AtlasIED

TSD-DCPDV
DC Power Distribution with Fixed & Variable Outputs

AtlasIED
TSD-DCPDV
Variable DC Power Distribution

USB CHARGE PORT

5V DC
1A

5V DC
1A

POWER

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NOTE: OUTPUT CURRENT IS DETERMINED BY THE SUPPLY CURRENT

TO SET THE VARIABLE OUTPUT VOLTAGE, MEASURE THE TERMINALS WITH A VOLT METER
WHILE ROTATING THE VOLTAGE CONTROL POT UNTIL YOU GET THE DESIRED VOLTAGE

DC24V

VARIABLE
VOLTAGE
CONTROL

OUTPUT
VOLTAGE

− +
24VDC IN
2.5A

− + − + − + − +

− +
5V-24VDC

− + − +
500mA   500mA

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TSD-DCPDV
Owner's Manual

Introduction

The AtlasIED TSD-DCPDV Variable DC Power Distribution Block is designed to reduce cost and wiring clutter in installations where multiple DC power supplies with the same voltage are required. Each unit has one 24VDC Input, 4 fixed 24VDC Outputs, 2 5VDC USB Charge Ports and 2 regulated variable outputs ranging from 5V - 24VDC. Each output has additional filtering to negate any AC ripple that may be present in the DC signal. Both USB and Variable outputs have a current overdrive protection circuit. The current output also depends on the power supply current rating.

The TSD-DCPDV is part of a full line of AtlasIED Time Saving Devices. These compact (1.5" x 4" x 2.75") units are designed to solve some of the common audio system problems in the easiest and in the most efficient and cost-effective way. All models are made from high quality components and include removable individual I/O connectors for quick and precise wiring, separate ground terminals for all I/Os assuring secured connections, and removable level controls that can be replaced with tamper-proof security covers. The TSDs are highly efficient and meet Energy Star™ standards as one 24V DC power supply (available separately) can power multiple Atlas Time Saving Devices.

Key Features

- Power Distribution for Multiple TSDs From a Single PSU
- 1 In 8 Out Configuration
- Four (4) Fixed 24VDC Outputs
- Two (2) Variable 5V - 24VDC Outputs
- Two (2) USB 5VDC Charge Ports
- Current Operating 2.5A
- DC Filtering Per Channel
- DC Isolation Per Channel
- Cable Management System
- Multiple Mounting Configurations
- Separate Ground Connections
- Removable Phoenix Style I/O Connectors
- Meets Energy Star™ Standards
- Compact Chassis Design

Audio Applications

- Wireless Microphone Power Supplies
- TSD Power Distribution
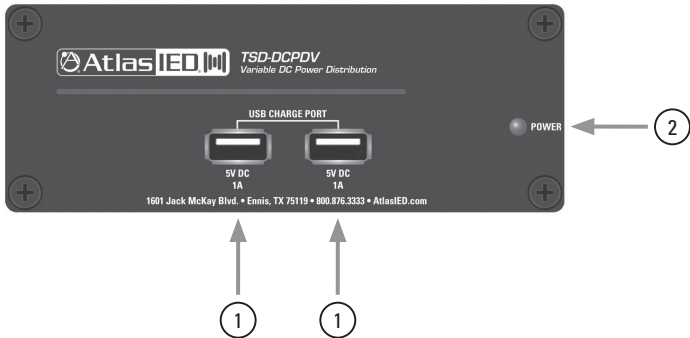- Reduce AC Outlets from Power Strips
- Use Less Power

Installation

- Government Buildings
- Medical Facilities
- Office Environments
- Churches
- Restaurants
- Schools
- Industrial Facilities
- House of Worship

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Front Panel

1. USB Charge Ports

Connect USB devices to these 2 ports. Maximum current draw from each port is 1A at 5VDC.

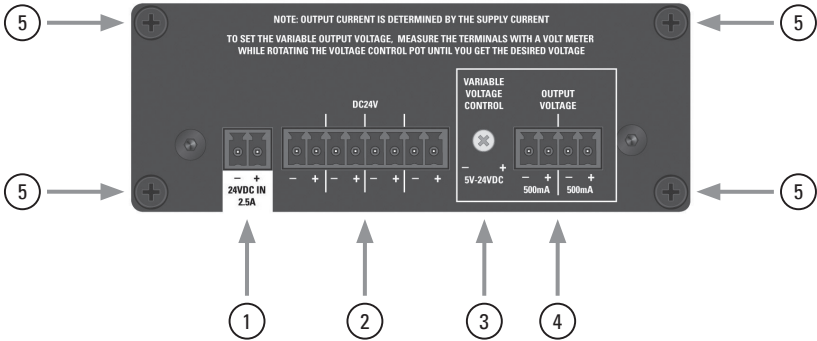**Note:** These USB charge ports may not charge all devices.

