USER MANUAL

U80PRO Ultrasonic Humidification System
INTRODUCTION

Thank you for choosing the Horticat U80PRO Ultrasonic Humidifier!

This unit is designed for easily and efficiently adding humidity to any environment that requires on demand humidity frequently.

This unit will disperse up to 80 pints of humidity per day. Depending on how tightly sealed your environment is or how much humidity is lost or removed, this unit can humidify up to 2000 sq.ft. of space. Additional units can be added and linked together for larger demands. We highly suggest having our units connected to a reverse osmosis or a water source under 200ppm.
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1 Product Overview

1.1 Appearance

![Diagram of ultrasonic mister]

1.2 Product Features

**A  Large Volume Output & Ultra-fine Mist Particle Size**

Ultrasonic mist output up to 80 pints per day. Ultra-fine mist droplets of ≤5μ with high gasification rate up to 80% to enhance humidification effectiveness.

**B  Convenient Autofill**

Directly connects to water source and fills itself as needed with the built-in float mechanism.
**D  Intelligent Auto-control**

With built-in humidistat for precise control of humidity ranging from 35-85%.

**E  Overflow / Loss of Water Protection**

In the event the float valve gets stuck open, there is an overflow drainage outlet to protect the unit from overflowing and causing internal damage to the unit.

In the event of loss of water pressure or the float valve is stuck closed, the unit will stop functioning to protect itself from internal overheating and damage to the ultrasonic plate.

**F  Energy Saving & Ultra Quiet**

Unit only uses 130 Watts while running at full output capacity. Much more quiet than centrifuge humidifiers while producing humidity levels much faster without the mess.

**G  Antibacterial & Easy to clean**

The ultrasonic chamber uses silver ion antibacterial technology for hygienic mist. It is recommended to clean the unit every two months or as needed. It is very easy to open and clean.

**H  Simple Installation**

Easy wall-mount installation, push-fit connectors and do it yourself water line connection valve allows for very fast and easy installation.
## 1.3 Package Listing

<table>
<thead>
<tr>
<th>Product/Pic</th>
<th>QTY</th>
<th>Product/Pic</th>
<th>QTY</th>
<th>Product/Pic</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>U80PRO Unit</td>
<td>1 SET</td>
<td>Saddle Valve</td>
<td>1 pc</td>
<td>Push-fit connector</td>
<td>1 set</td>
</tr>
<tr>
<td>1/2&quot; to 1/4&quot; Push-fit connector</td>
<td>1 pc</td>
<td>1/2&quot; to 1/4&quot; Push-fit connector</td>
<td>1 pc</td>
<td>1/2&quot; to 3/8&quot; Push-fit connector</td>
<td>1 pc</td>
</tr>
<tr>
<td>1/4&quot; black tubing</td>
<td>25ft</td>
<td>3/8&quot; white tubing</td>
<td>25ft</td>
<td>Expansion screws</td>
<td>6 pc</td>
</tr>
</tbody>
</table>
# 2 Product Specifications

## 2.1 Specifications

<table>
<thead>
<tr>
<th>Input Voltage</th>
<th>N.W</th>
<th>Ambient Temperature</th>
<th>≤50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>110AC 50/60Hz</td>
<td>9.9 lbs</td>
<td>9.9 lbs</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>G.W</td>
<td>Ambient Humidity</td>
<td>≤85%RH</td>
</tr>
<tr>
<td>130 W</td>
<td>14.33 lbs</td>
<td>14.33 lbs</td>
<td></td>
</tr>
<tr>
<td>Mist Output</td>
<td>Dimension</td>
<td>Atomizing Media</td>
<td>Tap-water</td>
</tr>
<tr>
<td>80 pints day</td>
<td>16.5x11.75x6.25 inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mist Particle Dia ( D50 )</td>
<td>≤5μm</td>
<td>Max Atomizing Distance</td>
<td>10ft throw</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water Temperature</td>
<td>50~130 °F</td>
</tr>
</tbody>
</table>
3 Installation Guideline

3.1 Installation

Mount securely to wall or structure that can support at least 30lbs. Please use the level ruler to position the wall mount panel on the wall, mark the holes, install the wall panel on the wall using anchors, and then hang the machine on the wall panel as shown below:

3.2 Connecting the Unit

A. Overflow and Drain Connections

Connect the tubing for the overflow and drain outlet, do not over tighten as you can damage the tank inside. The drain outlet should be the connection with inline open/close valve. Be sure to insert the rubber rings (washers). Connect supplied 3/8” tubing and run to the nearest drain, this U shaped piping assembly connection is for draining the unit to clean and to provide over flow outlet in case of float device malfunction.
B. Connecting the Humidistat

Plug in the supplied humidistat into the rj45 port next to the water inlet on the bottom of the unit. The humidistat is tucked into the foam in the box for shipping purposes, this humidistat can be extended by an rj45 extension to be hung anywhere you desire for a better relative humidity reading. The humidifier will not work if the humidistat is not plugged in or will go to sub mode and use the master unit settings if connected wirelessly in the room.

C. Water Input

Thread the supplied ½” threaded to ¼” push fitting adapter to the water inlet port on the bottom of the unit. Be sure to use the supplied rubber washer and be careful not to over tighten and damage the unit.

