

# SYNTHIAM

## E-21 Test Procedures

*E-21 NeoPixel Blaster Short Circuit Test*

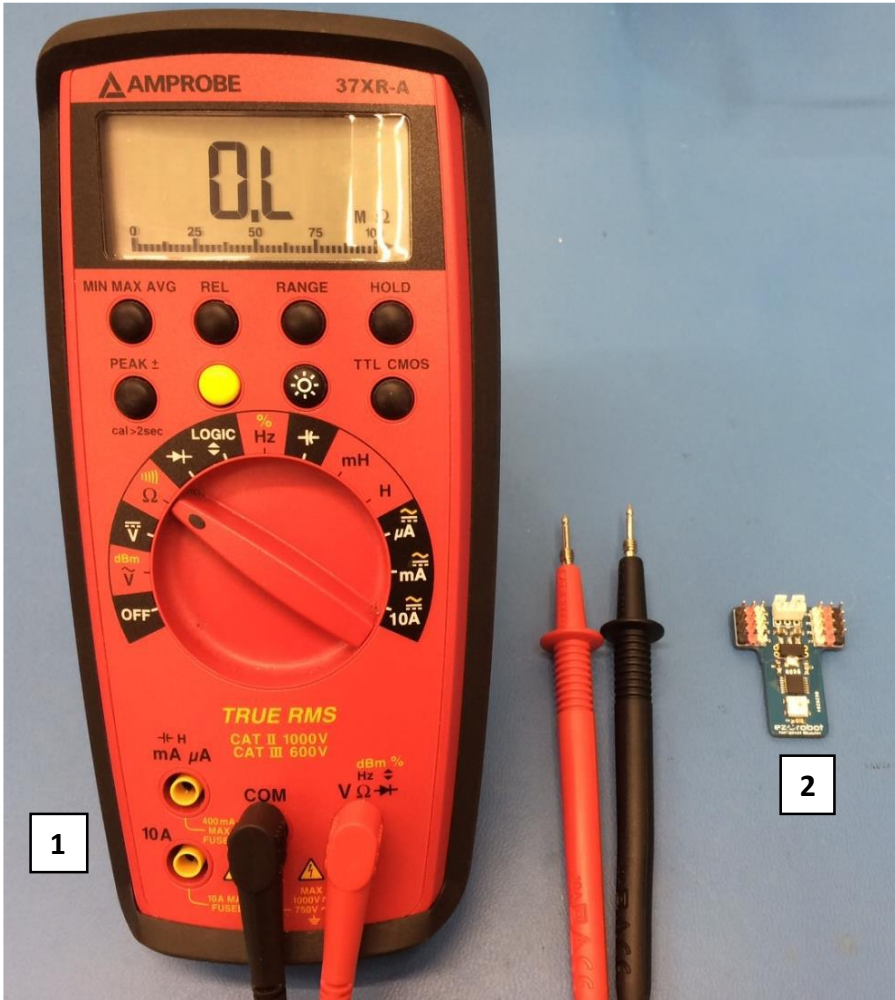
### PARTS & TOOLS

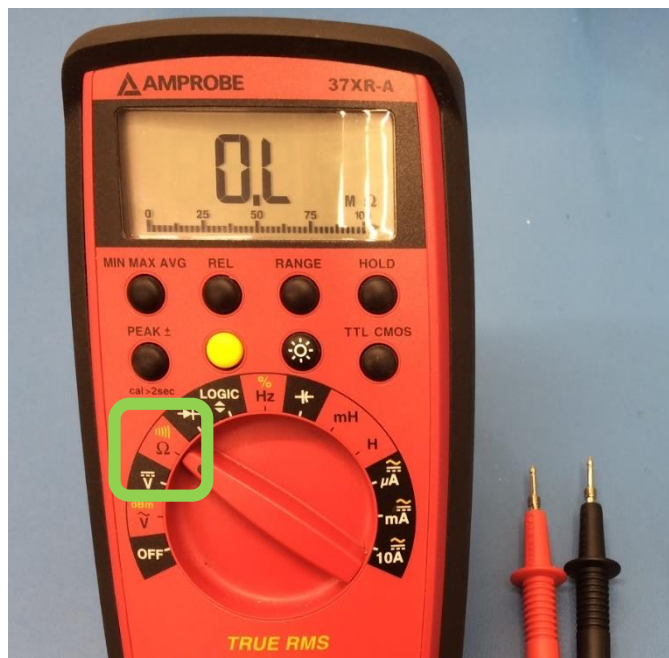
#	Part #	Name	Qty
1	N/A	Ohmmeter	1
2	E-21	Neopixel Blaster	1

