

# ULTRA WALL HUMIDITY CONTROL USER MANUAL





## **INTRODUCTION**

**Dear User:**

Thanks for choosing our wall mounted Ultra Wall Humidity Control System.

It is a multi-purpose humidification product that is typically suitable for most any indoor humidity control application. It is easy and simple to install, designed for quick flash evaporation, operates on extremely low energy use, this humidifier uses state of the art multi disc ultrasonic atomization technology that can suit almost any environment.

Please read the following instruction sheet carefully before using the product.

We look forward to working with you.

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# 1 Ultra Wall System Description

## 1.1 Appearance

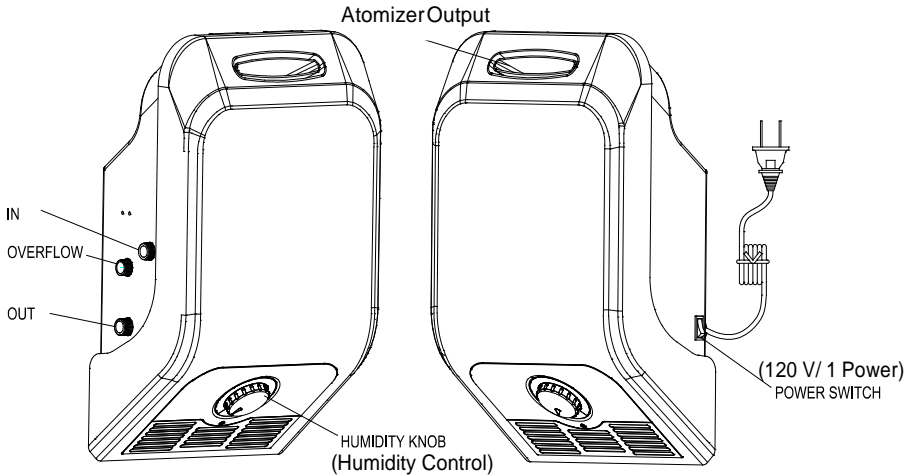


Chart 1 Product Appearance

## 1.2 Product Features

### A. Space & Systematization

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Single use for small space (up to 1,200 sq ft<sup>2</sup>) or combined use as a humidification system for larger space with multiple units.

### B. Large Mist Output & Ultra-fine Mist Particle Diameter

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Mist output as high as 0.8 gph to ensure the humidification effect for large spaces, ultra fine mist particle diameter (D<sub>40</sub>: ≤4μm) with high gasification rate up to 80% to enhance humidification effect.

## **C. Automatic Refill Water**

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The Ultra Wall Humidity Control System connects directly to the water supply for full time auto feed from your water supply, Reverse Osmosis and deionized water also works well. The float controlled water inlet allows for simple automatic controlled water filling system.

## **D. Intelligent Auto-control & Safety Protection**

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Set adjustable Humidity Control Knob for a 24/7 controlled environment humidity (20-100%) based on demands, mist will then automatic on/off as required.

## **E. Safety Protection**

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- Overflow Protection - Water is discharged through an overflow pipe when water inlet valve is damaged.
- Shortage Protection - It will automatically stop working when the water supply runs out.

## **F. High Efficiency & Energy Saving**

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Ultra fine mist particle diameter (D40 :  $\leq 4\mu\text{m}$ , mist transmission distance up to 6 ft, high gasification rate up to 80%, power consumption of 120W, saves water and energy.

## **G. Antibacterial & Healthy**

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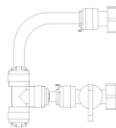

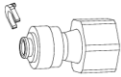
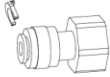





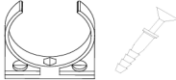
The chamber adopts a silver ion antibacterial technology for a hygienic mist.

## **H. Simple Installation**

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Plumbers can install the Ultra Wall Humidity Control System quickly with the included push-fit connectors for a simple wall-mount installation.

