

# PALOMAR 300 A

## AMATEUR BAND BI-LINEAR AMPLIFIER



The best gets even better – Introducing the all new Palomar 300-A Amateur Band Bi-linear AMPLIFIER.

Check the separate Power Transformer and the independent RF Deck. Now servicing is easier than ever. The Amateur Band coverage is 40 METERS, 20 METERS, 15 METERS and 10 METERS. Stable grounded grid circuitry provides a minimum transmitting power gain 90-100 times throughout the tuning range.

Pre-amp provides an approximate

3 db gain on received signal.

This rig will work on any signal of 1-100 watts.

Automatic switching uses RF power from your transceiver, no internal connections are required to your existing equipment.

Edgewise meter for easy tune-up. Fan cooled for extended tube life.

There's POWER to spare beneath that triple chromed cabinet.

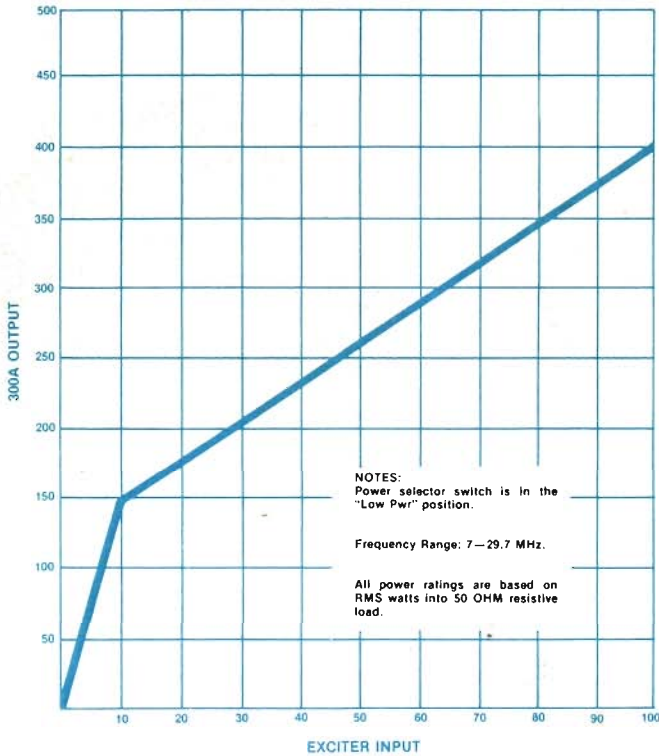
See it. Hear it. Try it. It's a powerpacked rig and then some.



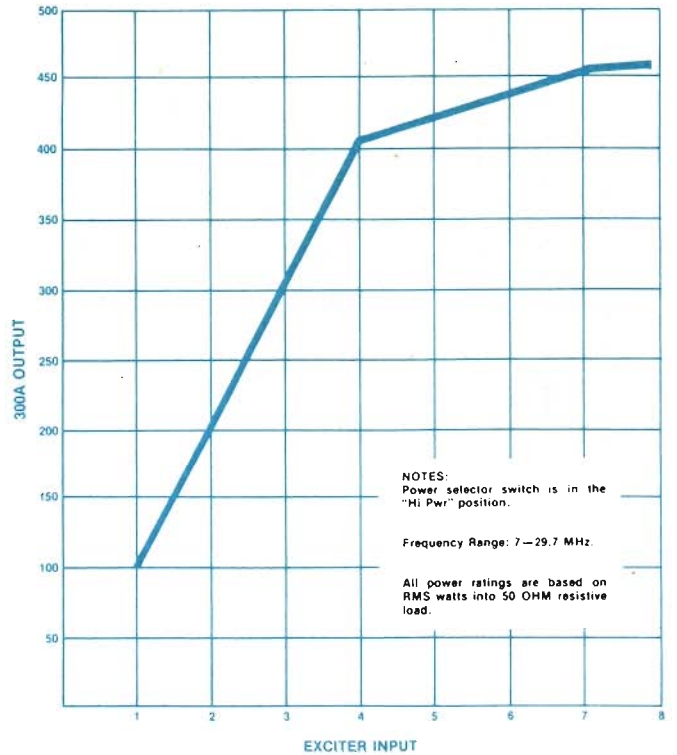
**PALOMAR** Electronics Corporation  
**'We're Wired for Progress'**

665 Opper Street • Escondido, Calif. 92025 • Telephone: (714) 746-2666

RF Power Output versus RF Power Input [Model 300A]

