# SYNTHIAM

## **E-18 Test Procedures**

E-18 Ultrasonic Sensor Short Circuit Test

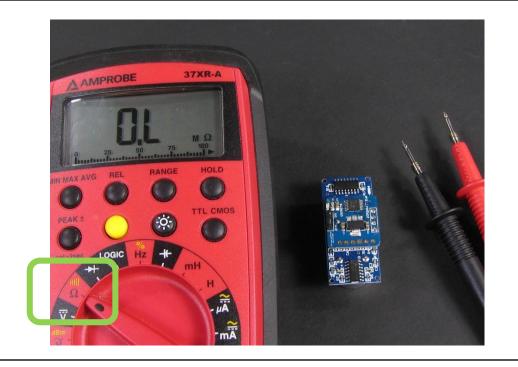
#### PARTS & TOOLS

#	Part #	Name	Qty
1	N/A	Ohmmeter	1
2	E-18	Ultrasonic Sensor	1

**Test Summary:** This is a test for the solder joints on the E-18 Ultrasonic Sensor and must be done for every unit

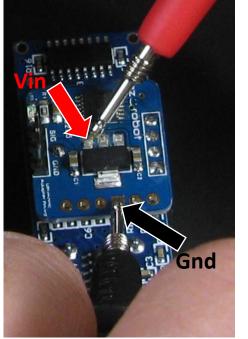
### \*IMPORTANT\*

This test must be done before any power is applied to the E-18



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

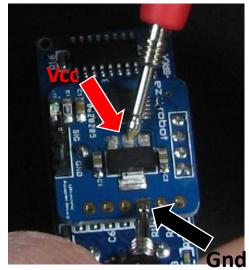




**Step 2.** Please check Vin to Gnd. The resistance should fluctuate in the Megaohm range

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





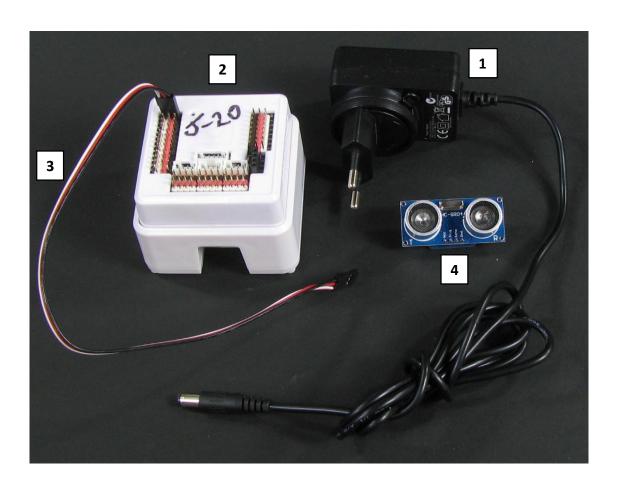
**Step 3.** Please check Vcc to Gnd. The resistance should be in the 800 ohm range. The E-18 Short Circuit Test is now complete

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

# SYNTHIMM

## **E-18 Test Procedures**

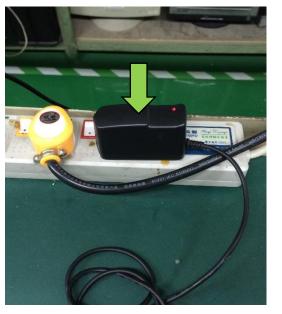
E-18 Ultrasonic Sensor Power ON Self-Test

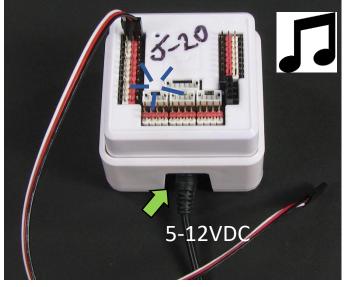


### Parts & Tools

:	#	Part #	Name	Qty
	1	N/A	5-12VDC Power supply	1
	2	J-20	Calibration Jig	1
	3	TP-111	DuPont 2 x 3-pin cable	1
	4	E-18	Ultrasonic Sensor	1

**Test Summary:** This is a test for the solder joints on the E-18 Ultrasonic Sensor and must be done for every unit

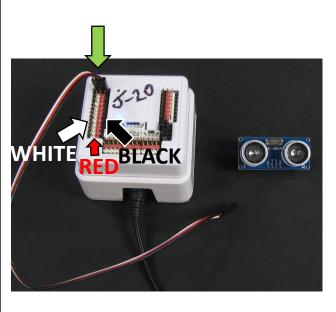


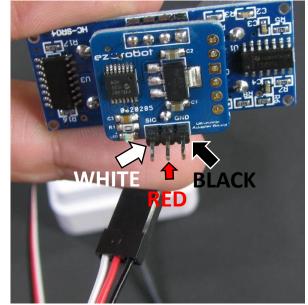


**Step 1.** Plug the 5-12VDC power supply into mains power then plug the barrel plug into J-20

#### \*IMPORTANT\*

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





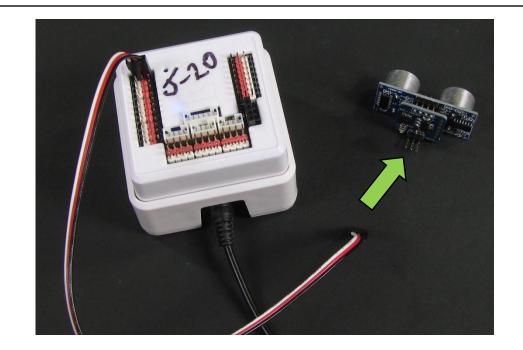
**Step 2.** Plug TP-111 with one side onto J-20 and the other side onto E-18 in the wire color order shown





**Step 3.** The Red LED on E-18 should now flash

\*IMPORTANT\* If the LED does not turn on, or does not flash, E-18 has failed the Power ON test



**Step 4.** Remove E-18 from TP-111. The E-18 Power ON Self-test is now complete