## 1.3 Package Listing

Product/Pic	QTY	Product/Pic	QTY	Product/Pic	QTY
 <p>Ultra Wall Humidification System</p>	1 set	 <p>Instruction Sheet</p>	1 copy	 <p>Push-fit connector</p>	1 set
 <p>1/2" to 1/4" Push-fit connector PE shut off valve</p>	1 pc	 <p>1/2" to 1/4" Push-fit connector</p>	1 pc	 <p>1/2" to 3/8" Push-fit connector</p>	1 pc
 <p>1/4" &amp; 3/8" pipe</p>	2.5M of each	 <p>Hose nail for 1/4" &amp; 3/8" pipe</p>	5pcs of each	 <p>φ5X80 expansion screws</p>	2 pcs
( Optional Accessories)					
 <p>filter</p>	1 pc	 <p>1/4" Push-fit connector</p>	2 pcs	 <p>Mounting clip /φ5X30 expansion screw</p>	2pcs of each

# 2 Ultra Wall Product Parameters

## 2.1 Parameters

<b>Input Voltage</b>	120V/1	<b>N.W</b>	9.92 lbs	<b>Ambient Temperature</b>	≤120 F
<b>Power</b>	120 W	<b>G.W</b>	14.33 lbs	<b>Ambient Humidity</b>	≤80% RH
<b>Mist Output</b>	3.05 KG/Hr	<b>Dimension</b>	14X8X22 inches	<b>Atomizing Media</b>	(demineralized) Tap-water
<b>Mist Particle Dia ( D90)</b>	≤10μm	<b>Max Atomizing Distance</b>	6-8 ft	<b>Water Temperature</b>	55-120 F
<b>Mist Particle Dia ( D50)</b>	≤4μm	<b>Noise</b>	≤55dB	<b>Water Pressure</b>	5-80 PSI

