



ORDER NO.
489

INSTALLATION & OPERATION INSTRUCTIONS

BI-LINEAR POWER SUPPLY

HY-GAIN ELECTRONICS CORPORATION
Rural Route 3 Lincoln, Nebraska 68505

SECTION I

GENERAL DESCRIPTION

1.1 INTRODUCTION:

The Hy-Gain Model 489 DC Transistor Power Supply is designed for use with the Hy-Gain Model 488 Linear Amplifier. It features an all aluminum chassis with heat sinks as well as heavy duty switching transistors. It can be attached directly to the back of the 488 Linear Amplifier to make a compact mobile rig or with the use of a Hy-Gain 491 cable it can be remotely mounted.

1.2 TECHNICAL SPECIFICATIONS:

Input.....12-14V DC/20 amp max.
.....NEGATIVE GROUND ONLY
Output.....800V DC/200 ma
.....12-14V DC/3 amp/switched
Output connector.....Wired for 488 amplifier
Fuse required.....3AG/20 amp

SECTION II

UNPACKING AND INSTALLATION

2.1 UNPACKING:

Carefully remove the power supply from the carton. Examine it closely for signs of shipping damage. If inspection shows damage the delivering carrier must be contacted immediately and a claim filed.

The responsibility for safe delivery rests with the carrier. The responsibility in obtaining reimbursement rests with you. Prompt action will speed adjustments. Our warranty does not cover malfunction or damage which is a result of improper handling by a carrier.

2.2 WARRANTY REGISTRATION:

Fill out the enclosed Warranty Card and mail immediately.

2.3 SHIPPING CARTON:

Save the carton and packing material. You may need it at a later date for storage or shipment of the power supply.

2.4 INSTALLATION:

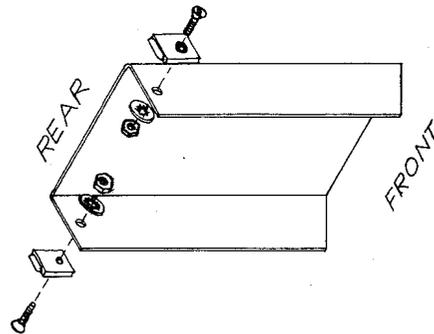
Installation should not prove difficult, however, there are certain precautions and necessary conditions which must be observed to obtain a good installation.

Before connecting the primary cables to the +12V DC, first check the voltage output of the generator or alternator. To do this, first turn on the car headlights for about five minutes without running the motor. This allows the battery to discharge slightly. Now connect a voltmeter to the battery terminals. Start the motor and check the voltage output of the generator with the motor at a fast idle. It should not exceed 14.5 volts. If it does it will be necessary to reset the voltage regulator not to exceed 14.5 volts at the battery. If the voltage does not exceed 14.5 volts, the primary cables may be connected. The electrical system should deliver at least 12.5 volts under all operating conditions. If your system voltage is low, it should be serviced and adjusted.

CAUTION

This unit can be used in Negative ground vehicles only. The lead with the IN-LINE fuse holder must be connected to a high current +12V DC source, such as the car battery. The other lead must be connected to the negative battery post or car chassis. Be certain these cables are not reversed. If it is necessary to lengthen these cables, use #10 gauge wire or larger. Use connectors that will give a positive, low loss connection.

The power supply is designed to be mounted on the rear of the Hy-Gain Model 488 Linear Amplifier. To mount the unit, first remove the cover of the 488 by removing the two screws on each side of the unit. Then, using the parts hardware in the small parts package, attach the anchors for the latches to the cover of the 488 Linear Amplifier as shown in the illustration.



After replacing the cover of the 488 RF Amplifier, feed the coax cables from the Antenna and the Transceiver through the tunnel in the power supply and attach to the appropriate socket on the 488 Amplifier. (ANTENNA to the TOP, TRANSCEIVER to the BOTTOM) Push the 489 Power Supply onto the back of the 488 and secure by snapping the latches closed.

The 489 Power Supply can also be remotely located from the 488 by using an extension cable, Hy-Gain Model 491. The Power Supply should not be mounted under the hood, but should be placed in a convenient place inside the passenger compartment.

