The OmniMetrix TrueGuard PRO unit, with ModbusTCP functionality, comes with default network configurations and connects via CAT5 cable to the COMPUTER (top port) ethernet connector on the PowerZone display unit. The OmniMetrix monitor (OMNI unit) is powered by the same generator Battery **+** and DC GND as the display or the base control module.

The PowerZone (PZ) control software should be updated to the most recent available from Generac. Initial releases of the PowerZone product had data-related issues, so bring the control current is important.

The genset IP addressing must be set up to match the values shown below.

Ethernet must be enabled. Make sure the ethernet icon is orange.
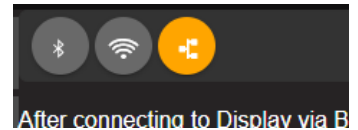
ModbusTCP must enabled (under Tools and Setups) and the control should be set for External Network (not Control). While the ModbusRTU Unit ID may not be necessary for ModbusTCP, set it anyway.

The Ethernet settings screen should be similar to the one shown below (firmware changes may change the look / feel).
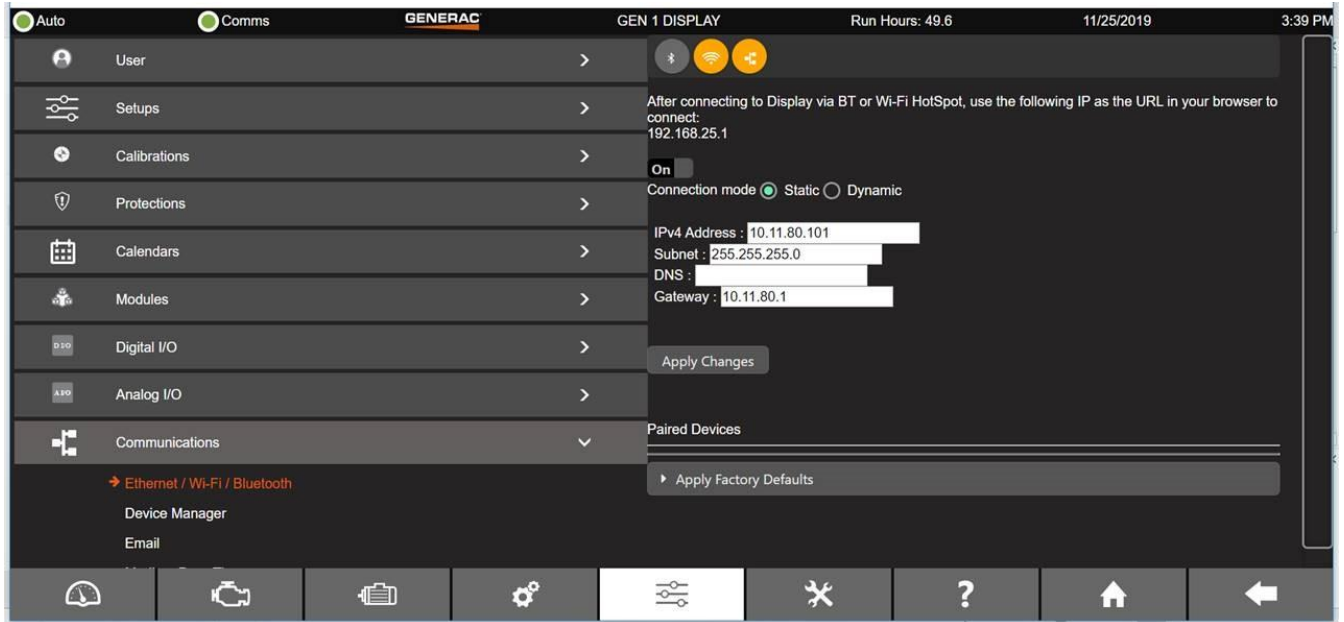
The IP addresses shown above were from a specific installation… don't use these, but use the ones listed below instead.

