1. Unpack the monitor, antenna and the data/power cable. The data/power cable will be a black cable with DB9 data connectors on two ends and red/black wires emerging from the connector labeled OmniMetrix® END, or a 25 wire connector that includes wires to power the monitor as well as for alarm inputs. Take a moment to inspect all components to verify there is no shipping damage.

2. Place the antenna vertically 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. **(RS232 Option)** If using the DB9 data/power cable, route the cable into the generator control enclosure. Connect the OmniMetrix end onto the front of the monitor and connect the other end to the RS232 connection on the back of the control panel (see Figure A on Page.3). Connect the RED wire to Battery+ and the BLACK wire to Battery-. Instructions for configuring the software can be found on the following pages.

5. **(RS485 Option)** If using the 25-pin data/power cable, route the cable into the generator control enclosure. 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 (See Figure A on Page 3, Terminals 59-61). 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. Attach the antenna cable to the front of the monitor and thumb tighten.

7. 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.

8. 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.

RS232 Option: DB9 Data/Power

RS485 Option: 25 Wire Data/Power

Deep Sea 8700 Controller

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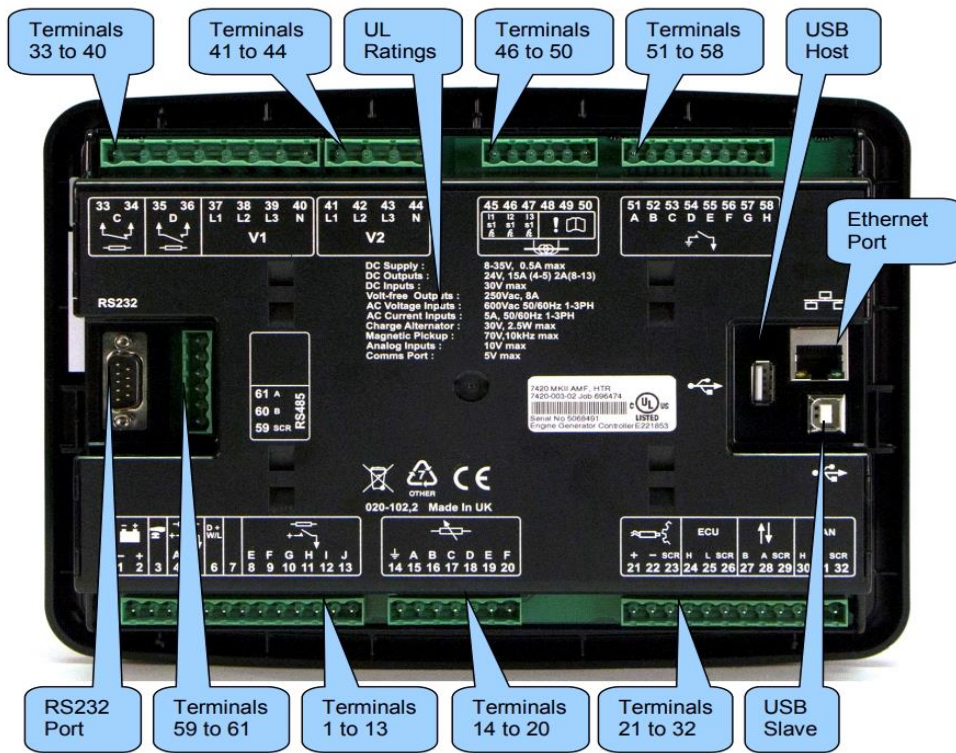

6.5.2 VIRTUAL LEDS

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	OMN Alarm ID	DSE 8700 VLED Category
Virtual LED Output 1	Generator Running/Bus Live	64	Status-Bus
Virtual LED Output 2	ATS Calling for Run	65	Status-Operation
Virtual LED Output 3	In Auto Mode	66	Status-Operation
Virtual LED Output 4	In Manual Mode	67	Status-Operation
Virtual LED Output 5	In Stop Mode	68	Status-Operation
Virtual LED Output 6	Common Alarm	69	Alarms-Common
Virtual LED Output 7	Common Warning	70	Alarms-Common
Virtual LED Output 8	Common Shutdown	71	Alarms-Common
Virtual LED Output 9	Fail to Start	72	Alarms-Engine
Virtual LED Output 10	Overspeed	73	Alarms-Engine
Virtual LED Output 11	Coolant Temp High Warning	74	Alarms-Engine
Virtual LED Output 12	Coolant Temp High Shutdown	75	Alarms-Engine
Virtual LED Output 13	Oil Pressure Low Warning	76	Alarms-Engine
Virtual LED Output 14	Oil Pressure Low Shutdown	77	Alarms-Engine
Virtual LED Output 15	Battery Voltage Low or High	78	Alarms-Engine
Virtual LED Output 16	Generator Voltage Warning	79	Alarms-Generator
Virtual LED Output 17	Generator Voltage Shutdown	80	Alarms-Engine
Virtual LED Output 18	Emergency Stop	81	Alarms-Mics.
Virtual LED Output 19	Fuel Level Low	82	Alarms-Engine
Virtual LED Output 20	Coolant Level Low	83	Alarms-Engine

Figure A (Back Side of Controller)

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