



Noise floor, 500 Hz, 14.2 MHz, no preamp				-135	dBm
Noise floor, 500 Hz, 14.2 MHz, Preamp 1 On				-142	dBm
Noise floor, 500 Hz, 14.2 MHz, Preamp 2 On				-144	dBm
Noise floor, 2.4 kHz, 50.125 MHz, no preamp				-125	dBm
Noise floor, 2.4 kHz, 50.125 MHz, Preamp 1				-134	dBm
Noise floor, 2.4 kHz, 50.125 MHz, Preamp 2				-135	dBm
Sensitivity, SSB, 50.125 MHz, no preamp				0.38	uV
Sensitivity, SSB, 50.125 MHz, Preamp 1				0.14	uV
Sensitivity, SSB, 50.125 MHz, Preamp 2				0.11	uV
Noise floor, 500 Hz, 50.125 MHz, no preamp				-131	dBm
Noise floor, 500 Hz, 50.125 MHz, Preamp 1 On				-140	dBm
Noise floor, 500 Hz, 50.125 MHz, Preamp 2 On				-141	dBm
Roofing filter selection	15 kHz	6 kHz	3 kHz		
Signal for S9, no preamp	51	54	68		uV
Signal for S9, Preamp 1	24	25	32		uV
Signal for S9, Preamp 2	9	10	12		uV
Gain of preamp(s)					
Preamp 1				6	dB
Preamp 2				15	dB
AGC threshold at 3 dB, no preamp, 3 kHz roofing filter				2.9	uV
AGC threshold at 3 dB, Preamp 1 On				1.35	uV
AGC threshold at 3 dB, Preamp 2 On				0.50	uV

Notes:

Initially the 6 meter noise floor were significantly worse than the 20 meter values. Ran a full CPU reset, and the values improved 6 to 7 dB.

Measurement of the nominal 3-kHz roofing filter is 8.7 kHz wide at -6 dB.

Measurements unless otherwise noted were made using the 3-kHz roofing filter.

The S meter has a dead zone around S9 where it takes more than 6 dB to make it move one division on the LCD meter. This was not a problem at S5. S meter linearity at S9 +10 dB up to S9 +60 dB was quite good. Reducing a test signal 10 dB below S9 reads S5. Reducing a test signal 20 dB below S9 reads S2. At 5 dB per S unit, S0 to S9 should require a change of 45 dB.

When preamp 1 is enabled, the noise from the speaker drops 1 dB. The signal increases 6 dB. When preamp 2 is enabled, the noise from the speaker increases 6.5 dB. The signal increases 15 dB

AGC: The radio AGC exaggerates transient noises, such as click, ticks and pops. This unfortunately is common today in DSP radios.

Transmit issues:

The transmitter can exhibit as much as a 6 dB power overshoot on voice peaks. If the radio is set for 25 watts out, key down on CW, on SSB some voice peaks approach 100 watts. This poses a potential risk when driving a linear that requires significantly less than 100 watts for full output.

Rev B