

Operating Manual

160-10 AT/1kw

Super Tuner

Dentron

DenTron 160-10 Super Tuner

1kw

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

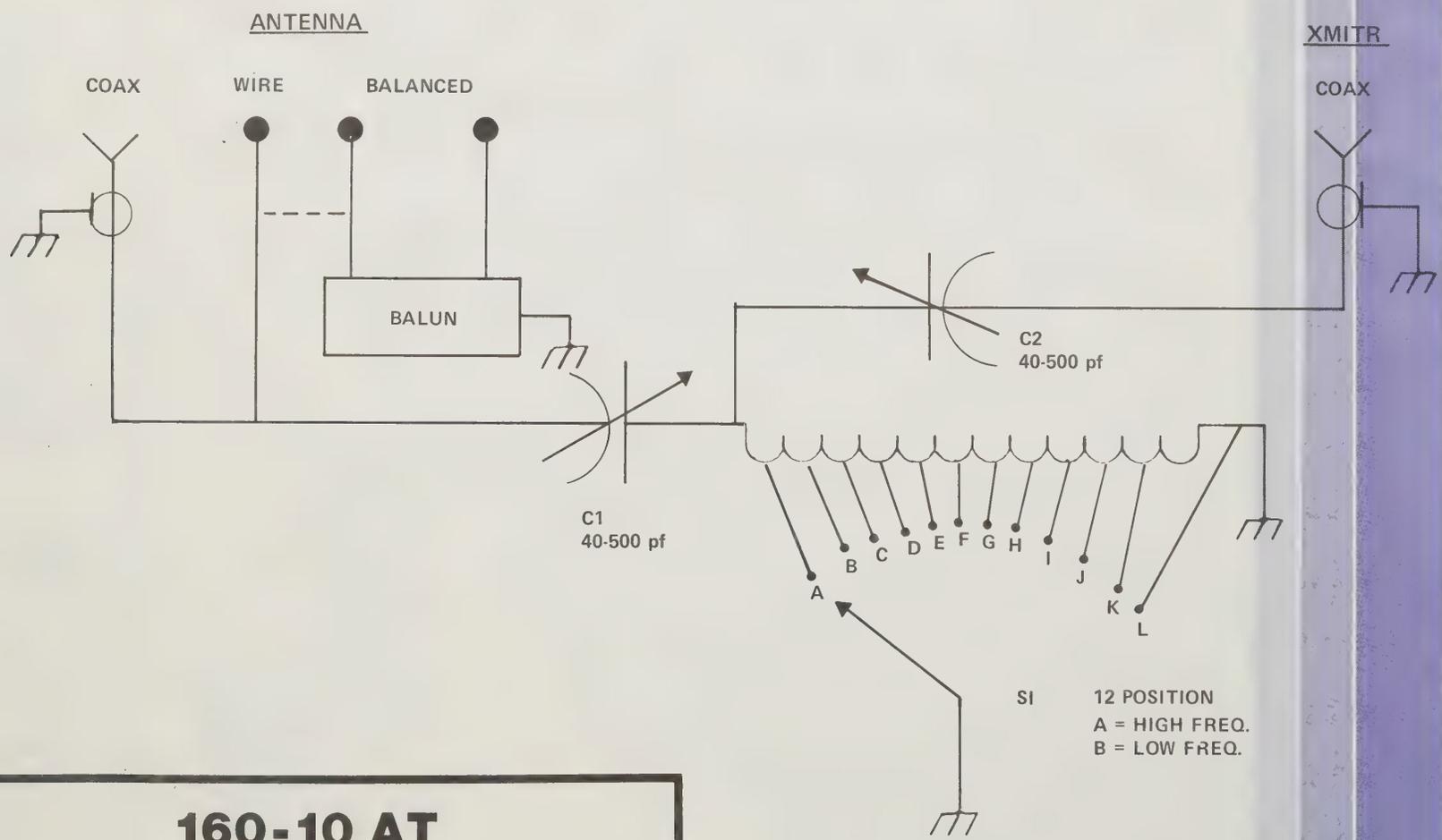
1. Hook ground wire on back of tuner.
 - a. A good ground is very important when using end-fed wire antennas.
2. From the rear panel marked "transmitter," connect a coax cable to an SWR bridge or preferably the DenTron W-2 Wattmeter that is connected to the station transceiver.
3. ANTENNA CONNECTIONS:
 - 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).

PLEASE NOTE: If experiencing difficulty when tuning a random wire for 160M, place a jumper wire across terminals, as indicated by dotted line on the back of tuner. **CAUTION:** Remove this jumper wire for other frequency on single wire.

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 or wattmeter 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.

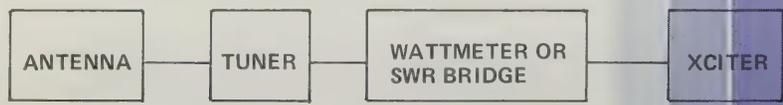


160-10 AT

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

SUPERTUNER IN BASIC SYSTEM



Limited Warranty

DenTron Radio is proud of the quality and workmanship of its communication equipment. If properly installed and operated in accordance with our instruction manual, it will give reliable performance. DenTron Radio extends to you as an owner of a new DenTron Radio Product the warranty set forth below:

For ninety (90) days from the date of original retail purchase, **DENTRON RADIO CO.** will either repair or replace, at its option, free of charge, any part or parts found to be defective in material or workmanship. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished.

This warranty will not apply where the unit has been used commercially or when the unit has been used in conjunction with accessories not manufactured by **DENTRON RADIO CO.**

All implied warranties are limited in duration to ninety (90) days from the date of original retail purchase.

The provisions of this warranty specifically exclude any warranty or remedies for incidental or consequential damages.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

In order to obtain warranty service, send written notification to the following address: **DENTRON RADIO CO.**, Attn: Service Dept., 2100 Enterprise Parkway, Twinsburg, Ohio 44087.

Any written notification should include the model number of the unit, date and place of purchase, and a description of the defective part or condition. Do not return the unit or any parts unless requested to do so by **DENTRON RADIO CO.**

Although the return of the DENTRON Warranty Registration Card is not a condition precedent to warranty coverage and performance, the purchaser is encouraged to promptly return the Warranty Registration Card upon purchase in order to more easily facilitate the handling of any future service under these warranty provisions.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

DenTron
Radio Co., Inc.

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