

DX-929

ALIGNMENT (EPT092910Z)

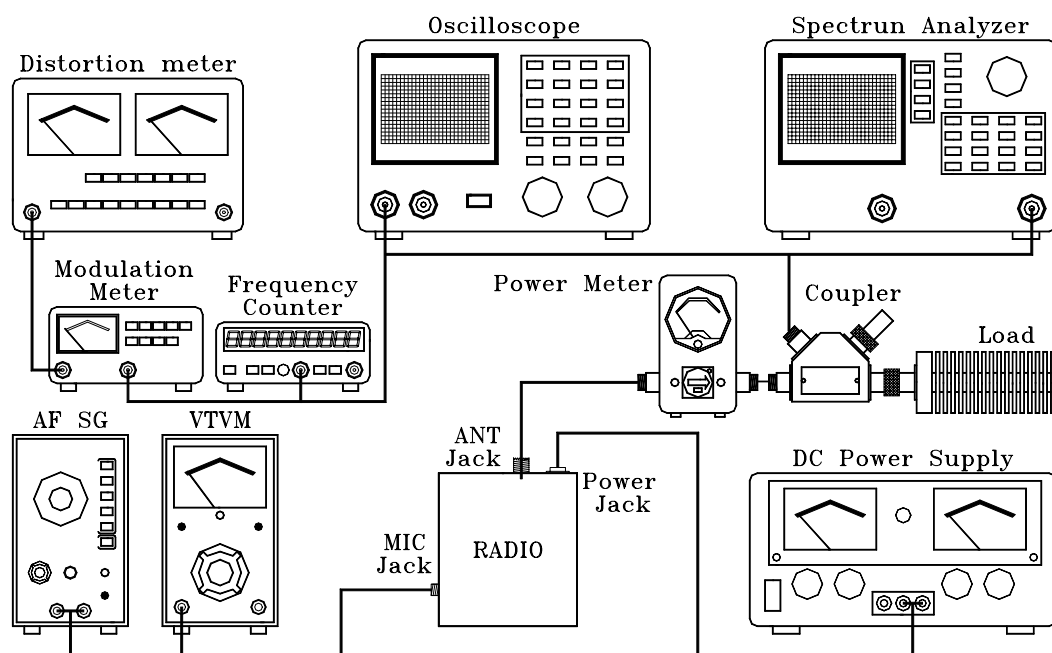
1.0 TEST EQUIPMENT

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|---------------------------------|----------------------------------|
| 1. Oscilloscope (50MHz) | 6. Frequency Counter (100MHz) |
| 2. DC Power Supply (13.8V, 10A) | 7. MultiMite (digital) |
| 3. Deviation Meter | 8. Distortion Meter |
| 4. Audio Signal Generator | 9. Spectrum Analyzer |
| 5. RF Signal Generator (100MHz) | 10. RF Power Meter (100MHz, 25W) |

1.1 PLL SYNTHESIZER / OSCILLATOR FREQUENCY ALIGNMENT

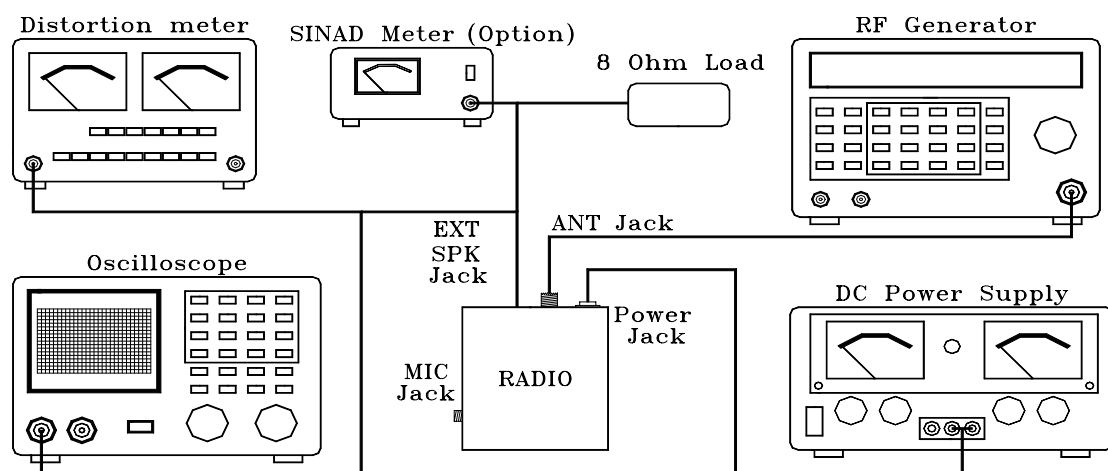
ITEM	CONNECTS & SETTING	ADJUST	MEASUREMENT
VCO	Set radio to CH19 AMRX mode.	L14	3.5VDC±0.1
VOLTAGE	connect volt meter to TP2		
	Connect Oscilloscope to TP3	L15	Maximum Output
	Set radio to CH19 AMRX mode.	VCL	10.24000MHz ± 20Hz
	Connect Frequency counter Pin7		
AMFREQ	Set Radio to CH19 AMRX mode	L20	16.49000MHz ± 20Hz
	Connect Frequency counter to TP3		
TX FREQ	Set Radio to CH19 AMTX mode	VR7	16.49000MHz ± 20Hz
	Connect Frequency counter to TP3		
AMOSC	Set Radio to CH19 AMTX mode	L23	10.69500MHz ± 20Hz
	Connect Frequency counter to TP5		

1.2 TRANSMITTER ALIGNMENT



ITEM	CONNECTS & SETTING	ADJUST	MEASUREMENT
TX	Set Radio CH 19 AM TX mode		MAX $\geq$ 12W
POWER	Connect RF power meter to ANT Jack	L43,44,42, 40	Spurious Emission
	Set radio to CH 40. AM TX mode		
	Set radio to CH 1. AM TX mode		
AM	Set radio to CH 19. AM TX mode	VR17	3.8W
TX POWER	NO MOD	VR18	0.3W $\pm$ 0.2W
AM	Set radio to CH 19. AM TX mode	VR16	90%
MODULATION	Audio signal 30mV, 1KHz to MIC	VR18	Meter 90%
TX	Set Radio to CH19 AM TX mode	VR9	Meter needle to
S/RF METER	Meter switch to S/RF position..		the top
	MIC Gain at minimum position		in green RF

1.3 RECEIVER ALIGNMENT



ITEM	CONNECTS & SETTING	ADJUST	MEASUREMENT
AM	Set Radio to CH 19 AM RX mode		Audio output >2V
SENSITIVITY	RF gain fully clockwise, SQ at MIN, VOL control at 20'clock. Connect RF SG to ANT jack Frequency 27.185MHz MOD 30% 0.5uV.connect distortion meter Set radio to CH40, AM mode RF SG setting 27.405MHz Set radio to CH1, AM mode RF SG setting 26.965MHz	L5,6,7,8,9 10,2,3	S/N 10dB
NB ADJUST	Set Radio to CH19 AM mode RF SG setting 27.205MHz MOD 30%, 100uV, NB/ANL switch	L1	DC voltage to Max MAX (>2.0V)
AM SQUELCH	Set Radio to CH19 AM mode SQ control at fully Clockwise. RF SG setting	VR4	Adjust very slowly Slowly until squelch just open.
AM S/RF METER	Set Radio to CH19 AM mode Meter switch at S/RF position. RF SG setting 27.185Mhz MOD	VR1	Meter needle to S9 on the S scale.