2. Power LED

Illuminates BLUE when 5-24VDC power is present.

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Rear Panel

NOTE: OUTPUT CURRENT IS DETERMINED BY THE SUPPLY CURRENT

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WHILE ROTATING THE VOLTAGE CONTROL POT UNTIL YOU GET THE DESIRED VOLTAGE

VARIABLE VOLTAGE CONTROL

DC24V

OUTPUT VOLTAGE

− 24VDC IN 2.5A +

− + − + − + − +

− 5V-24VDC +

− 500mA + − 500mA +

(1) (2) (3) (4)

(5) (5) (5) (5)

TSD input / output connections are removable for easy system wiring. The connector has a 3.5mm pitch between pins.

1. DC Power Input

Each TSD that requires DC power comes with a 2 position connector for an external 24VDC power supply (sold separately). Because of the TSD's low power consumption, a single external power supply may power more than one TSD. Please refer to the specifications on current requirements in milliamps to match with the appropriate power supply. **Note:** It is acceptable to exceed the current requirements of the TSDs but NOT safe to use a power supply that is below the current requirement of the device.

2. Isolated DC Outputs

Connect all system TSD products to these outputs, ensuring the total current draw of all the connected devices does not exceed the supply current of the TSD power supply being used. Observe the polarity of the output connectors and the polarity of the TSD devices being connected as well. Each output is filtered and isolated.

3. Variable DC Voltage Control

Rotate clockwise to increase the voltage at the 2 variable output voltage connectors. Rotate counterclockwise to decrease. A meter should be used to measure the DC voltage at the output terminals. Adjustment range is 5-24VDC when a 24VDC power supply is connected to the 24VDC Input.

4. Variable Output Voltage Connectors

Connect devices to these two outputs that require a voltage other than fixed 24VDC. Observe the polarity at the connectors. Maximum current output is 500mA at each port.
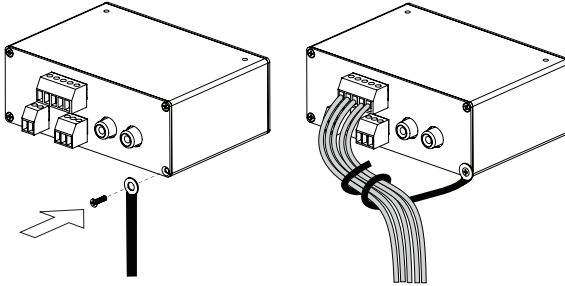
5. Cable Management Retainer Points

Each TSD includes two cable retainer straps for securing the included cable management retainers. Remove one of the rear panel screws, align the panel hole with a retainer and firmly tighten the screws.

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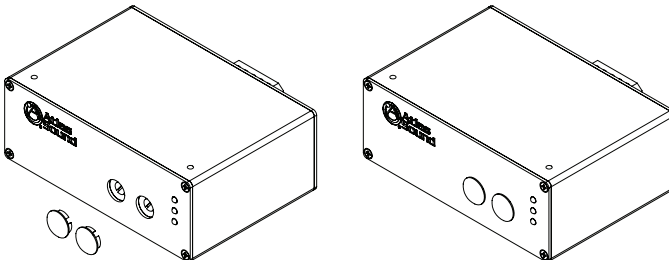# TSD-DCPDV

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Cable Management

Knob and Security Cover

All front panel level controls feature a removable knob that can be replaced with an included security cover. Follow these steps to prevent potentiometer damage or unwanted changes.

