



LMR1S

Mic/Line Input Module with Remote Control

Features

- Input level control by remote pot or direct voltage input
- Line mode for high impedance input
- MIC Mode for low impedance input
- Electronically balanced input
- Gain/Trim control with Gain range switch
- Bass and treble
- 24V Phantom power
- Audio Gating
- Gating with threshold and duration adjustments
- Built-in limiter with LED activity indicator
- Fade back from mute
- 4 levels of available priority
- Can be muted from higher priority modules
- Can mute lower priority modules
- Screw terminal input

1. Gate - Threshold (Thresh)

Controls the amount of input signal level necessary to turn the module's signal output on and mute lower priority modules. Clockwise rotation increases the necessary input signal level required to produce audio output and mute lower priority modules.

2. Gate - Duration (Dur)

Controls the amount of time the signal output and priority muting of the module remains applied to the main unit's buses after the input signal falls below the required minimum signal level (set by the threshold control).

3. Limiter (Limit)

Sets the signal level threshold at which the mod-

ule will begin to limit the level of its output signal. An LED to the left of the knob illuminates when the limiter is active. Clockwise rotation of the knob will allow more output before limiting, counterclockwise rotation will allow less. The limiter monitors the module's output signal, so increasing Gain will affect when limiting takes place.

4. Gain

Provides control over the level of input signal that can be applied to the internal signal buses of the main unit. Balances the input levels of various devices so that the main unit controls can be set to relatively uniform or optimum levels. 18-60 dB Gain range in MIC position, -2 to 40 dB in Line position.

5. Treble (Treb)

The Treble control provides +/- 10 dB at 10 kHz. Clockwise rotation provides boost; counterclockwise rotation provides cut. Center position provides no effect.

6. Bass

The Bass control provides +/- 10 dB at 100 Hz. Clockwise rotation provides boost; counterclockwise rotation provides cut. Center position provides no effect.

7. MIC/Line In

MIC/Line level input on screw terminal strip. Electronically balanced input.

8. Remote Control

Input level can be controlled by direct voltage input or by remote 10K-ohm pot.



Jumper Selections

Priority Level*

This module can respond to 4 different levels of priority. Priority 1 is the highest priority. It mutes modules with lower priorities and is never muted. Priority 2 can be muted by Priority 1 modules and can mute modules set for Priority Level 3 or 4. Priority 3 can be muted by either Priority 1 or 2 modules and can mute Priority 4 modules. Priority 4 modules are muted by all higher priority modules. Remove all jumpers for "no mute" setting.

* The number of priority levels available is determined by the equipment the modules are used in.

Gating

Gating (turning off) of the modules output when insufficient audio is present at the input can be disabled. Detection of audio for the purpose of muting lower priority modules is always active regardless of this jumper setting.

Phantom Power

24V Phantom power can be supplied to condensor microphones when jumper is set to ON position. Leave OFF for dynamic mics.

Bus Assignment

This module can be set to operate so that the mono signal can be sent to the main unit's A bus, B bus, or both buses.

MIC/LINE Switch

Sets input gain range for the intended input device. MIC gain range 18 - 60 dB, LINE gain range -2 - 40 dB.

WARNING:

Turn off power to unit and make all jumper selections before installing module in unit.



Module Installation

- 1. Turn off all power to the unit.
- 2. Make all necessary jumper selections.
- 3. Position module in front of any desired module bay opening, making sure that the module is right-side up.
- 4. Slide module onto card guide rails. Make sure that both the top and bottom guides are engaged.
- 5. Push the module in to the bay until the faceplate contacts the unit's chassis.
- 6. Use the two screws included to secure the module to the unit.

Input Wiring

Balanced Connection

Use this wiring when the source equipment supplies a balanced, 3-wire output signal.

Connect the shield wire of the source signal to the "G" terminal of the input. If the "+" signal lead of the source can be identified,



connect it to the plus "+" terminal of the input. If the source lead polarity cannot be identified, connect either of the hot leads to the plus "+" terminal. Connect the remaining lead to the minus "-" terminal of the input.

Note: If polarity of the output signal versus the input signal is important, it may be necessary to reverse input lead connections.

Unbalanced Connection

When the source device provides only an unbalanced output (signal and ground), the input module should be wired with the "-" input shorted to ground (G). The unbalanced signal's shield wire is connected to the input module's ground and the signal hot wire is connected to the



"+" terminal. Since unbalanced connections do not provide the same amount of noise immunity that a balanced connection does, the connection distances should be made as short as possible.

Direct Voltage Control

Input level can be controlled by an external DC voltage source, which must be able to supply up to 1mA of current to the LMR1S. The attenuation level is linear with voltage. 4.5V or greater = 0 dB of attenuation (full volume) and 0V > 80 dB of attenuation. Distance from the source should be kept to 200 feet or less.

The CS+ terminal is not used in this configuration.





Note:

If no connections are made to the remote control, the LMR1S module defaults to 0 dB of attenuation (full volume).



Control Voltage Input (Volts DC)

Remote Control

These configurations use the included wall-mounted remote panel. Up to 2,000 feet of #24 wire can be run from the remote panel to the LMR1S.

Single Conductor Shieldes Remote Connections

The maximum wire run length for this configuration is 200 feet. Use one-conductor shielded wire for this configuration.



Note:

If no connections are made to the remote control, the LMR1S module defaults to 0 dB of attenuation.

Two-Conductor Shielded Remote Connections

This configuration is recommended when wire runs up to 2,000 feet are necessary. Use two-conductor shielded wire for this connection.



Note:

If no connections are made to the remote control, the LMR1S module defaults to 0 dB of attenuation.

Block Diagram





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