## Scale Rails DCC equipment and Wireless Throttle strategy.

### Today's discussions:

- 1. Status of Club wireless throttles
- 2. Digitrax Wi-Fi server with Smartphones.
- 3. Wi-Fi throttles with Raspberry PI system.

**Problem:** Duplex throttle system has been unreliable for some time.

**<u>Status</u>**: On 3/8/2019 Lee and Tom went over the entire system again.

- 1. They did find one receiver that needed a Firmware update. This was completed.
- Found that the power on sequence is key. The three UR92 receivers need time to set RA addresses before turning on the DCS100 Command Station. Wait 20 seconds.

## **Digitrax Wi-Fi server with Smartphones.** [not enough connections]

- 1. Allows only four users to connect.
- 2. Select correct Wi-Fi network on phone.
- 3. You can forget SCALERAILS. No longer used except to print.
- 4. Run Engine Driver or Apple app.
- 5. Even if you close the app the Wi-Fi connection still exists.
- 6. When finished have the phone forget the Wi-Fi connection.
- 7. If you don't you block others from connecting.
- 8. Plus, it will automatically connect when you enter the building.

# Adding more Wi-Fi connections and still use Digitrax DCC power system:

- 1. Tom, Lee and Robert are actively building a new Wi-Fi server based on the Raspberry PI 3B+ board. Many clubs are doing this.
- 2. This will allow many more Wi-Fi throttle connections.
- 3. The cost is about \$75 for parts. Free software.

- 4. The Raspberry pi is up and running. Members are using the Smartphones more every day.
- 5. The layout is very stable with Duplex and Raspberry pi.

### **Expanding the DCC power:**

 Four additional DB150s were added bringing our DCC capacity to 40 amps. Each booster has current meter.