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HAMMOND
MANUFACTURING™

COMMUNICATION
PRODUCTS DIVISION

SERIES

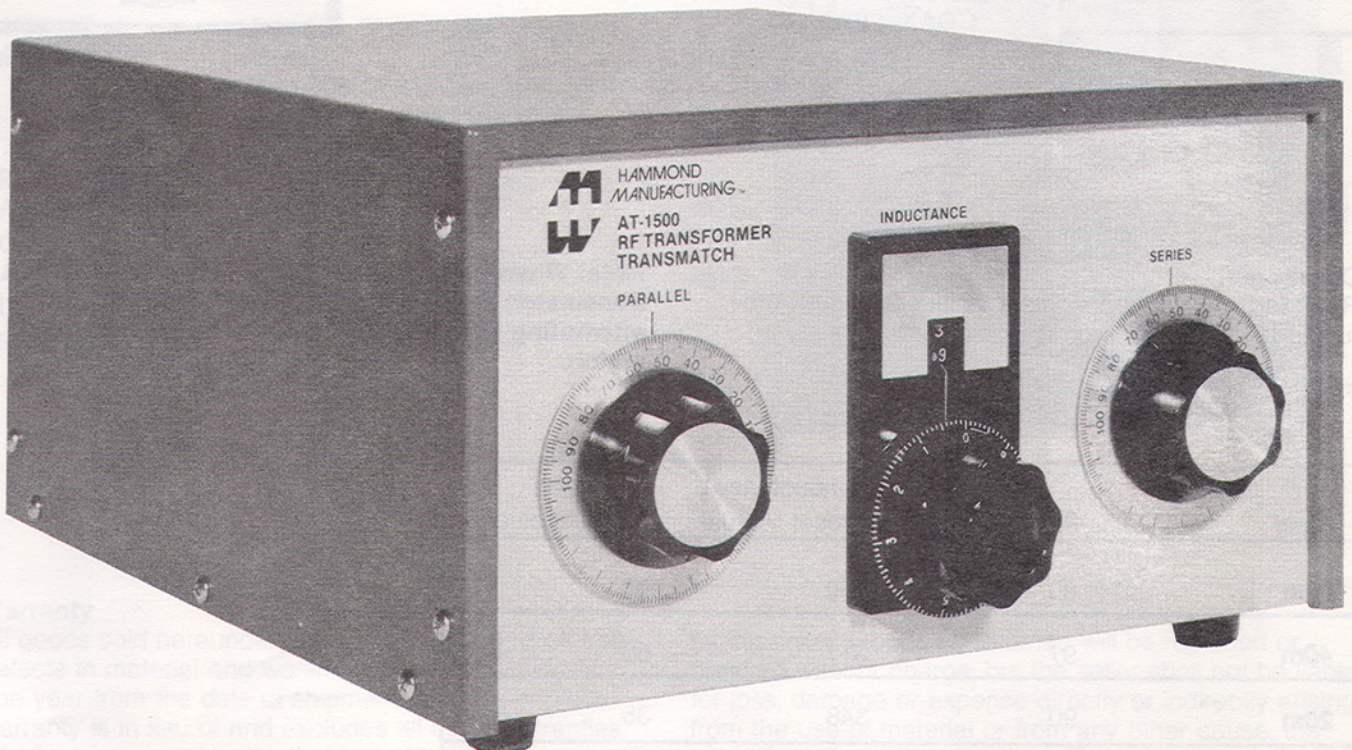
AT

ANTENNA TRANSMATCH AT-1500

The AT-1500 Transmatch is a 1500 Watt continuously adjustable RF transformer. The transmatch, inserted between the transmitter and a transmission line, will convert the impedance of any 15 to 500 OHM coaxial fed antenna system to 50 OHMS so that the transmitter may, at all frequencies, work into the impedance for which it was designed. The match or mismatch between the antenna and the transmission line determines the impedance the transmission line presents to the transmitter. When the antenna is not matched into the 50 OHM transmission line, the transmitter load will not be 50 OHMS. This means the transmitter will not be working into 50 OHMS and will not do the job for which it was designed. This transmatch will correct this situation.

