

POWER AMP IC 8W (MONO)
CODE 604 **LEVEL 1**

The power amplified circuit uses IC Power Amp, an OTL operation. The multifunction amplifier can amplify the signal from a walkman, a tuner or a cassette tape.

Technical specifications:

- power supply : 9-15VDC.
- consumption : 800mA.max.
- output power : 8W.max.
- adjust. level sound by trimmer potentiometer.
- total harmonic distortion : 0.03% (0.1-14W/1kHz)
- S/N ratio : 94dB (A weighted)
- frequency response : 20Hz to 20kHz (-3dB)
- PCB dimensions : 2.00 x 1.62 inches.

How to works:

The input signal is transmitted through R1 passed on VR1, which have C2 connect to ground for protect noise signal to be decreased and increased before transmitted to the middle pin of the volume VR1 through C1 to pin 1 of IC1. The signal will be amplified and transmitted through pin 4 passed on C8 and finally coupling throughout the speaker. And C6 series connect with R6 from pin 4 of IC1 to ground for protect oscillate.

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:

1. Rotating the volume VR1 max. counterclockwise. Connect the speaker at "SP" point. The speaker should be

4-8 ohms, 10 watts up.

2. Then connect the input signal i.e. tape, radio to "IN" point.

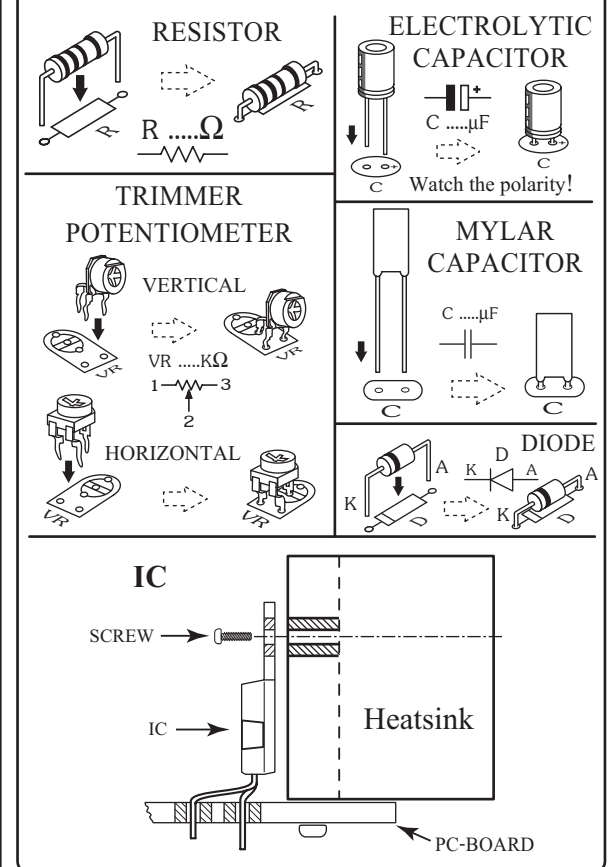
3. Connect the power supply 12 volts into the circuit, anode at "+12V" point and cathode at "G" point.

4. Slightly adjust the volume VR1 clockwise so that the input signal is amplified throughout the speaker.

Application:

The adapter can be connected as illustrated figure circuit. It should be 800mA, 12-0-12, 2 pieces of the rectifier diode 1N4001 and C 1000/25. This circuit uses a tone control mono FK625.

Figure 1. Installing the components



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 power amp 8W. (mono) circuit