1. Knob Installation - Turn the potentiometer shaft fully counter-clockwise. Align the knob indicator to the lowest setting on the panel and the potentiometer shaft slot. Carefully press the knob onto the potentiometer shaft. Do not force or damage may occur to the potentiometer.
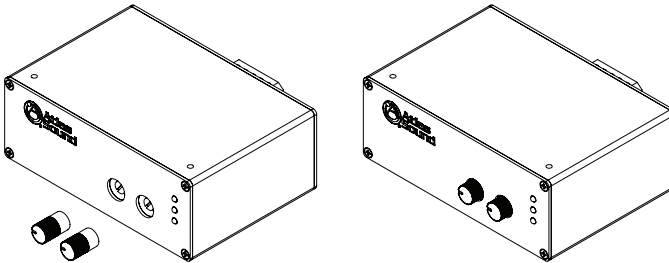
2. Security Cover Installation - Remove the knob from the panel and insert the cover. Small pliers may be required to remove the knobs. Align the security cover to the level control panel hole. Push the cover into the hole until it snaps into place. Do not force or damage may occur to the potentiometer.
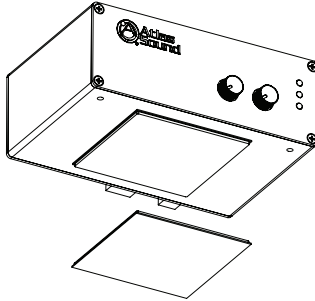
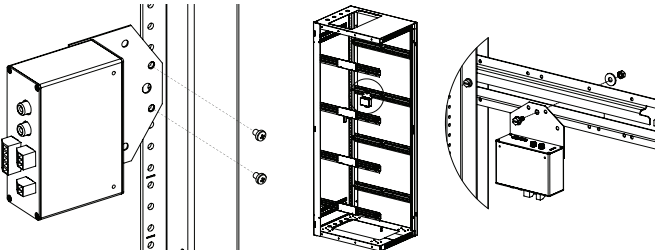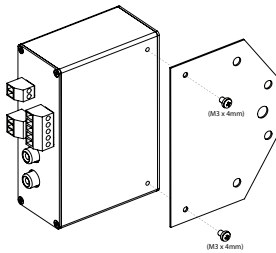# TSD-DCPDV

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Mounting

Listed below are the ways to mount the TSD and the optional accessories that can be purchased.

1. Velcro™ - Each unit includes two 2" x 2" pieces of industrial-grade Velcro™ with adhesive backing to adhere to any flat surface. Clean all surfaces before applying the adhesive side of the Velcro™.

2. Multi Mount Plate - Each TSD includes a versatile multi-position mounting plate. This plate allows the TSD to be mounted to any surface; but is ideal for use with rear rack rails or side rack hat channels. Use the included M3 x 4mm screws to install the plate on the TSD. **Note:** Only use the included M3 x 4mm screws as other screws may be too long and will cause internal damage to the TSD. The multi-position mounting plate is a new addition being included with TSDs. If the TSD being used did not include the mounting plate, contact AtlasIED customer service at 1-800-876-3333.

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Optional Mounting Accessories

1. TSD-RMK 19" Width Rack Mount Kit - For 19" rack mounting, AtlasIED offers an optional rack mount kit, the TSD-RMK. This rack mount kit can support up to four TSD units. The kit includes three blank panels designed to fill any unused slots. Use the included hardware to mount the TSD into the rack mount kit using the top mount screw holes on the TSD.
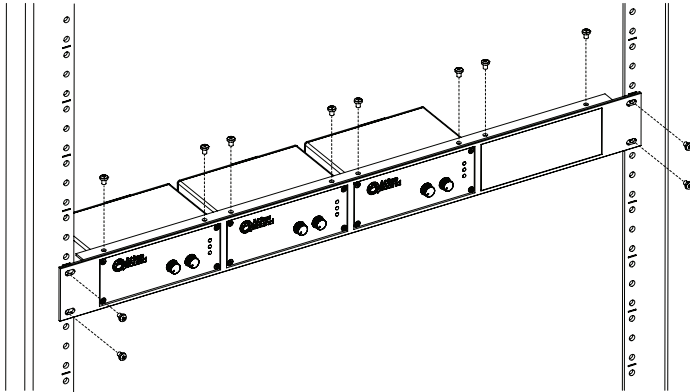
2. TSD-RMKHR Half Width Rack Mount Kit - AtlasIED offers an optional rack mount kit that can be used in half width rack applications including the AtlasIED WMA-HR and AWR-HR models. The TSD-RMKHR can support up to two TSDs. Included is an extra blank panel to fill one of the spaces if only one TSD is being used.
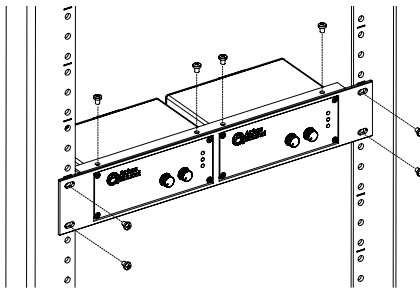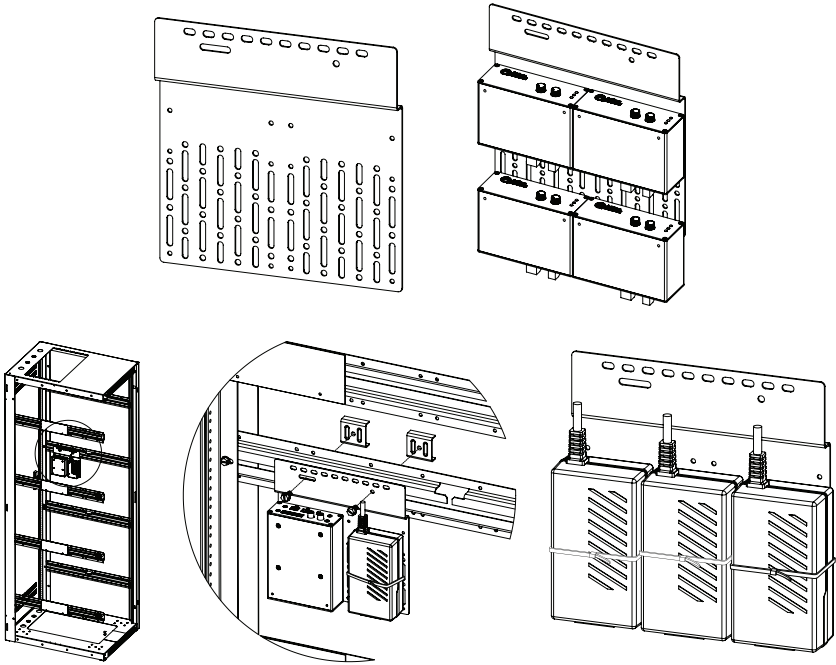
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Owner's Manual

