

## **DenTron 160 - 10 Super Tuner and 3 kw Models**

The DenTron 160 - 10 AT Antenna Tuner (Transmatch), will couple a 160 - 10 meter Transmitter to almost any type antenna system.

The 160 - 10 AT, when properly adjusted, will tune out load reactance, and transform the load impedance to 50 - 70 ohms.

The 160 - 10 AT also includes a highly efficient balun, so antennas fed with open - wire line may be properly tuned to desired frequency.

The 160 - 10 AT may be used with coax-fed antennas as well as end-fed single wire types.

### **INSTALLATION**

1. Hook ground wire on back of tuner.
  - a. a good ground is very important when using end-fed wire antennas.
2. From the rear panel marked "transmitter", connect a coax cable to an SWR bridge that is connected to the station transceiver.
3. **ANTENNA CONNECTIONS:**
  - a. Coax fed antennas to coax feedline.
  - b. End-fed wire to SINGLE WIRE TERMINAL.
  - c. OPEN WIRE FEED to BALANCED FEED LINE TERMINALS and also JUMPER WIRE to SINGLE WIRE TERMINAL (dotted line).

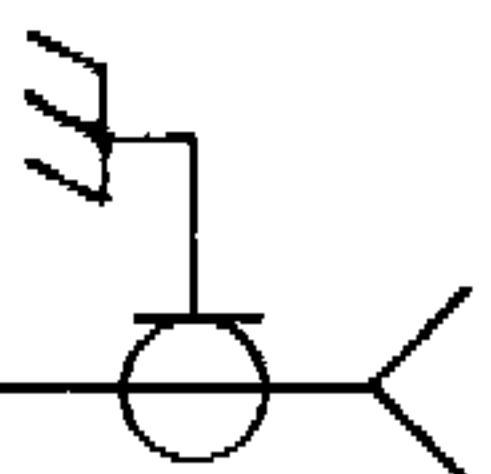
### **OPERATION**

1. Set "Transmitter Matching" and "Antenna Matching" Controls to "5".
2. Listen on receiver for maximum band noise while turning inductance control for maximum noise.

(A is highest frequency, L is lowest frequency)
3. Feed enough power through the system to get a reading on the SWR bridge in the reflected position.
4. Rotate Inductance Control for a drop in SWR reflected reading.
5. Adjust "Transmitter Matching" and "Antenna Matching" control for minimum SWR.
6. Now apply full power and touch up "Transmitter Matching" control if necessary.

