



88-108 MHz 20 Watt Power Amp

WARNING!

DO NOT POWER AMP WITHOUT A SUITABLE 50 OHM BAND II ANTENNA OR DUMMY LOAD CONNECTED TO RF OUT SOCKET

SETTING UP PROCEDURE

1. Tune up the 500mW to 1W Transmitter Drive on a 50 ohm Dummy Load for maximum power at your chosen operating frequency.
2. Remove the 4 Pozidrive Screws on the Power Amp Heatsink and lift off the Metal Cover. Adjust the Power Amp yellow variable capacitor to mid position.
3. Connect a 50 ohm Antenna to the Power Amp SO239 RF OUT Socket.
4. Remove the power from the Transmitter Drive. Use a short PL259 patch lead to connect the Transmitter Drive to the Power Amp SO239 RF IN Socket.
5. Connect the Power Amp to a 13.8V Regulated Power Supply capable of delivering a continuous 3 amps. The Red LED should illuminate indicating the presence of DC to the Power Amp.
6. Power up the Transmitter Drive and the Power Amp Green LED should illuminate, it may be dim.
7. Adjust the Power Amp yellow variable capacitor for maximum brightness on Green LED.
8. Slightly adjust the output tuning on the Transmitter Drive for a further brightness increase on the Power Amp Green LED.
9. Remove the power from the Transmitter Drive and Power Amp and then replace the Power Amp Metal Cover and 4 Pozidrive screws.
10. The Power Amp and Transmitter Drive are now tuned to maximum power and ready for use. Position the Heatsink Fins and the SO-239 sockets in an upwards direction for best cooling under normal operation.

SPECIFICATIONS

RF Power Output Performance:

PSU	Drive Power	Output Min.	Output Typ.
13.8v	500mW	17W	20W
13.8v	1W	20W	24W
16.0v	1W	24W	29W

RF Gain:	Min 13dB Max 16dB
Frequency Range:	88-108MHz +/- 0.5dB
Spurious Emissions	Better than -50dB ref to carrier
Impedance	50 ohm input and output

Max RF Input:	1W
RF Input VSWR:	Max 1.7
RF Connectors	2 x SO239
RF Stability	stable up to 10:1 mismatch
Power Supply:	13.8v DC regulated, 16V max.
Supply Current	2.5 to 3 amps continuous
Ruggedness:	30:1 VSWR mismatch capability
Indicators	RF Power LED, DC Supply LED
Dimensions	120mm x 100mm x 62mm
Power Lead	0.5m 10amp red and black



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