3. TSD-RRMK Rear Rack Mounting Kit - For complete flexibility in mounting a TSD or TSD external power supplies the optional TSD-RRMK is available. The TSD-RRMK can support mounting of either two larger TSDs with external power supplies or up to 4 TSD models. **Note:** Only use the included M3 x 4mm screws as other screws may be too long and will cause internal damage to the TSD.

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Block Diagram

DC 24V OUT

DC 24V OUT

DC 24V

DC TO DC POWER SUPPLY

AUTO RESET THERMAL SWITCH

5V - 24VDC ADJUSTABLE OUPUT VOLTAGE 2X0.5A

VARIABLE VOLTAGE CONTROL

DC TO DC POWER SUPPLY

AUTO RESET THERMAL SWITCH

USB DC 5V OUT 2X1A
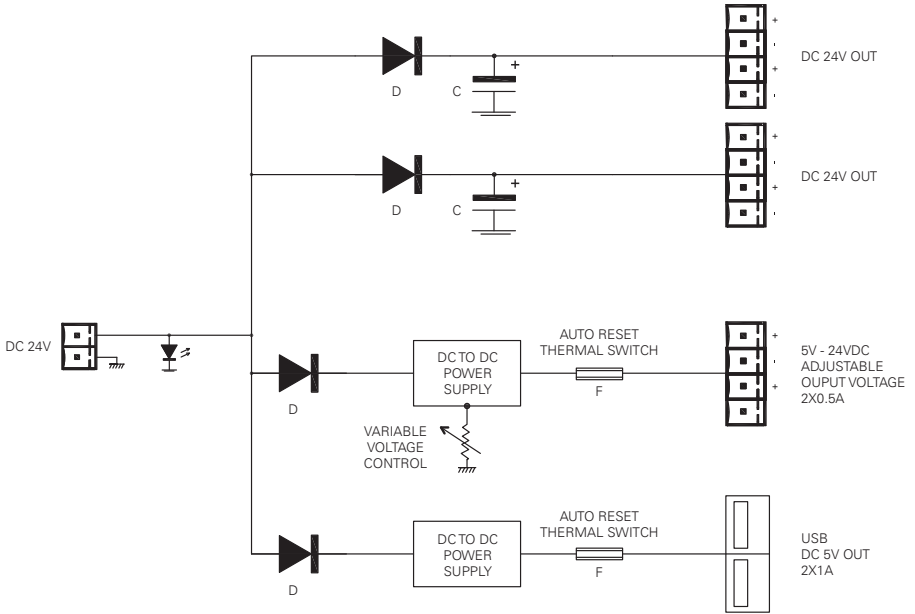
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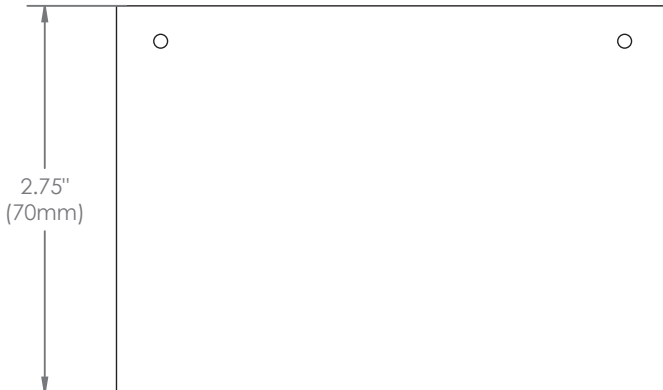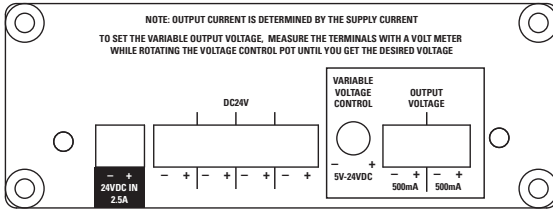| System	
Type	DC Power Distribution with Fixed & Variable Outputs
Inputs	
DC Voltage Input	1A - 3A, 24V DC, 3A Max
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Outputs	
DC Voltage Output Fixed	24V DC, Current Output Related to Input Power Supply and Load
Connection	Qty 4, Removable 2 Position Captive Screw 3.5mm Spacing
DC Voltage Output Fixed	5V DC, 1A Each
Connection	Qty 2, USB Charge Port, Front Panel, **Note:** May Not Charge All Devices
DC Voltage Variable	Qty 2, Ports 1 Adjustable Voltage, Variable DC Output 5V - 24VDC, 500mA Each
Controls	
Variable DC Adjust	Recess Pot
Indicators	
Power	Blue LED
Electrical	
Isolation	Active
Filters	DC Storage & AC Ripple
Over Current	Auto Reset Thermal Switch for Variable Output
Power Requirements	
Idle	10mA
Mechanical	
Chassis Color	Black
Chassis Material	Aluminum
Product Dimensions (HxWxD)	1.5" x 4" x 2.75" (39mm x 101mm x 70mm)
Shipping Dimensions (HxWxD)	2.75" x 5.25" x 3.7" (69mm x 133mm x 94mm)
Net Weight	0.375 lbs (0.165kg)
Shipping Weight	0.625 lbs (0.28kg)