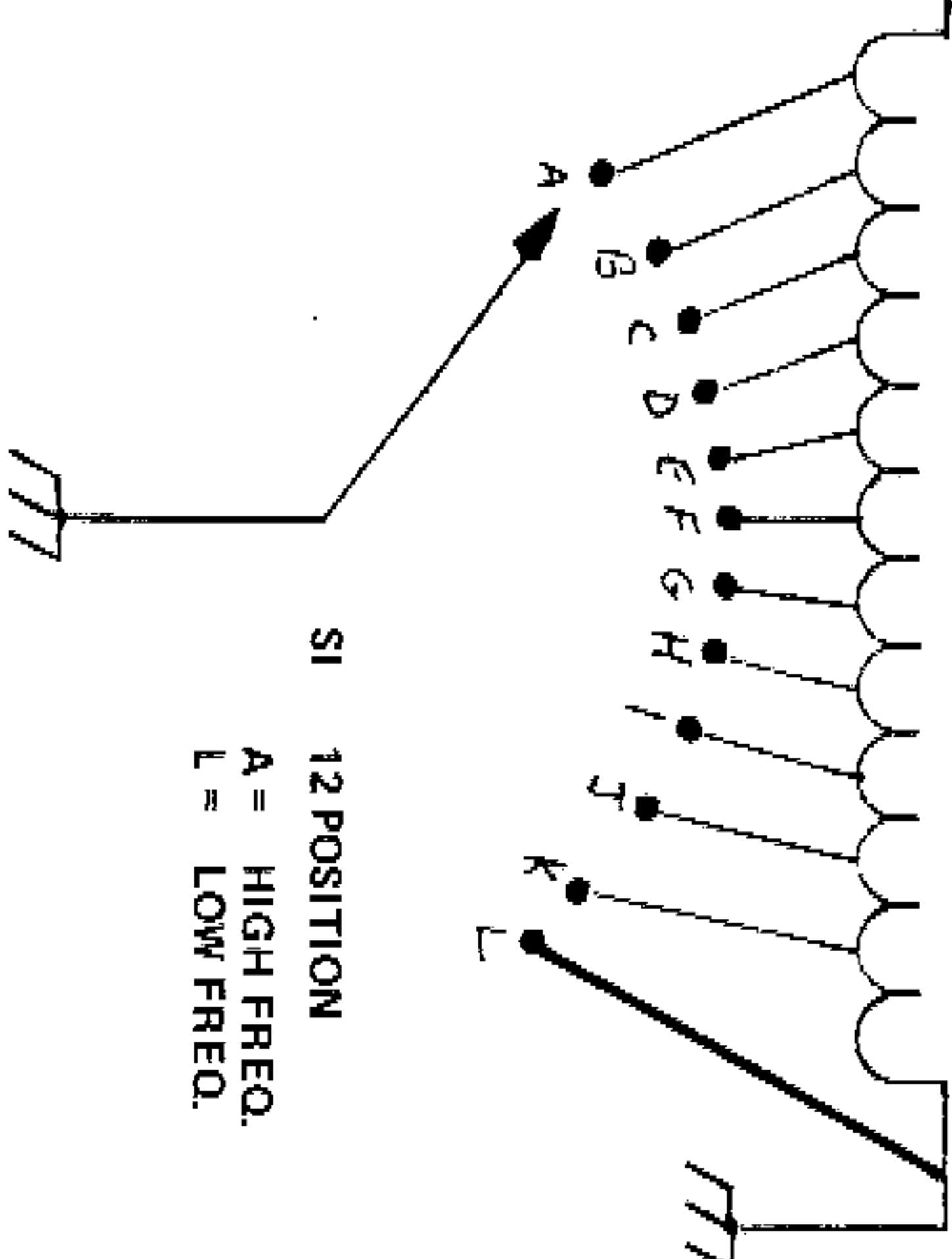
# ANTENNA

COAX WIRE BALANCED



C1  
40-500 pf

160 - 10 AT

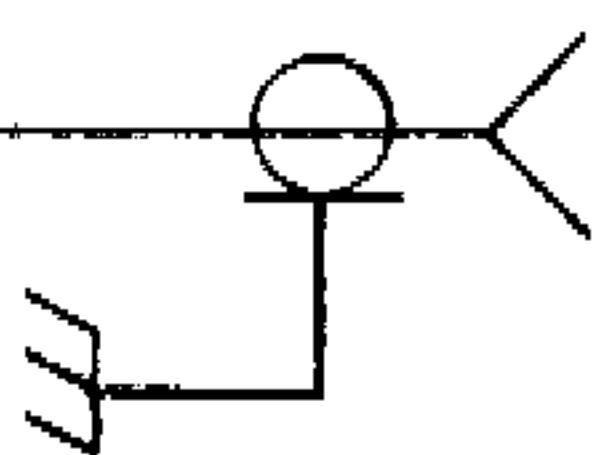


SI 12 POSITION  
A = HIGH FREQ.  
L = LOW FREQ.

C2  
40-500 pf

# XMITR

COAX



# Dentron

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## BASIC CONTROL SETTINGS

(into a 50 ohm resistive load)

BAND & FREQ.	TRANS.	INDUCTANCE	ANT.
160- 1.830	1	L	2.5
75- 3.8	3	E	4
40- 7.2	5.5	C	6
20- 14.2	4	B	1
15- 21.3	3.5	B	3
10- 28.6	8.25	A	8