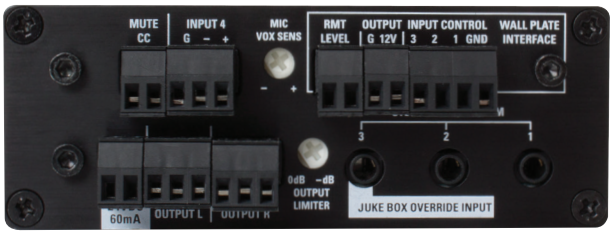
TSD-MIX42RT

4x2 Mic/Line Mixer with Priority Sense and Remote Control



TSD-MIX42RT

Features

- Stereo or Mono Configurations
- One Balanced Mic/Line Input
- Switchable 24V Phantom Power
- Three Unbalanced Stereo Line Inputs 3.5mm
- VOX Sense and Contact Closure, Priority Mute
- Variable Output Limiter
- Remote Level Control
- 12dB/Octave Low Cut Filter @ 125Hz Mic/Line
- Remote Control Input Select & Level Control
- Audio Auto Sensing Juke Box Override
- Input Signal & Peak Indicator LEDs
- High Gain Output for Driving Long Balanced Lines
- Separate Ground Connections
- Security Covers Included for All Front Panel Controls
- Cable Management System
- Multiple Mounting Configurations
- Removable Phoenix Style I/O Connectors
- Meets Most Energy Standards
- Compact Chassis Design

Audio Applications

- Mixer
- Mic Preamp
- Line Preamp
- Stereo Summing Preamp
- Line Drive
- Remote Level Control
- Priority Paging
- Music Override
- Digital Signal Auto Sense

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 them versatile and user friendly. The TSD design mandate was to make the installation quick and reliable, saving you valuable time and money. The TSD-MIX42RT is housed in a compact 1.5" x 4" x 2.5" 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 Atlas Sound TSD-MIX42RT 4x2 mic/line mixer is ideal for applications where paging, priority music override and/or remote input selection with level control are required. Use alone or in conjunction with amplifiers in meeting rooms, digital signage, luxury suites, and other applications requiring versatile, stereo or mono multi source mix control.

The unit includes one mic/balanced line input via removable Phoenix style connector and three stereo 3.5mm inputs. Switchable phantom power is provided for the mic input to facilitate condenser microphones. The high quality, low noise internal mic preamps ensure clarity and quiet operation without unwanted coloration. A 12dB/octave high pass filter @ 125Hz also is available on the mic input to minimize bass rumble and low frequency feedback.

The TSD-MIX42RT can be used in conjunction with a WPD-MIX42RT decor style wall plate that is designed for remote activation of the TSD-MIX42RT mic/line mixer. The WPD-MIX42RT features an audio source slide selector as well as a source volume control. The unit includes an LED indicator to indicate which source is selected and if it is active. The unit fits in a single gang electrical outlet and uses an 8-conductor interface connection that includes a single 4 position removable Phoenix connector and dual 2 position Phoenix style connectors. When connected to the TSD-MIX42RT and the Juke Box Override, any page made through the system will override the selected source so that the page can be heard clearly.

Priority paging can be accomplished via contact closure or VOX trigger on Input 1 that will mute Inputs 2, 3, or 4 (assignable). Remote level control feature allows use of the Atlas Sound AAVC-10K or WPD-VC10K decorative wall plate control for convenient remote adjustment of either the entire Master mix bus or Inputs 1, 2, 3. A variable output limiter provides system protection by reducing clipping and distortion - which is especially useful when mixing mic and/or line sources with varying volumes.

The TSD-MIX42RT is highly efficient and meets most energy standards as one 24VDC power supply (available separately) can power multiple Atlas Time Saving Devices.