The network status shown above identifies the External Network IP that must be set up to match the OMNI. The Control Network is used for inter-generator comms… DO NOT CHANGE THEM!!!
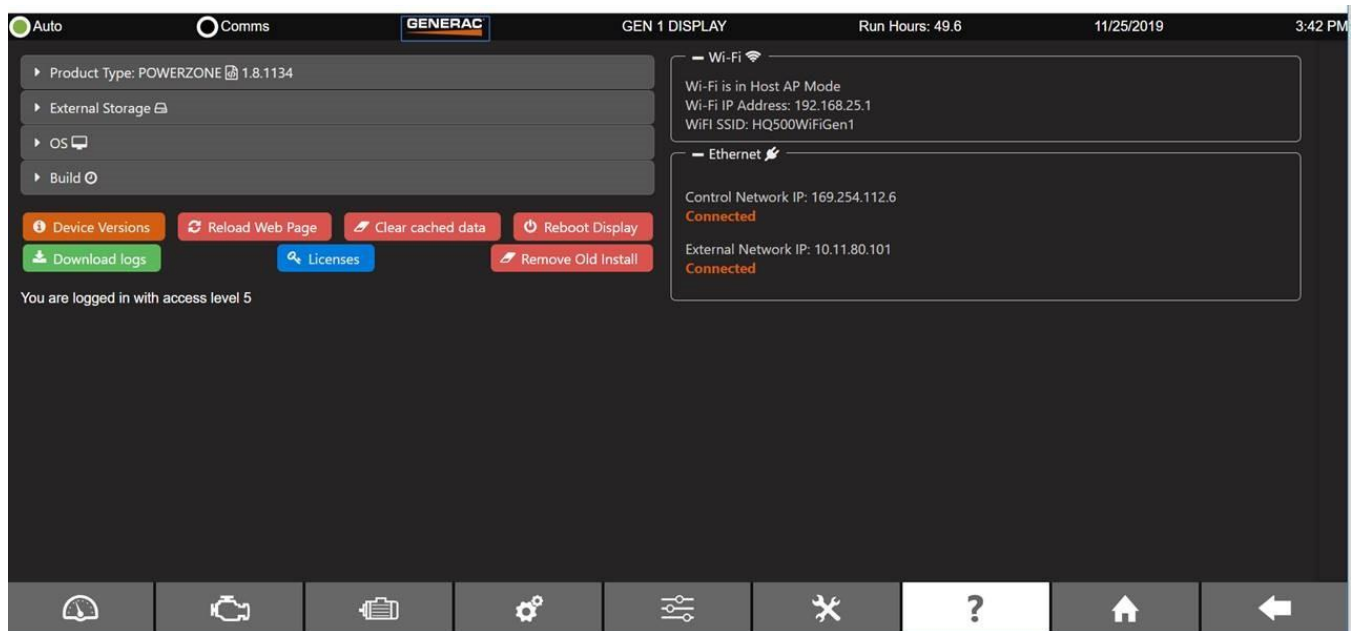
Configuring the correct IP Address:

For a **single** PZ control, set the following:
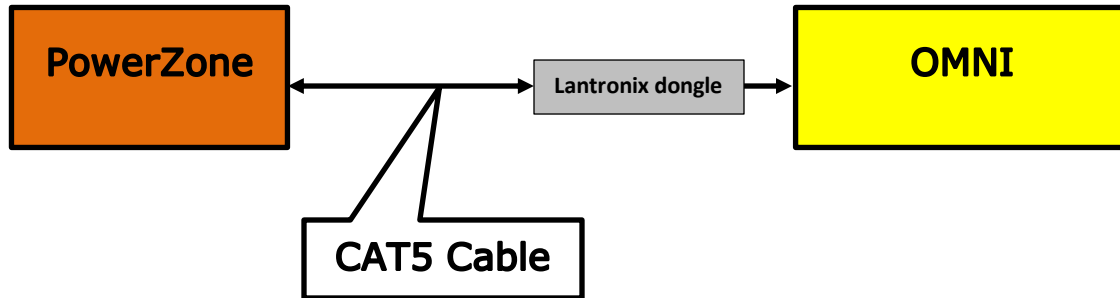
Modbus Slave ID = 1

IP Address: 10.0.1.101

Subnet Mask: 255.255.0.0

Gateway: 10.0.1.1 (this is not important)

If **multiple** PZ controls are to be connected, such as in an MPS configuration, use the following:

MPS Gen #	Modbus Slave ID	IP Address	Subnet Mask
1	1	10.0.1.101	255.255.0.0
2	2	10.0.1.102	255.255.0.0
3	3	10.0.1.103	255.255.0.0
4	4	10.0.1.104	255.255.0.0
5	5	10.0.1.105	255.255.0.0
6	6	10.0.1.106	255.255.0.0
7	7	10.0.1.107	255.255.0.0
8	8	10.0.1.108	255.255.0.0