The AT-1500 is capable of supplying configurations as follows:

- (A) SINGLE-ENDED
- (B) BALANCED
- (C) UNBALANCED



AT-1500 ANTENNA TRANSMATCH



Fig. 1

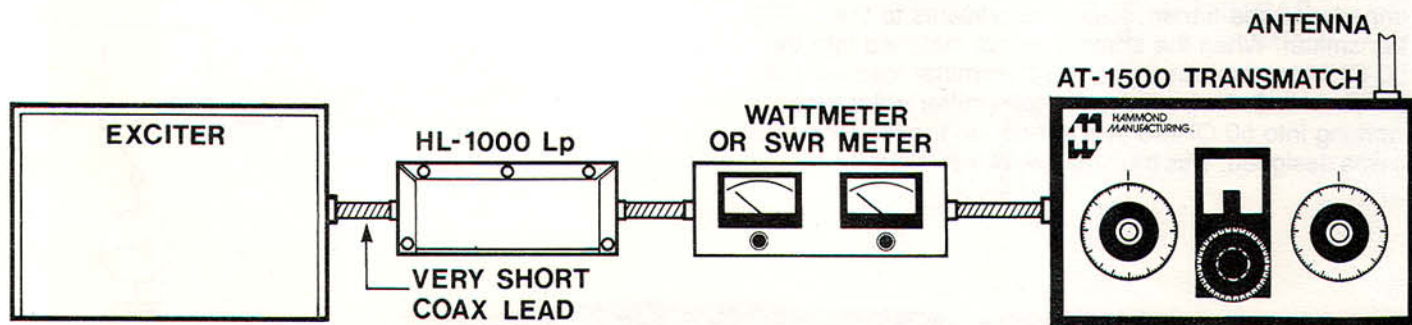
Introduction

The Hammond AT-1500 Transmatch is a 1500 watt adjustable RF Transformer. The transmatch inserted between the transmitter and a transmission line will convert the impedance of any 15 to 500 coaxial antenna system to 50 ohms so that the transmitter may, at all frequencies work into the impedance for which it was designed.

Installation

Remove the transmatch from the shipping carton and examine for damage. (Notify the transport company immediately if any damage is present).

Your transmatch should be installed (see fig. 1) in such a way that the interconnecting coax leads are short and direct. It must be installed after the wattmeter and low pass filter.



Operation

Refer to Fig. 2 for approximate initial settings for pre-tuning the transmatch on the amateur bands.

Fig. 2

Note: When tuning a linear amplifier into a transmatch verify match with your exciter before attempting to load your amplifier into the transmatch.

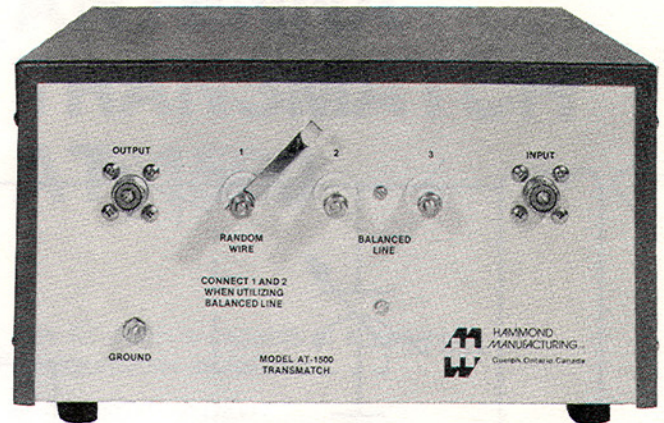
Band	Parallel		Inductance		Series	
	Preset	Actual	Preset	Actual	Preset	Actual
80m	90		250		60	
40m	97		317		60	
20m	90		348		35	
15m	90		364		25	
10m	55		369		20	