You may alter your layout / connections / fittings to customize to your needs. The only required connection is the water supply in and a shut off fitting on the drain outlet. We suggest running this unit on a RO water system and/or with the use of an inline filter and supplied water is under 200ppm. Without any pre-filter you may get calcium and other mineral deposits built up in the unit and surrounding area. The most common connection is to your buildings water supply lines with the use of the included ¼” saddle valve. We have included in the box a step by step installation sheet for the saddle valve installation, if you don’t feel comfortable with installing it please contact a local plumber.
4 Getting Started

4.1 Steps to Success

1) Be sure the drain inline valve is closed
2) Make sure sensor is plugged in via rj45 port by the water inlet on bottom side
3) Turn on your water source
4) Ensure the unit is plugged into power source
5) The unit is powered on
6) Adjust to desired humidity levels

Note: The unit will not produce ultrasonic mist until the tank has reached its required water fill level which could take a couple of minutes.

4.2 Features

1) The humidity controller responds to environmental temperature changes in real time.
2) The controller has a built-in light sensor, which can automatically identify the light intensity and allows for two operating parameter settings for day and night modes.
3) According to your different humidity needs, the humidity upper limit and humidity over limit can be set (for humidity lag and calibration). The settings are automatically saved.
4) Multiple humidifiers can be operated as one unit with the built in wireless signal with master-sub mode.
1.3 Setting Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>d1</td>
<td>35-85</td>
<td>Daytime desired humidity</td>
</tr>
<tr>
<td>d2</td>
<td>2-10</td>
<td>Daytime humidity tolerance limit</td>
</tr>
<tr>
<td>n1</td>
<td>35-85</td>
<td>Night humidity desired limit</td>
</tr>
<tr>
<td>n2</td>
<td>2-10</td>
<td>Night humidity tolerance limit</td>
</tr>
<tr>
<td>CH</td>
<td>0-41</td>
<td>Communication channel selection</td>
</tr>
</tbody>
</table>

- **Set daytime humidity upper limit**: In normal operation, press and hold the SET key, the controller enters into the setting state, the left digital display shows "d1", the right digital display shows the daytime humidity upper limit.

  Press ▲ ▼ key to modify, press SET key to save data and automatically goes to the next parameter setting.

- **Set daytime humidity tolerance**: The left digital display shows "d2" and the right digital display shows the daytime humidity tolerance value.

  Press ▲ ▼ key to modify data, press SET key to save data and automatically goes to the next parameter setting.

  EXAMPLE: When the set point is 60% humidity and the tolerance is 5%, the humidifier will run till it reaches 60% and not start running again till it reaches 55%. 
- Set night humidity upper limit: The left digital display shows "n1" and the right digital display shows the night humidity upper limit.

Press ▲ ▼ key to modify, press SET key to save data and automatically goes to the next parameter setting.

- Set night humidity tolerance: The left digital display shows "n2" and the right digital display shows the night humidity hysteresis.

Press ▲ ▼ key to modify, press SET key to save data and automatically returns to the running interface.

- Set up wireless communication channels: The left digital display shows "CH" and the right digital display shows the wireless communication channel 0-41.

Press ▲ ▼ key to modify data, press SET key to save data and automatically returns to the running interface.

Master-Sub Control:

When a humidifier is powered on and has the humidistat plugged into it, the system defaults to the master mode, which can wirelessly control the sub’s on the same channel. The default is sub when the humidistat is not plugged in, and the humidity setting is controlled by the host signal (master unit). When using multiple units in multiple rooms be sure all humidifiers in each room are on the same channel. Each of your rooms should have only one master unit and the rest would be in sub mode with no humidistat plugged in.
5 Maintenance

5.1 Air Filter Maintenance

The air filter should be cleaned every week or as needed. To do so, remove the filter from the back of the unit, clean and dry it, then re-insert it into the back of the unit.

5.2 Ultrasonic Plate Maintenance

The ultrasonic mist plate and chamber need to be cleaned every month or as needed. To do so, power off the unit by the switch on gfi or unplug the unit, remove the front cover by removing the corner screws on the unit, then remove the directional nozzle. The basin and mist plate are not removable. Drain the unit by opening the inline blue drain valve, close valve and fill basin with a clr or white vinegar and water mixture that covers the plate inside, soak for 10-15 minutes. Then gently wipe the heads with a washcloth or non-abrasive rag or sponge, drain and thoroughly rinse with clean water, close valve and resume normal operation.
# 6 Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Causes</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low output</td>
<td>Buildup on ultrasonic plate.</td>
<td>Clean the ultrasonic plate and chamber.</td>
</tr>
<tr>
<td>No output</td>
<td>Basin water level too low.</td>
<td>Verify unit is powered on.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verify water source is on.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check drain valve is closed.</td>
</tr>
<tr>
<td>Water overflow</td>
<td>Float valve malfunction.</td>
<td>Verify valve shuts off when in up position.</td>
</tr>
<tr>
<td>Ultrasonic mist low projection</td>
<td>Dirty air filter or covered.</td>
<td>Clean the air filter.</td>
</tr>
</tbody>
</table>
7 Warranty and Customer Service

The U-80PRO carries a six month limited manufacturer warranty.

For support you may contact your local dealer or reach us directly at 1-800-259-3743, e-mail us at help@horticat.com or find us on Instagram @horticatgrowtech.