**Test Summary:** This is a test for the solder joints on the E-21 NeoPixel Blaster and must be done for every unit

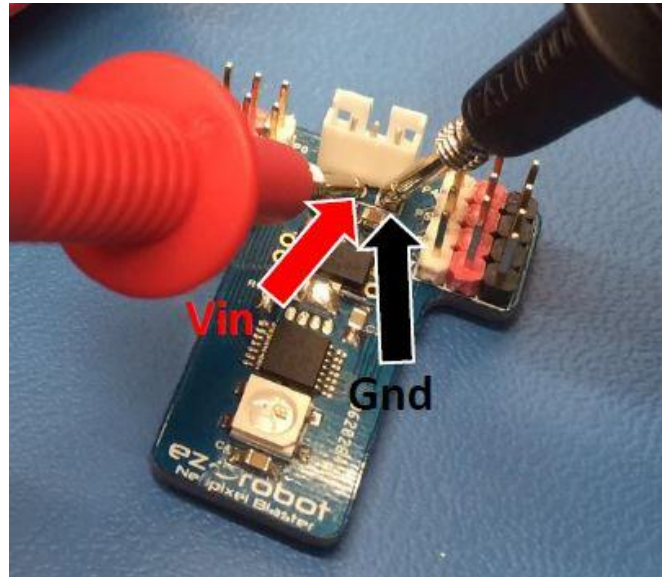
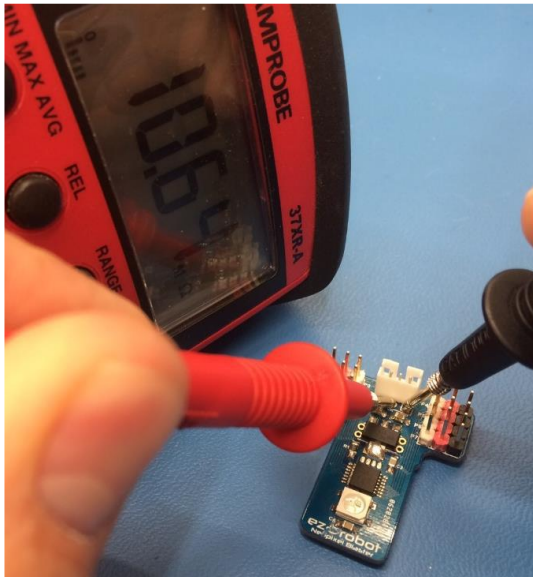
**\*IMPORTANT\***

This test must be done before any power is applied to the E-21



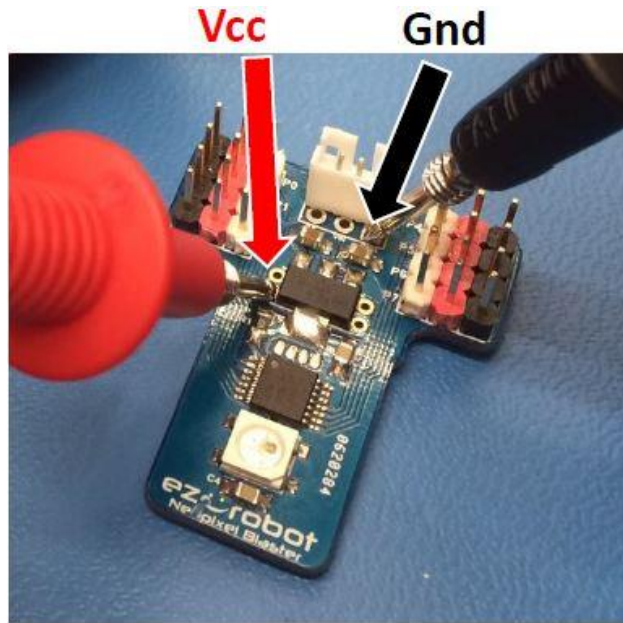
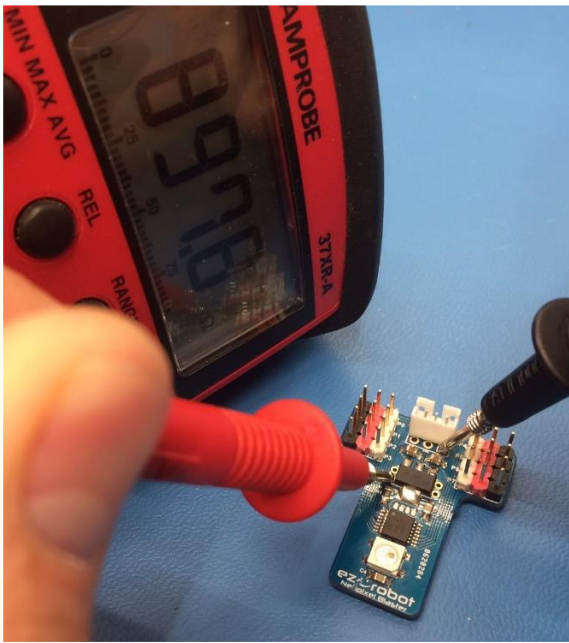


