needs to be adjusted.

NOTE:
**DO NOT ATTEMPT TO REPAIR ON YOUR OWN! THIS WILL
VOID ANY AND ALL WARRANTIES.**

MAINTENANCE

There is a filter located in the dehumidifier. Under normal operating procedures, plan on cleaning the filter at least twice a year.

Depending on the environment in which the unit is operating, the filter may need to be changed more often.

To clean the filter, remove the cover screws (with the power off!), and wash with fresh water. Ensure the filter is dry before re-assembling the dehumidifier. Failure to follow these instructions will cause the dehumidifier to work improperly.

OPERATION & HUMIDISTAT WIRING

HUMIDISTAT WIRING

Humidistat Terminals:

0 0 0 0 0 0 0

1 2 3 4 5 6 7 8 9

- 1 = Black power in
- 2 = To fuse
- 3 = From fuse
- 4 = White power in
- 5 = Humidity Sensor #1 (Black)
- 6 = Humidity Sensor #2 (Yellow)
- 7 = Humidity Sensor #3 (Red)
- 8 = Temperature Sensor #1
- 9 = Temperature Sensor #2

OPERATION

POWER:

Press RST key once to turn unit on

Press and hold RST key for 3 seconds to turn unit off

HUMIDITY:

Press SET key to enter humidity settings mode

Use arrows to adjust humidity settings

Press and hold arrow for 3 seconds for fast adjustments

Press SET key again to exit humidity settings mode

SYSTEM MENU:

Press and hold SET for 3 seconds while not in humidity settings mode to enter menu.

Use arrows to move thru menu.

Press SET once to set selected parameter.

Press RST to exit menu.

MENU CODES:

HC H=Humidification C=Dehumidification.

d Humidity on/off range (1% to 30%). Preset is 5%.

LS Minimum humidity set limit (1% to 99%).

HS Maximum humidity set limit (1% to 99%).

CA Calibration (-20% to 20%). Preset is 0%.

P7 Delay Time (1 to 10 minutes). Preset is 1 minute.

FAULT MESSAGES:

EEE means a sensor has become disconnected or is faulty.

LLL means humidity is below 1%.

HHH means humidity is above 99%.

FUSE:

The fuse housing is located on the front of the unit. To open, push in and turn counterclockwise. Replace the fuse with a similar fuse. The standard DP is equipped with a 10 AMP fuse. The dehumidifier – XL is equipped with a 30 AMP fuse.

Replacing your fuse with a higher load fuse may cause a dangerous condition and will void the 5-year warranty!

WARRANTY

Your Mermaid dehumidifier is protected by a FIVE year factory warranty from the date of purchase. Please retain your sales slip/invoice for your warranty records.

Should you need any further assistance, please don't hesitate to contact us.

Thank you again for your purchase of the Mermaid Dehumidifier!