

DANCING LIGHT 3 CH 220V 2,400W. CODE 130

The dancing light device consists of high, medium and low frequency channels which can be connected lamps up to max. 800W/220VAC per channel. Each channel can be adjusted separately. Low and high voltage modules are divided as to prevent an electrical shock that may take place. Idel for discotheques, partyrooms, etc.

Technical specifications:

- power supply: 9-12VDC.
- consumption: 35mA max.
- max. load per channel: 800W.
- input sensitivity: adjust by potentiometer
- PCB dimensions : 3.64 x 2.80 inch.
- How to works:

VR1 is adjust the input signal level. The signal is divided to be transmitted through three channels. Each one has trimmer potentiometer available for adjustment of sound frequency and VR2 available for adjustment of the bass, VR3 for the medium and VR4 for the high. After been increased or decreased, the signal is transmitted through channel's filter set and VR4 for the high. After been increased or decreased, the signal is transmitted through channel's filter set and TR1, TR2 and TR3 to be amplified. Therefore the signal is transmitted through the collector of TR. Input transformer functions as a coupling tricking the gate of each channel's SCR in order to let the lamp according to music rhythm.

PCB assembly:

Shown in Figture 3 is the assembled PCB. Starting with the lowest height components first, taking care not to short any tracks or touch the edge connector with solder. Some tracks run under components, and care should be taken not to short out these tracks. All components with axial leads should be carefully bent to fit the position on the PCB and then soldered into place. Make sure that the electrolytic capacitors are inserted the correct way around. The LED has a flat spot on the body which lines up with the line on the overlay. Now check that you really did mount them all the right way round!

Testing:

Before connect all the power supply, adjust VR2, VR3 and VR4 to max. clockwise and adjust VR1 to max. counterclockwise. After that connect the lamp max. 800W to "BASS 220V", "MIDDLE 220V" and "TREBLE 220V" position and connect "IN" position parallel to "OUTPUT" position of power amplifier. Connect the power supply 9 to 12VDC to "+9V" and "G" position and the power supply 220VAC to "IN 220V" position. Adjust VR1 to clockwise slowly. The lamp blink according to music rhythm. Adjust the bass by turning VR2, the medium by VR3 and the high by VR4. Increase or decrease the speed of all signal by turning VR1. If the circuit functions in this fashion this indicates that it is practical.



The most problem like the fault soldering. Check all the soldering joint suspicious. If you discover the short track or the short soldering joint, re-solder at that point and check other the soldering joint. Check the position of all component on the PCB. See that there are no components missing or inserted in the wrong places. Make sure that all the polarised components have been soldered the right way round.

