

BASS BOOSTER (MONO)
CODE 642

LEVEL 2

This mono stereo bass increasing circuit amplifies low frequency (base sound) while twitter is blocked from output.

Specification:

- Supply voltage : 12 VDC
- consumption : 5mA.max.
- Dimension : 2.46 x 1.63 inches.

How it works:

Input signal will transfer through TR1 to amplified and transferred to R, C network circuit. Low frequency will transfer through R7 while high frequency will transfer through C3 to R4. As R4 has high value, so than high frequency can pass lesser. Both frequencies will be combined at pin 2 of IC1. IC1 will amplify signal to pin 6 to OUT. Pin 6 will then feedback to R11 to control amplification ratio.

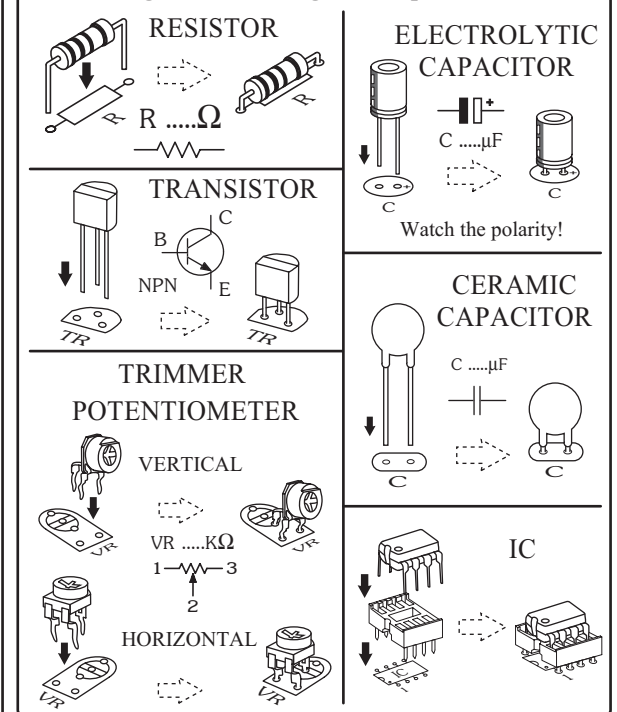
PCB assembly:

Shown in Figure 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. If the pins will not enter the holes with ease, use a small drill to slightly enlarge the opening. 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. Some components are particularly sensitive to heat (ie: Transistors, IC's, diodes etc.) extra care must be taken to only apply the iron for as little time as possible, using a pair of pliers to grip the leads will help conduct heat away. Trim components leads with wire cutters to prevent excess lengths causing a short circuit. Now check that you really did mount them all the right way round!

Testing:

Connecting input with tape of tuner. Connecting out with amplifier. If amplifier has tone control, connect out prior to tone control. Giving supply 12 volts to the circuit, positive pole at +12V, negative pole at G. Turning volume, there should be bass sound of music, only low twister presented. Adjusting VR to increase or decrease bass sound. If there is "hummm..." sound means unsmooth current. It requires power supply 6-9-12V 300mA code 801.

Figure 1. Installing the componants



Troubleshooting:

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.

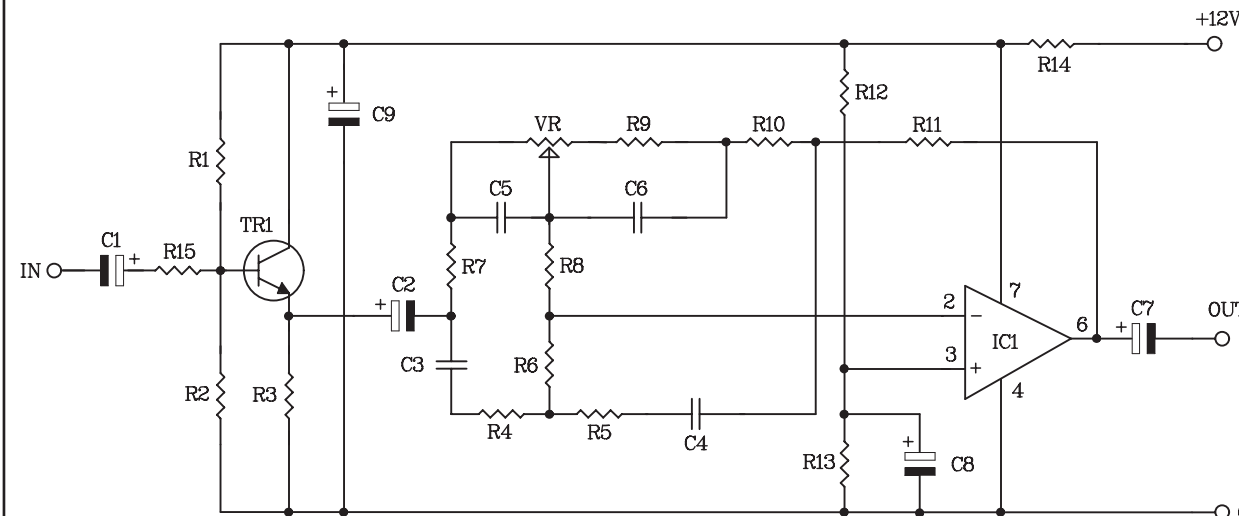


Figure 2. The bass booster (mono) circuit

Figure 3. Connections

