

Environment One Standalone Sentry Advisor Installation Instructions

1. DISCLAIMER

THE SENTRY ADVISOR REMOTE MONITORING SYSTEM PROVIDES AN OPTIONAL MEANS OF OBTAINING OPERATIONAL INFORMATION FROM A PUMP CONTROL / ALARM PANEL, INCLUDING INDICATIONS OF VARIOUS TROUBLE CONDITIONS, AND SPECIFICALLY HIGH LEVEL ALARMS. THE SENTRY ADVISOR SYSTEM IS INTENDED AS A SECONDARY NOTIFICATION SYSTEM AND IS NOT INTENDED TO REPLACE PRIMARY, LOCAL NOTIFICATIONS. PUMP STATION ALARM PANELS ARE TYPICALLY EQUIPPED WITH BOTH AUDIBLE AND VISUAL NOTIFICATIONS OF HIGH LEVEL ALARMS WHICH SHOULD NEVER BE BYPASSED IN LIEU OF SECONDARY NOTIFICATION SYSTEMS, SUCH AS THE SENTRY ADVISOR. ENVIRONMENT ONE CORPORATION ASSUMES NO RESPONSIBILITY FOR ANY INCIDENTAL, INDIRECT, CONSEQUENTIAL OR SPECIAL DAMAGES AS A RESULT OF THE USE OF THE SENTRY ADVISOR AS A PRIMARY MEANS OF HIGH LEVEL ALARM NOTIFICATION. THIS INCLUDES BUT IS NOT LIMITED TO FAILURE OR OUTAGES OF THE CORRESPONDING CELLULAR NETWORK, OR WEBSITE SERVERS USED IN COLLECTING, STORING, AND TRANSMITTING OF SYSTEM DATA. REFER TO THE END USER AGREEMENT FOR MORE INFORMATION.

2. OVERVIEW

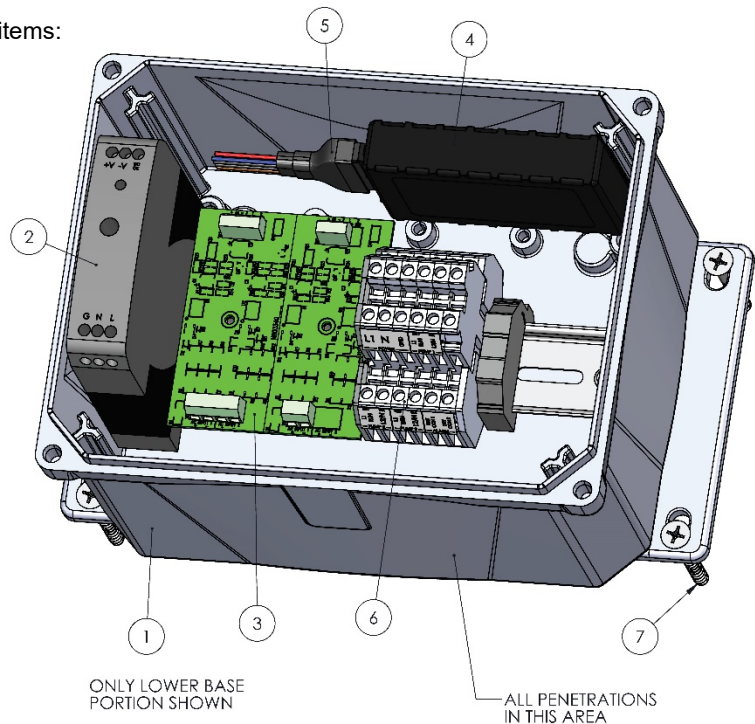
These instructions are to be used for installing a Standalone Sentry Advisor Panel. Standalone Sentry Advisor panels are designed to be generic enough to install with ANY typical application where Pump Running for up to 4 pumps and a High Level Alarm signal are to be monitored. Optional data package is available for use exclusively with E/One Simplex, Duplex, Triplex and Quadplex Protect Plus panels. Versions are available with and without dry contacts for High Level Alarm; Pump Running Dry Contacts are always supplied. Each application can have unique wiring and connections for existing hardware. Care should be taken when installing the Standalone Sentry Advisor that all connections are made properly. Please refer to the decal included for proper wiring.

