



# TSD-HF11

## Paging Horn Crossover & Limiter



TSD-HF11

### Features

- Selectable Hi-Pass and Lo-Pass Filter
- Balance and Unbalance Inputs
- Input and Output Trim Controls
- Variable Limiter
- Security Covers Included for All Front Panel Controls
- Output Signal, Peak & Limit Indicator LEDs
- Removable Phoenix Style I/O Connectors
- Power Supply Sold Separately
- Optional Rack Mount Kit – TDS-RMK
- Optional Half Rack Mount Kit – TDS-HRMK
- Optional Rear Rack Mount Kit – TDS-RRMK

### Audio Applications

The TSD-HF11 is designed to be used in conjunction with paging horns in applications where the horn is used for both paging and background music. The TSD-HF11 protects the horn driver from damaging low frequency signals often found in vocals or music.

### Atlas Time Saving Devices

New Atlas Sound Time Saving Devices are designed to solve some of the common audio system problems in the easiest and in the most efficient and cost-effective way. Utilizing the highest quality components and inspired by real world installation issues, the Atlas Sound TSDs include mixers, amplifiers, preamps, and other distribution and control devices to simplify your connections, provide specific application needs, and add flexibility in expansion and changes that prevent expensive system overhauls.

The Time Saving Devices are loaded with features making it versatile and user friendly. The TSD design mandate was to make the installation quick and reliable, saving you valuable time and money. Each model is housed in a compact 1.5" x 4" x 2.75" footprint that allows for placement almost anywhere. Common features 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 a tamper-resistant security cover.

### Description

The TSD-HF11 is specifically designed use with paging horns in applications where band pass filter and power limiting are required. The TSD-HF11 has a 1 Input and 1 Output configuration and includes Input and Output trim controls, selectable Hi-Pass filter, and a variable limiter to prevent excess signal from entering the amplifier. The TSD-HF11 can be used with a variety of paging horns and amplifiers as its full feature set allows individualized customization based on system requirements.

### Installation

- Schools
- Stadiums
- Arenas
- Recreation Centers
- Raceways

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## Specifications

Description	1 x 1 Paging Horn Crossover and Limiter
Chassis Color	Black
Chassis Material	Aluminum
<b>Inputs</b>	
Type	Qty 1, Unbalanced
Connection	RCA
Impedance	10k $\Omega$
Input Level	316mV (-10dBV) = 1V (0dBV) Unbalanced RCA Output, Maximum Input 3V (9.5dBV)
<b>Type</b>	
Type	Qty 1, Balanced Line
Connection	Removable 3 Position Captive Screw 3.5mm Spacing
Impedance	10k $\Omega$ Balanced
Line Input Level	1V (0dBV) Balanced = 2V (+6dBV) Balanced Output, Maximum Input 6V (15.5dBV)

### Outputs

Type	Qty 1, Unbalanced
Connection	RCA
Impedance	150 $\Omega$
Input Level	316mV (-10dBV) RCA Input = 1V (0dBV) RCA Output, Maximum Output 7V (16.9dBV)
<b>Type</b>	
Type	Qty 1, Balanced Line
Connection	Removable 3 Position Captive Screw 3.5mm Spacing
Impedance	300 $\Omega$ Balanced
Line Input Level	1V (0dBV) Balanced Input = 2V (+6dBV) Balanced Output, Maximum Output 12.5V (17dBV)

### Controls

Input Level Control	Qty 1, Removable Knob with Security Cover
Output Level Control	Qty 1, Removable Knob with Security Cover
Input Limiter	Threshold Adjust

### Dip Switch Function

Dip Switch # 1	200Hz Hi Cut / 18dB
Dip Switch # 2	300Hz Hi Cut / 18dB
Dip Switch # 3	400Hz Hi Cut / 18dB
Dip Switch # 4	All Pass

### Indicators

Input Signal	Green, 25mV ON Threshold, Qty 1
Input Peak	Red, -3dB Before Clip, Qty 1
Limiter	Yellow, Limiter Activation, Qty 1
Power	Blue, Qty 1