**Step 1.** Place Multimeter on the Ohms setting



**Step 2.** Please check Vin to Gnd. The resistance should be in the Mega-ohm range

**\*IMPORTANT\*** If the ohmmeter reads near to  $0\Omega$  the test has failed.



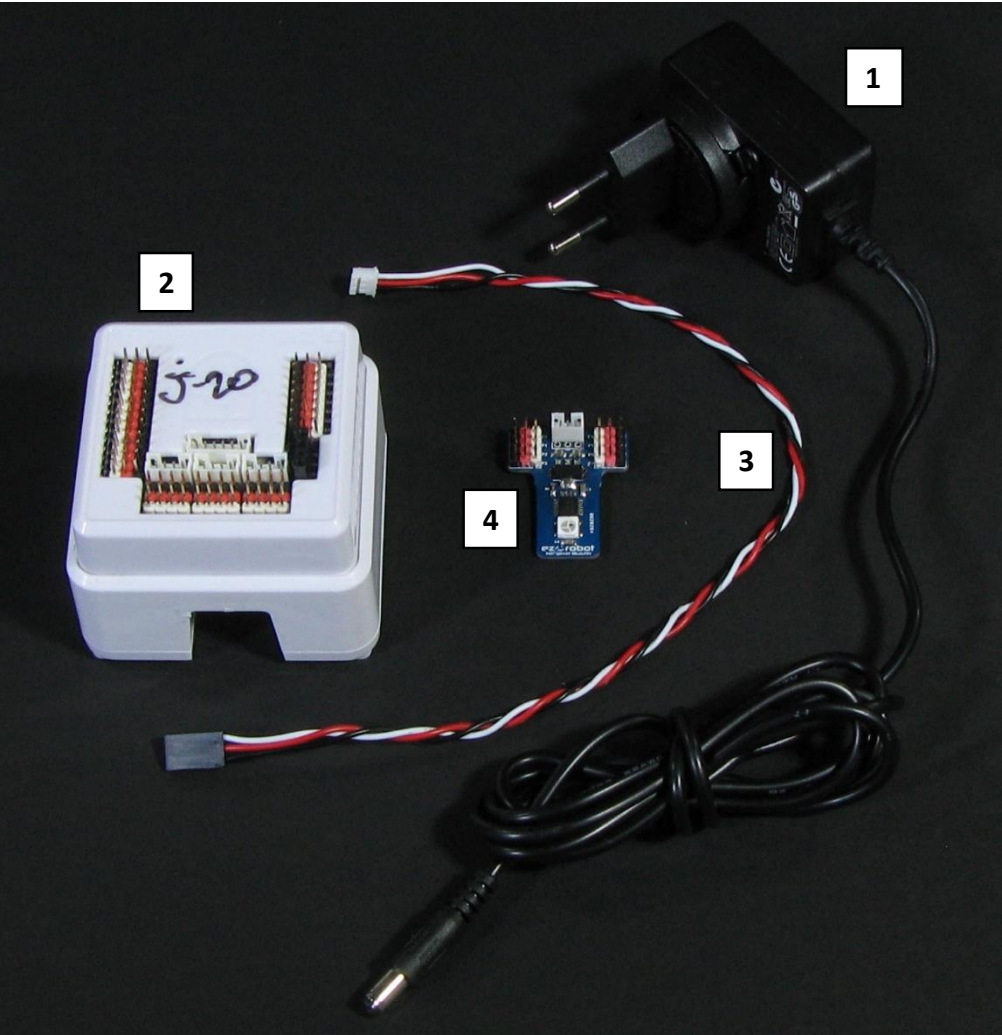
**Step 3.** Please check Vcc to Gnd. The resistance should be over 800ohms. The E-21 Short Circuit Test is now complete