Regardless of which mounting is used, care should be taken to insure the Power Supply is not placed near a heater outlet. Transistor failure due to excessive temperatures could result.

SECTION III

SERVICE INFORMATION

3.1 RETURNING EQUIPMENT FOR SERVICE:

DO NOT ship equipment to the Manufacturer without prior authorization. We prefer to send special shipping labels which will avoid the delay of unexpected shipment.

If time is extremely important, wire or call for approval and we will rush labels to you. When a shipment is expected, even the time of sending the labels is less than that lost when an unexpected shipment is received.

It is VERY IMPORTANT that the shipment be well packed and fully insured. Damage claims must be settled between you and the carrier and will greatly delay any returns. Proper packing normally avoids this trouble.

ALL SHIPMENTS MUST BE SENT TO US PREPAID. We do not accept collect shipments. All returns should be made in our standard cartons only — so save your carton when unpacking the unit. When a shipment is returned it will be handled in one of three ways

1—Where all service is in warranty the shipment will be returned prepaid by a carrier of our choice.

2—If there are any charges not covered by warranty we will hold the shipment and advise you of costs, which you can then send.

3—Or, upon your written authorization, we will ship C. O. D. for any charges not covered by warranty, then the carrier will collect these charges and the transportation costs on arrival. Unclaimed or refused C. O. D. shipments will not be reshipped until payment of service and transportation charges is received. Shipment will then be made collect for reshipment transportation charges. Unclaimed

Hy-Gain Electronics Corporation warrants each new product manufactured to be free from defects in material and workmanship and agrees to remedy any such defect, or to furnish a new part, in exchange for any part of any unit which under normal installation, use, and service discloses such defect within ninety days from the date of purchase by original owner. The unit serial number must be registered by the original owner at the time of purchase to validate the warranty.

This warranty does not extend to any of our products which have been subjected to mis-use, neglect, accident, incorrect wiring not our own, improper installation or to use in violation of instructions furnished by us. Nor does it extend to units which have been repaired or altered outside of our factory nor to accessories used therewith not of our own manufacture, nor to any cases where the serial number has been removed, defaced, or changed.

Hy-Gain Electronics Corporation reserves the right to make any

CAUTION

NEVER start the car or turn it off unless the 489 DC Power Supply is turned OFF!

Once the 489 DC Power Supply is connected to the 488 Linear Amplifier, it is turned ON and OFF with the main switch on the front panel of the 488 Linear Amplifier. Use of a fuse other than 3AG/20 AMP will damage the supply and void the warranty.

equipment automatically becomes the property of the Manufacturer 60 days after date of refusal or return and will be disposed of for payment of charges due.

NOTE

We WILL NOT ship by means of a carrier that will not fully insure the shipment. Some carriers have a \$200.00 limit. The exception to this is when there is no other means (APO-FPO-etc.) of shipment than parcel post, and then we will ship by this means with your written agreement that you assume any loss over that which the carrier will insure. C. O. D. shipments cannot be made to APO-FPO addresses.

3.2 REPLACEMENT PARTS ORDERING:

All replacement parts orders must be prepaid or C. O. D. only.

Replacement part price quotes will be furnished on request for those who desire prepaid shipment or cannot accept C. O. D. shipments.

3.3 SHIPPING ADDRESS:

All requests, inquiries, warranty claims or equipment returns should be made to:

Hy-Gain Electronics Corporation
Rural Route 3
Lincoln, Nebraska 68505

Attn: Customer Service Manager

SECTION IV

WARRANTY

changes deemed necessary or desirable without advance notice or incurring any obligation to make like changes in units previously manufactured or sold.

This warranty does not cover transportation or installation costs that may be incurred. Hy-Gain Electronics Corporation's sole liability is the remedy of any defect for ninety days. Hy-Gain Electronics Corporation is not responsible for personal injury or property damage resulting from improper or careless installation not intended by the manufacturer.

No person is authorized to assume for us any other liability in connection with the sale of our products.

All warranties are void and terminated one year after the last unit of its type and design has been manufactured by us.

