

- * Supply voltage is 9 or 12 volts DC from a regulated supply. A battery is not used as consumption can rise to around 75mA in strong signal conditions.

 * Amplifier is LM386 with an adequate gain of 20. Input from 10k pot and series 10k resistor to pin 3. Pin 2 and 4 to 0v line.

 * To raise gain to 50 connect a 1.2k resistor and 10uF capacitor between pin 1 and pin 8 [— to pin 8].

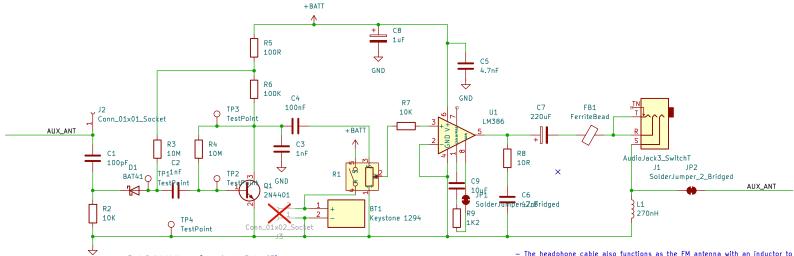
 * Output is via pin 5 and a 220uF capacitor, [+ towards pin5] 25v wkg or better. LS is a 4 or 8 0 hm miniature loudspeaker.

 * Supply to LM386 is via pin 6 which is strapped to + rail but with a 4n7 decoupling capacitor near to the chip.

- * Various lengths of antennae can be used and for experimentation a parallel tuned circuit can be connected between the RF input and the Ov [Ground] rail.
 * If a BAT41 is not available a BAT85 can be used. 1N5711 and 1N6263 are also suitable.

Test Point Voltages [no signal, Fluke 83] * TP1 circa 100mV * TP2 circa 540mV * TP3 circa 2.95V

GND



alternatives to BAT41

* BAT85 * 1N5711

* 1N6263

- The headphone cable also functions as the FM antenna with an inductor to block RF from ground while allowing the audio signal to have a ground return.

 — A small blocking capacitor allows antenna RF to pass to the receiver front end but blocks audio
- from that antenna input.

 The ferrite beads provide a low—impedance audio path and a high—impedance RF path between the
- headphone amplifier and the headphone.
- * see https://www.connectortips.com/getting-one-wire-to-do-more-part-4-headphone-wire-as-antenna-fag/

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