### Electrical

Frequency Response	Related to Dip Switch Settings, All References -3dB, Filters 18dB per Octave
	<ul style="list-style-type: none"><li>• 200Hz - 15KHz</li><li>• 300Hz - 15KHz</li><li>• 400Hz - 15KHz</li><li>• All Pass - 20Hz - 15KHz</li></ul>
THD	.06% @ 1kHz
Noise, Maximum	450uV (-99dBV)
Input Limiter	Hard Limiter Potentiometer Position
	<ul style="list-style-type: none"><li>• FCCW 0dB = 0dB</li><li>• 12 O'clock = - 4dB +/-1dB</li><li>• FCW -dB = -8dB</li></ul>

### Power Requirements

Voltage	24VDC, 35mA, Removable 2 Position Phoenix
Power Consumption VA Watts	1.6W
Dimensions	1.5" (39mm) x 4" (101mm) x 2.5" (70mm)
Weight	6oz, .165kg

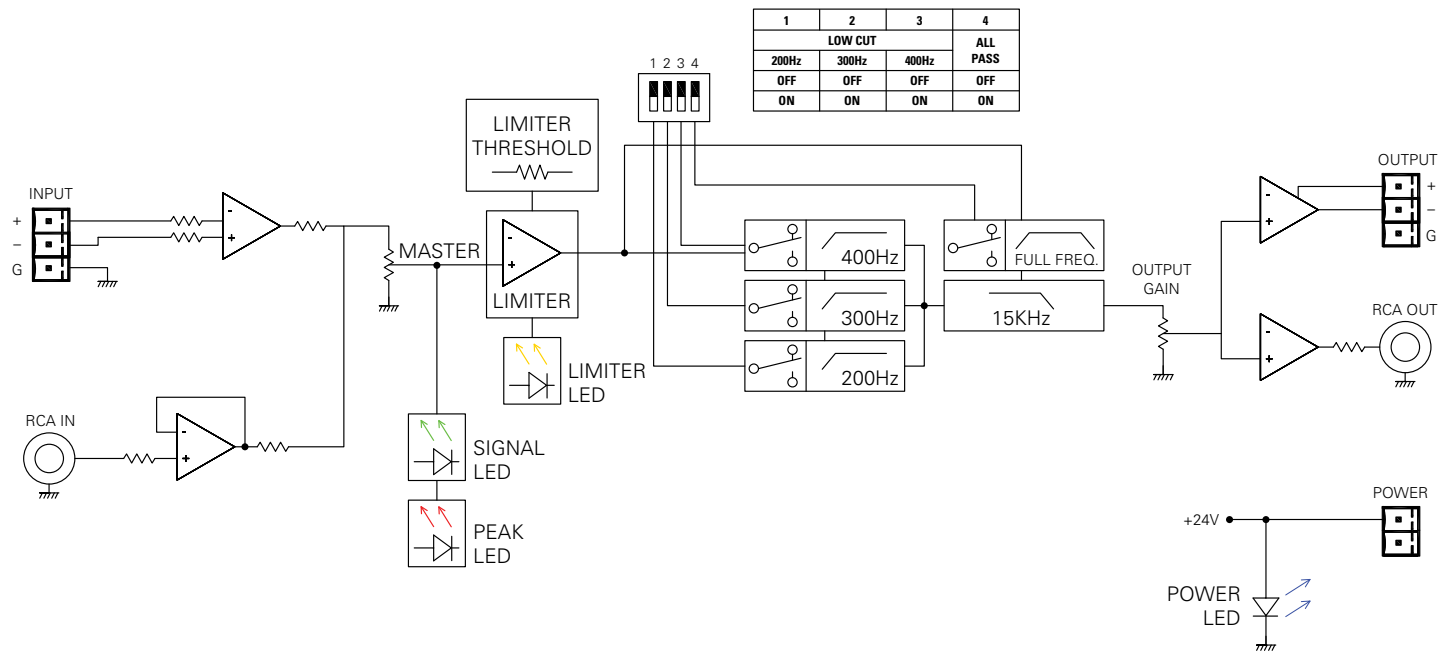
### Included Accessories

Velcro™	Industrial-Grade
Multi-Mount Plate	Qty 1, Includes Two (2) M3 x 4mm Screws
Cable Retainer	Qty 2
Level Control Knobs	Qty 2
Level Control Security Covers	Qty 2

### Safety and Certifications

External Power Supply	cUL, CE, RoHS, TUV
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# Block Diagram



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