NOTE: Standalone Sentry Advisor panels are designed to work with a variety of typical pump systems. Contact E/One for more information about a specific application.

3. COMPONENTS

A Standalone Sentry Advisor panel consists of the following items:

1. Qty. 1 – NEMA 4X Enclosure – base, cover, cover screws (Enclosure appearance subject to change at any time)
2. Qty. 1 – DIN rail mounted power supply 120VAC / 240VAC universal input, 12VDC output
3. Qty. 1, 2 or 3 – DIN rail mounted signal sensing PCB assembly. These provide Dry Contacts for Pump Running and High Level Alarm if needed
4. Qty. 1 – Cellular modem
5. Qty. 1 – Modem wire harness. One end plugs into the modem, the other end(s) are connected to various panel locations as required
6. Qty. multiple - Terminal Blocks. As required to provide locations for making incoming connections from the host panel
7. Qty. 4 – Mounting screws. 2" wood screws provided for mounting the panel



4. LOCATE AND INSTALL PANEL

NOTE: It is recommended that the Sentry Advisor Standalone Panel be located as close as possible to the host panel being monitored. All wire connections and fittings needed between it and the host panel are provided by others. (For applications with the Advanced Data Option, a data cable extension is available and necessary)

- The enclosure has 4 mounting holes to affix the panel to a wall or other structure. Four, 2" wood screws are provided for mounting. If needed, alternate hardware should be sized properly to prevent damage to the enclosure. In addition, 4 screws are built into the cover for securing it to the base.
- Mount the panel in the desired location accounting for wire routing to the host panel and allowing for all necessary penetrations. **ALL PENETRATIONS TO THE STANDALONE ADVISOR PANEL ARE TO BE MADE THROUGH THE BOTTOM - RIGHT OF THE LOWER BASE PORTION OF THE ENCLOSURE ONLY (refer to image above).**

5. WIRE CONNECTIONS

The Standalone Sentry Advisor requires the following connections be made to the host control panel. Not all connections are needed in every configuration of the panel. All connections are made via the provided terminal blocks, which are labeled accordingly:

- POWER – terminal blocks are provided for L1, N/L2, and GND of the incoming AC mains. The unit operates universally on all power configurations (120V, 1-Leg, 240V, 2-Leg, 240V, 1-Leg)
- PUMP 1, PUMP 2, PUMP 3 and PUMP 4 RUN – two connections are required for each pump being monitored. L1 RUN that corresponds to when the pump is running and a common for that signal, typically L2 or NEUTRAL. These signals will see full pump voltage (120V or 240V) when the pump is operating. Each pair should be dedicated to each pump separately.
- ALARM RETURN – if equipped, this signal is the high voltage (120VAC or 240VAC) return from the high level alarm switch. It is assumed that the supply for the alarm switch is provided from the host panel.
- ALARM DRY CONTACTS 1 and 2 – if the host panel is equipped with high level alarm dry contacts of its own, these two terminals must be connected in series with those contacts. One terminal is supplying +12VDC as a common and the other is the return of this signal that will be present when the Dry Contacts are closed in conjunction with a high level alarm. It is assumed that a single dry contact represents a combined alarm for ANY pump in a multi-pump system.

A specific wiring schematic is included on the inside of the top cover to assist in troubleshooting and making the necessary connections. Care should be taken to ensure that all wire connections are made in accordance with the appropriate schematic and are properly secured to prevent loosening or falling out.

6. OPTIONAL PROTECT PLUS DATA (E/One Sentry Protect Plus Alarm Panels only)

Sentry Protect Plus data features are available with E/One Sentry Protect Plus alarm panels only. An additional data cable is required to be run between the Protect Plus board in the host panel and the cellular modem in the standalone panel, to enable advanced serial data transmission to the sentry advisor website. Refer to protect plus installation decal (located in E/One Sentry Protect Plus host panel) and standalone sentry advisor decal (located in standalone advisor unit) for installation guidance.

