

Output power mod for the Uniden HR2510 & HR2600

Uniden's HR2510 & HR2600 10 Meter Amateur radio's are nice for single band operation, but a little more output power is desirable for portable use.

CREDITS:

M.T. Stacey KC4HGH in Septembers issue of 73 Amateur Radio (1989)
Published his findings on power modifications to the HR2510.

The modifications that follow are based on his works with some additions:

INTRO:

The factory has the HR2510 & HR2600 output power levels set for continuous duty. I.E. AM,FM & CW 10 Watts, SSB - 20/25 Watts. The radio is capable of much more output power for intermittent operation like SSB.

***** POWER MOD *****

PROCEDURE	HR2510	HR2600	
Relocate capacitors to bottom of Board. (This is to allow spreading of the tuned/trap output coils.	C122,C116	C122,C116	<input type="checkbox"/>
Replace Pre-driver Tx (2SC2086D) w/ ECG-340 (Note pinout change) 2510/2600's w/ the 2SC1973 device require no pinout change.	Q124	Q34	<input type="checkbox"/>
Replace output Device MRF477 w/ MRF497	Q132	Q32	<input type="checkbox"/>
Replace Bias current limiting resistor from 82 ohms to 68 ohms 1/2 watt device.	R158	R158	<input type="checkbox"/>
Pull bias jumper board out of the circuit. Place a current meter (100ma) between pins TP2 and TP4	PB100	PB100	<input type="checkbox"/>
Adjust Final bias for 80-85 MA, USB position. No Modulation.	VR112	VR13	<input type="checkbox"/>
Fire radio up with power meter and 100W dummy load attached. Adjust ALC for Maximum. 1Khz tone is helpful.	VR104	VR5	<input type="checkbox"/>
Mode to AM/FM Spread coils for maximum.	L121,L123	L14,L16	<input type="checkbox"/>
AM/FM power adjustment, 20 Watts is easily obtained. I think 25/30 may be pushing it in this Mode. (Melt Down.) Adjust controls for your desired levels.	VR103,VR107	VR4,VR8	<input type="checkbox"/>

My experience in increased output levels are as follows: "SSB Mode."

HR2510 = 32 Watts RMS (1Khz Tone) / 45.2 Watts PEP

HR2600 = 37 Watts RMS (1Khz Tone) / 52.3 Watts PEP

The above measurements are made with Bird 43 into a 50 ohm load.

PARTS SOURCE:

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