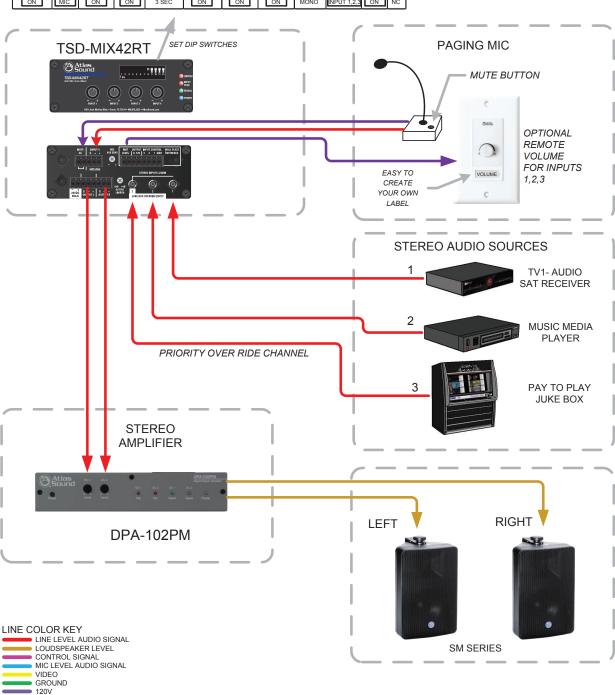


# **Example of Mixer Using Music Source to Override or Mute Specified Audio Channels**

### **DIP SWITCH SETTINGS:**

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





1601 Jack McKay Blvd. • Ennis, Texas 75119 U.S.A. Telephone: 800.876.3333 • Fax: 800.765.3435



### Overview:

This example illustrates how to use a TSD-MIX42RT as a 3 Input Stereo source mixer in a system that requires selected channel muting when triggered by an Audio Source.

## **Application Example Description:**

This example illustrates how the TSD-MIX42RT can be configured to mix between 3 stereo audio sources, audio from a Satellite TV receiver, a Music Media Player, and a "Pay to Play" Juke Box system, and how to configure the "Pay to Play" Juke Box music to override (mute) the Satellite TV audio and Music Media Player audio automatically whenever a customer pays to hear a song. Additionally, a paging Mic is configured to take priority over all 3 audio sources if needed for security or emergency announcements.

### **Benefits:**

- Cost Effective Solution
- Stereo or Mono Applications
- Mic Input with Phantom and Low Cut Filter
- Priority Override Assignment
- Selectable Override Release Times
- Trigger Accepts Analog Audio
- Adjustable Output limiter

## **Application Example Notes:**

- 1. The Juke Box audio is connected to Input 3, to make use of the Juke Box override feature, and DIP switch 4 is set to ON. In this configuration, any audio signal sensed on Input 3 will automatically override (mute) Inputs that have Mute RCV set to ON. In this case Inputs 1, 2, and 3 (DIP switches 6, 7, and 8) are set to ON.
  - When Juke Box override is active (ON), and Input 3 Mute RCV is also active (ON), only the VOX or CC Mute affects Input 3 mute.
- 2. DIP switch 5 is set to 20 Sec, which mutes Inputs 1 and 2 for approximately 20 seconds after the Juke Box music stops before fading back up. This setting will need to be tested for the application.
- 3. A condenser (phantom powered) Paging Mic is connected to balanced Input 4 and appropriate DIP switch settings 1, 2, and 3 are set to ON.
  - DIP switch 3 provides a high pass (low cut) filter to improve the microphone sound and reduce low-end feedback.
  - Adjust the VOX sensitivity until the Mic announcements automatically mute all Mute RCV assigned inputs.
  - The paging Mic base has a built-in mute switch connected to the remote CC (contact closure) pins. When the mute switch is pressed, all music channels will mute.
  - Balanced Input 4 can also be configured to Line Level (DIP switch 2) for a pre-recorded Fire Alert message. For this Safety application, set Mute RCV 1, 2 and 3 to ON (DIP switches 6, 7 and 8).
- 4. A wall mounted remote Master Volume control is used to control the level of the sound system.
  - DIP switch 10 is set to Input 1,2,3 for level control of the three audio sources together.
  - Relative mix levels are set by the individual input level controls on the front of the TSD-MIX42RT.

    Note: The paging Mic (Input 4) is not affected by this setting.
  - Setting DIP switch 10 to MASTER affects all Inputs including the Mic (Input 4).
- 5. Set the Output Limiter so a normal speaking voice barely causes the limiter to start working (Limiter LED blinks occasionally).
  - Loud speaking voices should cause the limiter to engage on peaks, not all the time. This causes the loudest peaks of the announcements to be leveled out so the Mic can be set louder than the music while still providing speaker protection.
- 6. In this example, stereo audio is maintained throughout. If a mono speaker system is required for a 70V system, DIP switch 9 sums the Inputs to a mono output. See other TSD-MIX42RT applications for examples of a mono 70V system.



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