

HR2510 Misc. Enhancements

Author: VE2XQQ

Increasing the Receive Audio I

The HR2510 does not have a by-passed emitter in the audio circuit. To correct this, Add a 4.7uf 16v Electrolytic capacitor across (in Parallel) with R152 (a 560 ohm resistor). This modification will increase the receive audio.

Increasing the Receive Audio II

This mod will increase the AM reception: Replace the AM Detector diodes (D111 & D112) with better Schottky Barrier diodes. You can use ECG 583 or NTE 583 diodes or 1N6263 or equivalent. (In the HR2600 the diodes are labelled D11 & D12).

Increasing the Receive Audio III

This mod will increase receive strength and dynamic range, resulting in louder, cleaner signals while actually reducing noise levels. All you need to do is to replace the existing IF Amp transistor with a new one which has greater frequency response and lower noise characteristics. Once installed you will need to adjust your μS meter for more realistic readings.

Remove diode D101 and Transistor Q101.

Replace Q101 with a ECG or NTE 23.

Note: The new transistor has a different pin out from the original. You will need to reorient the new transistor to work. With the flat side of the transistor facing you and leads pointing down : Existing leads of Q101 = 1 2 3 , the replacement ECG or NTE, you will need to cross the first lead to the last = 2 3 1 .