

TSD-TXHL High Level to Line Level Converter & Signal Isolator







Description

The AtlasIED TSD-TXHL is a high to low level converter designed to interface with $4\Omega/25V/70V/100V$ distributed speaker lines. An unbalanced line level output is provided to drive remote amplifiers or other devices.

The TSD-TXHL allows easy expansion of zones without the need for dedicated wiring to remote locations. The high to low-level converter features an isolated transformer, which will not add measurable load to the speaker line. An output level control allows for trim adjustment to best match the remote amplifier (or other device) input sensitivity. The TSD-TXHL works perfectly in conjunction with AtlasIED's CP and PA series.

The TSD-TXHL 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, precise wiring and separate ground terminals for all I/Os assuring secured connections.

Features

- · Speaker Level to Line Level Conversion
- Works with 4Ω, 25V, 70V, 100V Speaker Systems
- · Variable Output Level
- Transformer Isolated
- Trim Level Control
- · Cable Management System
- Multiple Mounting Configurations
- Wide Bandwidth Frequency Response
- Separate Ground Connections
- · Removable I/O Connectors
- · No External Power Required
- · Compact Chassis Design

Audio Applications

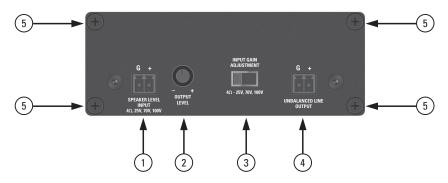
- System Isolation
- Level Matching
- Add a Zone Anywhere a Speaker System Exists

Installation

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

TSD-TXHL High/Low Level Converter

Rear Panel Description

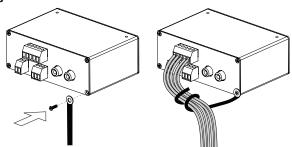


TSD Input/Output connections are removable for easy system wiring. The connector has a 3.5mm pitch between pins.

- Speaker Level Input Connect the loudspeaker line to the (G) and (+) terminals. The loudspeaker line can be 4/8 ohm system or 25/70/100V signal levels.
- Output Level Control Adjust the signal level of the unbalanced line output. Turn clockwise to increase the signal level and counter-clockwise to decrease it. Note: The output level control knobs can be removed and replaced with supplied security covers to prevent unauthorized adjustment.
- Input Gain Adjustment Switch Set this switch to match the signal level present on the loudspeaker line. Use the 4 - 25V ohm position for 4/8 ohm and 25V systems, 70V or 100V for 70V and 100V loudspeaker systems, respectively.
- 4. Unbalanced Line Output Provides an unbalanced line output when an speaker level input signal is present. Output is variable with adjustments made with the Output Level Control. Note the polarity of the connector, reversing the polarity can cause sound quality issues.
- 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.



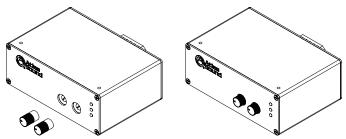
Cable Management



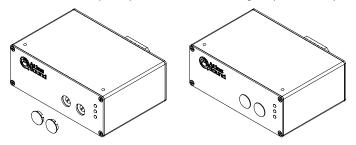
Knob and Security Cover

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.

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.



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.





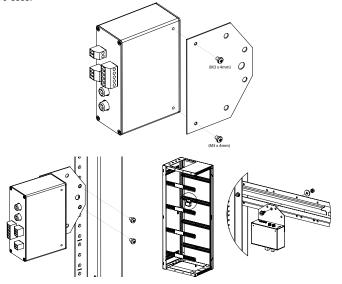
Mounting

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

 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[™].



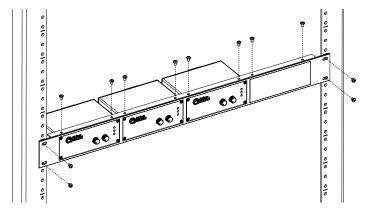
2. Multi Mount Plate - Each TSD includes a versatile multi-position mounting plate. This plate allows the TSD to be mounted to any surface; but is ideal for use with rear rack rails or side rack hat channels. Use the included M3 x 4mm screws to install the plate on the TSD. Note: Only use the included 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.



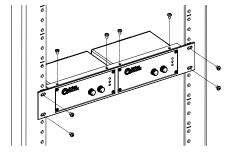


Optional Mounting Accessories

 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.

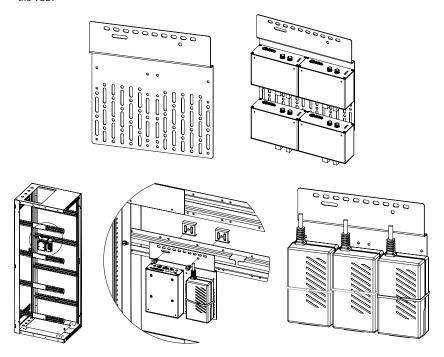


TSD-RMKHR Half Width Rack Mount Kit - AtlasIED offers an optional rack mount kit that can be used in half width rack applications including the AtlasIED WMA-HR and AWR-HR models. The TSD-RMKHR can support up to two TSDs. Included is an extra blank panel to fill one of the spaces if only one TSD is being used.

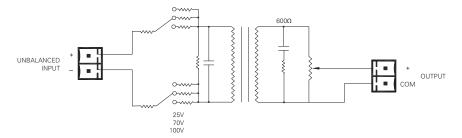


TSD-TXHL High/Low Level Converter

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.



Block Diagram



Owner's Manual

TSD-TXHL High/Low Level Converter

Specifications

Description High Level to Line Level Converter & Signal Isolator

Chassis Color Black
Chassis Material Aluminum

Inputs

Outputs

Type Qty 1, Unbalanced

Connection Removable 2 Position Captive Screw 3.5mm Spacing

 $\begin{array}{ll} \text{Impedance} & 600\Omega \text{ Unbalanced} \\ \text{Line Output Level} & \text{Max Output 1V } \pm 10\% \end{array}$

Controls

Electrical

Transformer Isolation Step Down Frequency Response 40Hz - 25kHz (-3dB)

Power Requirements

None Passive

Dimensions H 1.5" (39mm) x W 4" (101mm) x D 2.75" (70mm)

Weight 6oz, .165kg

Included Accessories

Velcro[™] Industrial-Grade

Multi-Mount Plate Qtv 1, Includes Two (2) M3 x 4mm Screws

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



TSD-TXHL High/Low Level Converter

Owner's Manual

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Owner's Manual

TSD-TXHL High/Low Level Converter

Notes:			



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.

AtlasIED does not assume, or does it authorize any other person to assume or extend on its behalf, any other warranty, obligation, or liability. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Service

Should your Atlas TSD require service, please contact the AtlasIED warranty department at 1-877-689-8055, ext. 277 to obtain an RA number.

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

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

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