



**DAWNco**

Reasonable prices, priceless reasoning.

DIVINSUP-2-1X5A Manual

## ***Power-Conditioned Distribution System for satellite L band signals***



## ***Installation and Operation Manual***

You are entitled to the manufacturer's limited express warranty, if any, that accompanies the product. DAWNco makes no additional or independent warranty. All other warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose are disclaimed. We do our best to be accurate. We are not responsible for any typographical, photographic or technical errors. See "Policies for DAWNco" under the "Answers" button at the button at the DAWNco website.

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## Safeguards

### Product Inspection

Inspect the equipment for shipping damage. Should any damage be discovered, immediately file a claim with the carrier.

### Important Safety Instructions

To insure proper installation and operation, take a moment to read this guide before proceeding with the installation. If you have any questions or comments about the DIVINSUP-2-1X5A satellite power conditioned distribution system, please contact DAWNco at phone number 248-391-9200.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### **WARNING:**

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.**

#### **CAUTION:**

**TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.**

#### **ATTENCION:**

**POUR PREVENIR LES CHOCS ELECTRIQUES, NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.**

- 1. Read Instructions:** All safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions:** The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings:** All warnings on the appliance should be adhered to.
- 4. Follow Instructions:** All operating and user instructions should be followed.
- 5. Cleaning:** Unplug this appliance from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use liquid cleaners or aerosol cleansers.
- 6. Do Not Use Attachments:** Use of attachments not recommended by the manufacturer may cause hazards.
- 7. Water and Moisture:** Do not use this product near water—for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool—and the like.

**8. Accessories:** Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the appliance.

**9. Ventilation:** This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to. Any slots or opening in the cabinet are provided for ventilation. To ensure reliable operation of the video product and to protect it from overheating, these openings must not be blocked or covered. Openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.

**10. Grounding or Polarization:** This video product is equipped with either a three prong plug for 110 VAC use or a two prong flat blade 220 volt type plug. Each type is to be inserted into only the type of receptacle for which they specifically designed. Do not cut off the round grounding pin in order to be able to fit into a two prong receptacle as this could cause injury and will void the warranty.

## Safeguards

**11. Power Sources:** This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.

**12. Power-cord Protection:** Power-supply cords should be routed so they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.

**13. Lightning:** For added protection for this product during a lightning storm, or when it is left unattended or unused for long periods of time, the unit should be disconnected from power source.

**14. Power Lines:** An outside antenna system should not be located in the vicinity of overhead power lines, other electric light or power circuits, where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them may be fatal.

**15. Overloading:** Do not overload wall outlets and extension cords as this can result in risk of fire or electric shock.

**16. Object and Liquid Entry:** Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

**17. Servicing:** Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

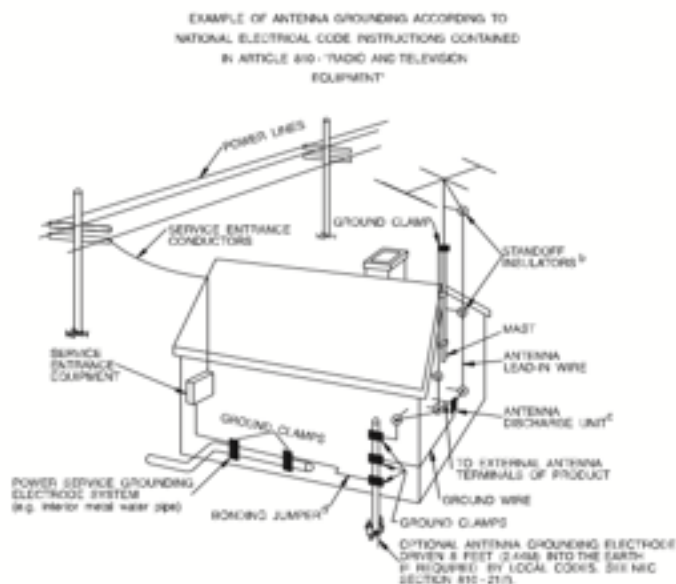
**18. Damage Requiring Service:** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the product.
- c. If the product has been exposed to rain or water.
- d. If the product does not operate normally by following the operating instruction. Adjust only those controls that are covered by the operating instructions. An improper adjustment may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e. If the product has been dropped or the cabinet has been damaged.
- f. When the product exhibits a distinct change in performance—this indicates a need for service.