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Specifications

Description	4 x 2 Stereo Line Mixer with Priority Sense & Remote Level
Chassis Color	Black
Chassis Material	Aluminum

Inputs

Type	Qty 3, Unbalanced
Connection	3.5mm Stereo
Impedance	10kΩ
Input Level	316mV (-10dB) = 2V (+6dBV) Balanced Output, Maximum Input 1.6V (4.1dBV)
Type	Qty 1, Balanced Mic or Line Selectable
Connection	Removable 3 Position Captive Screw 3.5mm Spacing
Impedance	1.2KΩ Balanced, 600Ω Unbalanced
Phantom	24VDC Defeatable
Low Cut Filter	125Hz/12dB Defeatable
Line Input Level	1V (0dBV) Balanced = 2V (+6dBV) Balanced Output, Maximum Input 6V (15dBV)
Mic Input Level	46dB Gain, 10mV (-40dB) Balanced = 2V (+6dBV) Balanced Output, Maximum Input 40mV (-27dBV)

Outputs

Type	Qty 2, Balanced Line, Left & Right
Connection	Removable 3 Position Captive Screw 3.5mm Spacing
Impedance	300Ω Balanced, 150Ω Unbalanced
Line Output Level	1V (0dBV) In = 2V (+6dBV), Maximum Output 6V (15dBV)

Controls

Input Level Control	Qty 4, Removable Knobs with Security Covers
Mute CC	Contact Closure, Removable 2 Position Captive Screw 3.5mm Spacing
VOX Mute Sens	Trim Adjust for Mic Sensitivity
Output Limiter	Threshold Adjust
Remote Level	Control Port 10kΩ External Pot, Removable 2 Position Captive Screw 3.5mm Spacing
DC 12V Output	12V DC to power wall controller LED, Removable 2 Position Captive Screw 3.5mm Spacing
Wall Controller Interface	Connects to optional WPD-MIX42RT wall controller, Removable 4 Position Captive Screw 3.5mm Spacing **Note:** Juke Box Override will not work when Remote Wall Plate is activated

Dip Switch Functions

Dip Switch # 1	24VDC Phantom Power
Dip Switch # 2	Input 4 Mic or Line Select
Dip Switch # 3	Low Cut Filter 125Hz
Dip Switch # 4	Juke Box Override
Dip Switch # 5	Juke Box Override Mute Hold Delay
Dip Switch # 6	Input 3 Mute Receive
Dip Switch # 7	Input 2 Mute Receive
Dip Switch # 8	Input 1 Mute Receive
Dip Switch # 9	Outputs Left and Right Stereo/Mono
Dip Switch # 10	Remote Level Master/Inputs 1,2,3
Dip Switch # 11	Wall Plate Activation **Note:** Juke Box Override will not work when Remote Wall Plate is activatedt
Dip Switch # 12	Not Used

Indicators

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

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Electrical

Frequency Response	20Hz - 20kHz (±1dB)
THD	.06% @ 1kHz
Signal to Noise	Line to Line: 85dBV
	Mic to Line: 78dBV
Output Limiter	Threshold Adjust 50mV Minimum Output to No Limit

Mounting

Velcro	Industrial-Grade, Included
Brackets	Qty 2, Included
TSD-RMK	Optional 1 RU Rack Mount Panel (Supports up to 4 TSD Units)
Cable Retainer	Qty 2, Included

Power

Voltage	24VDC, 60mA
Power Consumption Current	60mA
Power Consumption VA Watts	1.4W

Dimensions H 1.5" (39mm) x W 4" (101mm) x D 2.5" (70mm)

Weight 13.4oz, .3kg

Accessories

WPD-MIX42RT	Wall Plate Input Select Switch, Volume Control
TSD 24VDC	Power Supply
TSD-RMK	1 RU Rack Panel