In the case of a **single** PowerZone, simply connect the OMNI and PZ, through the silver, Lantronix dongle via a CAT5 cable:

```
┌──────────────┐                          ┌──────────────────┐       ┌──────────────┐
│  PowerZone   │◄──────────────┐ ─ ─ ─ ─ ►│ Lantronix dongle │─ ─ ─ ►│     OMNI     │
└──────────────┘               │          └──────────────────┘       └──────────────┘
                         ┌─────┴──────┐
                         │ CAT5 Cable │
                         └────────────┘
```

In the case of **multiple** PowerZone controls, connect the system using a Hub or Switch as shown. This Hub / Switch should be powered by a genset battery or other uninterruptible power source:

```
┌──────────────┐                                          ┌──────────────────┐
│  PowerZone   │◄────────────────────────────────────────►│                  │
│      1       │                                          │                  │
└──────────────┘                                          │                  │
                                                          │                  │
┌──────────────┐                                          │                  │
│  PowerZone   │◄────────────────────────────────────────►│                  │
│      2       │                                          │  HUB or Switch   │
└──────────────┘                                          │                  │
                                                          │                  │
┌──────────────┐                                          │                  │
│  PowerZone   │◄────────────────────────────────────────►│                  │
│      3       │                                          │                  │
└──────────────┘                                          │                  │
                                                          │                  │
┌──────────────┐     ┌──────────────────┐                 │                  │
│     OMNI     │◄───►│ Lantronix dongle │◄───────────────►│                  │
└──────────────┘     └──────────────────┘                 └──────────────────┘
                              ┌────────────┐
                              │ CAT5 Cable │
                              └────────────┘
```
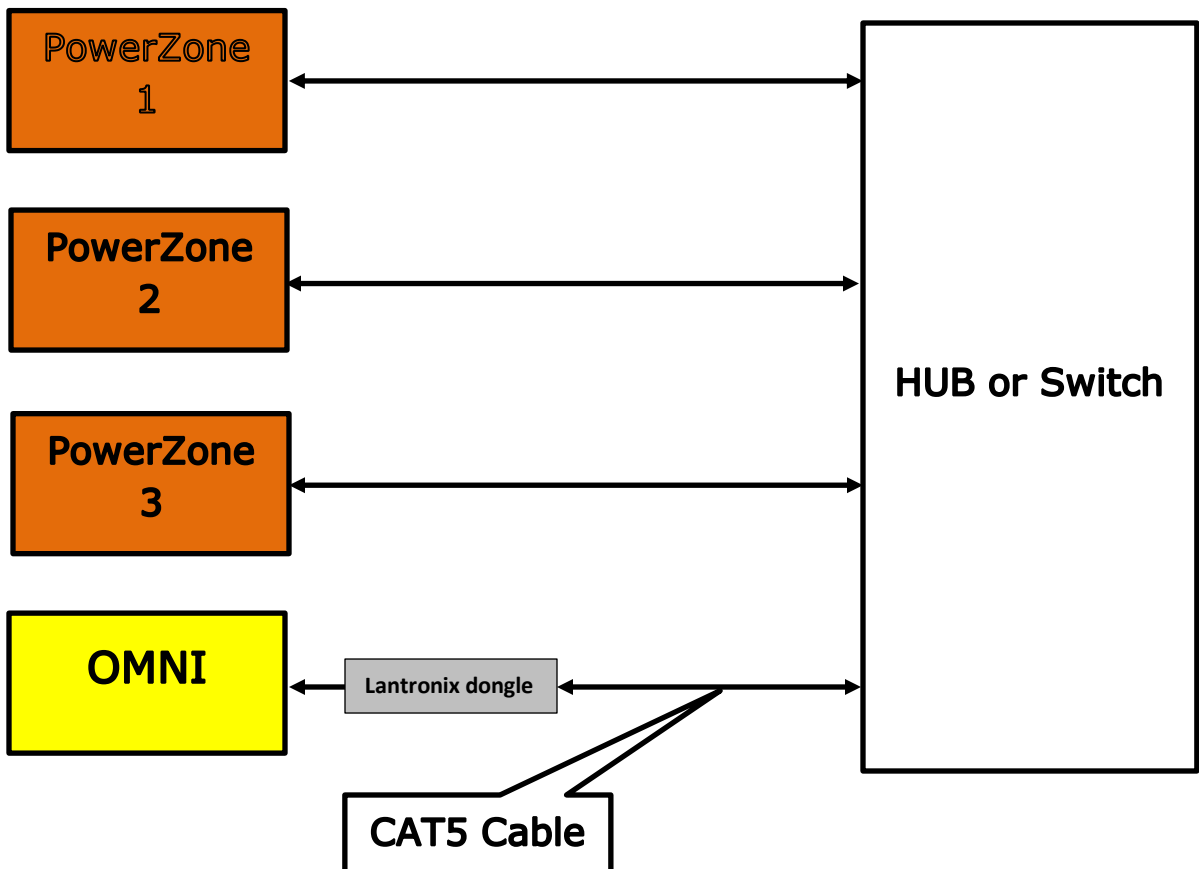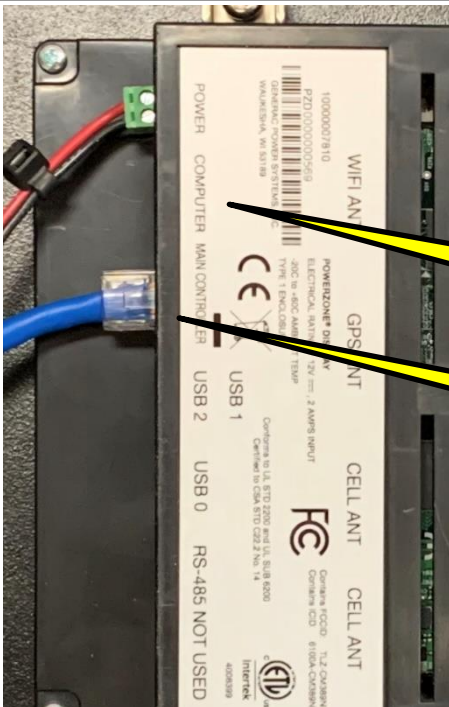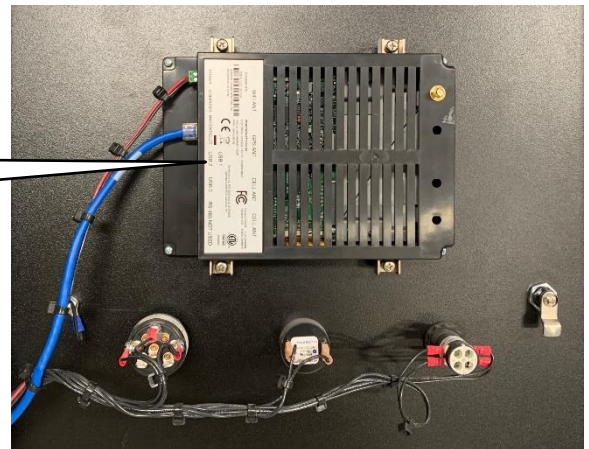
PowerZone Synch

