



**RDL**<sup>®</sup>  
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## RACK-UP<sup>®</sup> SERIES

### Model RU-MX5ML

### Audio Mic/Line Mixer

- Mic or Line Level Audio Mixer
- Five Channel Audio Mixer with Expansion Capability
- Inputs and Outputs on Detachable Terminal Blocks
- Switchable 24 V Phantom for Each Mic Input
- Balanced Mic and Line Outputs
- Expansion Bussing Capability
- Output Level dual-LED VU Metering
- Studio-Quality, Low-Noise Performance



The RU-MX5ML is part of the group of RACK-UP products from Radio Design Labs. RACK-UPS feature the advanced circuitry for which RDL products are known, combined with accessible user-friendly controls and displays. The ultra compact design permits high-density installations, with *three* products mounted in a single rack unit! Single RACK-UPS can be mounted right where they are needed using the adhesive method popularized by RDL's STICK-ON<sup>®</sup> series of products. Optional brackets permit mounting a RACK-UP module above, below, or in front of any flat surface!

**APPLICATION:** The RU-MX5ML is the ideal choice in many applications where a combination of balanced mic and/or balanced or unbalanced line-level signals needs to be mixed with the ability for additional expansion. All connections are made using detachable terminal blocks on the rear panel. Four of the RU-MX5ML inputs can accept either mic or line inputs. The fifth input is for line level sources.

24 V phantom is individually switch selectable for each mic input. The output from one RU-MX5ML may connect to the **MIX** input of another RU-MX5ML to expand mixing capabilities. Up to three RU-MX5ML mixers may be rack mounted in a single rack unit using an RDL<sup>®</sup> RU-RA3HD rack adapter. The output section provides both a balanced line (+4 dBu) and balanced microphone level (-45 dBu) output. Both outputs may be used at the same time. Audio levels are adjustable on the front panel. The output is equipped with a front-panel dual-LED VU meter that follows standard VU ballistics. A green LED illuminates at 15 dB below +4 dBu. The intensity of the green LED progresses from minimum at -11 dBu to full intensity at +4 dBu. The adjacent red LED illuminates at +4 dBu.

Audio levels are adjustable on the front panel. A convenient label area is provided below each fader knob. A label tab included with the mixer may be professionally labeled using a commercial lettering machine, or the user may write on the tab. The tab locks into a pocket behind the front panel laminate to produce a professionally labeled appearance.

The RU-MX5ML operates from ground-referenced 24 Vdc external power, connected through a rear-panel detachable terminal block.

Wherever a mixer is needed to provide superior audio clarity, user adjustments, reliability, compactness and unsurpassed versatility, the RU-MX5ML is the ideal choice. Use the RU-MX5ML individually, or combine it with other RDL products as part of a complete audio/video system.



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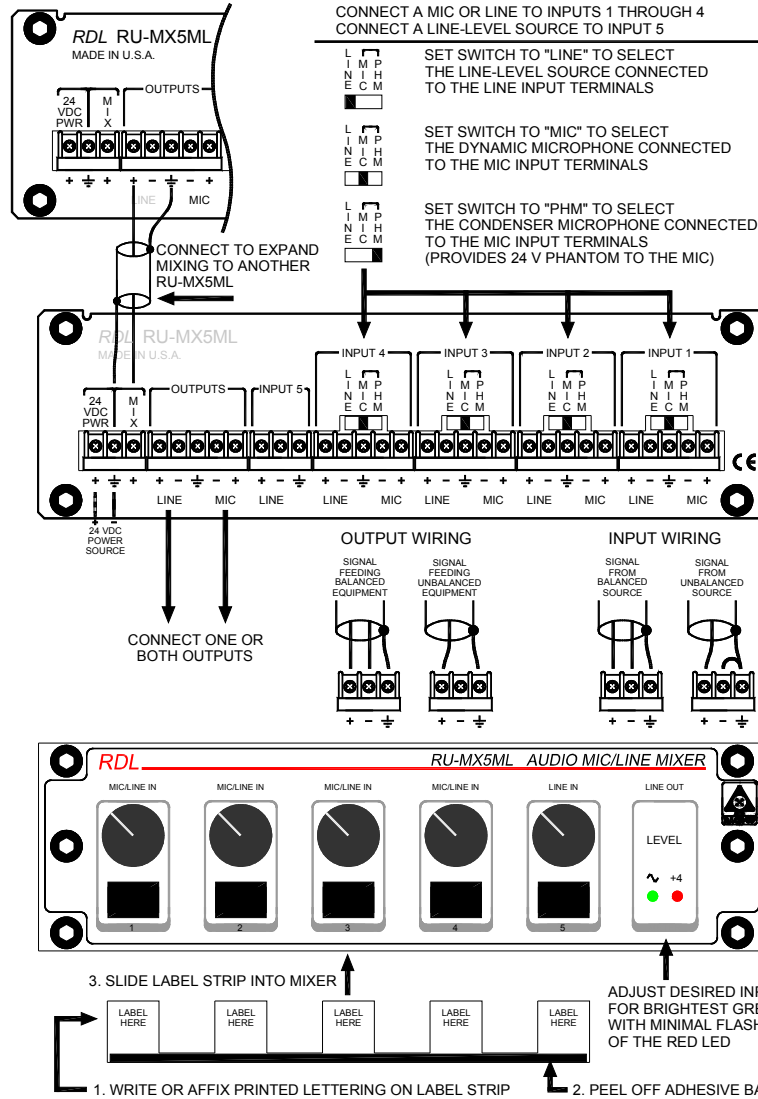


RACK-UP® SERIES  
Model **RU-MX5ML**  
Audio Mic/Line Mixer

# Installation/Operation



**EN55103-1 E1-E5; EN55103-2 E1-E4**  
Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



## TYPICAL PERFORMANCE

Inputs (6):	4 selectable mic or line level; 1 line level; 1 direct MIX; detachable terminal block	Noise:	< -70 dB below +4 dBu output (20 Hz to 20 kHz; all mic channels at 50 dB gain; or one mic channel active at 60 dB gain)
Input Impedance:	Mic: >1.2 kΩ balanced; Line: >10 kΩ balanced	CMRR:	< -90 dB below +4 dBu (20 Hz to 20 kHz; all channels off)
Maximum Input Level:	Mic: -20 dBu; Line: +24 dBu	Metering:	Mic: > -65 dB (10 Hz to 10 kHz); Line: > -45 dB
Phantom:	Switch-selectable 24 V (IEC 1938: 1996-12)	Power Requirement:	Dual-LED VU Meter (calibrated to +4 dBu)
Gain:	Mic: Off to 65 dB; Line: Off to 15 dB	Dimensions:	GROUND-REFERENCED, 24 Vdc @ 75 mA (120 mA max. including phantom); detachable terminal block
Outputs (2):	Mic: -45 dBu balanced; Line: +4 dBu balanced; detachable terminal block	Ambient Operating Environment:	Height: 1.7 in. 4.3 cm; Width: 5.8 in. 15.0 cm; Depth: 4.8 in. 12.2 cm
Output Impedance:	150 Ω balanced	Power Requirements:	0° C to 55° C
Frequency Response:	Mic: 80 Hz to 40 kHz (±1 dB, < -6 dB at 20 Hz with integral high-pass filter)		24 to 33 Vdc @ 65 mA, Ground-referenced
	Line: 10 Hz to 35 kHz (±0.5 dB)		
THD+N:	Mic: < 0.03%; Line: < 0.003%		
Headroom:	20 dB (above +4 dBu output)		

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