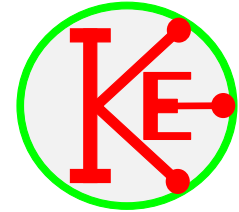


Volume control panel.



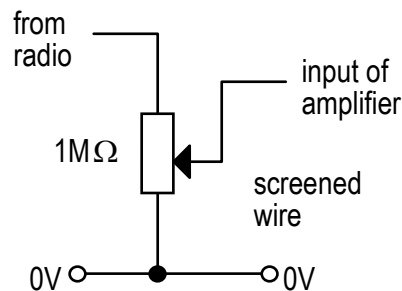
Specification

- High input resistance
- Headphone socket
- Loudspeaker switch

Irrespective of which audio amplifier subsystem is used, there needs to be a way of controlling the volume.

A $1\text{M}\Omega$ logarithmic potentiometer is used for the volume control as this provides a large input resistance which will ensure that the tuned circuits of the radio section work efficiently.

The circuit diagram is shown below.

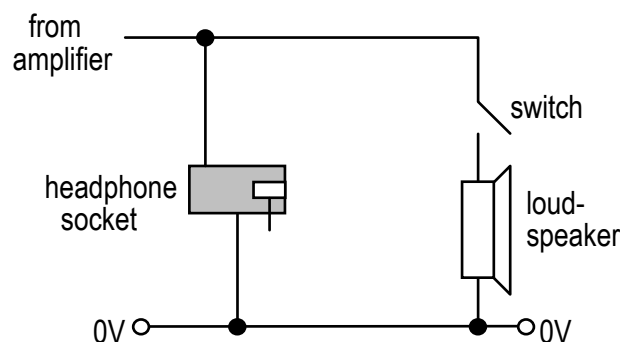


Screened wire should be used for the wire going from the potentiometer to the input of the amplifier. Screened wire should also be used to carry the signals from the radio section of the system. The potentiometer should be wired so that as it is turned clockwise, the volume increases.

If the potentiometer has a metal case, then this should also be connected to 0V.

This can be done by wrapping a single loop of bare wire around the fixing thread before attaching the potentiometer to the panel. The wire should then be connected to 0V on the potentiometer.

The circuit diagram for the output of the audio amplifier is shown below.

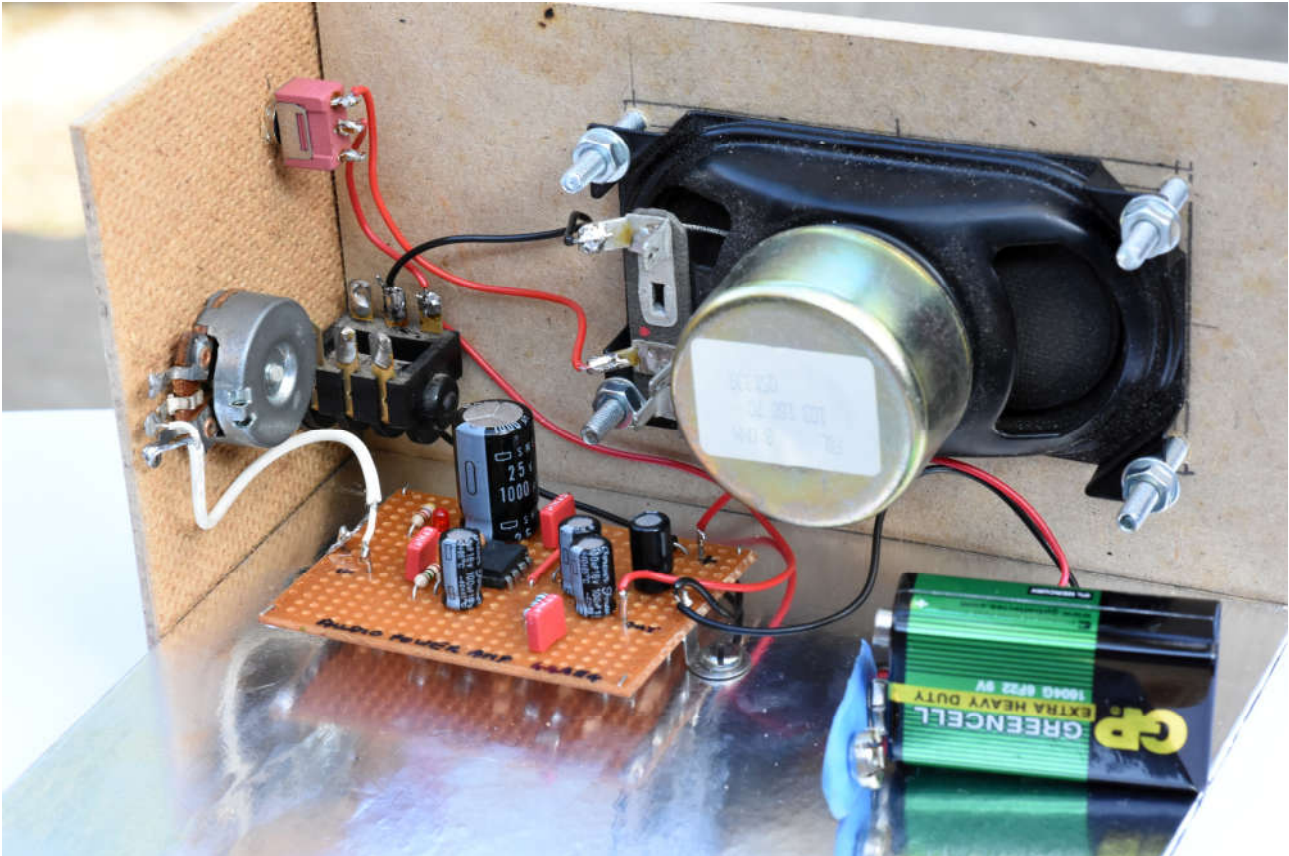


The headphone socket should be a stereo version since most headphones will be stereo.

The socket is wired so that the separate earphones are wired in series giving a resistance of $32 - 64\Omega$. Note that the common terminal is left unconnected, see the photograph below.

This reduces the load placed on the audio amplifier.

The picture below shows the audio amplifier controls wired onto a piece of hard board 10cm × 7cm and attached to the baseboard.



Note where the screen of the screened cable is connected on the amplifier.

