D-15-N 420-450 MHz AMPLIFIER

The MIRAGE D-15-N represents the latest in 440 MHz Power Amplifiers. It incorporates features that make it the most versatile and useful amplifier available today. The D-15-N will amplify FM, SSB, and ATV signals.

SPECIFICATIONS

FREQUENCY RANGE420-450 MHz					
POWER	. INPUT: 0.1 - 2 Watts (2 Watts max.)				
	OUTPUT: 18 Watts or more for 2 Watts input - intermittent duty cycle				
MODES	.FM, SSB, CW, and ATV				
POWER IN	. 1.5	1.0	0.75	0.5	0.25
POWER OUT	. 18	15	13	10	6
DC POWER	. 13.6 VDC at 3 Amps nominal				
FUSE	.5 amps				
IMPENDANCE	50 Ohm input and output				
SIZE	.7-1/4" x 3-1/2" x 2"				
WEIGHT	1.5 lbs.				

<u>INSTALLATION</u>

The D-15-N may be mounted by using the optional brackets. The D-15-N must have adequate ventilation around the heat sink. Use of #10 or larger wire to connect the D-15-N to the battery is recommended. Use good quality 50 Ohm coax, between the radio and the D-15-N. RG-8U or the equivalent should be used between the D-15-N and the antenna. The antenna should be matched to better than 1.5:1 for the best performance. SWR less than 3:1 will degrade system performance. SWR greater than 3:1 may cause damage to the amplifier VOIDING ANY WARRANTY.

FRONT PANEL FUNCTIONS

POWER - ON/OFF	This switch turns the power amplifier ON and OFF.
SSB/FM	. Selects the relay time delay for the mode of
	operation. In either the SSB or FM position, the
	amplifier is still biased for linear operation.

REAR PANEL FUNCTIONS

"INPUT" This connects to the transmitter or transceiver.

"OUTPUT" This connects to the antenna.

PRECAUTIONS

HEAT SINK TEMPERATURE...... The D-15-N must be mounted where air can circulate over the heat sink.

INPUT POWER...... Input power should not exceed 2 Watts. Higher power than this may cause failure of the input transistor. This will VOID ANY WARRANTY.

INTERNAL ADJUSTMENTS

IN CASE OF DIFFICULTY

- 1. Check for loose antenna or B+ connections.
- 2 Check SWR of antenna.
- 3. Look for bad or lossy coax.

TECHNICAL ASSISTANCE

If you have any problem with this unit first check the appropriate section of this manual. If the manual does not reference your problem or your problem is not solved by reading the manual you may call MIRAGE at 601-323-8287. You will be best helped if you have your unit, manual and all information on your station handy so you can answer any questions the technicians may ask.

You can also send questions by mail to MIRAGE, 921 HWY 25 South, Starkville, MS 39759 or by Fax to 601-323-6551. Send a complete description of your problem, an explanation of exactly how you are using your unit, and a complete description of your station.