

Test Author: David Popa, Pushpesh Sharma						
	Test Case Name:	Electroboom Code Test #1			Test ID #:	Electroboom-CT-01
	Description:	Checks that our project works as needed. Switching states and ultimately sending voltage through to the leads and arcing when touched.			Type:	<input checked="" type="checkbox"/> white box <input type="checkbox"/> black box <input type="checkbox"/> _____
Tester Information						
	Name of Tester:	David Popa , Pushpesh Sharma Jade Nguyen Shyamal Singh			Date:	11/26
	SW Version:	Elecode Boom			Time:	
	Setup:	Security device should be fully wired onto the Arduino				
S T E P	Action	Expected Result	P A S S	F A I L	N / A	Comments
1	Power on Arduino	LCD displays state of door, wait for IR response	✓			
2	Press 0 on remote	LCD displays state of door and displays that the system is unarmed, GreenLED on	✓			
3	Open the door	LCD displays door open and displays that the system is unarmed, GreenLED on	✓			
4	Close the door	LCD displays door closed and displays that the system is unarmed, GreenLED on	✓			
5	Press 1 on remote	LCD Displays door closed and displays that the system is armed, Red LED on	✓			
6	Open the door	LCD displays door open, and displays that the system is sending voltage through, Blue LED on, voltage flows from arduino to the transformer, through the booster module and to the leads	✓			
7	Touch output leads together	Voltage arcs and LCD displays a delay timer	✓			
8						
	Overall test result:		✓			

Test Author: David Popa, Jade Nguyen						
	<b>Test Case Name:</b>	Electroboom Boost Module Test #2	<b>Test ID #:</b>	Electroboom-BMT-01		
	<b>Description:</b>	Check to see if purchased boost module works with our circuit and output voltage and current levels are safe for human touch	<b>Type:</b>	<input type="checkbox"/> white box <input checked="" type="checkbox"/> black box <input type="checkbox"/> _____		
<b>Tester Information</b>						
	<b>Name of Tester:</b>	David Popa , Pushpesh Sharma Jade Nguyen Shyamal Singh	<b>Date:</b>	10/25		
	<b>HW Version:</b>	Boost module 1.0	<b>Time:</b>			
	<b>Setup:</b>	Boost module should be connected to our 9V power supply (9V battery)				
<b>S T E P</b>	<b>Action</b>	<b>Expected Result</b>	<b>P A S S</b>	<b>F A I L</b>	<b>N / A</b>	<b>Comments</b>
1	Connect 9V battery to Boost module input	Boost module should turn on	✓			
2	Test output voltage	Output Voltage should be at 2k	✓			Boost module is rated for 3V to 2kV
3	Test output current	Output Current should be under 10mA	✓			Break the circuit before the output and put a DMM in series, a human can tolerate 2kV at 10mA, output reading was at 4mA
4	Touch leads together	Voltage should arc	✓			
5	Touch leads with hand	Ow!	✓✓			Should hurt, not too bad, the anticipation and the sudden zap causes more pain than the shock itself
6						

<b>Test Author: Pushpesh sharma, Shaymal Signh</b>						
	<b>Test Case Name:</b>	Electroboom Code Test #3	<b>Test ID #:</b>		Electroboom-CT-02	
	<b>Description:</b>	<i>We need to make sure that the IR sensor works before implimenting it onto our code. In order to do this, we must run a fundamental test.</i>	<b>Type:</b>		<input type="checkbox"/> white box <input checked="" type="checkbox"/> black box <input type="checkbox"/> _____	
<b>Tester Information</b>						
	<b>Name of Tester:</b>	David Popa , Pushpesh Sharma Jade Nguyen Shyamal Singh	<b>Date:</b>		11/30	
	<b>SW Version:</b>	Elecode Boom 2.7	<b>Time:</b>			
	<b>Setup:</b>	<i>Hook up Ir Sensor with the Arduino to turn on the light</i>				
<b>S T E P</b>	<b>Action</b>	<b>Expected Result</b>	<b>P A S S</b>	<b>F A I L</b>	<b>N / A</b>	<b>Comments</b>
1	Hook up Arduino to computer	Arduino is found by the computer	✓			
2	Install IR Sensor	N/a			✓	
3	Go through Serial print to find hex values of remote	Find the hex value for 1 and 0 and write them down	✓			
4	Code to have 0 go green (unarmed)	Whenever 0 is pressed, have the RGB LED go green (system is unarmed)	✓			
5	Code to have 1 go red/blue (arm)	Whenever 1 is pressed, have the RGB LED switch to red when the door close/ blue when the door opens to confirm the switching of states (system is armed)	✓			
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	<b>Overall test result:</b>		✓			