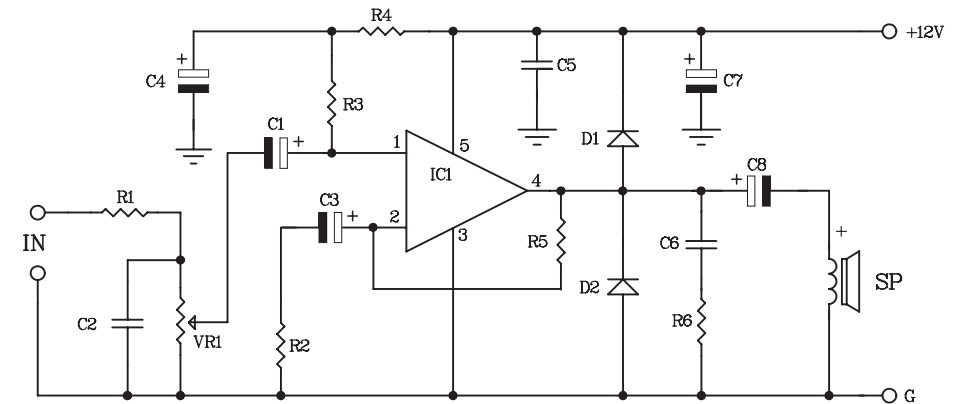
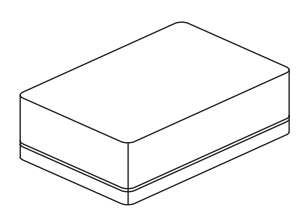
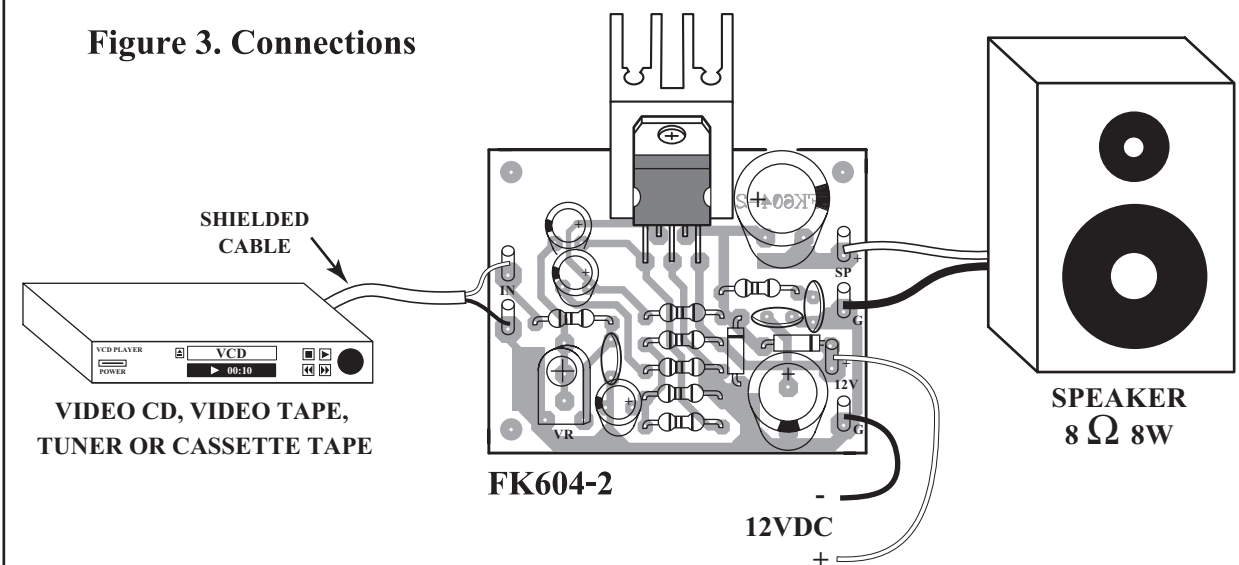


Figure 3. Connections



NOTE:
FUTURE BOX FB03 is suitable for this kit.

NEW KIT SET **NEW**

CODE FK	DESCRIPTION	POWER
167	FIREFLY LIGHT (NIGHT ACTIVATE)	3VDC
275	THREE TRAIN SOUNDS (IC DIGITAL)	3VDC
276	OWL VOICE (IC DIGITAL)	3VDC
326	DUAL STATION INTERCOM&DOOR BELL (WITH 2 SPEAKER)	6-12VDC
436	UHF REMOTE CONTROL 1 CH.	TX. 9VDC RX. 12VDC
673	MINI POWER AMP 1+1W. STEREO	3-12VDC