Manual Humidistat EPHUM110E

Manual Index

ECOR-PRO Humidistat EPHUM110E

The humidistat is simple-stage, electronic humidity controller. The large, lighted LCD screen display is easy to read. It is easy to program. Plug and play designed. The case is designed with fireproof ABS material for human engineering. Humidity sensor is reliable, stable and high-accuracy.

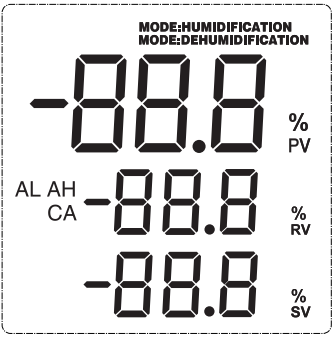
Features

- **Large LCD screen**
  Display the sensed humidity, setting humidity, and custom icons on the display indicate working mode.
- **Easy to use and program**
  Only 2-steps setting for your application, and plug-n-play design.
- **Reliable and accurate humidify probe**
  It is plug and play transducers designed for OEM applications where reliable and accurate measurements are needed.
- **With a humidity correction function**
  Allow user to adjust measuring accuracy base to on different probe, etc.
- **High and low humidity alarms are available**
- **Over-humidity and sensor fault alarm**

Technical Specifications

Control Range	5-99%RH
Humidity Resolution	0.1%RH
Accuracy	±3%RH
Control Mode	Humidify or Dehumidify
Input Power	100~240VAC, 50/60Hz
Temperature Control Output	Max.10A, 100-240VAC
Humidity output load	1100W@110V, 2200W@220V
Buzzer Alarm	High / Low Humidity Alarm
Sensor Model	MEAS HTG3500 series
Sensor Lead Length	2m, 6ft
Relay Contact Capacity	Humidify (10A,100-240VAC) Dehumidify (10A,100-240VAC)
Input Power Cable Length	150 cm/6ft
Output Power Cable Length	18cm/7”

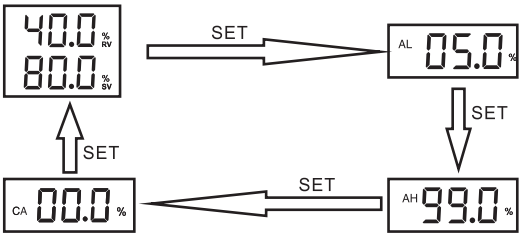
Panel Instructions



1.PV: Current Humidity
2.RV: Run Humidity
3.SV: Stop Humidity
4.AH: High Humidity Alarm
5.AL: Low Humidity Alarm
6.CA: Humidity Calibration

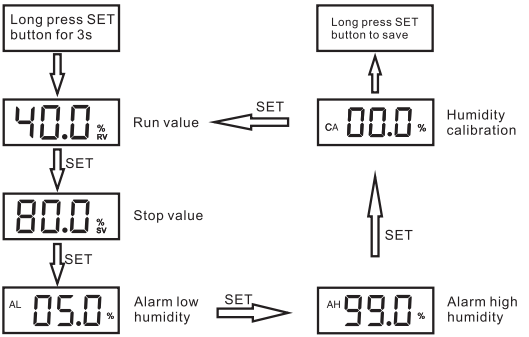
View Setting Parameters

When the controller is working normally, short press SET and you can look at the parameter values in order.



Setting Instructions

Setup Flow Chart



Setting the RUN humidity (RV) and STOP humidity (SV)

1. Long press the SET button until 40.0% Run humidity (RV) flashing
2. Press5 ▲ and ▼ to adjust the humidity value
3. Press SET button to set 80.0% Stop humidity (SV)
4. Long press SET button to save and exit.

Note: If no entries are made for 30 seconds while programming is in progress, the control reverts to the normal temperature display.

Setting Other Functions

To set Low humidity Alarm(**AL**), High humidity Alarm(**AH**), Calibration(**CA**), use the method below.

1. Long press the SET button until 05.0% **AL** flashing
2. Press ▲ and ▼ to adjust the humidity value
3. Press SET button to set next function.
4. Long press SET button to save and exit.

For example

User want to run humidification equipment at 30%RH, and stop humidification equipment at 70%. Low humidify alarm at 20%, high humidify alarm at 80%. So RV=30%, SV=70%, AL=20%, AH=80%

1. Long press the SET button until 40.0% **RV** Run humidity flashing
2. Press ▲ and ▼ to adjust the humidity value to 30%;
3. Short press **SET** button once to set 80.0% **SV** Stop humidity (70%)
4. Short press **SET** button once to set **AL** value(20%)
5. Short press **SET** button once to set **AH** value(80%)
6. Long press **SET** button to save and exit.

