

MIDLAND 76-900 UK

TRANSMITTER ALIGNMENT =====

1. Test Equipment Required

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| a) Oscilloscope (100 MHz). | f) Frequency Counter (100 MHz). |
| b) Deviation Meter. | g) AF Oscillator. |
| c) RF Power Meter. | h) Spectrum Analyzer. |
| d) AF Voltmeter (V.T.V.M). | |
| e) 50 Ω Dummy Load & Attenuator. | |

2. Alignment Procedure

STEP	PRESET TO	ADJUSTMENT	REMARKS
1	Channel :20 RF ATT: -10dB	T2, T3 and T4	Connect the Oscilloscope to ANT JACK. Adjust coils T2, T3 and T4 for MAX reading of the scope
2	Same as step 1 Except RF ATT: Normal	L4, L8 and L9	Connect RF Power Meter To ANT JACK. Adjust coils L4, L8 and L9 for maximum reading on the RF Power Meter. Adjust L4 core CW to obtain 4.4 Watts, now adjust L9 core CCW to obtain 3.8 watts. Check RF power difference of channel 1 to 40 it should be within 0.3 watt, if not readjust L4, L8 and L9 to obtain a good balance.
3	Same as step 1	RV5	Adjust RV5 for RF power output approx 0.5 watt.
4	Same as step 1 Except RF ATT: Normal	RV2 and RV6	Connect Deviation Meter to ANT JACK and AF Oscillator to the MIC JACK. Set the AF Oscillator to 1KHz at 30mV output. Adjust RV6 for maximum deviation. Adjust RV2 for 4.5 KHz deviation; readjust RV6 for 2.5 KHz of deviation.
5	Same as step 4	RV4	Adjust RV4 for equal indication on both built-in RF meter and external wattmeter.

3. Test Equipment Connection

