

TrueGuard-2™ is for use on 12v systems only.

1. Unpack the monitor. With integrated cable and the antenna. The data/power cable will include a DB9 connector (data) and power connections. 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 control. 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 keep 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. If using the DB9 data/power cable, route the cable into the generator control enclosure. Connect the DB9 cable connector to the RS232 connection (DB9) on the back of the control panel.
5. Connect the RED wire to Battery+ and the BLACK wire to Battery-. Instructions for configuring the software can be found on the following pages.
6. (Optional connection): Using the RS485 connector, the OMNI WHITE (Data+) wire connects to terminal **A**, the GREEN (Data-) wire connects to terminal **B** and SCR is unconnected. Plug the connector into the RS485 connection on the back of the panel. Connect the RED wire to Battery+ and the BLACK wire to Battery-. Instructions for configuring the software can be found on the following pages.
7. Attach the antenna cable to the front of the monitor, and tighten thumb tight.
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 and 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.



TrueGuard-2 with Data/Power Cable



Deep Sea 7310 Control



Deep Sea 7310 Controller (Back View)

The DSE Configuration Suite Software is required for configuring the Virtual LED Outputs. (See DSE 7310 Operating Manual for additional information).



6.5.2 VIRTUAL LEDS

LED Configuration

	Source	
LED 1	Not Used	Lit
LED 2	Not Used	Lit
LED 3	Not Used	Lit
LED 4	Not Used	Lit
LED 5	Not Used	Lit
LED 6	Not Used	Lit
LED 7	Not Used	Lit
LED 8	Not Used	Lit
LED 9	Not Used	Lit
LED 10	Not Used	Lit
LED 11	Not Used	Lit
LED 12	Not Used	Lit
LED 13	Not Used	Lit
LED 14	Not Used	Lit
LED 15	Not Used	Lit
LED 16	Not Used	Lit
LED 17	Not Used	Lit
LED 18	Not Used	Lit
LED 19	Not Used	Lit
LED 20	Not Used	Lit

Allows configuration of 'status' items. These items are not available for viewing on the module itself but can be seen in the SCADA section of the PC software, or read by third party systems (ie BMS or PLCs) using the Modbus protocol.

All LEDs should be marked as Lit

Deep Sea 7310 Virtual Outputs		
Deep Sea Virtual Output	Function	OMNI Alarm ID
Virtual LED Output 1	Generator Running	64
Virtual LED Output 2	ATS Calling for Run	65
Virtual LED Output 3	In Auto Mode	66
Virtual LED Output 4	In Manual Mode	67
Virtual LED Output 5	In Stop Mode	68
Virtual LED Output 6	Common Alarm	69
Virtual LED Output 7	Common Warning	70
Virtual LED Output 8	Common Shutdown	71
Virtual LED Output 9	Fail to Start	72
Virtual LED Output 10	Overspeed	73
Virtual LED Output 11	Coolant Temp High Warning	74
Virtual LED Output 12	Coolant Temp High Shutdown	75
Virtual LED Output 13	Oil Pressure Low Warning	76
Virtual LED Output 14	Oil Pressure Low Shutdown	77
Virtual LED Output 15	Battery Voltage Low or High	78
Virtual LED Output 16	Generator Voltage Warning	79
Virtual LED Output 17	Generator Voltage Shutdown	80
Virtual LED Output 18	Emergency Stop	81
Virtual LED Output 19	Fuel Level Low	82
Virtual LED Output 20	Coolant Level Low	83

LED Behavior:

The BLUE LED will illuminate at boot up (stay on). The LED will start blink rapidly, on/off every 1/2 second, once the modem is connected to an available tower. The LED will begin to blink more slowly, three seconds on, three seconds off, once the modem has connected to the OmniMetrix server. Note: The BLUE LED is an indication of network service. If it continues to stay illuminated (on), please check the SIM card, antenna, and signal strength.

The Red LED illuminates approximately 20 seconds after the Blue LED illuminates. A solid Red LED indicates the unit is trying to log into our server.

After approximately 20 seconds, Red LED turns off and the Green LED illuminates for 3 seconds. This indicates the unit has logged into our server.

The Red LED or Green LED flashes after login: Short Green LED flashes indicate the monitor is getting data; Long flashes of the Red LED indicate failure.

Signal Strength: LED signal strength indication is provided at login and routinely during operation, using the Red & Green LED's as follows:

1. The Red & Green LED's flash rapidly for 2 seconds to indicate the beginning of the "Signal Strength" routine.
2. Next, the LED(s) will stay fully illuminated 2 seconds to indicate the current signal strength:
 - a. Solid Red LED only = below 10
 - b. Solid Red & Green LED's = 10~60
 - c. Solid Green LED only = greater than 60.
3. To complete the Signal Strength cycle, the Red & Green LED's flash rapidly again for 2 seconds, then stop (end of cycle).

If you have any questions, please call OmniMetrix Tech Support at 770-209-0012 or email at techsupport@omnimetrixconnect.com