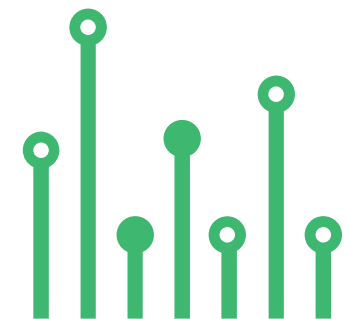


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# ” Xenon Flash Tube Driver —



SKU: EL143599

# Xenon Flash Tube Driver



This is a Xenon Flash tube driver board and consists of a high voltage AC to DC converter circuit, a DC storage capacitor, a trigger circuit that will fire the xenon lamp, an Optocoupler to control the flashes etc. The circuit requires 220VAC and trigger pulse which should be between 3V to 5V. The input trigger pulse is optically isolated and can be interfaced with Arduino or other circuits. The circuit works well with a 2Hz to 10Hz trigger frequency.



**Note:** The board operates at lethal voltages and has bulk capacitors that store significant charge, even when disconnected from the power source. Accidental contact can lead to lab equipment damage, personnel injury, or may be fatal. Please be exceptionally careful when probing and handling this board. Always observe normal laboratory precautions.

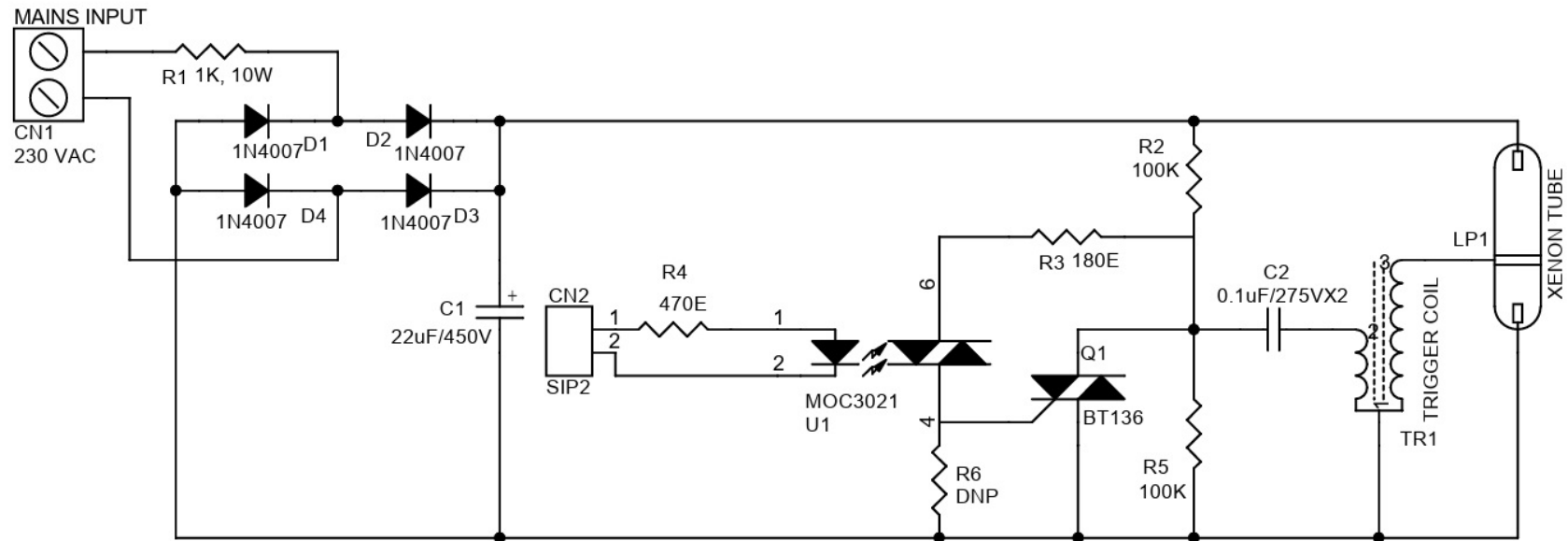
The project can be tested with simple Arduino code which is available as download. Connect the D4 pin to trigger input and enjoy the magic of the flash tube.

## FEATURES

- Supply 220V AC
- Flash Frequency 2-10Hz
- Trigger Input 3V to 5V DC
- Trigger Input Optically Isolated
- 4 X 4MM PCB Mounting Holes
- PCB Dimensions 73.66 X 43.18MM

