

Mini Amplifier Circuit

Description

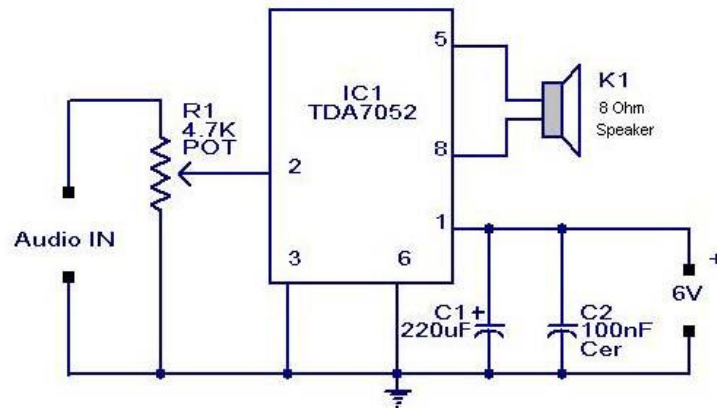
Here is a simple and humble 2 Watts mini **audio amplifier circuit** suitable for small pocket **radios** and other portable audio gadgets. The circuit is based on Phillips Semiconductors IC TDA 7052. The amplifier can be run even from a 3V Mercury button cell. This makes it ideal for battery operated gadgets.

The IC TDA7052 is a mono output amplifier coming in a 8-lead DI package (DIP). The device is mainly designed for battery-operated portable audio circuits. The features of TDA 7052 include ,no external components needed, no switch-on or switch-off click sounds , great overall stability ,very low power consumption(quiescent current 4mA) , low THD, no heat sinks required and short-circuit proof.

The gain of TDA 7052 is fixed internally at 40 dB. . To compensate the reduction of output power due to low voltage supply the TDA7052 uses the Bridge-Tied-Load principle (BTL) which can provide an output of around 1 to 2 W Rms(THD = 10%) into an 8 Ohm load with a power supply of 6 V.

In the circuit the potentiometer can be used to control the volume. Capacitor C1 and C2 are meant for filtering the supply voltage if a battery eliminator is used as supply source. For operations using a battery C1 and C2 are no necessary.

Mini Audio Amplifier Circuit Diagram with Parts List .



Mini Audio Amplifier Circuit Diagram

Notes.

- Assemble the circuit on a good quality PCB or common board .
- If you are a little expert, you can assemble the circuit in a match box including the speaker

Source : <http://todayscircuits.blogspot.com/2011/06/mini-audio-amplifier-circuit.html#.VUB4m9Kqqkp>