AT-1500 ANTENNA TRANSMATCH

Operation

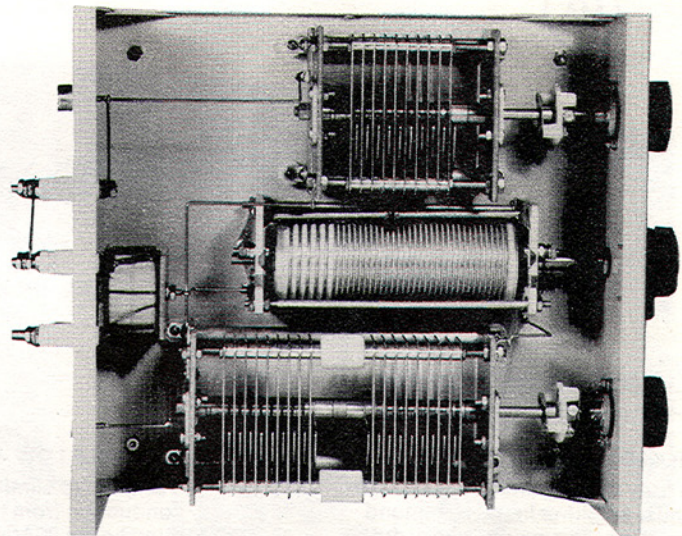
For operation knowing the present values for any of the bands 10 through 160m, adjust to values as indicated in Fig. 2. Insert a small amount of power from the exciter through the transmatch and into a dummy load. Switch wattmeter or other indicating device to read reflected power and tune the variable inductor for minimum and adjust the parallel and series capacitance for minimum as well. Alternate back and forth from the inductor and capacitor until you have achieved the best minimum reading. You may have to increase the power to maintain readings. Increase the exciter to full power and verify best match.

For operation of this transmatch not knowing the preset value (ie unknown load) preset parallel and series capacitors to maximum capacitance. Insert a small amount of power from your exciter into the transmatch which is terminated by a dummy load. Switch indicating device to read reflected power and vary inductor through the range until there is a significant dip in the reflected reading. Continue to alternate as before with the capacitors and inductance to obtain best minimum reading. Refer to Fig. 3 for rear panel connections.



SPECIFICATIONS

INPUT IMPEDANCE	50 to 75 OHMS unbalanced
OUTPUT IMPEDANCE	15 to 500 OHMS unbalanced coaxial Up to 500 OHMS balanced feed single-ended feed from 10 to 1000 OHMS
FREQUENCY RANGE	1 to 30 MHz continuously variable roller inductor
POWER HANDLING	1500 Watts continuous
SIZE	6" x 10" x 12"
WEIGHT	5 Lb.