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Included Accessories	
Velcro™	Qty 2, Industrial-Grade 2" x 2"
Multi-Mount Plate	Qty 1, Includes Two (2) M3 x 4mm Screws
Cable Retainer	Qty 2
Optional Accessories	
TSD 24VDC	Power Supply
TSD-RMK	1 RU 19" Width Rack Mount Panel (Supports 4 TSD Units)
TSD-RMKHR	1 RU Half Rack Width Panel (Supports 2 TSD Units)
TSD-RRMK	Rear Rack Mounting Kit
Warranty Coverage	
Warranty Period	3 Years

TSD-DCPDV

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Dimensional Drawings

4"
(101mm)

AtlasIED **TSD-DCPDV**
Variable DC Power Distribution

1.5"
(39mm)

USB CHARGE PORT

POWER

5V DC
1A

5V DC
1A

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VARIABLE
VOLTAGE
CONTROL

OUTPUT
VOLTAGE

DC24V

−   +

24VDC IN
2.5A

−   + −   + −   + −   +

−   +
5V-24VDC

−   + −   +
500mA 500mA

2.75"
(70mm)

Notes

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Service

Should your TSD-DCPDV require service, please contact the AtlasIED warranty department through the online warranty claim process.

Online Warranty Claim Processes

1. Warranty submissions are accepted at: https://www.atlasied.com/warranty_statement where the type of return Warranty or Stock return can be selected.

2. Once selected, you will be prompted to enter your login credentials. If you do not have a login, register on the site. If already logged-in, navigate to this page by selecting "Support" and then "Warranty & Returns" from the top menu.

3. In order to file a Warranty Claim, you will need:

   A. A copy of the invoice / receipt of the purchased item

   B. Date of Purchase

   C. The product name or SKU

   D. The serial number for the item (if no serial number exists, enter N/A)

   E. A brief description of the fault for the claim

4. Once all required fields are completed, select the "Submit Button". You will receive 2 emails:

   1. One with a confirmation of the submission

   2. One with a case# for your reference should you need to contact us.

Please allow 2-3 business days for a response with a Return Authorization (RA) number and further instructions.

AtlasIED Tech Support can be reached at 1-800-876-3333 or atlasied.com/support.

Visit our website at www.AtlasIED.com to see other AtlasIED products.

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Limited Warranty

All products manufactured by AtlasIED are warranted to the original dealer / installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of three years on all AtlasIED products, including SOUNDOLIER brand, and ATLAS SOUND brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty. AtlasIED will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to AtlasIED do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any nonwarranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ATLASIED SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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