WINLAND
ELECTRONICS, INC.
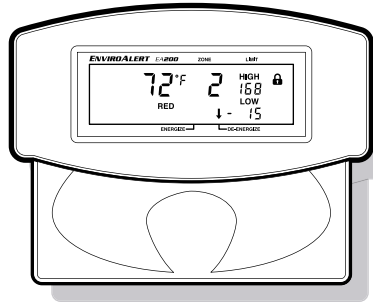
ENVIROALERT® EA200
ENVIROALERT® EA400

QUICK START GUIDE

ALWAYS TEST THE SYSTEM

Test the system to ensure proper operation prior to leaving the job site. To test the system, either change the probe's temperature so it exceeds your limits, or change the limits to simulate an alarm. If a delay has been programmed, take the delay out, test the unit, and then put the delay back in.

FREEZER/COOLER MONITORING

Never install the EnviroAlert console in a cooler or freezer (condensing environment). Instead, use a remote probe (TEMP-L-S or TEMP-L-W) and program your zone accordingly. Extend the length of probe wiring up to 1,000' (304.8m) using 22-18 AWG twisted pair.

AVOIDING FALSE ALARMS ON A COOLER OR FREEZER

Both the EA200 and EA400 offer an alarm delay from 0-120 minutes for each zone. When a cooler or freezer door is opened, the temperature will rise and the probe will detect that rise. Freezers periodically need to enter a defrost cycle which may also cause the temperature to rise above your limits. Set delays to avoid nuisance alarms under these normal circumstances. We cannot advise you on what to set for delays or limits.

ON-BOARD TEMP SENSOR (EA200 ONLY)

The EA200 has an on-board ambient temperature sensor and it is programmed on Zone 1.

More information and product manuals can be found at: www.winland.com

POWER REQUIREMENTS:

EA200-12: 11 to 14 VDC @ 120mA   **EA400-12:** 11 to 14 VDC @ 200mA
EA200-24: 23 to 26 VDC @ 120mA   **EA400-24:** 23 to 26 VDC @ 200mA
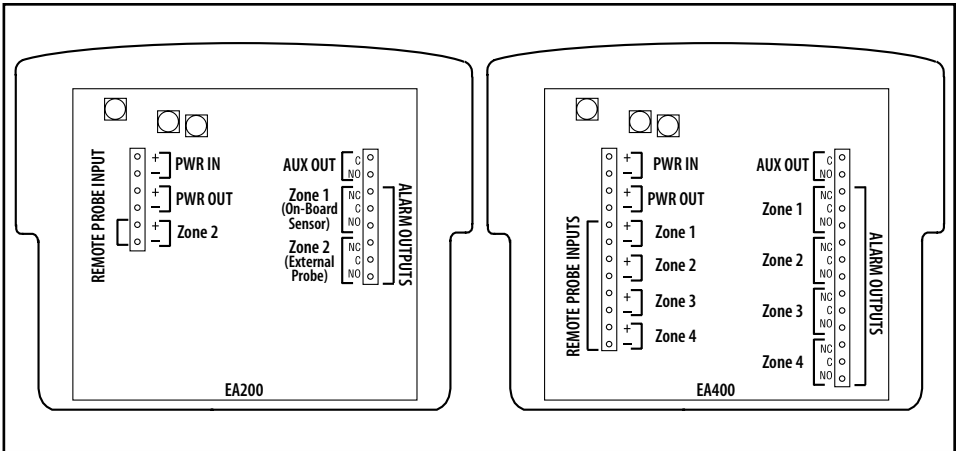

Figure 1 - EA200 and EA400 Wiring

STEP 1: CONNECT POWER AND PROBE(S)

Connect power to the PWR IN terminals, as shown in Figure 1. Be sure to observe proper polarity. Connect the probe(s) to the zone(s) you intend to monitor. Extend the length of probe wiring up to 1,000' (304.8m) using 22-18 AWG twisted pair.

EA200 NOTE: Zone 1 is dedicated for the on-board temperature sensor. Remote probes must be programmed on Zone 2. There is only one input for a remote probe on the EA200 - this is Zone 2.

EA400 NOTE: The EA400 does not have an on-board temperature sensor and uses only remote probes.

STEP 2: UNLOCK CONSOLE FOR PROGRAMMING

To unlock the console, press and simultaneously release the ENTER and ALARM SILENCE buttons. The "lock" icon should change to "unlocked".

Lock   Unlock

STEP 3: SET THE TIME AND DATE

Press the TIME/DATE button. Using either the INCREASE or DECREASE button, adjust the hours and then press the ENTER button. Continue in this manner to set the minutes, AM/PM, year, month, and day. If power is lost, the time and date must be reset.

STEP 4: PROGRAM THE ZONE(S)

1. Press the ZONE button. The active zone number will be flashing.
2. Select the zone you wish to program using INCREASE or DECREASE and then press ENTER. The "no" means "not operational" and indicates the zone is currently off. Any zone not programmed should be set to "no" and therefore turned off.
3. Based on the chart (Figure 2), select the proper sensor type using INCREASE or DECREASE and press ENTER.

