# RedHat Assembly and Testing

Pre-assembly testing

1. 5V to GND -> 17.6k
2. 3.3V to GND -> 16k

Assembly

1. Remove D2, if installed
2. Install DC-DC converter, turn trim pot to right
3. Install SMT components: RGB LED, blue, yellow LED
4. Test LED with 2.7VPin to GND
5. Install Stick connector
6. Install LED Pigtail Pin1 = GND
7. Install DCC Input Terminal connector
8. Install Arduino Headers
9. Install Jumper Sockets
10. Install DC Plug
11. Install Loconet Sockets
12. Adjust DC-DC voltage to 5.1 – 5.2V
13. Install Jumpers
14. Install 50mm Grove cable

Testing

1. Place on stack, connect DCC wires, Track
2. Install Stick, connect Grove cable
3. Connect LED Matrix
4. Connect power
5. Verify Stick is booting up
6. Verify Loconet T LED comes on after about 5 Secs
7. Verify Track power LED is showing red
8. Verify Loconet T sockets using Loconet tester. All 4 LEDs on
9. Click power button. Power on, Loconet B LED on,
10. Connect throttle, test Locomotive is running
11. Verify Loconet B sockets using Loconet tester. All 4 LEDs on
12. Issue switch commands 25, verify Matrix LED