The **PowerZone Synch** has a display that is rectangular, horizontally mounted, and with a nice touchscreen display.
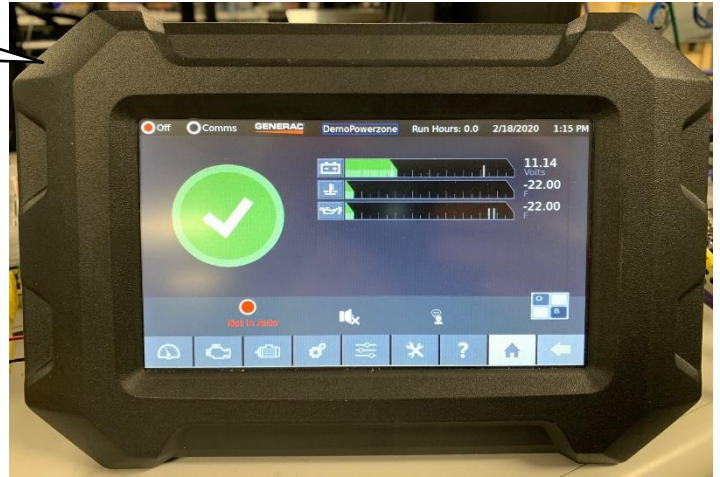
The display will typically be mounted into a cabinet, as shown here.

