



HUMID-ALERT®

Economical Humidity Monitoring



HA-1

CONTENTS

This package contains:

- 1 HA-1
- 1 Rubber mounting gasket (duct mounting only)
- 2 Wire nuts
- 1 Adhesive mounting template/instructions (duct mounting only)
- 2 Lead wires
- 2 Mounting screws (for use with single-gang wall box)
- 1 Owner's Manual

SPECIFICATIONS

Power Requirements	None
Sensing Range	20-80% RH \pm 10% RH
Sensing Element	Nylon band
Response Time	TC = 12 min.
Output Contact Ratings	1A resistive @ 24VDC; 50VA @ 24VAC
Operating Temperature	60 to 90°F (15 to 32°C)
Optimum Operating Temperature	70°F (21.1°C)
Weight	8 oz (0.23 kg)
Dimensions	5 x 3.18 x 2.43" (12.7 x 8.1 x 6.2 cm)
Case Material	ABS plastic
Mounting	Wall, wall box, or duct surface



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General Information

The Humid•Alert® humidity sensor provides reliable monitoring of an area where a single high or low humidity limit is critical. The HA-1 monitors relative humidity from 20% to 80% RH, activating an internal switch output when the critical limit is exceeded. This output can be used to activate alarm systems, telephone dialers, or other warning devices. This is a single set-point device; it can monitor for either a high or a low level, but not both. If additional monitoring (high and low) is required, Winland's EnviroAlert® line of products with humidity monitoring accessories is recommended.

Theory of Operation

The HA-1 senses the ambient room humidity using a nylon-banded sensing element. The HA-1 requires no power to operate and provides a SPDT contact output when the single set-point is met. 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. The single set-point is established by using the adjustment knob on the face of the unit.

Location

Choose a location for the Humid•Alert about five feet above the floor on an inside wall with average room temperature and relative humidity conditions. The maximum ambient temperature at the selected location must not exceed 125°F (51°C).

NOTE: Temperatures above 90°F (32.2°C) will adversely affect the accuracy of the Humid•Alert.

Installation

The HA-1 has three mounting options: horizontally positioned single-gang wall box, direct wall mount, and duct mount.

NOTE: Only use the rubber mounting gasket when mounting the HA-1 to a duct; use in any other application will limit natural airflow reducing the accuracy of the unit.

To install onto a single-gang wall box:

- 1) Run low voltage wiring from alarm panel, dialer, etc. to chosen location through the wall into the single-gang wall box. Plug openings in the sides and back of the box to prevent drafts from affecting the Humid•Alert's operation.
- 2) Remove the Humid•Alert cover by prying with a screwdriver in the notch on the bottom of the case (Figure 1).
- 3) Mount the base of the unit onto the single gang wall box using the screws provided.
- 4) Make the wiring connections to the Humid•Alert assembly using lead wires and wire nuts supplied (Figure 2). Tuck wires into the bottom of the base, and then snap the cover assembly onto base (Figure 2).

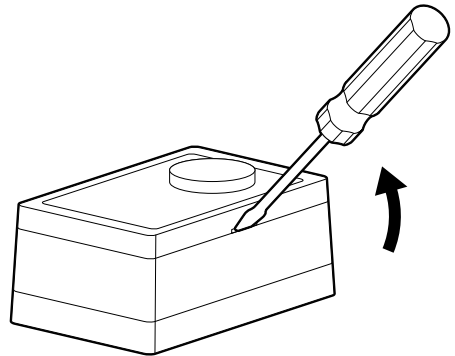


Figure 1

To install directly onto a wall:

NOTE: If installing on sheetrock, use sheetrock anchors and screws.

- 1) Drill a small hole in the wall and run low voltage wiring from alarm panel, dialer, etc. to the location chosen. Pull about six inches of wire through the hole. Plug the opening to prevent drafts from affecting the Humid•Alert's operation.
- 2) Remove the Humid•Alert cover by prying with a screwdriver in the notch on the bottom of the case (Figure 1).
- 3) Mount the base of the unit onto the wall using the hardware provided.
- 4) Make the wiring connections to the Humid•Alert assembly using lead wires and wire nuts supplied (Figure 2) Tuck wires into the bottom of the base, and then snap the cover assembly onto base (Figure 2).

