

Palomar ELECTRONICS CORPORATION

BOX 2403

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MODEL 160 BI-LINEAR AMPLIFIER

INSTRUCTION SHEET

FREQUENCY RANGE	26 Mhz to 54 Mhz
OUTPUT POWER	High power, 150 watts RMS. Low power, 50 watts RMS, into 50-72 ohm load with 3 watts R.F. drive. Stable grounded grid circuitry provides a minimum transmitted power gain of 65 times throughout the tuning range. Will work on any signal of 1 watt or more. Silicon Transistor pre-selector provides an approximate gain of 3 decibels on received signal. Automatic switching using R.F. power from your existing equipment. Self-contained 117 VAC power supply. Illuminated front panel meter indicates relative R.F. strength of transceiver and linear amplifier. Dependable PI output circuitry for easy tune-up.
TUBE COMPLEMENT	(1) 12JB6A (2) 8950
TRANSISTORS & DIODES	(2) 2N2905-A (5) 1N4005 or equivalent (1) 1N914 or equivalent (1) 1N4002 or equivalent

INSTALLATION

DO NOT BLOCK AIRFLOW at bottom and top of unit. Connect line cord to 117 VAC source. Model 160 is protected by a 10 ampere fuse. Connect a good outside ground to grounding stud on rear of unit. Observe above precautions about airflow and cooling. Connect coaxial cable from transmitter to bottom connector and antenna to top connector.

OPERATION

Turn power switch on and put the 3 position switch in the standby position. Pilot lamp and tube filaments will light. Your transceiver will now be producing its normal output. Put the 3 position switch in the xmit-rec. amp on position, immediately you will hear an increase in the received signal strength. In the xmit-rec. amp off position, the 160 will be amplifying the transmitted signal without amplifying the received signal. Set tune and load knobs at 12 o'clock, wait 30 seconds before depressing microphone switch. Depress microphone switch and immediately adjust tune control for maximum meter reading. Now adjust load control for maximum meter reading. NOTE: WHILE TUNING THE AMPLIFIER, DO NOT TRANSMIT FOR MORE THAN 30 SECONDS AT ONE TIME, AS IT WILL SHORTEN TUBE LIFE CONSIDERABLY. It will be necessary to repeat the adjusting of the tune and load controls several times before maximum meter reading is obtained. After maximum meter reading is obtained, the amplifier will properly

be tuned for SSB and FM operation. For AM operation, the amplifier must be overcoupled. This is accomplished by taking the load control and turning clockwise 1/4 inch. If this is not done, the transmitted audio will sound "fuzzy" or distorted.

WARRANTY POLICY

PALOMAR ELECTRONICS CORP. WARRANTS THIS EQUIPMENT AGAINST DEFECTS IN MATERIAL OR WORKMANSHIP, EXCEPT FOR TUBES, TRANSISTORS, AND DIODES UNDER NORMAL SERVICE FOR A PERIOD OF SIX MONTHS FROM DATE OF ORIGINAL PURCHASE. DO NOT SHIP TO THE FACTORY WITHOUT PRIOR AUTHORIZATION. ALL RETURNS FOR REPAIR MUST BE SENT FREIGHT PREPAID. PALOMAR Electronics Corp. WILL PREPAY THE RETURN FREIGHT. THIS WARRANTY IS LIMITED TO REPAIRING OR REPLACING ONLY THE DEFECTIVE PARTS, AND IS NOT VALID IF THE EQUIPMENT HAS BEEN TAMPERED WITH, MISUSED, OR DAMAGED.

WARNING

Palomar Electronics Corp. its representatives or agents, will not be responsible for the improper or illegal use of this unit.

NOTE

THE VARIABLE CAPACITOR LOCATED ON THE TUBE SOCKET ASSEMBLY HAS BEEN SET AT THE FACTORY. READJUSTING OR TAMPERING WITH IT WILL RESULT IN DISTORTION IN THE TRANSMITTED AUDIO.