

BRIEF DESCRIPTION

The Transistor Radio Tester consists of several functions and they are briefly described below:

1. An RF Oscillator that covers the broadcast range 500 KC to 1600 Kc. This can be used for signal injection or RF alignment.
2. An RF Oscillator that covers the intermediate frequency range, 200 KC to 600 KC. This can be used for signal injection or IF alignment.
3. A tuned radio frequency receiver with a range of 200 KC to 600 KC. Input sensitivity of this receiver is approximately 200 microvolts. Its use is for signal tracing the IF stages of the receiver under test. The IF signal is picked up by a special cathode follower probe to minimize loading, and amplified. The amplification consists of two stages of tuned RF and two stages of audio. The amplified signal is then fed into a speaker for an aural indication. This receiver can also be used to pick up aircraft weather signals which are found in this range.
4. A tuned radio frequency receiver with a frequency range of 500 KC to 1600 KC. The input sensitivity is approximately 200 microvolts. Its use is for signal tracing the RF section of the receiver and for checking resonance of the antenna coil. The signal picked up by the low loading probe is amplified and fed to a speaker for an aural presentation as in the previous IF section. This receiver can also be used as an AM tuner for Hi-Fi audio system because of its wide band characteristics.
5. Audio signal output. This consists of a sawtooth waveform with a repetition frequency of 600 cycles per second. Its maximum amplitude is 2 volts peak-to-peak. This is sufficiently low to prevent damage to transistors used in audio circuits. This signal is used for signal injection into audio circuits. Its low output impedance is particularly suitable for driving audio signals into transistor circuits.
6. Audio Amplifier. The audio amplifier featured in this unit has a sensitivity of 10 millivolts. 10 millivolts of AC signal will give a good aural indication by the speaker. A volume control is incorporated in the amplifier circuit to enable adjustment of sound level. The audio amplifier is used for complete signal tracing of the audio section of the receiver under test. Other uses would be. phono amplifier. auxiliary amplifier. etc.
7. Transistor Test Circuit. This circuit has been incorporated for the purpose of checking transistors.