## 2.2 Operating Principles

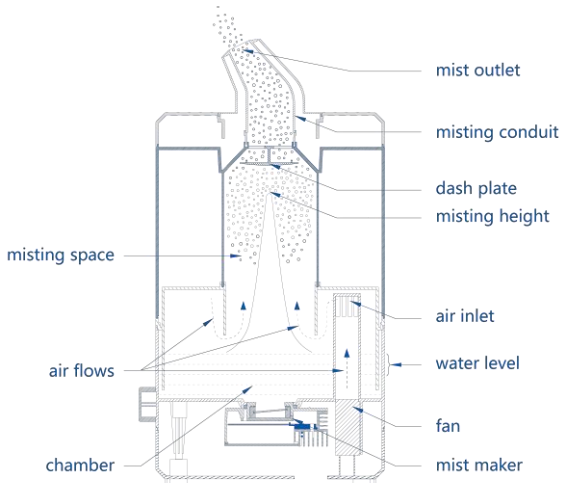


Chart 2.1



## 2.3 Electrical Principles

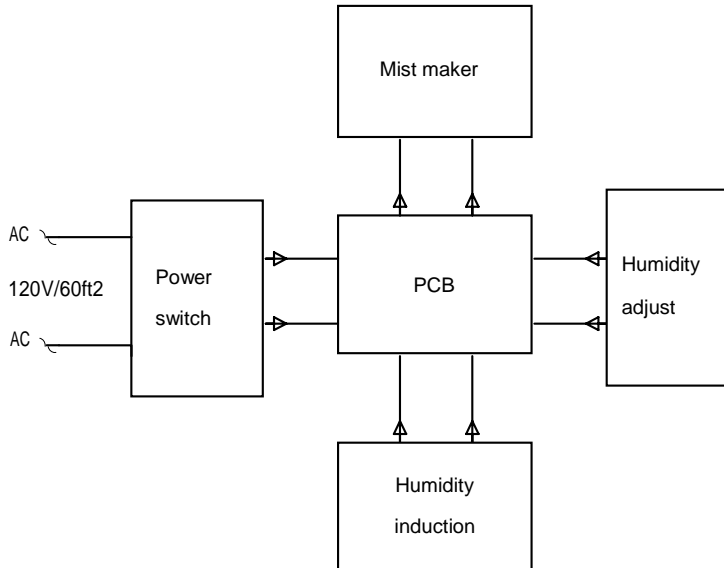


Chart 2.1 Electrical Principles

# 3 Ultra Wall Installation Guideline

## 3.1 Installation Requirement

- Ensure wall can withstand twice weight of humidifier full of water ( $\geq 33$  lbs).
- Installation height away from ceiling is 3 ft above the ground is 4-5 ft.
- Operating voltage AC120V, demineralized, RO or tap-water, install based on actual needs.

## 3.2 Installation Steps

### A.

- ① Shown as chart 3.1, put two screws into the wall (concrete wall: expansion screws ( $\phi$  5X80); wood wall: tapping screws ( $\phi$  5X20)); if necessary to fix, first the installation position of filter and mounting clips (same as above mentioned).
- ② All screws firmly fixed, hang on the humidifier.

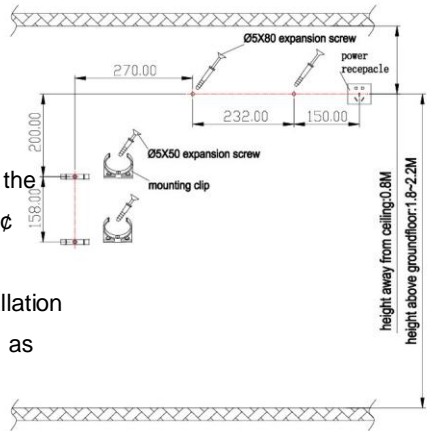


Chart 3.1

### B. Pipes & Filter Installation

- ① Shown as chart 3.2, connect the push-fit connector into OVERFLOW and OUTLET (shut off valve for OUTLET; remove the plastic semi-ring and push into the 3/8" pipe till cannot push forward anymore. Then put on the plastic semi-ring.

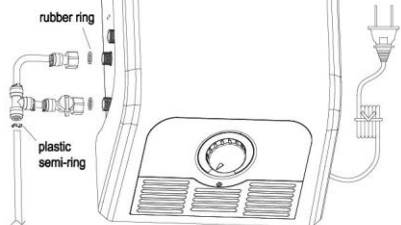


Chart 3.2

Note: Connection of push-fit kits shown as Chart 3.3

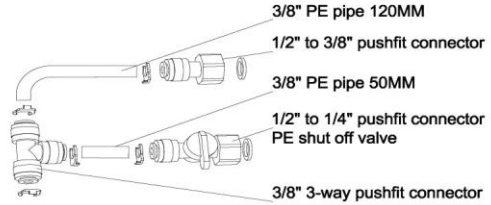


Chart 3.3 Push-fit kit connection

② Shown as chart 3.4, connect the 1/2" to 1/4" Push-fit into the water inlet, joint the filter with 1/4" on both sides-one to the water inlet, the other to the water supply, and have the filter fixed into the mounting clip (Note: filter is optional item part for hard water only).

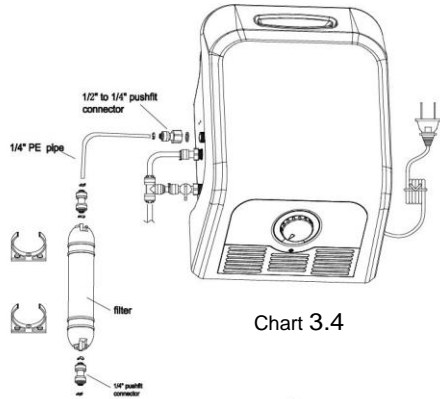


Chart 3.4

③ Shown as Chart 3.5, the pipe connect to the water supply must use 1/2" to 1/4" Push-fit connector with PE shut off valve on it; outlet connected by 1/2" to 1/4" Push-fit connector.