**\*IMPORTANT\*** If the ohmmeter reads near to  $0\Omega$  the test has failed.



## E-21 Test Procedures

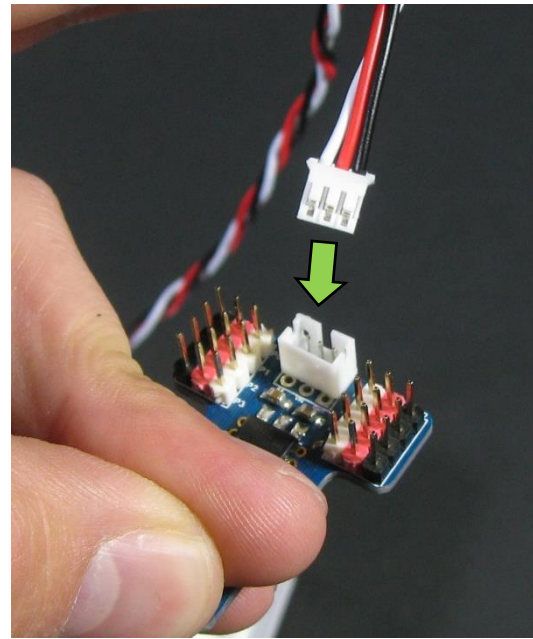
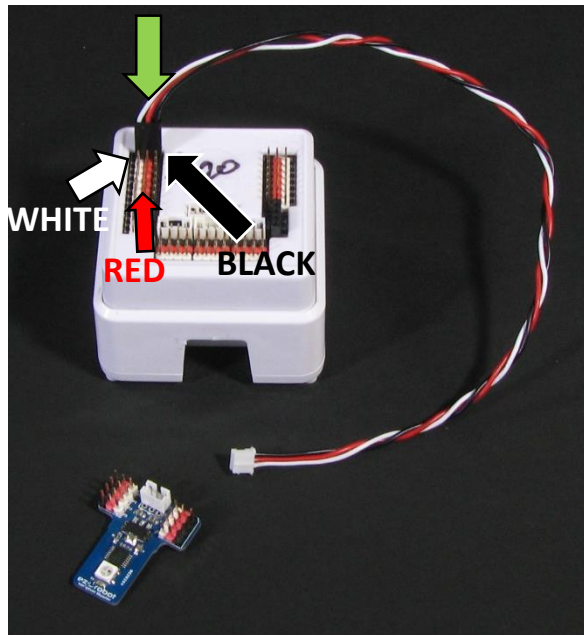
*E-21 NeoPixel Blaster Power ON Self-Test*



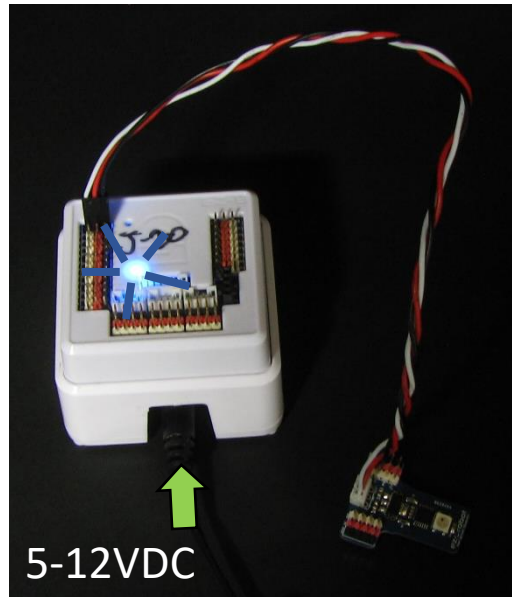
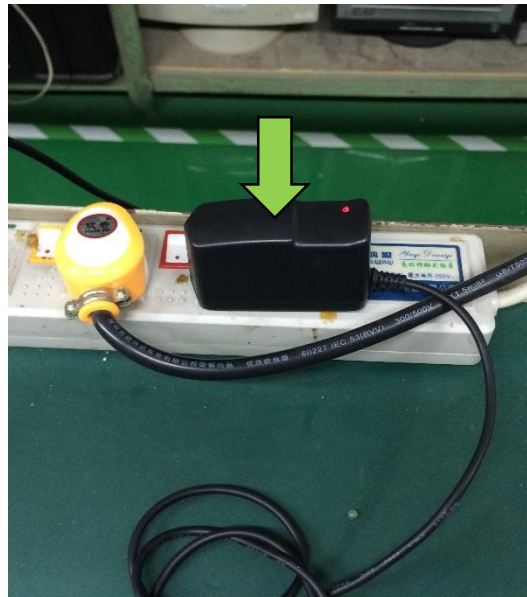
### PARTS & TOOLS

