# D-26-N 430-450 MHz AMPLIFIER

The MIRAGE D-26-N represents the latest in 430-450 MHz Power Amplifiers and incorporates features that make it the most versatile and useful amplifier available today. The D-26-N will amplify FM, SSB, and CW signals. It has variable SSB delay, remote keying, and over-temperature protection. The D-26-N can be used for amateur television at a reduced output level. It was designed for use with HTs and will key-up with as little as 500 mW of input power.

## **SPECIFICATIONS**

FREQUENCY RANGE	. 430-450 MHz
POWER	. INPUT: 500 mW - 4 Watts (4 Watts max.)
	OUTPUT: 60 Watts or more for 2 Watts input
MODES	FM, SSB, CW, ATV
DC POWER	. 13.6 VDC at 12 amps nominal
FUSE	. 15 amps
IMPENDANCE	50 Ohm input and output
DUTY CYCLE	. Intermittent - Internal overtemp protection
SIZE	8-1/4" x 2-1/2" x 7"
WEIGHT	5 lbs.
INSERT	

Watts Input	Watts Output
1.0	50
1.5	60
2.0	65
2.5	70

Note: A 2-Watt ATV input signal will read approximately 22 Watts on a model 43 Bird Wattmeter

#### **INSTALLATION**

The D-26-N must have adequate ventilation around the heat sink. Use of #10 or larger wire to connect the D-26-N to the battery is recommended. **RG-8U** or the equivalent should be used between the D-26-N and the antenna. The antenna should be matched to better than 1.5:1 for the best performance. Higher SWR will not degrade the system performance.

#### FRONT PANEL FUNCTIONS

IN / OUT	This switch turns the power amplifier ON and OFF.
LED (Ready)	This LED indicates that the amp is ready to use.
LED (RF On)	This LED will light during transmitting periods.
LED (Overtemp)	This indicates that the D-26-N has been overheated.

### **REAR PANEL FUNCTIONS**

RADIO	. This connects to the transmitter or transceiver.
ANT	. This connects to the antenna.
RCA Jack	This is for Remote Keying. Connection to a +12- Volt source will hand-key the XMT Relay.
SSB Delay	Adjust through hole in rear panel next to RADIO CONNECTOR for desired Relay-Delay time.

#### PRECAUTIONS

HEAT SINK TEMPERATURE	The D-26-N must be mounted where air can
	circulate over the heat sink. It has a built-in
	thermostat that will turn it "OFF" at 170 degrees F.
INPUT POWER	Input power should not exceed 4 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 to be adjusted for a delay time of approximately one and a half seconds. Access to this adjustment is through the hole in the rear panel. Use a small screwdriver to adjust the control.
RF ADJUSTMENTS	There are no internal adjustments dealing with the RF amplifier board. Tuning of the RF amplifier is preset at the factory by our technicians.
SSB OPERATION	The D-26-N can be overdriven, causing the SSB signal to distort. When using the D-26-N on SSB, the drive level or the mic-gain from the exciter should be adjusted for best "on the air" performance.

## 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.