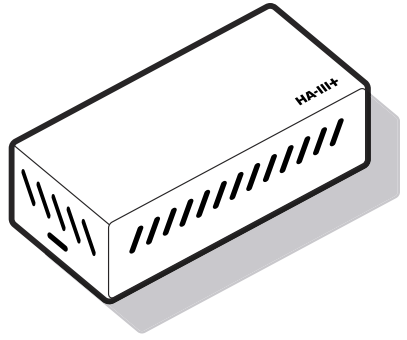




**WINLAND**  
ELECTRONICS, INC.

# HUMID•ALERT®

Electronic Humidity Sensor



**HA-III+**

## CONTENTS

This package contains:

- 1 HA-III+
- 2 Mounting Screws and 2 anchors
- 1 Installation/Operating Instructions Guide

## SPECIFICATIONS

Power Requirement	12 VDC @ 10mA
Sensing Element	Capacitive / IC
Sensing Range	5% - 95% R.H.
Accuracy	±5% (10% - 90% RH @ 77° F [25° C])
Response Time	TC < 12 minutes
Operating Temp	32° to 122° F (0° to 50° C); For use in non-condensing environments. NOT for coolers or freezers. Indoor use only.
Weight	5 oz (0.14 g)
Dimensions	3.25 x 1.5 x 1" (8.2 x 3.7 x 2.5 cm)
Mounting	Surface mount
Case Material	ABS
Warranty	1 Year Limited

Tech Support 8:00am - 5:00pm Central Time

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D-011-0105 Rev F (07/2015)

## GENERAL INFORMATION

The Winland HA-III+ is a sensor used for monitoring remote locations for rising or falling rates of humidity. The HA-III+ is designed and approved to be used with the EnviroAlert® family of monitoring devices including the EA200-12, EA400-12, EA800, and EA800-ip. The HA-III+ may also be used with Winland legacy monitoring devices including the TA-2HLD, TA-3HLD, UTA-1, DTA-4 and DPM-4.

The setup of high and low limits is done through the interface on the monitoring device you are connecting to.

**Important Note:** HA-III+ must not be used with monitoring devices that are powered with 24V AC/DC. When used with Winland legacy monitoring devices such as UTA-1, TA-2HLD, TA-3HLD, DTA-4 or DPM-4, the monitoring devices must be set to read Fahrenheit.

## THEORY OF OPERATION

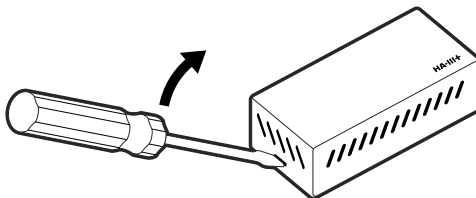
The HA-III+ senses the ambient room humidity electronically using a capacitive sensing element. Humidity should be expected to vary from room to room and from one area of a room to another. Ventilation and airflow will greatly affect relative humidity.

When programming the HA-III+ sensor on the monitoring device, the initial reading you receive should be considered a base reading. **Allow at least 30 minutes of operation for sensor to stabilize prior to setting your high and low limits.** It is necessary for the temperature of the sensor to stabilize before the readings are considered accurate. The outputs of Winland's electronic monitoring devices react within seconds of a limit being exceeded. A sudden burst of humid air from a door opening or a ventilation system starting, could cause a brief change in the humidity reading. To avoid false alarms, a time delay should be programmed into the EA200-12, EA400-12, EA800, and EA800-ip, UTA-1 or TA-2HLD. **It is strongly recommended to utilize a time delay unless your application requires instant notification.**

## Installation

The HA-III+ sensor should be flush mounted directly to a flat surface like a wall. The sensor should be located in an area free from drafts, heat sources, and direct sunlight. It is recommended that the sensor is mounted at a height of 4-5' (1.2-1.5 m) from the floor.

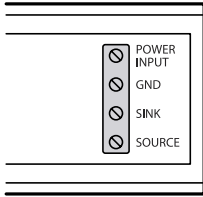
To begin installation of the HA-III+, you must first remove the cover. Do not use excessive force while removing the cover, you may crack or break the plastic housing. Grasp the HA-III+ between your thumb and index fingers along the long slotted surfaces of the sensor with the Winland logo facing you. Using a flat bladed screwdriver, insert tip of screwdriver into pry slot and **gently** pry open top cover until it swings loose from the base (See Figure 1). Remove screwdriver from pry slot, grasp cover beneath detached flange and swing to the right until cover fully detaches.



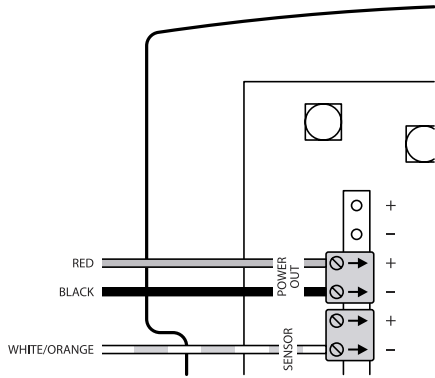
**FIGURE 1**

With the cover fully removed, fasten the base of the sensor to the wall via the screw holes in the base plate using the two screws provided.

