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

DIP SWITCH SETTINGS:

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<td>INPUT</td>
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<td>DELAY</td>
<td>RCV</td>
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<td>LEVEL</td>
<td>EASY TO</td>
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TSD-MIX42RT

Set DIP switches

PAGING MIC

Optional remote volume for Chan 1, 2, 3

STEREO AUDIO SOURCES

Priority Over Ride Channel

STEREO AMPLIFIER

LINE COLOR KEY
- LINE LEVEL AUDIO SIGNAL
- LOUDSPEAKER LEVEL
- CONTROL SIGNAL
- MIC LEVEL AUDIO SIGNAL
- VIDEO
- GROUND
- 120V

DPA-102PM

LEFT

RIGHT

SM SERIES

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Specifications are subject to change without notice.
Overview:
This example illustrates how to use a TSD-MIX42RT as a 3 Stereo Input 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.