1. Unpack the monitor and antenna. The data/power cable will be attached to your monitor. This cable includes wires to power the monitor as well as wires for alarm inputs and relay outputs. Take a moment to inspect all components to verify there is no shipping damage.

2. Place the antenna on the roof of the generator and route the antenna cable into the area of the generator controls. If the mounting surface will not hold a magnetic antenna, install the steel mounting plate provided on the generator roof, then the antenna. The antenna used for transmitting must be installed to provide a separation distance of at least 20 cm from all persons and must not transmit simultaneously with any other antenna transmitters. BE SURE to provide a drip loop lower than the monitor to prevent water from running down the antenna cable into the monitor connection.

3. *Attach the monitor via its magnetic feet, on top of the engine controller or other appropriate location. Horizontal surfaces are best, but the unit may be mounted vertically or even upside down if necessary. Note: If mounted vertically, install the monitor with the cables down to prevent water from entering the enclosure.*

4. Route the data/power cable into the generator control enclosure and make the 12 vdc power connections at this time.

5. **Non-encrypted Controllers**: (non-encrypted Modbus/data port) You can connect the monitor's serial data cable (White 8-Pin connector) into the controller's matching Modbus port (Page 2). In this case, none of the hardwireddetails below are required, though they can be utilized, if desired.

6. **Encrypted Controllers**: (encrypted Modbus/data port) The monitor connectsto the generator controller using the monitor's wire harness. See Page 2, *TrueGuard PRO Hardwire Wiring Table.*

7. Once setup is complete, allow 15 minutes for the monitor to log onto the OmniMetrix network (observing LED behavior). Call OmniMetrix at 770-209-0012 to confirm installation, if needed. Access to machine data is through the OmniView® web interface at www.omnimetrix.net.

8. Turn on the monitor and confirm that the LEDs light up and blink. If not, check for power on the terminal strip. If, after 5 minutes, the only LED lit is the Power LED, check the antenna mount and cable connection.

9. Allow 15 minutes for the monitor to log into the network, then call OmniMetrix® at 770-209-0012 to confirm installation. Access to machine data is through the OmniView® web interface at www.omnimetrix.net. Contact OmniMetrix for login instructions and web training.


True Guard PRO


25-pin Data/Power Cable

9-pin Data/Power Cable

TrueGuard PRO Hardwire Wiring Table		
OMNIMETRIX WIRE	**TERMINATION**	**FUNCTION**
Red	Battery +	Power Supply +
Black	Battery -	DC Ground (Battery -)
Orange	Alarm Input 1 - RUNNING	Fuel Control Relay
Blue	Alarm Input 2 – COMMON FAULT A	Common Fault Relay
White / Green	GND for COMMON FAULT B	See Notes for Black Wire
Violet	Alarm Input 3 – ATS Position	On Gen Power / On Utility Power
Gray	Alarm Input 4 – Utility Voltage Lost	See AC Detector Wiring
White / Yellow	Stop/Start Relay Coil	Remote Start (see IM-1087 appendix-A)
White / Brown	DC Ground	Remote Start (see IM-1087 appendix-A)

If you have any questions, please call OmniMetrix Tech Support at 770-209-0012 or email at techsupport@omnimetrixconnect.com . See the diagrams on the following pages for added wiring assistance.
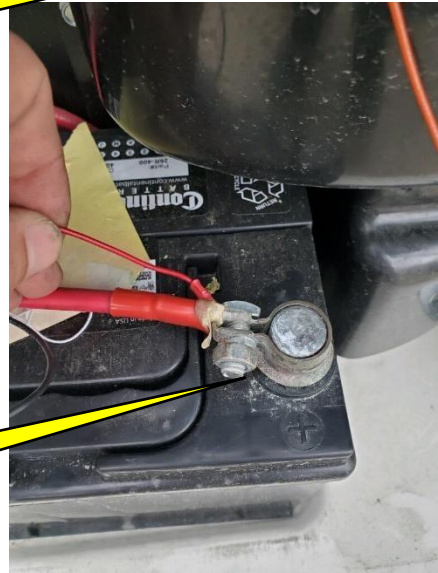
For Nexus and Evolution 1 & 2 controls, plug the white, OmniMetrix, 8-position connector into the data port on the back / bottom of the control, as shown to the right.

