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 RANGE .................... 420-450 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

IMPEDANCE .............................. 50 Ohm input and output

SIZE ........................................ 7-1/4" x 3-1/2" x 2"

WEIGHT .................................... 1.5 lbs.

INSTALLATION

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
"SSB DELAY" ................................. This allows the relay delay to be adjusted to any desired delay. Access to this adjustment is through the hole in the left side of the cover. Use a small screwdriver to adjust the control.

FUSE ............................................. A 5 Amp fuse is located in the power lead. Should the fuse "blow," determine the cause, and use the exact type in the unit as a replacement.

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.