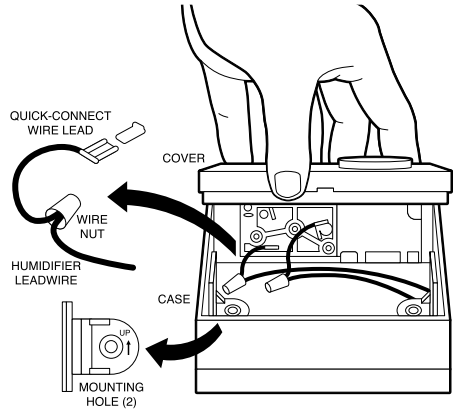


Figure 2

To install onto a duct: Follow instructions printed on the adhesive mounting template.

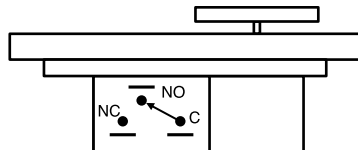
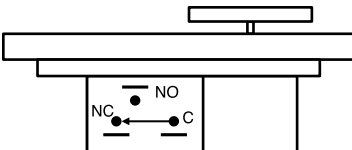
Setting the Humidity Limit

Select an acceptable high or low humidity limit by turning the adjustment knob on the face of the unit. For all installation options it is recommended that once the unit is installed the current ambient RH level is determined prior to setting the HA-1 high or low limit. To determine the current RH level, turn the adjustment knob on the face of the unit until you hear a "click". The point at which you hear the output contact change is the current relative humidity level. Always allow enough time for the sensor to acclimate to current room conditions before considering the reading to be accurate.

NOTE: The HA-1 has a built-in 2-3% hysteresis (delay). Therefore, the unit will not set and reset at exactly the same point. This spread will amount to approximately 2-3 %RH of the alarm set point.

If protecting against low humidity, assume continuity between C and NC under non-alarm conditions. When the actual humidity drops below the set point, C to NC will then be open. To test this configuration with the limit set below the current reading, rotate the knob clockwise until the output contact changes.

If protecting against high humidity, assume continuity between C and NO under non-alarm conditions. When the actual humidity rises above the set point, C to NO will then be open. To test this configuration with the limit set above the current reading, rotate the knob counterclockwise until the output contact changes.



FREQUENTLY ASKED QUESTIONS

Does this require power to operate?

No. The Humid•Alert does not require power to operate.

What is the contact rating output?

The contact rating output for the Humid•Alert is 50VA @ 24VAC; 1A resistive @ 24VDC.

How can I monitor for both high and low humidity levels?

The HA-1 will monitor only one limit, either high or low. The Winland EnviroAlert® products are designed to monitor for both high and low limits. Several configuration options are available:

1. Use the EnviroAlert® EA800 with the wireless humidity sensor (EA-WHS).
2. Use the EnviroAlert® EA800 with the hard wired HA-III+.
3. Use the EnviroAlert® EA400 with the hard wired HA-III+.
4. Use the EnviroAlert® EA200 with the hard wired HA-III+.

For more information, visit the our web site at: www.winlandsecurity.com.

ONE YEAR LIMITED WARRANTY

Winland Electronics, Inc. warrants that each product of its manufacture is free from defects in material and factory workmanship, when properly installed and operated under normal conditions according to the manufacturer's instructions.

Manufacturer's obligation under this warranty is limited to correcting, without charge, at its factory any part of parts thereof which shall be returned to the factory, by the original retail purchaser, transportation charges prepaid, within one year after purchase and which upon examination shall disclose to the manufacturer's satisfaction to have been originally defective. Correction of such defects by repair to, or supplying of replacements for defective parts shall constitute fulfillment of all obligations to purchaser. Repair service performed by the manufacturer after one year from date of purchase will be for a reasonable service charge.

This warranty shall not apply to any of the manufacturer's products which have been subject to misuse, negligence or accident of which shall have been repaired or altered outside of the manufacturer's factory.

Manufacturer shall not be liable for loss, damage, or expense directly or indirectly from the use of its product or from any other cause.

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