If the control is an Evolution 3, with encryption and without a data port, the hardwired instructions are to be followed.
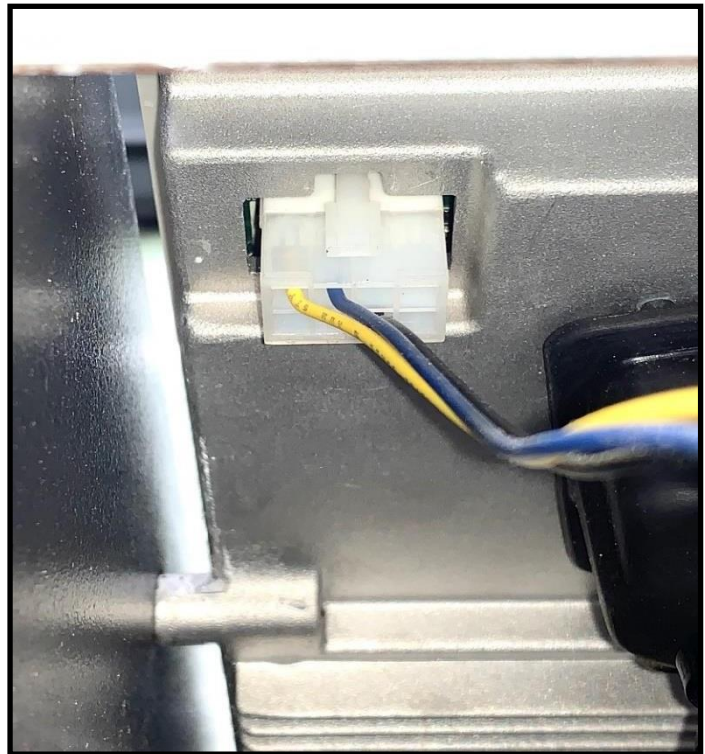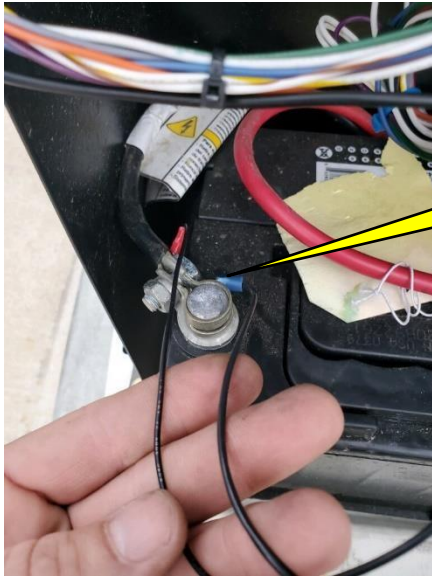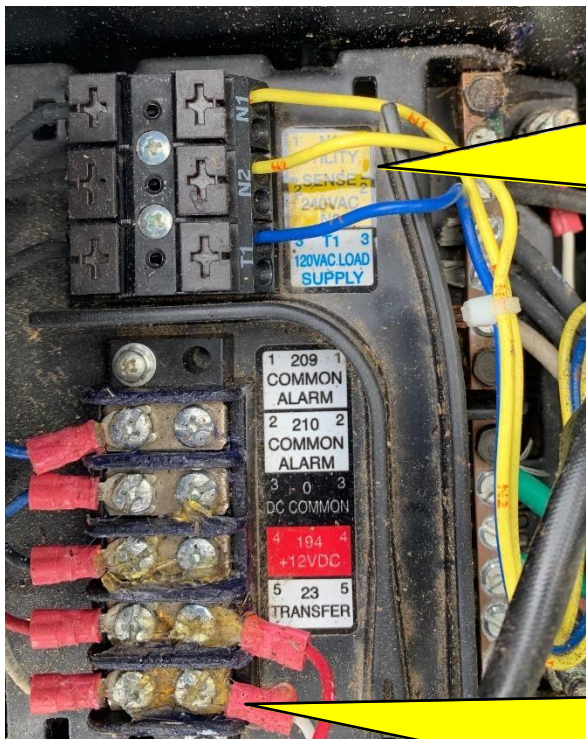
Attach OMNI Black wire with Ring Terminal to Battery Negative.

Attach OMNI Red wire with Ring Terminal to Battery Positive.

DO NOT CONNECT THE OMNI INPUTS TO 240 VAC!!!

N1 and N2 are the two legs of Utility 240 VAC. T1 is 120 VAC brought to the battery charger from the house side of the ATS.