4. Continue in this manner to set the
   - high limit
   - low limit
   - optional time delay in minutes (this defaults to 0)
   - non-alarm relay state (ENERGIZE/DE-ENERGIZE)

NOTE: If you are powering this device from a system with battery back-up, DE-ENGERGIZE (the default) generally makes the most sense. If an alarm is desired upon loss of power to the EnviroAlert, select ENERGIZE. However, the normally-open (N.O.) and normally-closed (N.C.) contacts shown in Figure 1 will then be functionally opposite.

Probe Type	Description
°C or °F	Legacy (discontinued) polarity-sensitive temperature probes 1106, 1107, 1108, 1109, 1109A
Red °C or Red °F	TEMP-H-S (32° to 300° F) and TEMP-H-W (32° to 221° F) High-temperature range thermistor probes
Blue °C or Blue °F	TEMP-L-S (-58° to 158° F) and TEMP-L-W (-58° to 158° F) Low-temperature range thermistor probes
%	HA-III+ Humidity probe (5 to 95 % RH)
💧	W-S-S and W-UC-S Water detection probe (surface and under-carpet) supervised

Figure 2 - Remote Probe Selections

STEP 5: ALARM WIRING

You have the option of using the AUX relay for all-in-one notification or using the individual relay outputs. The AUX relay will change state when any zone is in alarm and can be cancelled for 10 minutes using the ALARM SILENCE button. The individual outputs are not affected by the ALARM SILENCE button.

NOTE: If you are using the individual relay outputs, Output 1 corresponds to Zone 1; Output 2 corresponds to Zone 2; etc. See Figure 1.

STEP 6: TEST THE SYSTEM

Test the system to ensure proper operation prior to leaving the job site. To test the system, either change the probe's temperature so it exceeds your limits, or change the limits to simulate an alarm. If a delay has been programmed, take the delay out, test the unit, and then put the delay back in.

ADDITIONAL FEATURES

OFFSET button: The EnviroAlert has the ability to adjust the displayed temperature reading for each zone to match to a known-good reference (±9 degrees). To use this feature, press the OFFSET button, choose which zone you wish to offset, press ENTER, adjust the value of the offset, and then press ENTER again.

ALARM HISTORY button: This will display the most recent eight alarm events. The display will toggle between the time and date. To scroll through the alarm events, use the INCREASE or DECREASE buttons. Press the ALARM HISTORY button again to exit. This feature relies on the time and date being set correctly. To clear the alarm history, press and hold the ALARM HISTORY button until you see "CLr".

To insure proper operation, test weekly.

Reading the LCD screen:

- Zone 2 current temp is **45° F**
- Zone 2 high limit is **43°**
- Zone 2 low limit is **-25°**
- The console is **unlocked**
- Zone 2 programmed for **blue** probe
- **De-energized** means relay is OFF under normal conditions
- The **hour glass** shows an alarm delay (up to 120 minutes / zone)
- A **solid bell** indicates an alarm delay
- A **flashing bell** indicates active alarm
- Press and simultaneously release **Enter** and **Alarm Silence** buttons to **Lock** and **Unlock** the console.

COMMON MISTAKES AND HOW TO AVOID THEM

"De-Energize" vs. "Energize"

- "De-Energize" means the relay will be OFF under normal conditions and will switch ON when there is an alarm. This is the default state and will correspond with the legend on the circuit board (N.O. and N.C.).
- "Energize" means the relay will be ON under normal conditions and will switch OFF when there is an alarm or if power is lost, providing power-supervision. However, this will reverse your N.O. and N.C. contacts. In either case, you still have both sets of contacts. The AUX relay cannot be configured in this way.

Zone # vs. Output

These directly correspond. Zone 1 uses the Output 1 relay. Zone 2 uses the Output 2 relay. Using Zone 2, but wiring to your alarm panel using the Output 1 relay will not work. To cover all zones with a single relay, use the AUX relay.

"no" in Programming

To program a zone, press the ZONE button. The active zone will be flashing. Select the zone number using INCREASE or DECREASE, and then press ENTER. You will then see the word "no" flashing. This means "not operational" and indicates the zone is currently off. When you see this flashing, press INCREASE or DECREASE to scroll through your sensing options. Zones with no probe attached should be turned off. If you are trying to turn a zone off, select "no" here.

Temperature Reading is Not Accurate

If the reading does not match your temperature reference, ask yourself the following questions:

- Is it programmed as the correct sensor type (Figure 2) and in the correct zone? If the displayed temperature is not even close, this is most likely the problem.
- Has the temperature reference been calibrated, and is it known to be accurate?
- Is the reference probe in exactly the same place as the EA200/400 probe? It is normal for the temperature in a climate controlled room to vary by several degrees.

If you need to match the EA200/400's reading to a reference, use the OFFSET feature to do this. Ensure you have a known-good calibrated reference or you may be unintentionally changing an already accurate reading.