The backside of the display, looking from the inside of the cabinet, is the point of connection for the OmniMetrix monitor.

The OMNI CAT5 cable goes into the top RJ45 connector, initially labeled "COMPUTER"

Existing Generac CAT5 connection to the main controller

The OMNI unit may mount onto the shelf shown inside the cabinet, on the underside of the top of the cabinet, or on the cabinet door. The OMNI unit should be mounted so that the cables cannot drain water down and into the OMNI unit.

The antenna cable can route out through the louvers of the cabinet, and the OMNI power wires (Red and Black) pick up BATTERY+ and DC GND from the customer connection area at the bottom of the cabinet.
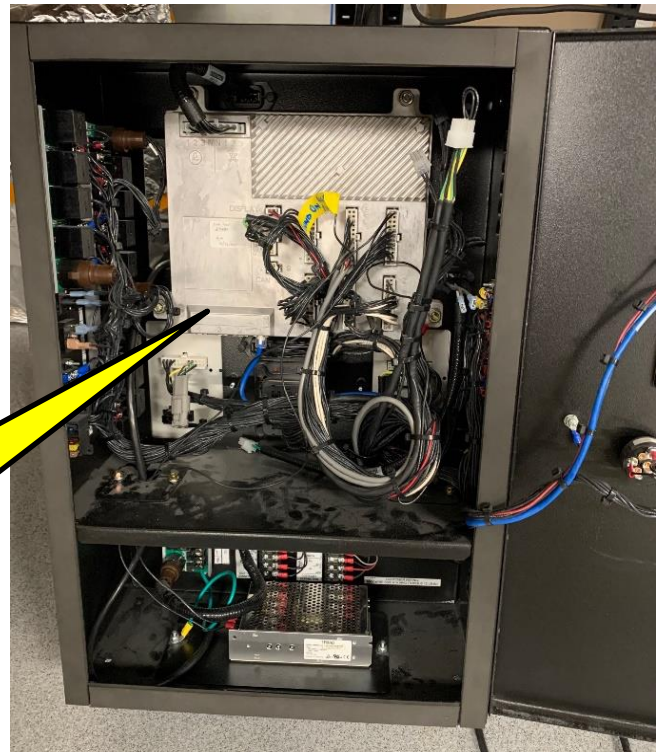
For reference, this is the PowerZone Synch Control. No connection from the OmniMetrix monitor is made to this panel.
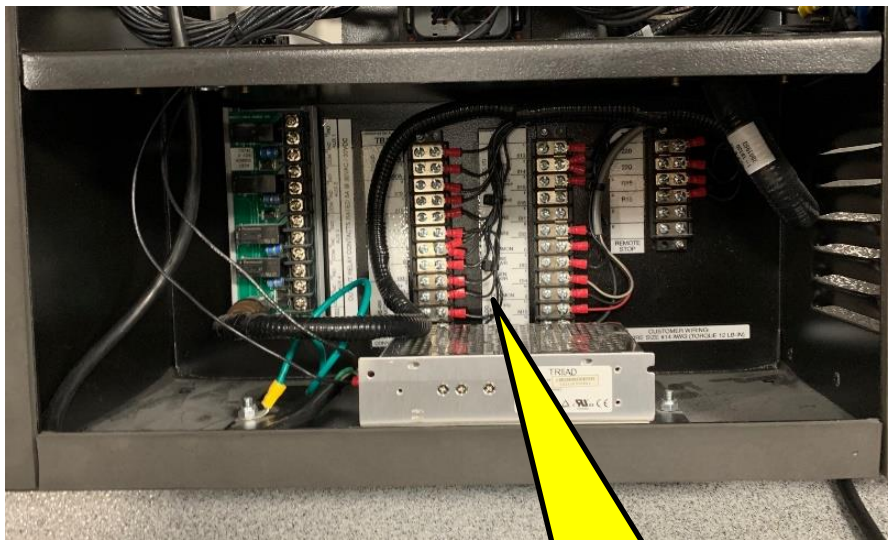
Customer Connection Area

PowerZone Pro

The **PowerZone Pro** looks like the image below. It is somewhat square, and the display is small, consuming only a fraction of the front face of the control:


There should be a small device called the "Connectivity Server", which allows generator techs to configure the control wirelessly. This device, shown to the right, is also the point of data connection for the control.

