

This guide provides basic setup instructions for the EA800 Environmental Monitoring System and associated sensors. Installers should refer to the Installation Manual for complete instructions and specifications, and to become familiar with the many features provided by the EA800. The EA800 allows connection of up to 4 wired and 4 wireless sensors.

**CAUTION** Read the *Installation/Owner's Manual* for complete instructions.

- Note:** All power terminals must be connected to a Class 2 power limited circuit complying with National Electrical Code NFPA 70, Article 725. Where required, this equipment is to be isolated from the mains supply by a limited power source as specified in EN60950.
- Note:** Batteries shall not cause explosion or produce a fire HAZARD as a result of excessive charge or discharge, or if a battery is installed with incorrect polarity.
- Note:** Ensure all wiring for wired sensor connections is done before powering on or programming the EA800 base unit.
- Note:** If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## Specifications

|   |  |
|---|--|
| EA800 Base Unit Input Voltage:                                  | +11 to +26VDC @ ≤ 500mA current draw   |
| EA-WMFS, EA-WTS, EA-WHS Wireless Sensor Input Voltage:          | +12VDC @ ≤ 100mA current draw using a 2.1 mm barrel plug, center positive OR 2xAA Alkaline Batteries (1.5V Cell)                   |
| EA800 Base Unit Auxiliary Output Voltage:                       | Equivalent to DC Input Voltage used: +11 to +26VDC. (Maximum output current 0.5A).   |
| Environmental Operating Range (EA800, EA-WMFS, EA-WTS, EA-WHS): | Temperature: 0°C to 50°C (32°F to 122°F). Not for installation inside coolers or freezers. Humidity: 5% to 95% RH, non-condensing. |
| Ambient Environmental Quality:                                  | Indoor use intended, non-corrosive environment.  |
| Relay Contact Ratings:  | Max 30VDC @ 1 amp resistive  |
| EA800 Real-Time Clock Battery:                                  | CR2032 (3V Cell)   |

## Installation Overview

### 1. Installing the Base Unit

**CAUTION** Do not connect or disconnect power, sensor, or alarm wiring while power is applied. Connecting and disconnecting the EA800 base unit with power connected may damage the base unit or result in improper or unreliable operation.

**CAUTION** Connection of unsuitable loads to this connection may damage the power supply and EA800 base unit, or result in improper or unreliable operation.

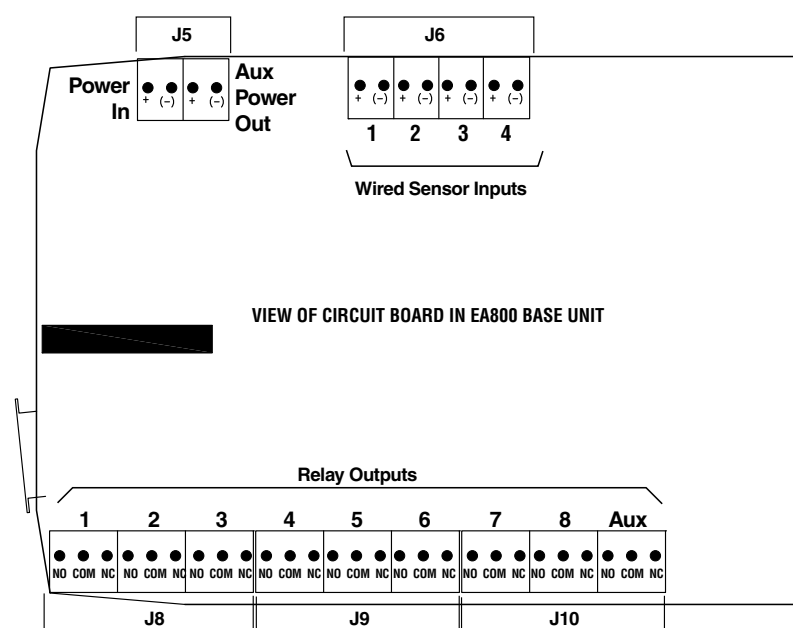
Using a terminal block adapter, connect power supply + and - leads to **POWER IN** (+) and (-) on **J5**. Observe proper polarity. If using a transformer, ensure that the transformer is an isolated power supply.

EA800 Input Voltage: +11 to +26VDC at ≤ 500mA current draw

**Note:** The input voltage specification does not include additional requirements for loads connected to Aux Power Out.

If Aux Power Out is to be used, connect + and - leads to **AUX POWER OUT** (+) and (-) on **J5** using a terminal block adapter.

**When base unit is powered up, a 30-minute timer starts. The base unit will alarm after this timer expires unless 1 or more sensors are installed.**



### 2. Unlocking/Locking the Base Unit



Press **F1** to unlock base unit. The default password is **0800**. See *Installation/Owner's Manual* to customize password.



To enter password, press **F3 (Next)** to move the cursor 1 digit to the right. Use the arrow keys to change the numeric value to **0800**, then press **↵** to enter. The base unit is now unlocked.



After completion of steps 3 through 5, press **F1** to lock the base unit. The base unit locks automatically if no keys are pressed within 30 minutes.

### 3. Setting Time and Date




**To set time and date format:** The defaults are 24-hour clock (military time) and mm/dd/yyyy format.

To change to 12-hour clock or dd/mm/yyyy format if desired, go to **MAIN MENU**, select **System**, **↵**; select **Configuration**, **↵**; select **Date Format** or **Time Format**, **↵**; then select the preferred configuration. Press **F3 (OK)** to set.