(Note: when use the push-fit kits, remove the plastic semi-ring first and push the pipe till cannot push forward anymore, then plug it back)

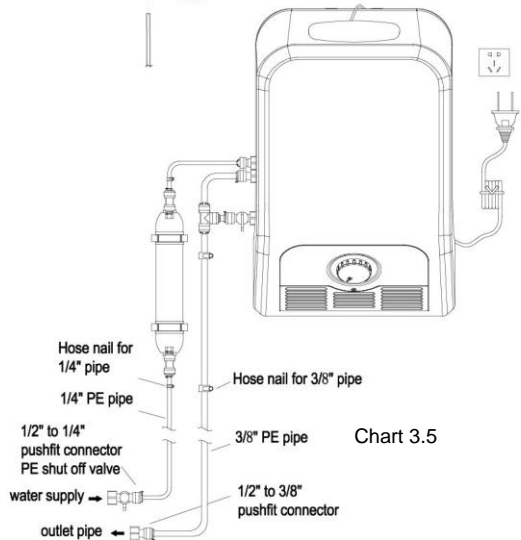


Chart 3.5

# 4 Ultra Wall Application

## 4.1 Single Use

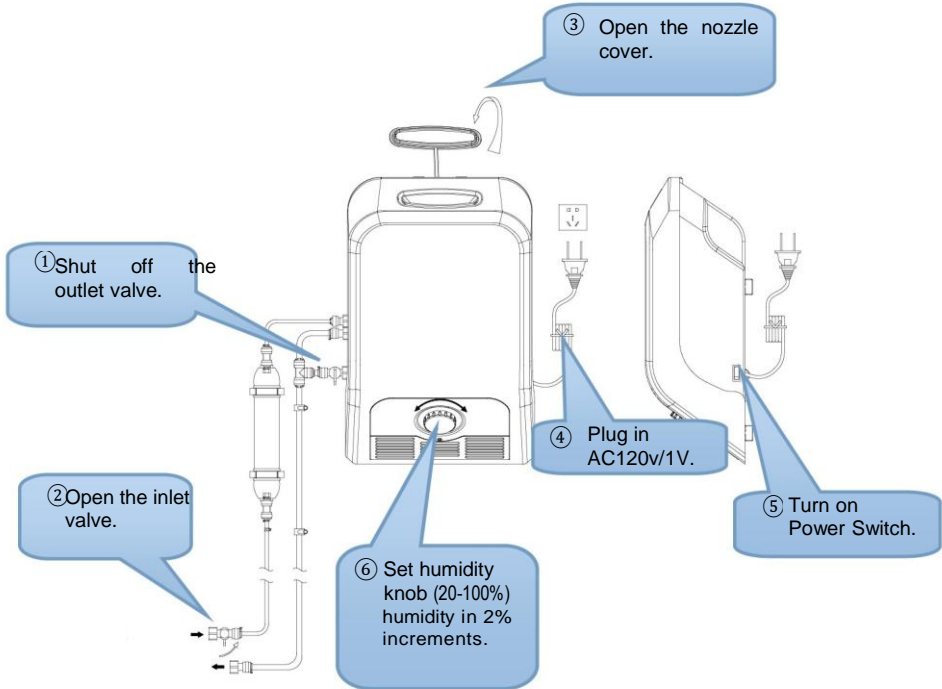


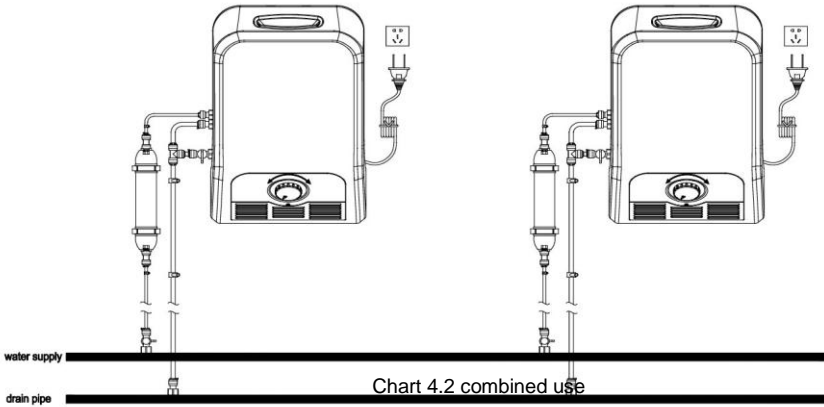
Chart 4.1 Single Use

Note:

