

# TrolMaster

## HS-1

Humidistat Station

For Hydro-X Control System

## Overview

Thank you for purchasing the TrolMaster's HS-1 Humidistat Station. It is specially designed to control dehumidifier with 24V terminal.

With the connection to Hydro-X by four data lines through the four ports on the back panel, user can use HS-1 to control any dehumidifier with 24V terminal. Choose your desired humidity setpoint for the Day / Night mode (see Humidity Settings in Hydro-X's instructions P19-20), the HS-1 will control the dehumidifier based on the setpoint.

The LCD screen of HS-1 will display the setpoint humidity (upper part) and current humidity (lower part). When the current measured humidity is higher than the setpoint, the HS-1 unit will control the dehumidifier to decrease the humidity to normal setpoint.

## Features

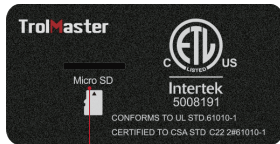
- Digital Control of Relative Humidity (digital set-point)
- LCD Display, Easy Operation
- Micro-SD for Firmware Update
- Seamless Connectivity with Hydro-X
- Control Dehumidifier based on Humidity Setpoint

# Installation

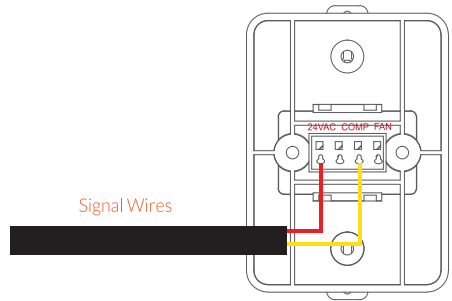
Pull the 2 tabs outward to release the bracket from the unit, mount the bracket to wall or surface near the dehumidifier. Peel off the outer sheath of all signal cable of a dehumidifier to reveal the copper wire. Then, insert each bare wire into the corresponding terminals on the back panel while pressing the button of the terminal designation at the same time. Release the button to clamp the wire in each terminal. Verify wire is firmly secured by gently pulling on wire. Finally, place the unit back on the bracket and press the 2 tabs back in to lock the unit in place.



RJ12 Cable Socket



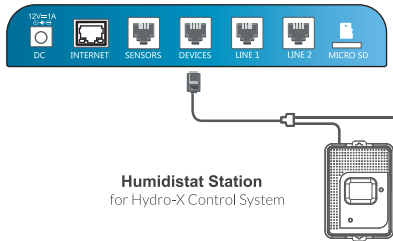
Micro SD Slot



# Operation Instructions

## 1. Connection to Hydro-X

When the signal wires are successfully connected to the HS-1 unit, and then connect the HS-1 to the Hydro-X with a RJ12 cable through the DEVICES socket on the bottom of Hydro-X, so now you can see the performance of the HS-1 unit. See below connection diagram for reference.



After power-on, the LCD screen of HS-1 will show “Please press Addressing Key” accordingly when the HS-1 is connected correctly. Otherwise, it will show “Offline” when the HS-1 is connected incorrectly.



Correct Connection



Incorrect Connection

## 2. Address Assignment

Press the Addressing button on the HS-1 unit so that the Hydro-X will assign an address such as H1 to HS-1 unit accordingly. The LCD screen of Hydro-X will display “Station H1 has been added”. Please note H1 is not the constant product code, it can be H2 depending on the connection sequence of the dehumidifier device. The first one is marked as H1, the second one as H2.



LCD Screen of HS-1



LCD Screen of Hydro-X

You can also check the address code on the Hydro-X as shown below:



Main Menu of Hydro-X

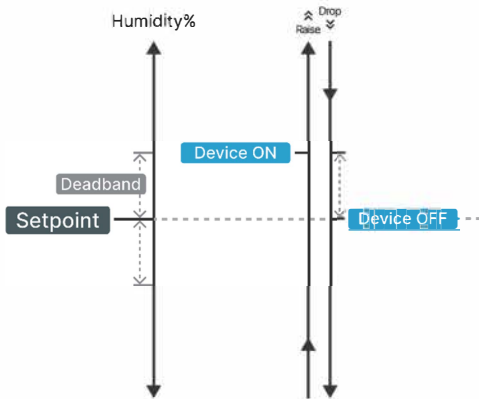


Left Button



Devices Status of Hydro-X

### 3. HS-1 Operation



The HS-1 will turn on the dehumidifier automatically depending on the variance between current humidity and setpoint. For example, when the current humidity is HIGHER than the setpoint, the HS-1 will start the dehumidifier and display "ON" on the screen.

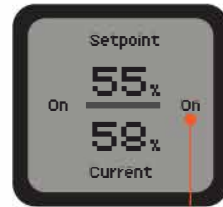
### 4. Fan Setting

Press button to select ON or AUTO (Toggle to re-select) mode for the fan.

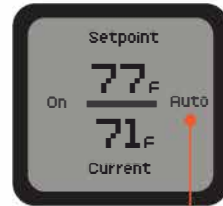
AUTO: Fan runs only when the dehumidifier is ON.

ON: The fan is always ON.

