

# STALKER 9 DX & FDX

## TRANSMITTER ALIGNMENT

### 1. Test Equipment Required

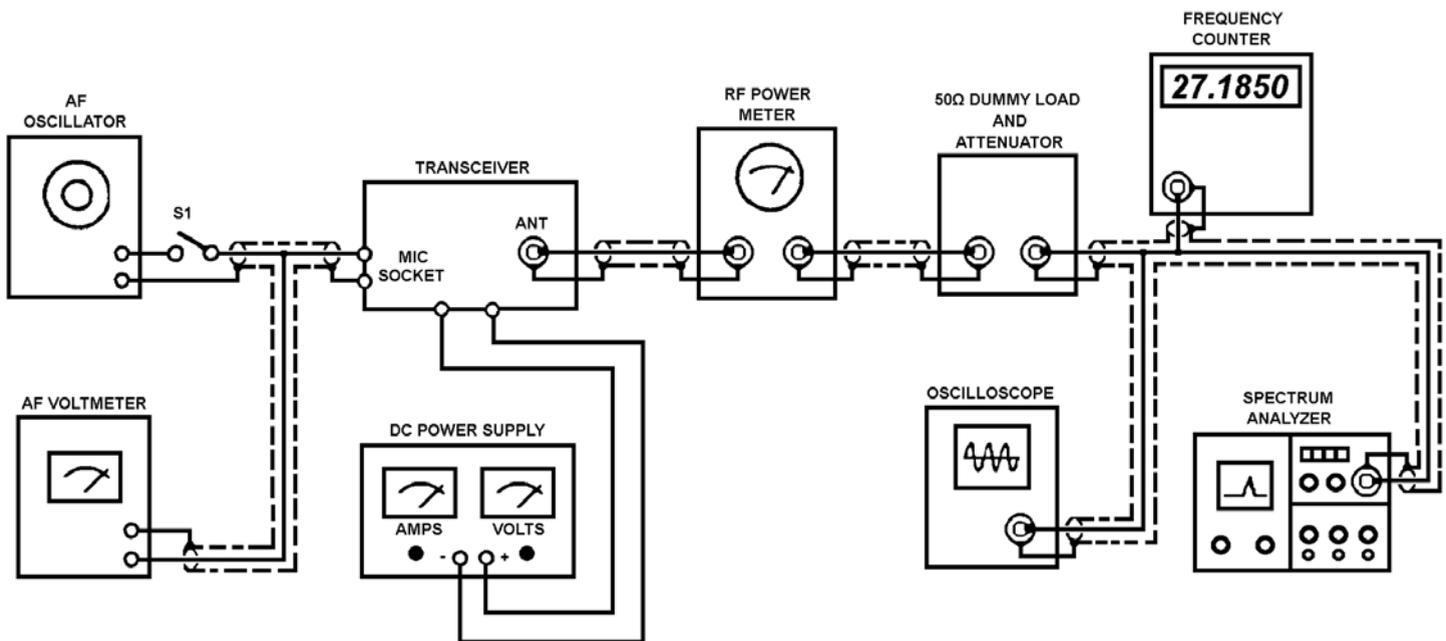
- a) Oscilloscope (100 MHz).
- b) DC Power Supply (13.8v, 3 Amps).
- c) RF Power Meter.
- d) AF Voltmeter (V.T.V.M).
- e) 50  $\Omega$  Dummy Load & Attenuator.
- f) Frequency Counter (100 MHz).
- g) Deviation Meter.
- h) Two Tone Oscillator.
- i) Spectrum Analyzer
- j) AF Signal Generator

### 2. Alignment Procedure

STEP	PRESET TO	ADJUSTMENT	REMARKS
1	Channel :40 Band : LOW Mode : USB, TX No Modulation	VR10	Remove Bias Shorting PCB, connect DC Ammeter to TP8 (+), TP7 (-), Adjust VR10 for a current reading of 50mA.
2	Same as step 1	VR9	Remove Bias Shorting PCB, connect DC Ammeter to TP8 (+), TP6 (-), Adjust VR9 for a current reading of 50mA.
3	Same as step 1	L43 and L44	Connect Two Tone Oscillator to Mic Jack, Set VR7 (ALC) CW Max, Adjust L43 and L44 for max power reading on the RF Power Meter.
4	Same as step 1 Except Channel :20	L42	Adjust L41 so that core is it is just flat with the top of the coil, Adjust L42 for max power reading on the RF Power Meter.
5	Same as step 1 Except Band : HI Channel: 20	L41	Adjust L41 for max power reading on the RF Power Meter.
6	Same as step 1 Except Band : HI Ch: 1 LOW Ch 40	L42	Adjust L42 to obtain the minimum difference between Channel 1 HI and Channel 40 Low On the RF Power Meter.
7	Channel: 40 Band: LOW Mode: AM, TX 90% modulation	L30	Adjust L30 to obtain the maximum indication on the RF VTVM.
8	Same as step 3	VR7	Adjust VR7 to obtain RF output of 25 volts on the RF VTVM.
9	Same as step 1	VR4	Adjust VR4 to obtain the minimum carrier leakage.

STEP	PRESET TO	ADJUSTMENT	REMARKS
10	Same as step 1 Except Mode: LSB	VR4	Adjust VR4 to obtain the minimum carrier leakage.
11	Repeat steps 9 and 10 to obtain approximately the same amount of minimum Carrier Leakage on USB and LSB.		
12	Channel: 40 Band: LOW Mode: AM, TX No Modulation	VR11	Adjust VR11 for 4.0 Watts, On the RF Power Meter.
13	Same as above	VR8	Adjust to show the same wattage on the built-in S/RF Meter.
14	Same as above	VR5	Connect AF Signal Generator to Mic Jack and set it for 30mV 1 KHz mod, Adjust VR5 to obtain 90% negative modulation.
15	Same as above Except Mode: FM	VR3	Connect Deviation meter Ant Jack and AF Signal Generator to Mic Jack and set it for 30mV 1 KHz mod, Adjust VR3 to obtain 4.5 KHz deviation on the Deviation Meter.
16	Repeat steps 3 to 15 to obtain the best results.		

### 3. Test Equipment Connection



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