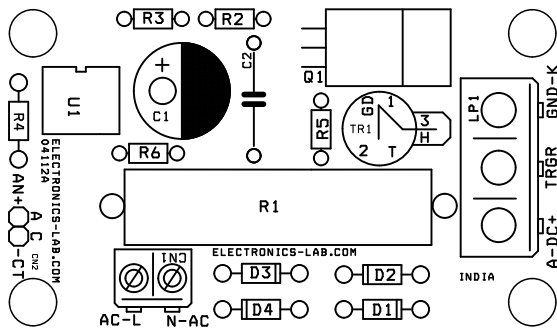
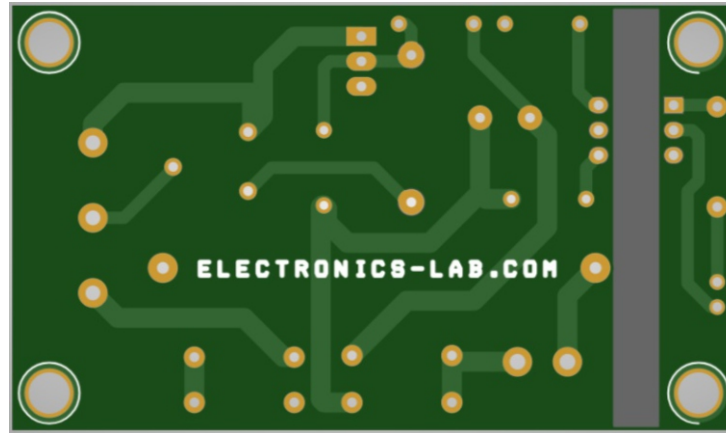
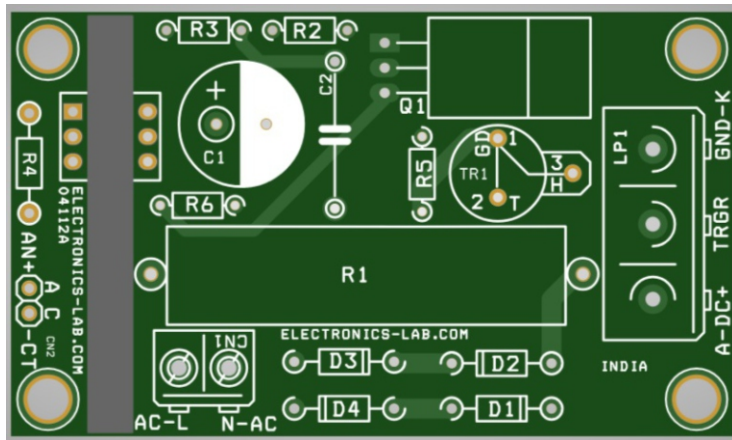


# Schematic

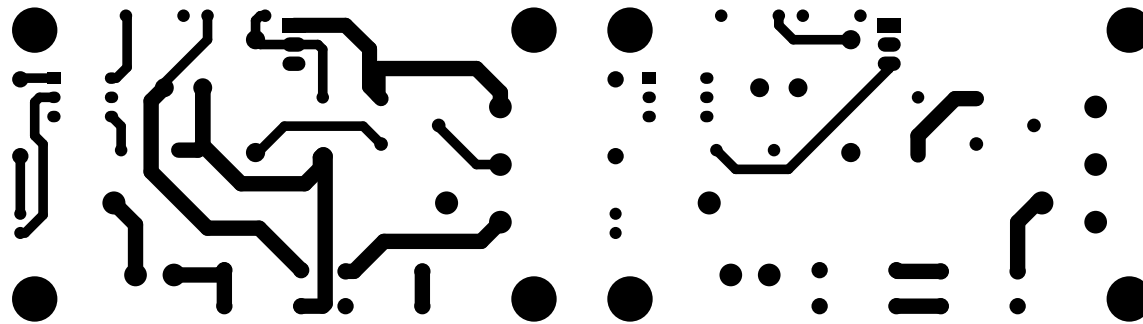




# PCB



SILK SCREEN TOP



BOTTOM LAYER

TOP LAYER

PCB DIMENSIONS 73.66 X 43.18MM

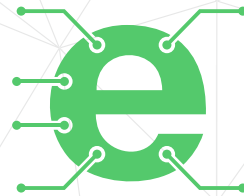
# Parts List

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BOM						
NO.	QNTY.	REF.	DESC	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	2 PIN SCREW TERMINAL PITCH 5.08MM	PHOENIX	DIGIKEY	277-1247-ND
2	1	CN2	2 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5315-ND
3	1	C1	22uF/450V ELECTROLYTIC	RUBYCON	DIGIKEY	1189-2936-ND
4	1	C2	0.1uF/275VX2AC	KEMET	DIGIKEY	399-9651-ND
5	4	D1,D2,D3,D4	1N4007 DIODE THT	DIOTEC SEMI	DIGIKEY	4878-1N4007TR-ND
6	1	LP1	SCREW TERMINAL PITCH 7.62MM	PHOENIX	DIGIKEY	277-5954-ND
7	1	Q1	BT136 TO220	NXP	DIGIKEY	2156-BT136X-600F,127-ND
8	1	R1	1K 5%, 10W RESISTOR THT	VITROHM	DIGIKEY	3964-KHS10AJB-AX-1KAA-ND
9	2	R2,R5	100K 5% 1/4W THT	YAGEO	DIGIKEY	
10	1	R3	180E 5% 1/4W THT	YAGEO	DIGIKEY	
11	1	R4	470E 5% 1/4W THT	YAGEO	DIGIKEY	
12	1	R6	DNP			
13	1	TR1	TRIGGER COIL-FOR XENON TUBE	EXCELITAS TECHNOLOGY	DIGIKEY	ZS1324-24VLUL1(H)-ND
14	1	U1	MOC3021	ONSEMI	DIGIKEY	MOC3021MFS-ND
15	1	SOCKET	6 PIN DIP SOCKET	ASSAMANN	DIGIKEY	123-AR06-HZL-TT-ND
16	1		XENON TUBE U SHAPE	MOFLASH	RS COMP	660-1117







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