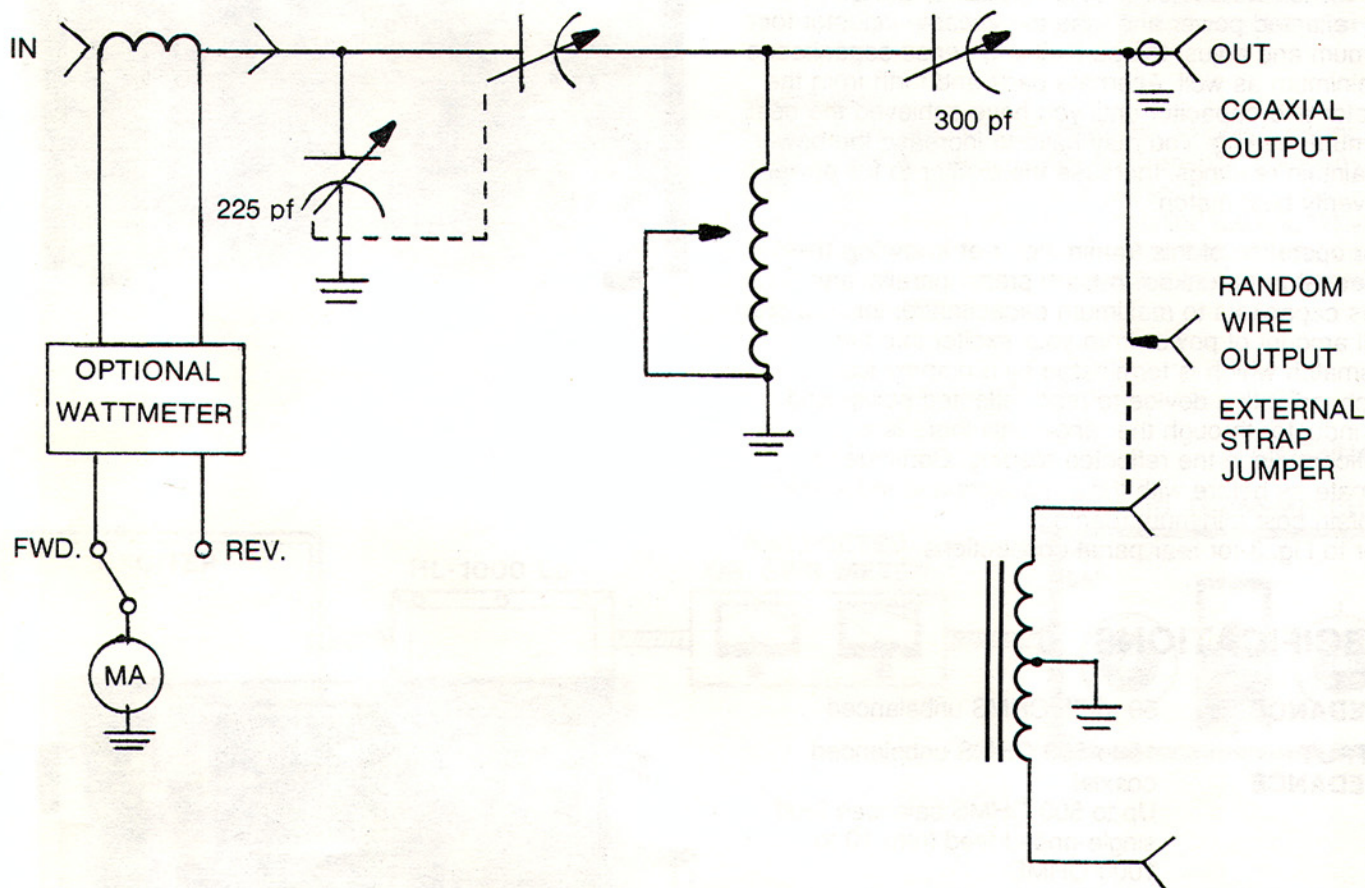


Warranty

All goods sold hereunder are warranted to be free from defects in material and workmanship, for a period of one year from the date of shipment, and this express warranty is in lieu of and excludes all other warranties whether expressed or implied by operation of law or otherwise including any warranty on the merchantability or fitness for a particular purpose. Defective material may be returned to the seller after inspection by the seller and upon receipt of definite shipping instructions

by the seller. Goods so returned will be replaced or repaired without charge, but the seller shall not be liable for loss, damage or expense directly or indirectly arising from the use of material or from any other cause, the exclusive remedy against the seller being to require the replacement or repair of defective material. Every claim on account of defective material or workmanship or from any other cause shall be deemed waived by the purchaser unless made in writing prior to the expiry date of the warranty.

AT-1500 ANTENNA TRANSMATCH



Other products from the
Hammond Communications Division

HL-2000A LINEAR AMPLIFIER

A truly rugged, uniquely Canadian, linear amplifier in the Hammond tradition. Top quality, heavy duty components designed for longest life performance.

General specifications;

- 2000 watt PEP input SSB, 1000 watt CW and RTTY covering the 10M, 15M, 20M, 40M, and 80M amateur bands.
- Two 3-500Z Zero based triodes, air chimney cooled.
- Computer grade capacitors for maximum reliability.
- Full Pi-L output circuit network for maximum harmonic suppression.
- Special Hammond power transformer designed for continuous duty operation. Rated 1100VA - 60Hz.

HF-1000LP LOW PASS FILTER

Designed to eliminate spurious conduction from transmitters operating below 30 MHz and eliminate 2nd and 3rd harmonics appearing in the TV bands when operating in 10, 15, and 20 meters.

General specifications

- 0 to 30 MHz band pass.
- Cutoff frequency 32MHz \pm .5MHz.
- Power capacity 2000W PEP SSB.
- Impedance 52 ohms input and output.

Hammond POWER BAR

Power Bar is a multi receptacle device for connecting several pieces of equipment to a single outlet:

- 4, 6 or 8 receptacle models
- lighted on-off switch
- 15amp circuit breaker
- choice of 6 or 15 foot cord
- CSA approved.