The AC Detector may be attached to ANY ONE of the three, depending on whether you want to report Lost Utility of Site Not Powered.

Generac signal 23 controls the contactor in the ATS. It will be 12Vdc in Utility Position, and 0 Vdc in Emergency.

Common Alarm signals 209 and 210 are dry contact relay points. They close in a shutdown condition, indicating Common Alarm. In the Evolution 3, these two are pigtailed into a connector… see Page 4.

The Generac Red Wire on the Fuel Control Solenoid goes to +12 Vdc when running.

Put the piggyback Faston connector provided on the OmniMetrix Red wire, replacing the fork connector. Then unplug the Generac red wire, attach it to the auxiliary blade on the piggyback connector and plug the pair back onto the solenoid as shown below.
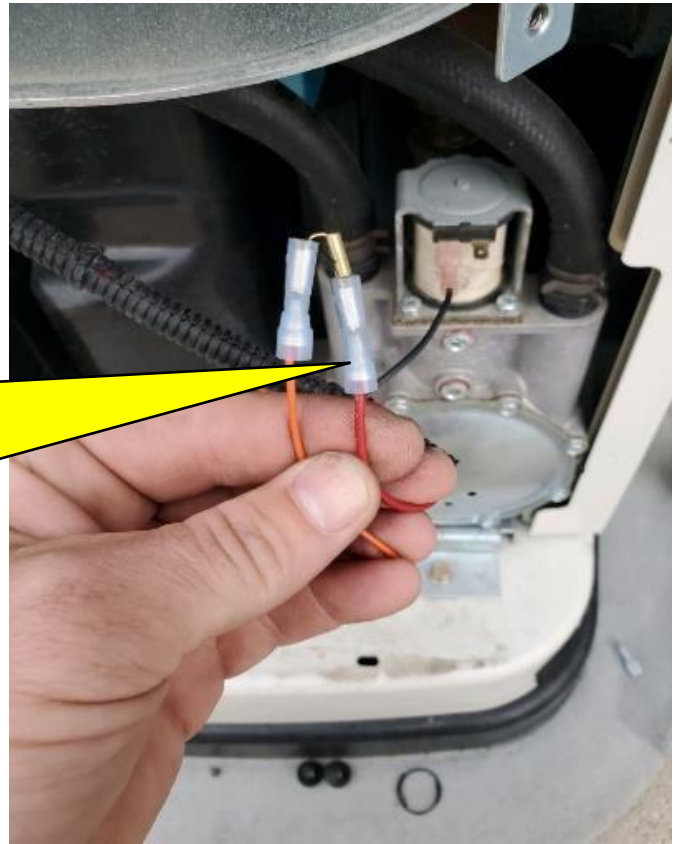
**Spare, piggyback connector provided by OmniMetrix.**
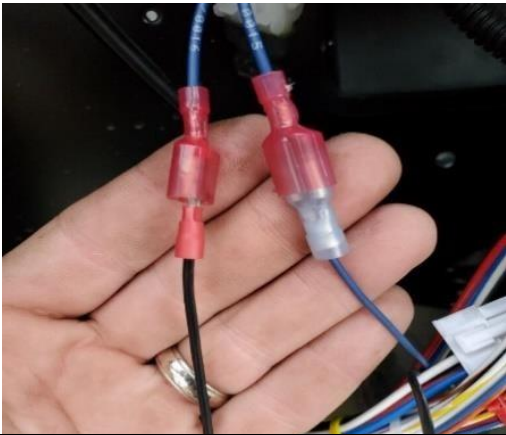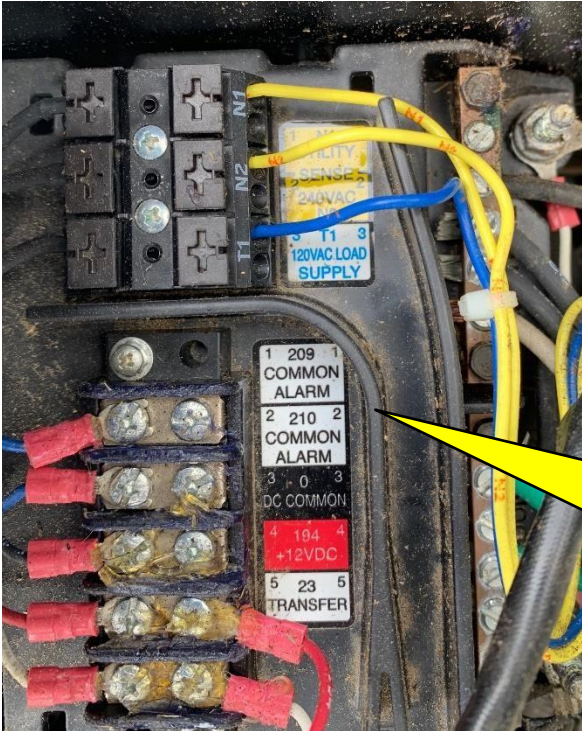
In older machines, the Common Alarm terminals are screw terminals, as shown. In the newest Evolution machines, the Common Alarm wires are pigtailed as shown above. The OmniMetrix Blue wire goes to one terminal / wire, and the other terminal / wire gets a DC Ground wire.
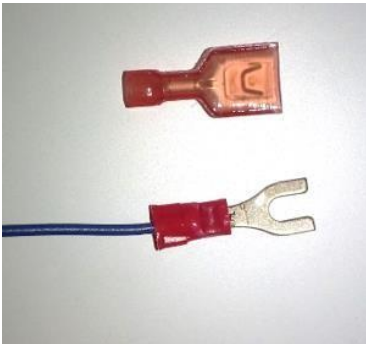