1. The humidifier will work in 5-10 seconds after water is filled.

2. For short time non-use of the humidifier: shut off the power switch. For long time non-use: cutoff the power, shut off water inlet valve, drain unit and clean with Windex type product.

## 4.2 Combined Use

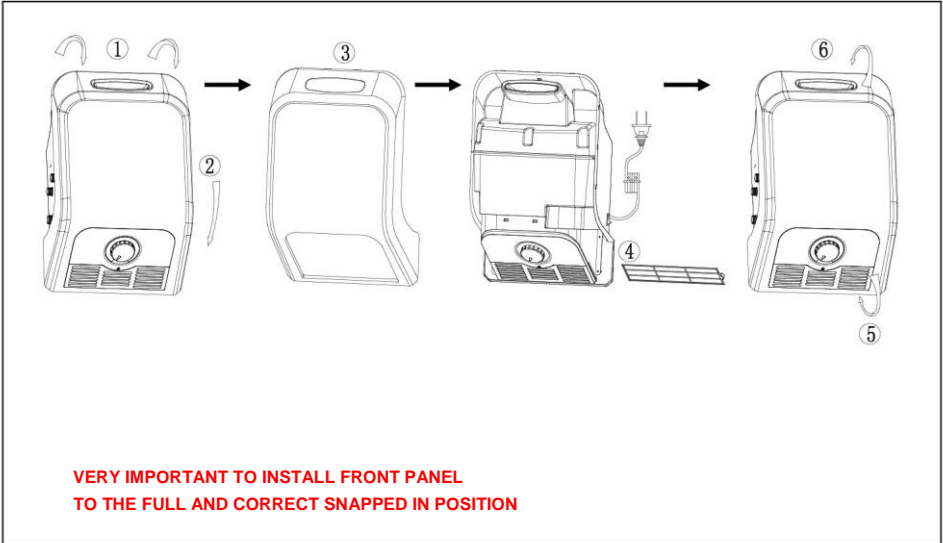


### Note :

1. You can increase or decrease the number of Ultra Wall based on your demands for humidifying time (For example: time for humidification raised from 20-70%RH (More units to shorten humidifying time, less units tend to extend humidifying time).
2. For different area where different humidity is required, either set target humidity or adjust density of installation units.

