

Power Supply Module	AMX-CI-00060	1.00
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Instruction Book

Ref: Paragraph 2.983 (d)(8)

Operator Manual AMX-MA-00400, Iss. 0.13

Tune Up Procedure at Nominal Operating Power

Ref Paragraph 2.983 (d)(9)

The product covers the whole operating frequency band without adjustment and contains no adjustable components for tuning purposes.

Circuitry and Devices for Determining and Stabilizing Frequency

Ref: Paragraph 2.983 (d)(10)

Means for Frequency Determination and Stabilization:

Frequency Stabilization for the equipment uses a high stability, temperature compensated oven oscillator operating at a frequency of 10MHz with a stability of ± 1.0 ppm over the operating temperature range. This oscillator is designated as G5 on sheet 21 of the schematic diagram AMX-CD-00633

The Transmitter output frequencies are generated directly by the Frequency Synthesizer shown on sheets 22 and 23 of the schematic diagram AMX-CD-00528.

The Receiver 1st Local Oscillator frequencies are higher than received frequencies by 45MHz and are generated by the Frequency Synthesizer (V14) as shown on sheet 12 of the schematic diagram AMX-CD-00948.

Both synthesizers use the 10MHz Reference Oscillator as the Frequency Reference.

Circuits for Suppression of Spurious Radiation, Limiting of Modulation, and Limiting of Power

Ref: Paragraph 2.983 (d)(11).

(i) Suppression of Spurious Radiation:

The Spurious Emissions are suppressed using appropriate shielding and filtering techniques. The harmonic filter (PBF1) for the transmitter as shown on sheet 6 of the schematic diagram AMX-CD-01584.

(ii) Limiting of FM Deviation

The transmitter is equipped with the system to automatically limit the frequency deviation to ± 5 kHz for 25/30kHz channel operation and ± 2.5 kHz for 12.5/15kHz channel

operation.

This function is performed by software algorithms, which are used to generate the modulation. These also include pre-emphasis and audio filtering.

(iii) Limiting of RF Power

The RF Output Power of the Transmitter is controlled by the circuitry shown on sheet 3 of the schematic diagram AMX-CD-01584.

The main components of the circuitry are Stripline Directional Coupler with the detector diode VF2 located at the output of the RF Power Amplifier (sheet 6) and the A/D converter NC2 (sheet 4). The processor (DC2) compares the output level to a table stored in memory and controls the input attenuator (V12, V13 sheet 2).

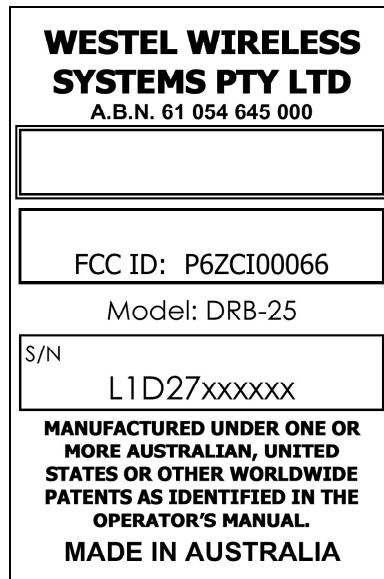
Test Data

Ref : Paragraph 2.983 (e)

All applicable test data are provided in the section Test Results of this Engineering Report.

Equipment Identification Plate/Label (Ref: Paragraph 2.983 (f))

The label measures 3” by 2” and is located on the left side of the equipment on the lower rear corner. The same label is used for FCC ID: P6ZCI00059 & P6ZCI00063.



Photographs of the Equipment (Ref: Paragraph 2.983 (g))

The following photographs are provided separately.