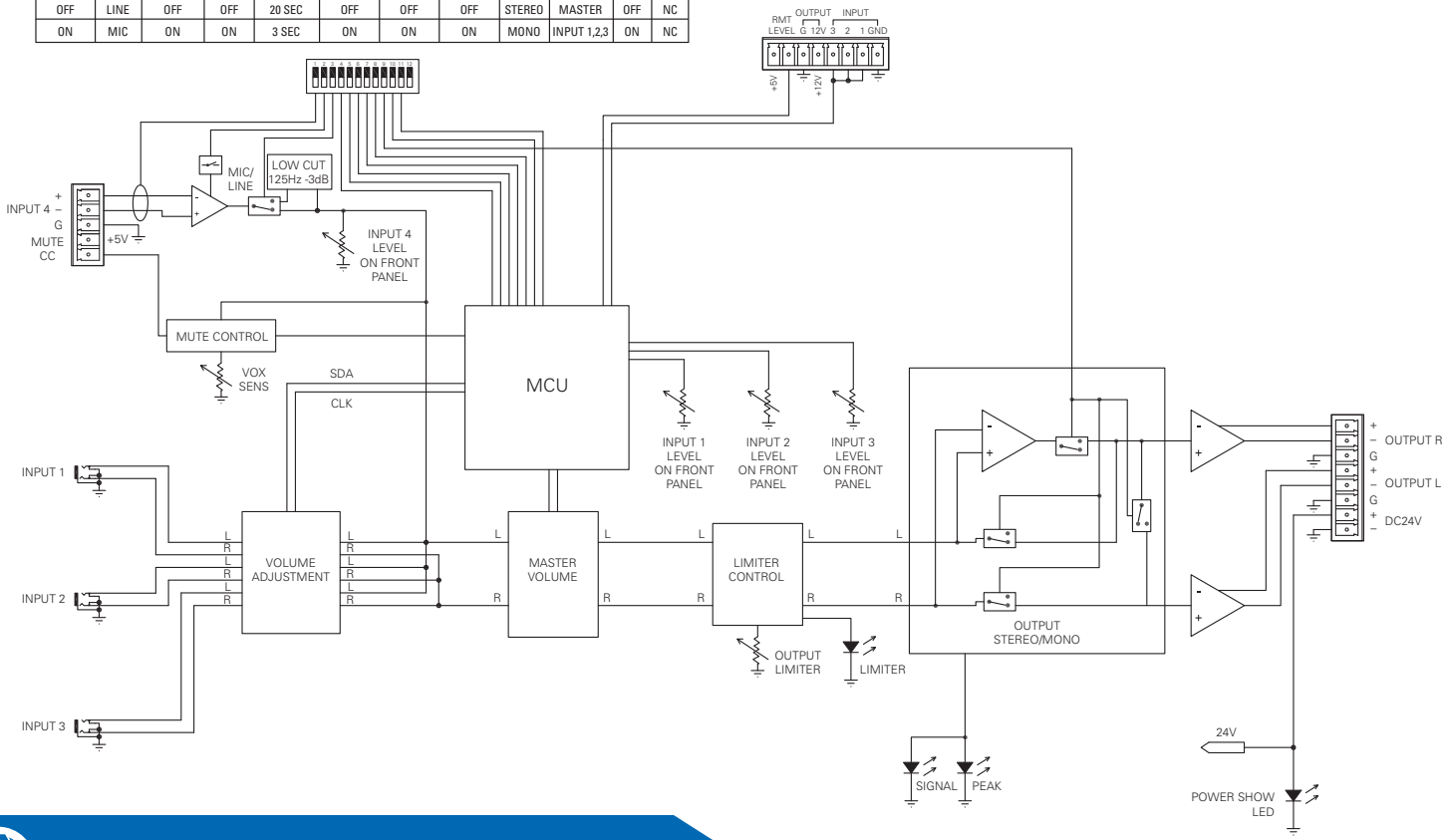
Safety and Certifications

External Power Supply	cUL, CE, RoHS, TUV

Block Diagram

DIP SWITCH FUNCTION SET

1	2	3	4	5	6	7	8	9	10	11	12
INPUT 4	INPUT 4	INPUT 4 125Hz/12dB LOW CUT	INPUT 3	INPUT 3 JUKE MUTE DELAY	INPUT 3	INPUT 2	INPUT 1	OUTPUT STEREO/ MONO	REMOTE LEVEL	WALL PLATE	NC
PHANTOM			JUKE OR		MUTE RCV	MUTE RCV	MUTE RCV				NC
OFF	LINE	OFF	OFF	20 SEC	OFF	OFF	OFF	STEREO	MASTER	OFF	NC
ON	MIC	ON	ON	3 SEC	ON	ON	ON	MONO	INPUT 1,2,3	ON	NC



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