**19. Replacement Parts:** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock or other hazards.

**20. Safety Check:** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating conditions.

**21. Outdoor Antenna Grounding:** Before attempting to install this product, be sure the antenna or cable system is grounded so as to



provide some protection against voltage surges and built-up static charges.

- a. Use No.10 AWG (5.3mm) copper, No.8 AWG (8.4mm) aluminum, No.7 AWG (10mm) copper-clad steel or bronze wire or larger, as ground wire.
- b. Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 feet (1.22m) to 6 feet (1.83m) apart.
- c. Mount antenna discharge unit as close as possible to where lead-in enters house.
- d. A driven rod may be used as the grounding electrode where other types of electrode systems do not exist. Refer to the National Electrical Code, ANSI/NFPA 70-1984 for information.
- e. Use jumper wire not smaller than No.6 AWG (13.3mm) copper or equivalent, when a separate antenna grounding electrode is used.

### NOTE TO THE CATV SYSTEM INSTALLER

THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO ARTICLE 820-22 OF THE NEC THAT PROVIDES GUIDELINES FOR PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.



## *Descriptions*



*Distribution system compactly combines LNB powering, signal separation, and amplification in a single rack space*

*Fully-conditioned power source eliminates power drawn from receiver, reducing heat buildup and increasing product life*

*Dual independent 1000mA high-capacity supplies have ample power reserve to reliably feed multiple line amplifiers*

*5 amplified outputs per polarity provide for multiple receiver flexibility*

*Single polarity configuration provides 9 outputs for maximum receiver operation*

*Front panel LED's provide quick and easy LNB open-or-short status monitoring*

*Automatic current sensing enables short circuit shutdown protection to safeguard from potential damage while servicing LNBs*

*Plug-in external UL approved power adapter supplied for ease of installation and to reduce heat build-up within the unit*

# ***DIVINSUP-2-1X5A***

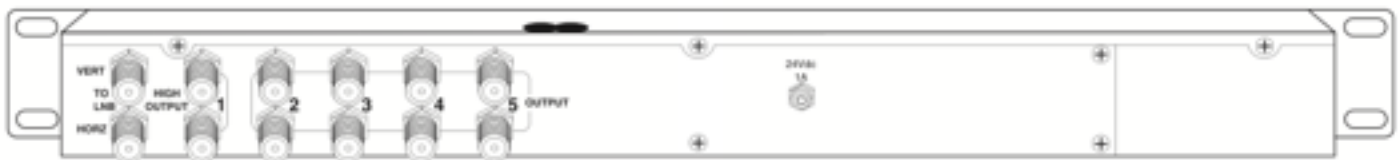
## ***Satellite Power-Conditioned Distribution System***

**DAWNco's Divinsup** is an L-band satellite power-conditioned distribution system, compactly combining multiple functions into a single rack unit. The unit powers two satellite LNB polarities in the 950-2150 MHz range, amplifies and splits the signals for distribution to multiple satellite receivers. Two high capacity 1000mA power supplies provide enough power for each LNB polarity and several line amplifiers, reducing wear-and-tear on commercial receivers. Front panel current-sensing indicators warn of system faults and allow quick system status.