**To set time and date:** go to **MAIN MENU**, select **System**, **↵**; select **Set Date** or **Set Time**, **↵**; follow menu prompts and use **PREV** and **NEXT** soft keys to select the desired values. Press **F3 (OK)** to set.

## 4. Adding Sensors

Press **MENU**  key, use arrow keys to select **Sensors** and press . Select **Add New Sensor**, . Follow procedure **4a** if adding a wired sensor and procedure **4b** if adding a wireless sensor.

### 4.a Adding Wired Sensors



Select **Wired**, . Select the type of sensor being connected. You can opt to select from a list of **Common** names or create a **Custom** name (16 characters or less). After assigning a name, continue to follow the on-screen prompts to complete the programming of your sensor. See *Installation/Owner's Manual* for details.

Repeat setup for each additional wired sensor. The steps vary depending on the sensor type being added.


**Note:** For detailed information on configuring a 4-20mA sensor, please refer to the *Installation/Owner's Manual*.


### 4.b Adding Wireless Sensors

Remove cover from wireless sensors until setup is complete. With the wireless sensor unmounted and located near the base unit, apply power to the sensor using remote power supply or 2 AA batteries before starting setup. It is recommended that power is applied to 1 sensor at a time, and that the setup is completed for that sensor before adding subsequent wireless sensors.

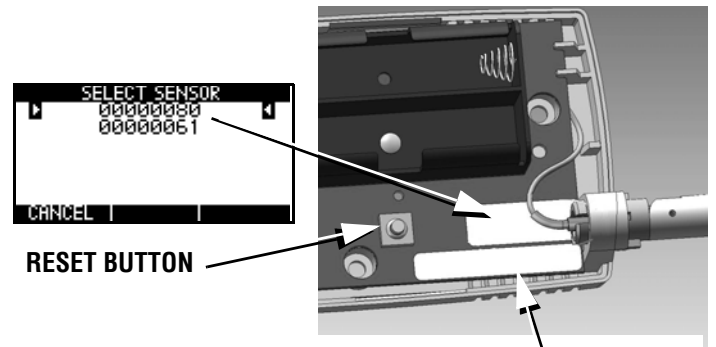
Select **Wireless**, press . The base unit searches for a connection with the wireless sensor. This may take 1-2 minutes.

**Note:** Press the Reset Button on the sensor to restart the search process if necessary.

Verify that the number shown on the base unit's screen matches the number on the sensor's PC board. Press . If the list of number(s) on the screen does not contain the number found on the sensor's PC board, press **F1 (Cancel)** to continue the search process.

Select the output relay to which the wireless sensor is to be connected, then press .


Continue the setup based upon the type of wireless sensor being added.



**RESET BUTTON**  
**SENSOR MODEL NO.**  
(Example: EA-WTS = Wireless Temperature Sensor)

#### ■ Wireless Multi-Function Sensor (EA-WMFS)

Wireless multi-function sensors provide a wireless transmitter for connection to a wired sensor.

Select the type of sensor to be connected to the wireless multi-function sensor, then press .

Assign either a **Common** name or a **Custom** name to the sensor, and continue to follow on-screen prompts to complete the setup.

**Note:** **Custom** names are limited to 16 characters for all sensors.

**Note:** The Wireless Multi-Function Sensor (EA-WMFS) supports the following sensor types: Blue Temperature Probe, Red Temperature Probe, White Temperature Probe, Supervised Waterbug Sensor, and Contact Closure Sensors (N.O. and N.C.).

**Note:** Not for use with the HA-III+ or 4-20mA sensors.

#### ■ Wireless Temperature Sensor (EA-WTS)

Assign either a **Common** name or a **Custom** name to the sensor, and continue to follow on-screen prompts to complete the setup.

**Note:** **Custom** names are limited to 16 characters for all sensors.

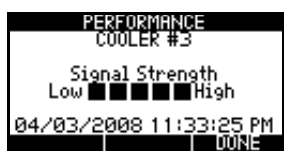
#### ■ Wireless Humidity Sensor (EA-WHS)





Assign either a **Common** name or a **Custom** name to the sensor, and continue to follow on-screen prompts to complete the setup.

**Note:** **Custom** names are limited to 16 characters for all sensors.

Repeat setup for each additional wireless sensor. The steps will vary depending on the type of sensor being added.

#### ■ Verifying Signal Strength



After temporarily mounting the wireless sensors in the desired location, verify the signal strength at the base unit by pressing **MENU** , select **Sensors**, ; select **Performance**, ; select the sensor to be checked, . It may take as long as 30 seconds to acquire the current signal strength.

If **No Data** is displayed in place of bars, it indicates that recent signal strength information has not been received. If this persists for 1-2 minutes without displaying any performance bars, it is a strong indication that your sensor is placed out of range with the base unit.

If fewer than two bars are shown, it is recommended that the sensor be relocated to obtain a better signal. Refer to the instruction sheet included with the wireless sensor for details on ensuring optimum signal strength.

## 5. Advanced Settings

Please refer to the *Installation/Owners Manual* on the CD for information on configuring the following advanced EA800 settings:

- Configuring the Relays
- Pausing Monitoring and Cancelling Pause
- Replacing a Sensor
- Editing Sensor Parameters
- Changing Sensor Data Collection Frequency
- Changing the Buzzer Setting
- Clearing the Alarm/Sensor Logs
- Saving/Loading Configuration Settings
- Exporting the Stored Logs



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