



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





Description

The Atlas Sound TSD-TXHL is a high to low level converter designed to interface with 4 Ω /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 Atlas Sound's CP and PA series.

The TSD-TXHL is part of a full line of Atlas Sound 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 4 Ω , 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



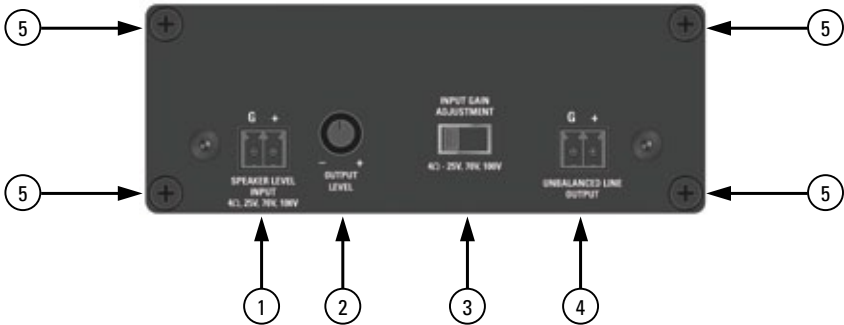
Front Panel Description



1. **Bracket Retainer Points** - Each TSD includes two mounting brackets for securing the TSD to a cabinet or wall. Remove screws and align the bracket with the panel hole before firmly tightening the screws.



Rear Panel Description



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

1. **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.
2. **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.
3. **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 a 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.



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. Do not force or damage may occur to the potentiometer. Small pliers may be required to remove the knobs.

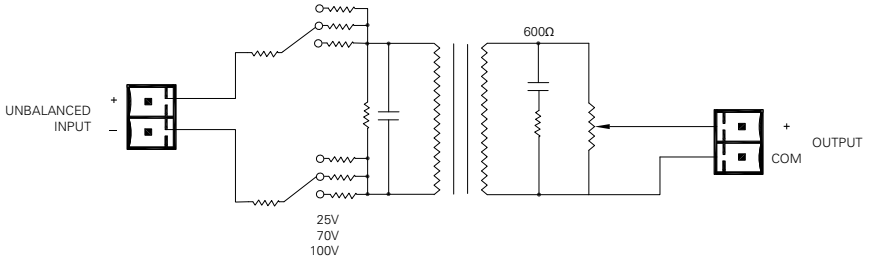
Mounting

There are three ways to securely mount this TSD:

1. **Velcro™** - Each unit includes industrial grade Velcro™ with adhesive backing to adhere to any flat surface.
2. **Brackets** - Each unit includes two mounting brackets to secure to a cabinet or wall.
3. **Rack Mount Panel** - The optional TSD-RMK rack mount panel supports up to four TSDs in a 1RU space.



Block Diagram



Specifications

Description	High Level to Line Level Converter & Signal Isolator
Chassis Color	Black
Chassis Material	Aluminum
Inputs	
High Level Input	Qty 1, Amplifier Speaker Outputs 4Ω, 8Ω, 25V, 70V, 100V
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Outputs	
Type	Qty 1, Unbalanced
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Impedance	600Ω Unbalanced
Line Output Level	Max Output 1V ±10%
Controls	
Level Control	Qty 1, Removable Knob with Security Cover
Input Level Adjustment	Three Selections 4Ω -25V, 70V, 100V
Electrical	
Transformer	Isolation Step Down
Frequency Response	40Hz - 25kHz (-3dB)
Mounting	
Velcro™	Industrial Grade, Included
Brackets	Qty 2, Included
TSD-RMK	Optional 1 RU Rack Mount Panel (Supports 4 TSD Units)
Cable Retainer	Qty 2, Included
Power Requirements	
None	Passive
Dimensions	H 1.5" (39mm) x W 4" (101mm) x D 2.75" (70mm)
Weight	6oz, .165kg





Limited Warranty

All products manufactured by Atlas Sound 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 Atlas Sound 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. Atlas Sound 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 Atlas Sound 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, ATLAS SOUND 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.

Atlas Sound 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.

©2010 Atlas Sound L.P. All rights reserved. Atlas Sound is a trademark of Atlas Sound L.P.
All other trademarks are the property of their respective owners. ATS003947 RevA 9/10