#	Part #	Name	Qty
1	N/A	5-12VDC Power supply	1
2	J-20	Calibration Jig	1
3	TP-110	DuPont to JST 3-pin cable	1
4	E-21	Neopixel Blaster	1

**Test Summary:** This is a test for the solder joints on the E-21 NeoPixel Blaster and must be done for every unit



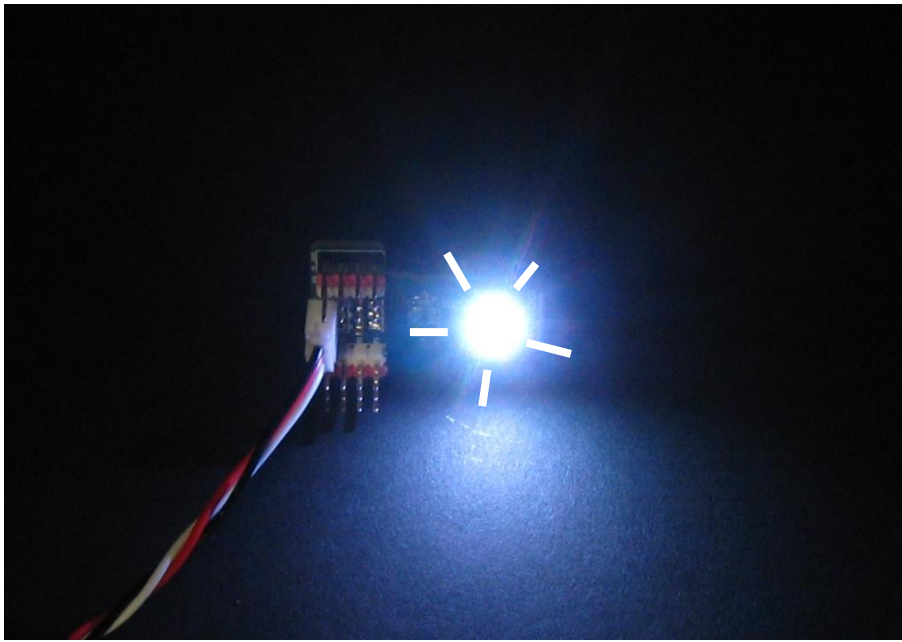
**Step 1.** Plug TP-110 with one side onto J-20 and the other side onto E-21 in the wire color order shown



**Step 2.** Plug the 5-12VDC power supply into mains power then plug the barrel plug into J-20

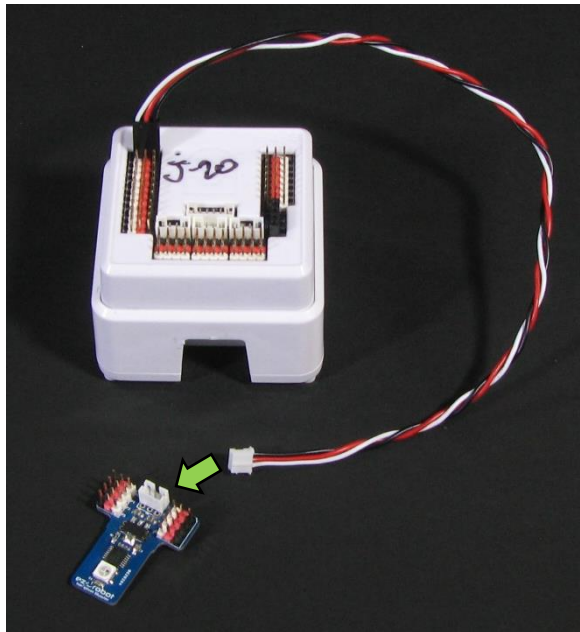
**\*IMPORTANT\***

Ensure that J-20 is powered on, the RGB LED will flash blue and the speaker will make a boot up sound



**Step 3.** The LED on E-21 should now flash white very quickly and then turn off

**\*IMPORTANT\*** If the LED does not flash E-21 has failed the Power ON test



**Step 4.** Remove E-21 from TP-110. The E-21 Power ON Self-Test is now complete