**NOTE:** Options may vary depending on your dehumidifiers.



ON Mode (FAN)



AUTO Mode (FAN)

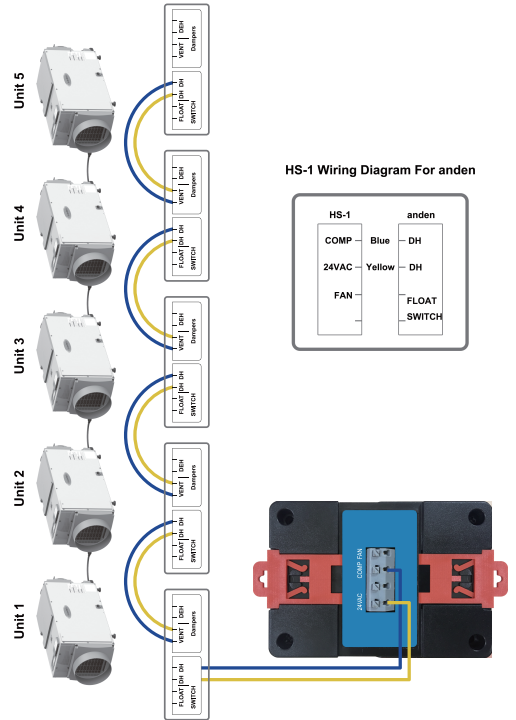
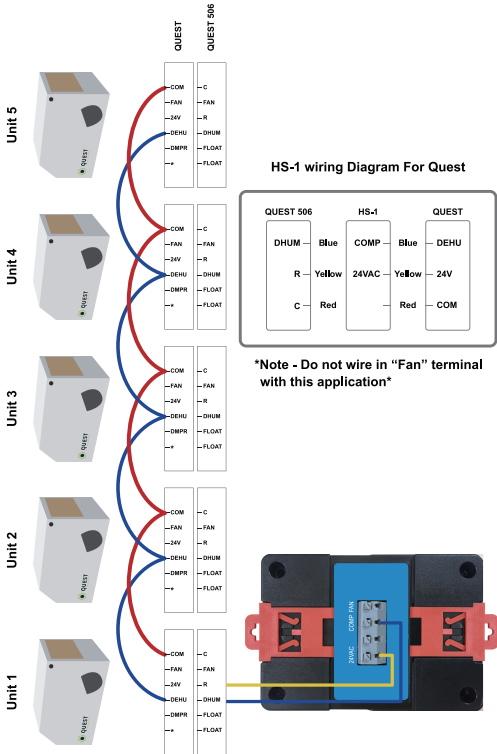
### 5. Firmware Upgrade

Press and hold "Addressing" button while replugging the RJ12 cable, the upgrade process will be done automatically.



**NOTE:** Make sure the file name of firmware upgrade should be named as "hs1\_update.hex".

## 6. Diagram Appendixes



## 7. Specifications:

Certifications Certifications	ETL / FCC ETL / FCC
Degree of Ingress Protection Indice de protection	IP20 IP20
Input Voltage:	12V
Maximum Current:	0.1A
Working Environments	Temperature 32-122°F, Humidity≤90%
Package Dimensions	160(L) x 86(W) x 86mm(H)

## 8. GENERAL INFORMATION

- a). Please use TrolMaster's components for better performance.
- b). In the case of defects of the Humidistat Station , the Humidistat Station will either be replaced or repaired using new or reconditioned products or parts by TrolMaster within three-year warranty from the original date of purchase. For service, return the Humidistat Station in good packaging to our agent with the original sale receipt.
- c). Non-professionals DO NOT open the cabinet to prevent electric shock or damage to the Humidistat Station.



**WARNING:** DO NOT allow the Humidistat Station to be exposed to water or excessive heat. DO NOT open or attempt to repair or disassemble the Humidistat Station, as there are no user-serviceable parts inside. Opening the controller will void the warranty.

1. If the surface of Humidistat Station is dirty, wipe it with a dry towel.
2. The Humidistat Station is designed for indoor use only, it should be operated under natural ventilation conditions.
3. For safety, it's necessary to connect the ground wire. If a short circuit did occur, the current would flow through the ground wire, causing a blown fuse or tripped circuit breaker.
4. The Humidistat Station should be positioned in a place that it's easily to be pull out when a fault occurs.



**AVERTISSEMENT:** N'exposez PAS le Humidistat Station à de l'eau ou à une chaleur excessive. NE l'ouvrez PAS, NE tentez PAS de le réparer ou de le démonter, car il ne contient aucune pièce réparable par l'utilisateur. L'ouverture du régulateur entraîne l'annulation de la garantie.

1. Si la surface du Humidistat Station est sale, essuyez-la à l'aide d'un chiffon sec.
2. Le Humidistat Station fonctionne sous des conditions de ventilation naturelle.
3. Pour la sécurité, il est nécessaire de connecter le fil de terre. Si un court-circuit se produisait, le courant circulerait à travers le fil de terre, causant un fusible grillé ou un disjoncteur déclenché.
4. La Humidistat Station de l'appareil doit être placée dans un endroit où il est facile de la retirer en cas de panne.