

## General Description

The Rane MLM 82 is an eight-input, two-output mic/line mixer. Inputs 1-4 are mic/line level switchable, and Inputs 5-8 accommodate up to four stereo or mono line level sources.

Inputs 1-4 are balanced XLR connectors for use with microphone or line level sources, split equally to both Outputs. Mic Phantom Power is provided by a switch on the rear of the unit. Recessed front panel switches convert each of these Inputs to Line level (an indicator lights to confirm this). Phantom power is removed from the Input whenever Line is selected.

Channels 5-8 are line level, accepting a mono balanced XLR Input, a 1/4" TRS balanced/unbalanced mono Line Input,

or a stereo pair of 1/4" TRS balanced/unbalanced Line Inputs. Automatic switching jacks determine whether a single input or stereo inputs are connected.

The microphone preamps in the MLM 82 have gain range trim combined with the Level control. The Level control adjusts the input dynamic range automatically as the Level is changed. There is no need for the typical gain trim controls found in complex mixers.

Left and Right Outputs feature Overload LEDs and Level controls. The recessed Mono switch is active when the LED is illuminated. Individual rear panel Output Level switches convert either Output to Mic or Line level.

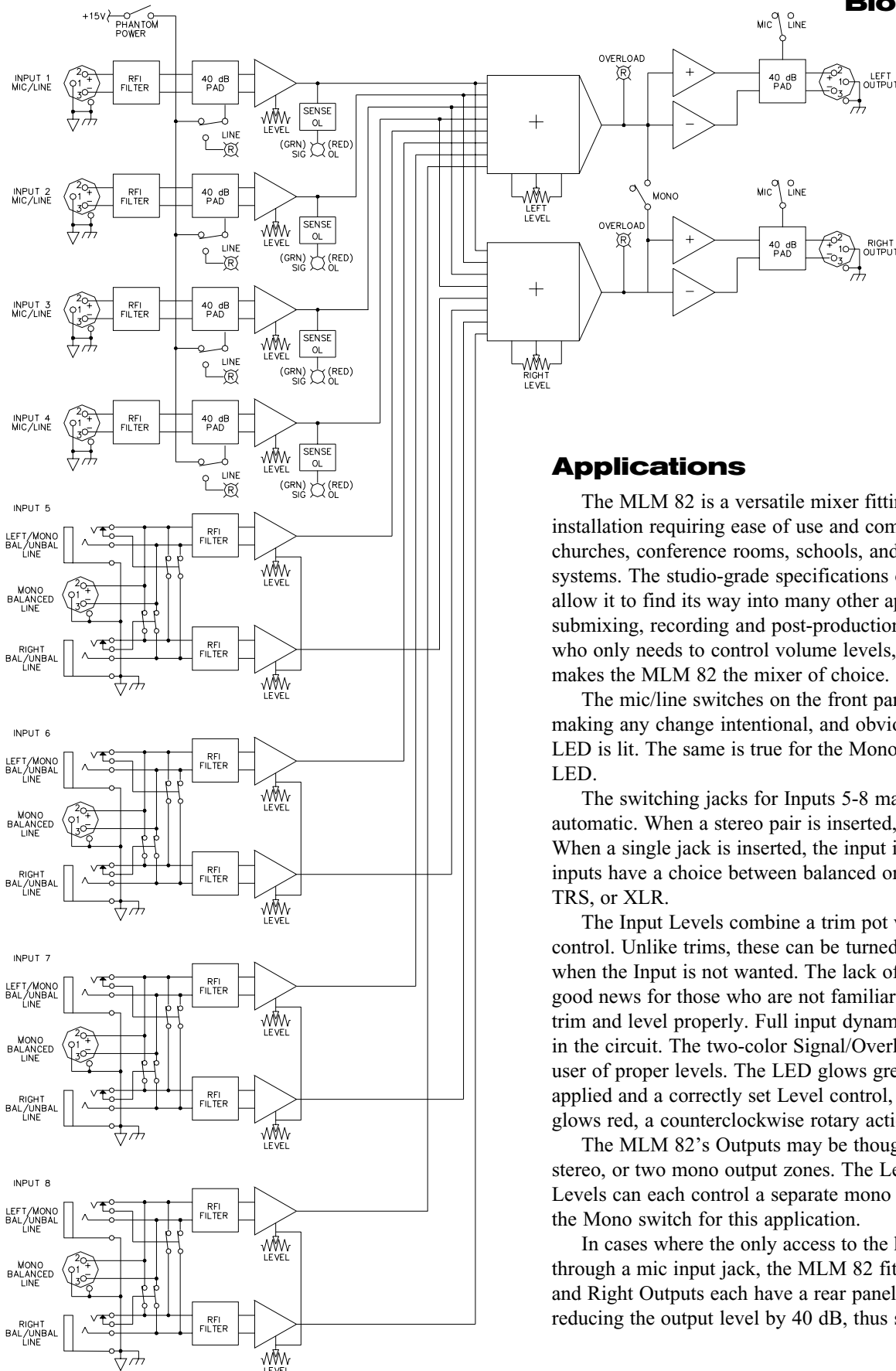
## Features

- Four Stereo/Mono Balanced/Unbalanced Line Inputs (1/4" TRS)
- Four Mono Balanced Line Inputs (XLR)
- Four Mono Balanced Mic/Line Inputs (XLR)
- Two Balanced Outputs (XLR)
- Outputs Switchable to Mic or Line Level
- Phantom Power Switch
- Trimless Mic Stage Preamps
- Stereo/Mono Switch
- Bi-Color Signal Present/Overload LEDs
- Studio Grade Low Noise Floor
- UL/CSA/CE and 100/120/230 VAC Remote Power Supplies