Top view of Connectivity Server

On the bottom side of the Connectivity Server is an RJ45 connector in the center. Plug the OMNI CAT5 cable into this RJ45.
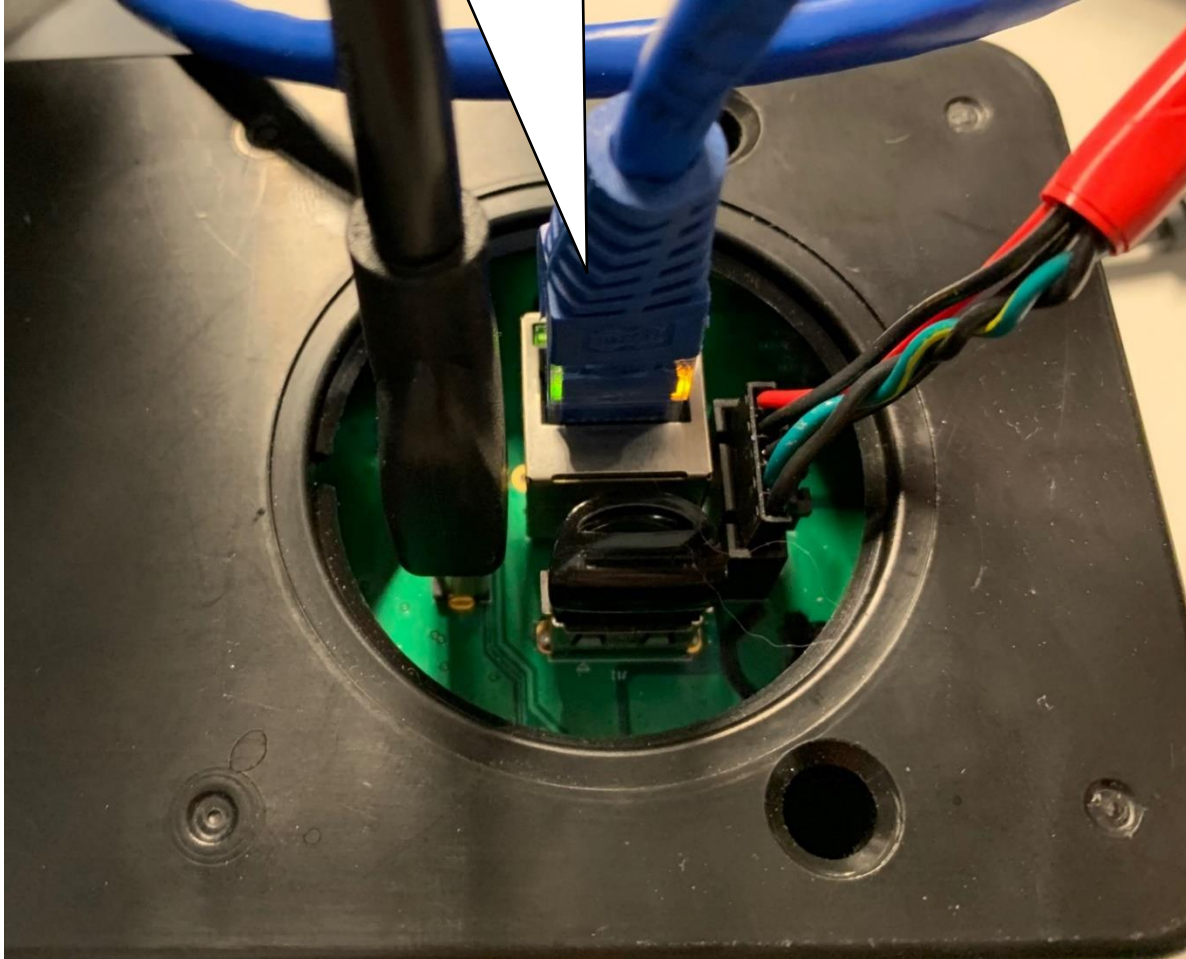
Attach the OMNI power wires, Red and Black, to generator Battery + and – respectively.