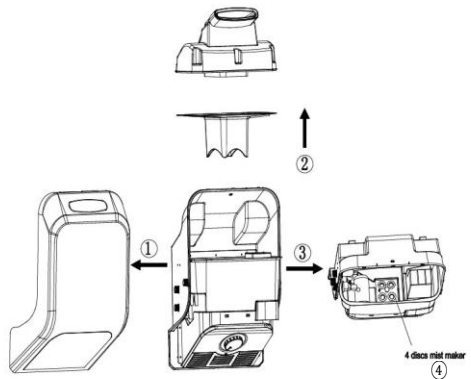
# 5 Ultra Wall Maintenance

## 5.1 Dust Screen Maintenance



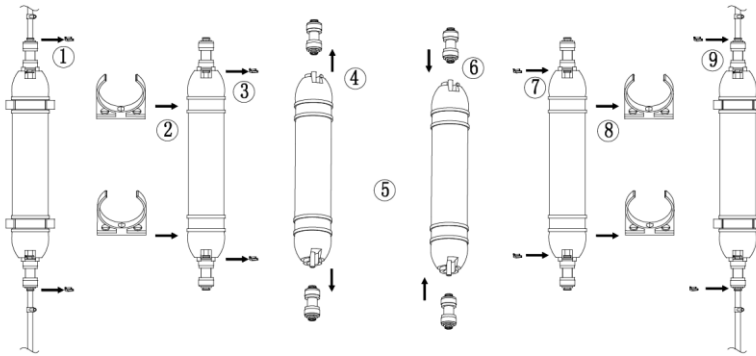
## 5.2 Chamber Maintenance

Shown as Chart 5.2: Turn off machine. ① Remove the front panel. ② Take out the nozzles. ③ Shut off outlet valve and open the inlet valve. ④ Use a clean soft cotton cloth to clean the atomizing chamber and the surface of mist maker. Then close the inlet and open outlet to drain off the water. Repeat again till it is completely clean. It is recommended to clean the chamber **every 3-6-months**.



**Chart 5.2 Illustration for Chamber Maintenance**

### 5.3 Filter Change (optional item)

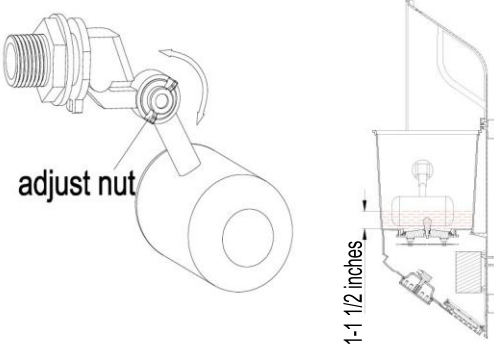


**Chart 5.3 Steps of Changing Filter**

Before changing the filter, shut off the power and the inlet valve. Shown as chart 5.3, ①take off the plastic semi-ring on the pipe side and push out the pipe ; ②take the filter away from the mounting clip ; ③take off the plastic semi-ring on the filter side, ④remove the 1/4" Push-fit connector ; ⑤change a new filter ; ⑥⑦⑧⑨⑩ are steps to fix the new filter back like the way above mentioned.

Note: the softening resin filter is to demineralize hard water in case of incrustation scale (white powder) on the surface, the filter is suggested to be used for 2-3 months based on water quality and change for new one at least 6 months.

# 6 Product Failure Causes & Treatment

Problem	Causes	Treatment
Small mist output	<ol style="list-style-type: none"> <li>1. Improper adjustable floating switch.</li> <li>2. Unclean chamber due to contaminated water</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the floating switch to the best water level ( Chart 6.1)</li> <li>2. Clean the chamber repeatedly.</li> </ol>
No mist output	<ol style="list-style-type: none"> <li>1. Improper adjustable floating switch for an working water level.</li> <li>2. Water outlet valve is unclosed or damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1 Adjust the float to the best water level (Chart 6.1)</li> <li>2. Close / change valve.</li> </ol>
Small mist output after long time working	<ol style="list-style-type: none"> <li>1. Incrustation scale on the surface</li> <li>2. Ultra Wall Mist is over working due to low efficiency</li> </ol>	<ol style="list-style-type: none"> <li>1. Use weak acid solution to clean the incrustation scale repeatedly.</li> <li>2. Order a new Ultra Wall Mist to put with existing unit to increase output.</li> </ol>
Water overflowing	<ol style="list-style-type: none"> <li>1. Floating switch become</li> <li>2. Float is improperly adjusted and water is overflowing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Change a new floating switch.</li> <li>2. Adjust the floating switch to the best water level.</li> </ol>
Short distance of atomization	Dust is preventing air from entering dustproof net.	Wash the dustproof net.
<p>Note:</p> <p>If the fog output becomes too small, check and adjust the floating switch to be a best working water level: 1-1 1/2 inches from the Ultra Wall Mist surface to the water top. (Chart 6.1)</p>	 <p style="text-align: center;">Chart 6.1</p>	