7. OPTIONAL EXTERNAL ANTENNA

For Standalone panels that require an external antenna for increased cellular reception, install according to supplemental instructions that shipped with the panel (document number NA0728P01).

8. MODEM SETUP AND ACTIVATION

NOTE: The Standalone Advisor requires internet access for complete activation. It is recommended that a mobile device with internet access is used *on-site* during setup and activation. If such a device is not available, the following steps can still be performed, however it is necessary to manually record all data on form NA0411P01, and then populate the website at a later time when internet access is available. This form can be found by searching on www.eone.com/sewers, or by contacting your local distributor. WITHOUT INTERNET ACCESS, MODEM ACTIVATION AND VERIFICATION CANNOT BE COMPLETED.

A Standalone Advisor 'site' is added to a customer account, with each customer account typically being associated with a specific distributor, or sub-account of a distributor. If a customer account has not yet been set up for the site being added, contact your local distributor or the E/One factory for assistance. Log in to your account at www.sentryadvisor.com and follow the steps in the Sentry Advisor Remote Monitoring System Operation Manual, NA0451P01 for adding a new site. An electronic version of this document can be found by searching on www.eone.com/sewers, or by contacting your local distributor.

9. BEFORE LEAVING THE STATION

- Make sure the modem has successfully communicated with the server and that both High Level Alarm and Pump Running events can be detected. This requires simulating a high level alarm and running of all pumps in the system, typical of any system startup procedure. Refer to the startup procedure for each specific panel for more information, which can be found at www.apps.eone.com.
- After simulating these events, log into the Sentry Advisor website and navigate to the newly added site. Verify that all simulated events are being properly detected.
- Ensure the appropriate LED's are on and reporting activity as required

LED Status
Power - Orange Solid
Network - Orange blinking
GPS - Green, may be OFF,
blinking, or solid

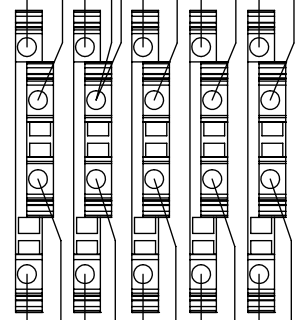
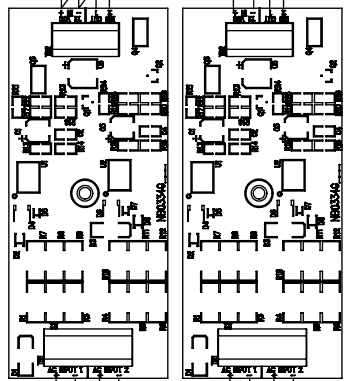
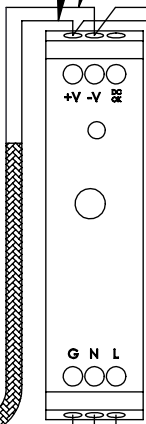
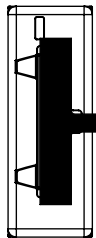


CalAmp Modem

- Ensure that the panel is restored to a normal operating mode. Refer to the startup procedure for the specific panel for more information.**

BLACK (1-2 WIRES)

RED (1 WIRE)



BLUE
ORANGE
BROWN / WHITE
BROWN
ORANGE/WHITE WIRE NOT USED IN TRIPLEX

OPTIONAL DATA CABLE
TO J3 ON BOARD
PROTECT PLUS ONLY

TO PUMP 2 L1 RUN
TO ALARM BREAKER L1
TO PUMP 2 N/L2
TO PANEL N
TO PUMP 3 L1 RUN
TO PANEL GROUND
TO PUMP 3 N/L2
TO PUMP 1 L1 RUN
TO ALARM RETURN
TO PUMP 1 N/L2

* FOR 240V, 2-LEG PANELS (US 240V), USE L2 CONNECTIONS FOR 120V, 1-LEG AND 240V, 1-LEG PANELS, USE N (NEUTRAL) CONNECTIONS