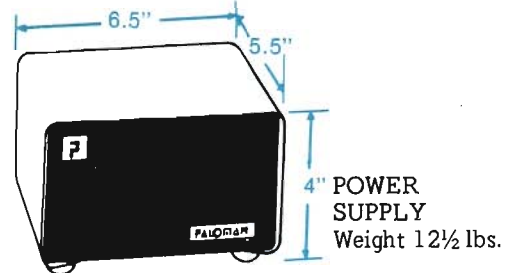
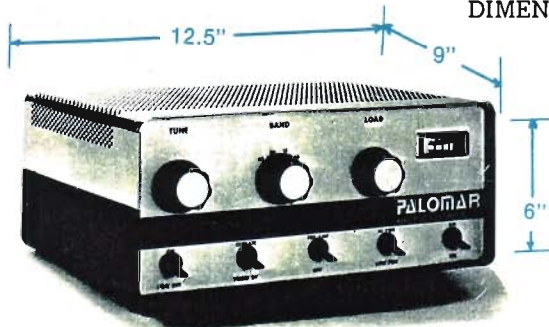


RF Power Output versus RF Power Input [Model 300A]



DIMENSIONS

RF DECK  
Weight 11 lbs.



SPECIFICATIONS

AMATEUR BAND COVERAGE	40 Meters (7.0-7.3 MHz), 20 Meters (14.0-14.35 MHz), 15 Meters (21.0-21.45 MHz), 10 Meters (28.0-29.7 MHz)
OUTPUT	Dual Power
OUTPUT POWER RATING	Refer to charts
TUBE COMPLEMENT	(6) 6KD6
TRANSISTORS & DIODES	(2) 2N2905-A (1) 1N4002 or equivalent (4) 1N5406 (3) 1N4148 or equivalent
POWER SOURCE	.117 VAC

RF DECK  
Weight 11 lbs.

POWER SUPPLY  
Weight 12½ lbs.

Specifications subject to change without notice.  
Suggested retail price \$349.95



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# PALOMAR ELECTRONICS CORPORATION

## 300-A AMATEUR BAND BI-LINEAR AMPLIFIER

### INSTRUCTION SHEET

AMATEUR BAND COVERAGE	40 Meters (7.0-7.3 MHz), 20 Meters (14.0-14.35 MHz), 15 Meters (21.0-21.45 MHz), 10 Meters (28.0-29.7 MHz)
OUTPUT POWER RATING	Refer to charts
DESCRIPTION	Stable grounded grid circuitry provides a minimum transmitted power gain 90 to 100 times throughout the tuning range, will work on any signal of 1 watt or more. Silicon transistor preselector provides an approximate gain of 3 decibels on received signal. Automatic switching using RF power from your transceiver, no internal connections are required to your existing equipment. Self-contained 117 VAC power supply with external power transformer assembly. Illuminated front panel meter indicates relative RF strength of transceiver and linear amplifier. Dependable Pi-network output circuitry for easy tune-up with excellent harmonic suppression.
TUBE COMPLEMENT	(6) 6KD6 and/or 6LF6
TRANSISTORS & DIODES	(2) 2N2905-A      (1) 1N4005 or equivalent (4) 1N5406      (3) 1N4148 or equivalent

### INSTALLATION

DO NOT BLOCK AIRFLOW at bottom and top of unit. Connect line cord to 117 VAC source. The 300-A 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 transmitter connector and antenna to antenna connector.

### OPERATION

Make certain that the bandswitch is set to the correct band position and the power transformer assembly is plugged into the linear's rear panel. Turn "PWR" switch to the "ON" position, and turn the "OPERATE/STANDBY" switch to the "STANDBY" position. Pilot lamp, fan and tube filaments will be activated. Your transceiver will now be producing its normal output. Turn "PRE-AMP" to the "UP" position; immediately you will hear an increase in the received signal. Now turn the "OPERATE/STANDBY" switch to the "OPERATE" position. Next select "HI-PWR" or "LOW-PWR" as follows: If the drive level is from 1-10 watts, either "HI" or "LOW" PWR may be used. If the drive power exceeds 10 watts, use the "LOW PWR" position only. Driving the amplifier with more than 10 watts in the "HI-PWR" mode will destroy the tubes and cause severe damage to the amplifier. Set tune and load knob at 12 o'clock. Wait approximately 30 seconds before depressing mike button. Depress mike button 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 THIS 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 tune and load have been adjusted for maximum reading, the  $\frac{1}{8}$ " shaft extending from the upper right corner of the rear panel will have to be tuned for maximum reading; the amplifier is now tuned for FM and SSB use. For AM use, the amplifier must be overcoupled; this is accomplished by taking the load control and turning clockwise  $\frac{1}{4}$  inch. If this is not done, the transmitted audio will sound "fuzzy" or distorted.

### WARNING

PALOMAR ELECTRONICS CORPORATION, ITS REPRESENTATIVES OR AGENTS, WILL NOT BE RESPONSIBLE FOR THE IMPROPER OR ILLEGAL USE OF ITS PRODUCTS.





MODEL 300A BI-LINEAR AMPLIFIER 9-75

