

# LAMP DIMMER

Triac based Incandescent lamp dimmer is a simple circuit doesn't require additional power supply, works directly with 110V AC or 230V AC.

It is a low cost dimmer circuit for adjusting the light brightness of incandescent, Halogen Lamp, Light Bulb load up to 250 W.

- Input supply: 230 VAC or 110 VAC
- Output: 250 W
- Triac controlled
- On board Potentiometer for adjusting level
- Power Battery Terminal (PBT) for easy input / output connection
- Four mounting holes of 3.2 mm each
- PCB dimensions 40 mm x 34 mm



## CIRCUIT DESCRIPTION:

This kit consists of BT 136 Triac, resistors and capacitor. CN1 connector is for Load connections and CN2 connector for power supply connections.

**BT136:** It is a sensitive gate Triac, used in general purpose bidirectional switching and phase control applications where high sensitivity is required.

**DB3:** It is a DIAC that functions as a trigger diode with a fixed voltage reference. It can be used in conjunction with Triac for simplified gate control circuits or as a starting element in fluorescent lamp ballasts

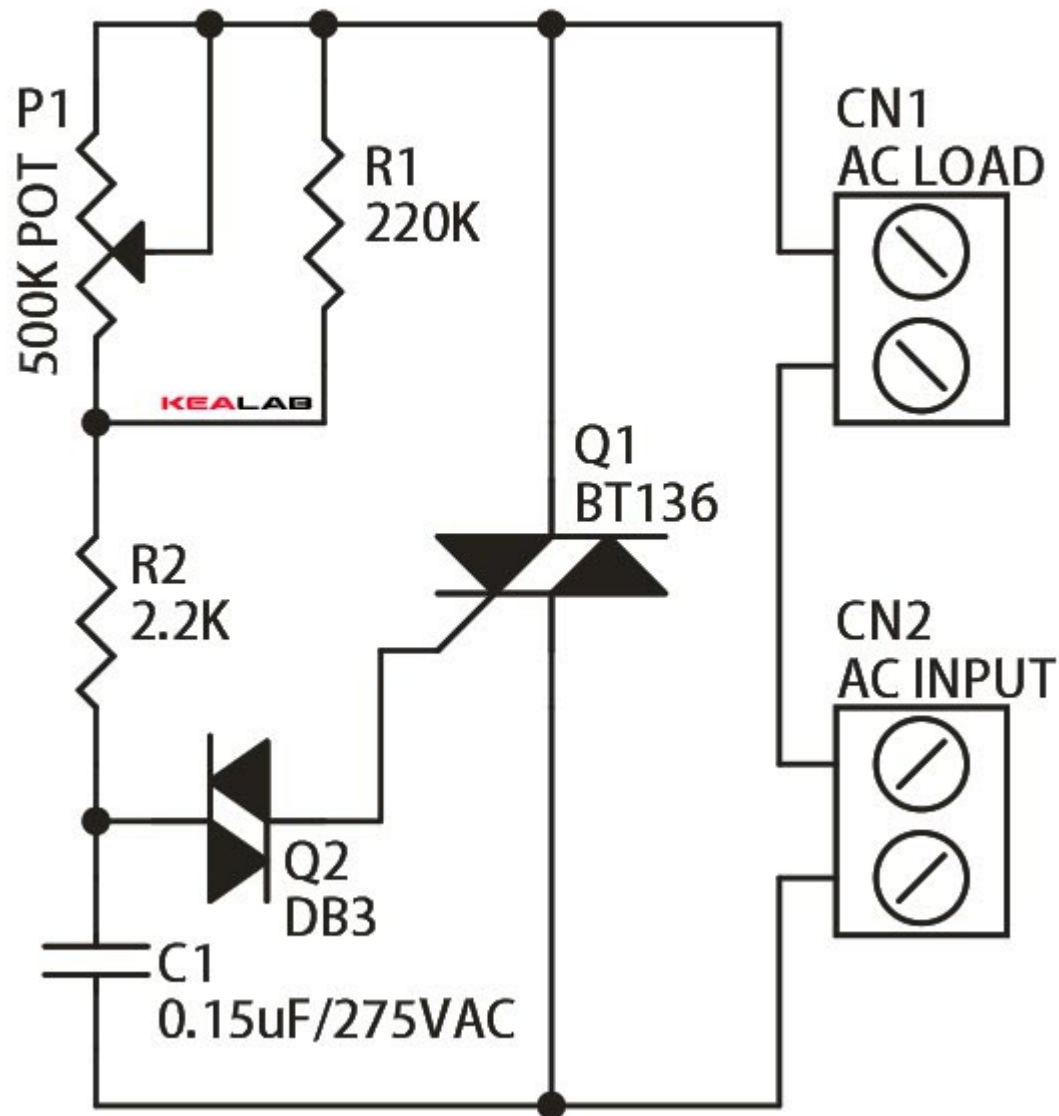
## WORKING:

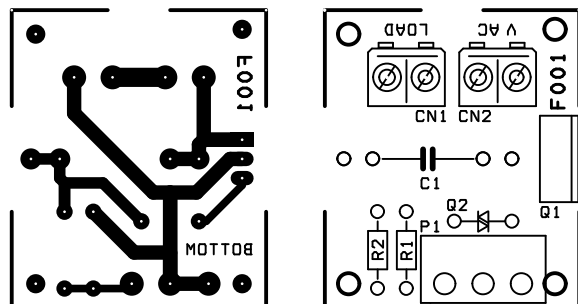
This kit is used as a Light dimmer. It is used to adjust the brightness of the Halogen Lamp, Light Bulb up to 250 W. A power supply of 230 or 110 VAC is supplied to the kit at CN 2 connector and a light bulb is connected at the CN 1 connector. Using the POT we can adjust the brightness of the bulb.

## APPLICATIONS:

It is used to adjust the brightness of incandescent, halogen lamp, light bulb up to 250 W.

110 VAC - USE R1  
230 VAC - OMIT R1





SR.	QTY.	REF.	DESCRIPTION
1	1	CN1	2 PIN PBT CONNECTOR
2	1	CN2	2 PIN PBT CONNECTOR
3	1	C1	0.15uF/275VAC
4	1	P1	470K/500K POT
5	1	Q1	BT136
6	1	Q2	DB3
7	1	R1	220K
8	1	R2	2.2K

**For 110V use R1, For 230V Omit R1**