In older machines, land the OmniMetrix Blue wire on Generac terminal 209. You can ground the Omni White/Green striped wire to the DC Common terminal next to it.

For new Evolution machines, replace the fork terminal on the blue wire with the female Faston connector provided and plug it into one of the pigtailed Common Alarm
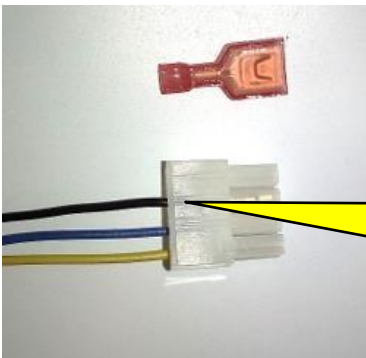
Assuming the OmniMetrix Serial Comms cable, with 8-position connector shown to the left, is not being used on the new Evolution machines, the black wire may be clipped near the connector and used as a DC Ground for the Common Alarm and/or the AC Detector described below. (You can use the Faston connector provided for this purpose, if needed).
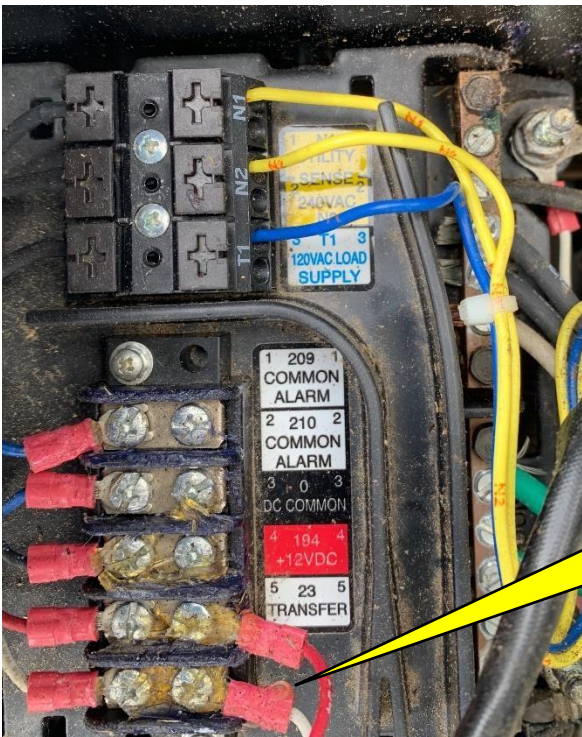
Land the OMNI Violet wire on Generac Terminal 23.

OPTIONAL AC DETECTOR INSTALLATION: If you are using the OMNI AC Detector, it simply zip ties to either N1, N2, OR T1. These three wires MUST BE UNBUNDLED so that the detector can be attached to only one of them. Attaching to N1 or N2 will report lost utility. Attaching to T1 will report the home is unpowered.

Optional AC Detector wiring diagram:

Evolution 3 Control ← AC Utility Sense Wire

AC Detector secured to Utility Sense Wire

AC Detector Black wire →

AC Detector Red wire

Gray wire

Black wire →

TG PRO MONITOR