Wire the HA-III+ to your EnviroAlert® monitoring device using the following wiring scheme (See Figures 2 and 3). Extend the length of probe wiring up to 1,000' (304.8m) using 22-18 AWG twisted pair.



**FIGURE 2**



**FIGURE 3**

(Shows typical use with an EnviroAlert® device)

**Connection will either be made to the Sink terminal screw or the Source terminal screw, never both.**

Avoid tucking excess wires under the PC board. To allow for maximum air movement, make certain that no wires surround the sensor which is located in the lower left hand corner of the PC board. Replace the cover by aligning the slots in the cover with the tabs on the base and slide the cover back toward the mounting surface until both side flanges snap into place.

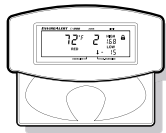
- |                      |  |
|----------------------|--|
| <b>Power Input =</b> | 12VDC Positive   |
| <b>GND =</b>         | 12VDC Negative   |
| <b>Sink =</b>        | Wire to either the white/brown or the white/red sensor input on the DTA-4 or DPM-4<br>This output is only used for the DTA-4 or DPM-4.   |
| <b>Source =</b>      | Wire to negative (-) terminal on sensor input of the desired device:<br>EA200-12, EA400-12, EA800, EA800-ip UTA-1, TA-2HLD, and TA-3HLD (See Figure 3)<br>Sensor input positive (+) is not used. |

**To insure proper operation, test weekly.**

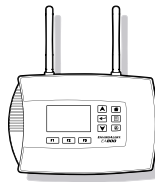
# ENVIROALERT.



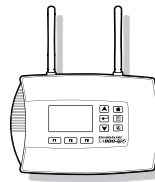
EA200



EA400



EA800



EA800-ip

## WEEE Product Recovery/Recycling for EU Customers

In an effort to improve waste management in the European Union, the European Union has enacted directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE Directive). According to the WEEE Directive, Winland Electronics must take back waste electrical or electronic equipment covered under the WEEE Directive, at its cost, for all product it puts on the market after July 1, 2006. The Return Process: Contact Winland via our web site at [www.winland.com](http://www.winland.com).



**Radio Frequency Interference Requirements:** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



**CE Marking and European Union Compliance:** Products intended for sale within the European Union are marked with the CE Mark, which indicates compliance to applicable Directives and European Norms (EN). Amendments to these Directives or ENs are included: Electromagnetic Compatibility Directive 2004/108/EC; Low Voltage Directive 2006/95/EC; RoHS Directive 2002/95/EC; WEEE Directive 2002/96/EC.

**Statement of Compliance:** Winland Electronics, Inc. hereby declares that this device is in compliance with all the applicable Directives 2004/108/EC, 2006/95/EC, 2002/95/EC, 2002/96/EC.

## Symbols on the Product or Manual Labeling



For product disposal, ensure the following:

- Do not dispose of this product as unsorted municipal waste.
- Collect this product separately.
- Use collection and return systems available to you.



WEEE Waste Electrical and Electronic Equipment  
RoHS Restriction of Hazardous Substances



TUV CUE Mark

## ONE YEAR LIMITED WARRANTY

Winland Electronics, Inc. ("Winland") warrants to the end user/purchaser that each product of its manufacture shall be free from defects in material and factory workmanship for a period of one year from the date of purchase, when properly installed and operated under normal conditions according to Winland's instruction. Winland's obligation under this warranty is limited to correcting, without charge, at its factory any part or parts thereof which shall be returned to the factory, by the original purchaser, transportation charges prepaid, within one year of the date of purchase and which upon examination, shall disclose to Winland's satisfaction to have been originally defective. Correction of such defects by repair to, or supplying replacements for, defective parts shall constitute fulfillment of all Winland's obligations to purchaser under this limited warranty. Repair service performed by Winland after one year from date of purchase will be for a reasonable service charge. This limited warranty shall not apply to any of Winland's products which have been subject to misuse, negligence or accident or which have been repaired or altered outside of Winland's factory. The warranty is void if the Product's housing or cover is removed. Winland shall not be liable for loss, damage or expense resulting, directly or indirectly, from the use of its products or any other cause. This warranty shall be null and void in its entirety if: (i) the product is altered or modified in any way that is not consistent with the manufacturer's instructions, or (ii) the product is used with or connected to a device: (a) that such product is not intended to be used with or connected to, (b) is not otherwise consistent with the manufacturer's instructions, or (c) is not otherwise approved by the manufacturer. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES, NON-INFRINGEMENT AND TITLE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, USAGE OF TRADE OR OTHERWISE. ALL OTHER REPRESENTATIONS MADE TO THE END USER/PURCHASER BY ANY OTHER PARTY ARE ALSO EXCLUDED. WINLAND SHALL NOT BE LIABLE TO ANY PERSON FOR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF WARRANTY OR OTHER CONTRACT, NEGLIGENCE OR OTHER TORT, OR OTHERWISE. Under no circumstances shall Winland's liability under this limited warranty exceed the purchase price paid by the end user/purchaser for the product. No person, agent or dealer is authorized to give warranties on behalf of Winland nor to assume for Winland any other liability in connection with any of its products.