Front View



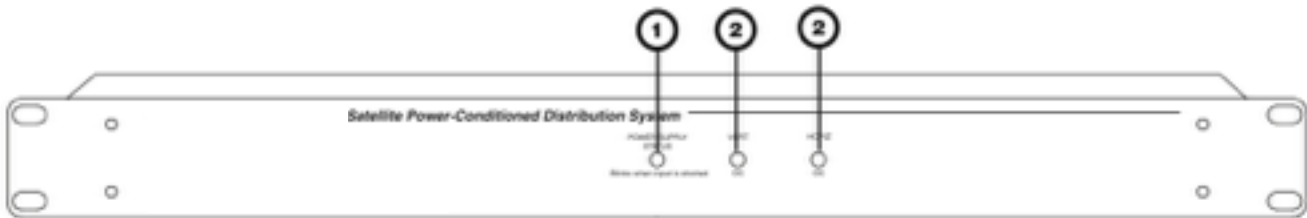
Rear View

## Specifications

<b>LNB Power:</b>	18 VDC regulated, 1000mA
<b>Isolation:</b>	10 dB
<b>Voltage Output:</b>	18 VDC @ 250 mA
<b>Current Limiting:</b>	1A each max
<b>Line Regulation:</b>	±0.2 VDC w 100mA load
<b>Ripple Voltage:</b>	20mV max
<b>Frequency:</b>	950-2150 MHz
<b>Gain:</b>	1dB, 4-Vertical Outputs, 4-Horizontal Outputs 5dB, 1 Vertical Output, 1-Horizontal Output
<b>Input Voltage:</b>	105-125 VAC
<b>Indicators:</b>	V/H Power supply ON V/H Power supply Short Circuit V/H Power supply Open Circuit

## General

<b>Power Input:</b>	24VDC 1000mA
<b>Operating Temperature:</b>	-10° to +50° C
<b>Dimensions:</b>	19"(L) x 3"(D) x 1 <sup>3</sup> / <sub>4</sub> "(H)
<b>Weight:</b>	6.5 lbs.



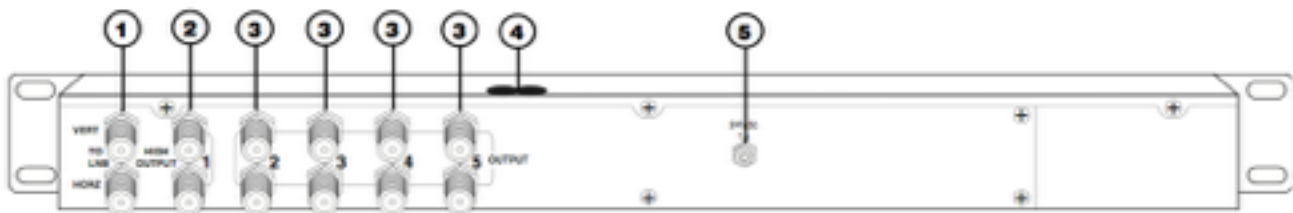
### Front Panel Control

**1. Power Supply Status:**

This LED indicates power is being supplied to the unit from the wall adaptor.

**2. "OC"**

When the "VERTICAL OC" is lit, this indicates an open circuit at the vertical LNB. When the "HORIZONTAL OC" is lit, this indicates an open circuit at the horizontal LNB.



### Back Panel Control

**1. LNB Inputs:**

These inputs provide DC power to the LNBs.

**2. High Outputs:**

These outputs provide an additional 6 dB of signal to the input of the receivers if needed

**3. Outputs to Receivers:**

These outputs provide approximately the same signal level to the input of the receivers as that of the LNBs, less cable loss.

**4. Vertical and Horizontal Adjustments:**

If the "OC" LED remains on after the LNBs are connected to the DIVINSUP-2-1X5A, Rotate the adjustment (top of case) until the LED shuts off.

**5. Power Jack:**

Input jack for 24Vdc, 1A wall adapter.

## Installation

It is recommended that assistance be available to safely install equipment in equipment racks.

1. Install chassis in equipment rack (equipment rack sold separately) by supporting the bottom and rear of **DIVINSUP-2-1X5A** at the desired elevation in rack.
2. Line up the side holes of chassis with the tapped equipment rack holes.
3. Insert the provided screws through the mounting holes at the extreme left and right of faceplate and thread into the tapped equipment rack holes.
4. Fasten the bottom screws first, then fasten top screws. (tighten securely).
5. Connect a cable from the satellite vertical polarity low noise block converter (LNB) to the vertical input connector of the **DIVINSUP-2-1X5A**.
6. Connect a cable from the satellite horizontal polarity low noise block converter (LNB) to the horizontal input connector of the **DIVINSUP-2-1X5A**.
7. Connect a cable from the output connector the **DIVINSUP-2-1X5A** to the input of a satellite receiver
8. Plug the wall adaptor plug into the jack located in the back of the unit.
9. Plug the adaptor into a 120Vac, 60Hz wall receptacle.