How to restore default settings

Keep pressing SET key until connect the power to this device, controller will restore factory setting after BI--- sound.

Function range and setting

CODE	Function	Setting Range	Default Setting
RV	Run Humidity Value	0%RH---99%RH	40%RH
SV	Stop Humidity Value	0%RH---99%RH	80%RH
AH	High Humidity Alarm	0%RH---99%RH	99%RH
AL	Low Humidity Alarm	0%RH---99%RH	5%RH
CA	Humidity Calibration	-10%RH---10%RH	0%RH

How to make the backlight shut off

Press and ▲ and **SET** buttons simultaneously about 3 seconds until the symbol 💡 disappears, the LCD light will shut off automatically after 30 seconds.

Press the ▲ and **SET** buttons simultaneously about 3 seconds until the LCD appears 💡, the LCD will be stay on.

Function Introduction

1. Dehumidify Mode

Set RV(RUN humidity) > SV(STOP humidity), the humidistat enter dehumidification mode. The LCD will display **MODE:DE-HUMIDIFICATION**.

When PV(measuring humidity) is higher than RV, the dehumidification equipment start working, and run LED is on. When PV(measuring humidity) reach to SV(STOP humidity), the dehumidification equipment stop working, and stop LED is on.

2. Humidify Mode

Set RV(RUN humidity) < SV(STOP humidity), the humidistat enter humidification mode. The LCD will display **MODE:DE-HUMIDIFICATION**.

When PV(measuring humidity) is lower than RV, the humidification equipment start working, and run LED is on. When PV(measuring humidity) reach to SV(STOP humidity), the humidification equipment stop working, and stop LED is on.

3.High/Low Humidity Alarm (AH/AL)

When measuring humidity (PV) ≥ high humidity alarm value (AH), high humidity alarm will be triggered, buzzer will alarm with tone "bi-bi-bi-", press any key to cancel the alarm sound if user want to close alarm, please reset the AH value or wait until PV is lower than AH.

When measuring humidity (PV) ≤ low humidity alarm value (AL), low humidity alarm will be triggered, buzzer will alarm with tone "bi-bi-bi-" , press any key to cancel the alarm sound, if user want to close alarm, please reset the AL value or wait until PV is more than AL

4.Humidity Calibration (CA)

When there is deviation between current humidity and actual humidity, use humidity calibration function to correct the current humidity and actual humidity. **Correction Humidity = Humidity** (before Calibration) + **Correction Value** (corrected value could be positive value, 0 or negative value).

Application

The humidistat can be used to control a wide variety of simple-stage humidify and dehumidify equipment.

Typical applications include:

- Electronic warehouse
- Bedroom and air-conditioned room
- Fresh storage
- Food manufacturing
- Laboratory
- Computer room
- Green house
- Production workshop

Troubleshooting

If you have a problem with humidistat, there's usually a quick and simple solution.

Err Alarm

When humidity sensor is in short-circuited or open-circuited, the humidistat will prompt sensor fault mode, and the buzzer will alarm, and LED displays Err. Buzzer alarm could be dismissed by pressing any key.

1. Make sure that the sensor is plugged into the hole fully;
2. Re-plug the sensor to controller after clean;
3. Exchange another sensor.

HL Alarm

When current humidity exceeds the measuring range (less than 5%RH or higher than 99%RH), the controller will prompt over- humidity alarm mode, and cancel all the actions. The buzzer will alarm, LED displays HL. Buzzer alarm could be dismissed by pressing any key. When humidity returns to measuring range, the system will return to normal working status. So please check if the sensor is mounted close to water or heating source.

Humidify sensor measuring value is inaccurate

1. Controller will take 2-3 minutes to stabilize the measuring value when mount the sensor in different positon.
2. Please mount the probe in the right positions;
3. Avoid exposing the probe to contact with water, air vent, etc.

Humidification or Dehumidification equipment don't work

1. Please make sure the setting value is correct. The green LED(RUN) Indicator is on when humidification or dehumidification equipment work.
2. Please make sure humidification or dehumidification equipment work fine when it don't connect to this controller.

If humidistat does not operate properly after trying the troubleshooting steps, please send your questions to our email: mailus@ecor-pro.com

WARRANTY

The ECOR-PRO products are guaranteed to the original owner for one year against defects in workmanship and materials.
Please contact us: mailus@ecor-pro.com

WARNING

※ Do Not Overload

This unit works with load up to 10A. If load is larger than rated value, it would become very hot even burn the humidistat. That is very dangerous. It is best that the load is less than or equal to 7A, if you require the humidistat to work stably for a long term.

※ The probe and controller are not waterproof, so don't get water into the controller and outlet, and don't plug the probe into water.

End of the period of use
Waste electrical equipment must not be disposed of in normal household waste. Take this product to your local recycling centre for proper disposal.

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