**Features and Specifications**

Parameter	Specification	Limit	Units	Conditions/Comments
Inputs: Type	Active Balanced			
.....Connectors	XLR & 1/4" TRS			
Mic Input Impedance	900		ohms	Balanced 450 + 450
.....Mic Gain Range	off to +60		dB	
.....Line Gain Range	off to +20		dB	
.....Equivalent Input Noise	-128		dBu	20 kHz bandwidth, 150 ohm termination
.....THD & Noise	0.02	max	%	
Stereo Line Input Impedance	20k		ohms	
.....Gain Range	off to +0		dB	
.....Signal-To-Noise Ratio	101		dB	Input Level max, Output at 0 dB
Outputs: Type	Active Balanced			
.....Connectors	XLR			Pin 2 "+"
.....Impedance	200/100		ohms	Line level Out/Mic level Out
.....Gain Range	Off to +6		dB	
.....Drive Level	+24		dBu	600 ohm load balanced
Phantom Power	+15		VDC	
Output Cable Length	1500		feet	Line level, <50 pf per foot
THD+Noise	0.005	0.002	%	
Frequency Response	10-150 kHz	-3	dB	
Crosstalk	75 @ 10 kHz	2	dB	re +4 dBu any Ch to any Ch, 20-20 kHz
Unit: Agency Listing				
.....120 VAC model	Class 2 Equipment UL CSA			National Electrical Code Exempt Class 2 equipment Exempt Class 2 equipment
.....230 VAC model	CE-EMC CE-Safety			EMC directive 89/336/EEC Exempt per Art. 1 of LVD 73/23/EEC Class 2 Equipment
Power Supply: Agency Listing				
.....120 VAC model	UL CSA			File no. E88261 File no. LR58948
.....230 VAC model	CE-EMC CE-Safety			EMC directive 89/336/EEC LV directive 73/23/EEC
Power Supply Requirement	18 VAC w/center tap	10%	Vrms	RS 1 (see data sheet)
.....Maximum Current	750		mA	RMS Current from Remote Supply
Unit: Construction	All Steel			
.....Size	1.75"H x 19"W x 5.3"D (1U)			(4.4 cm x 48.3 cm x 13.3 cm)
.....Weight	4 lb			(3 kg)
Shipping: Size	4.25" x 20.3" x 13.75"			(11 cm x 52 cm x 35 cm)
.....Weight	8 lb			(5 kg)
<i>Note: 0 dBu=0.775 Vrms</i>				



## Applications

The MLM 82 is a versatile mixer fitting well into any installation requiring ease of use and compact size: hotels, churches, conference rooms, schools, and rental sound systems. The studio-grade specifications of the MLM 82 allow it to find its way into many other applications such as submixing, recording and post-production. For the end user who only needs to control volume levels, the simplicity makes the MLM 82 the mixer of choice.

The mic/line switches on the front panel are recessed making any change intentional, and obviously Line when the LED is lit. The same is true for the Mono Output switch and LED.

The switching jacks for Inputs 5-8 make input mode automatic. When a stereo pair is inserted, the input is stereo. When a single jack is inserted, the input is mono. Mono inputs have a choice between balanced or unbalanced 1/4" TRS, or XLR.

The Input Levels combine a trim pot with a standard level control. Unlike trims, these can be turned completely off when the Input is not wanted. The lack of a trim control is good news for those who are not familiar with setting both a trim and level properly. Full input dynamic range is retained in the circuit. The two-color Signal/Overload LEDs alert the user of proper levels. The LED glows green with signal applied and a correctly set Level control, but when the LED glows red, a counterclockwise rotary action is requested.

The MLM 82's Outputs may be thought of as either stereo, or two mono output zones. The Left and Right Output Levels can each control a separate mono output zone. Depress the Mono switch for this application.

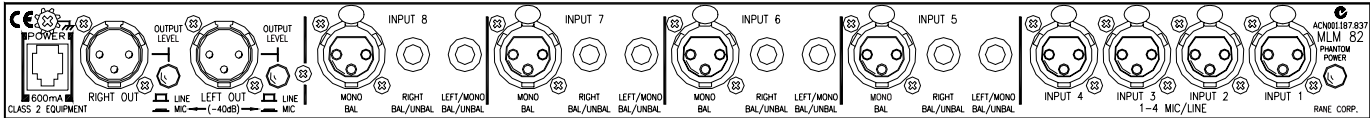
In cases where the only access to the house PA system is through a mic input jack, the MLM 82 fits right in. The Left and Right Outputs each have a rear panel Line/Mic switch, reducing the output level by 40 dB, thus saving the day.

# MLM 82

## MIC/LINE MIXER



### Rear Panel



### Architectural Specifications

The mixer shall have eight (8) balanced input channels with two (2) balanced outputs. Four (4) of these shall be microphone or line level switchable, and shall include overload indicators on each input. The remaining four (4) inputs shall be line level, accommodating stereo or mono signals.

The outputs shall be individually switchable to mic or line level. Individual output level controls and overload indicators shall be provided. The outputs shall be switchable

to mono or stereo operation.

15V Phantom power shall be provided for the microphone-selected inputs via a rear panel switch.

The unit shall be exempt from agency safety requirements and powered from a UL listed / CSA certified (120 VAC), or CE approved (230 VAC) remote power supply. The unit shall be constructed entirely from cold-rolled steel, and mount into a standard 19" 1U EIA rack.

*The unit shall be a Rane MLM 82 Mic/Line Mixer.*

### Available Accessories

- SC 1.7 Single Space Security Cover