

RACK-UP® SERIES Model RU-MX4 Pro Audio Mic/Line Mixer

- Four Channel Audio Mixer
- XLR Microphone Inputs, Phono Line Inputs
- Switchable Phantom for Each Mic Input
- Mic or Line XLR Output, Switchable
- Unbalanced Line Output and Direct Input
- Studio Quality, Low-Noise Performance
- Integral Compressor/Limiter, Switchable
- Expansion Bussing Capability
- Output Isolation Transformer (RU-MX4T)



The RU-MX4 is part of the group of RDL RACK-UP products. The compact design permits high-density installations, with three products mounted in a single rack unit. The RU-MX4 may be used alone, or mounted using a wide variety of RACK-UP series options.

APPLICATION: The RU-MX4 is the ideal choice in many applications where a combination of balanced mic and/or unbalanced line-level signals needs to be mixed. All balanced connections are made through XLR connectors. Unbalanced signals are coupled through phono jacks.

Each of the four RU-MX4 inputs can accept either a balanced XLR mic or an unbalanced line-level phono input. Each **MIC** input accepts either a dynamic or a condenser microphone. A **PHANTOM** switch is located below each microphone input. These switches activate the phantom voltage and set the input preamplifier for the optimum gain range for the type of microphone. An integral high-pass filter rolls off frequencies below 80 Hz.

A separate unbalanced **DIRECT** input allows an external audio source to be summed directly into the mix amplifier, bypassing the front-panel input level controls. The unbalanced phono jack **LINE OUTPUT** from one RU-MX4 may connect to the unbalanced input of other equipment, or may be connected to the **DIRECT** input of another RU-MX4 to expand mixing capabilities. Up to 3 RU-MX4 mixers may be rack mounted in a single rack unit using a rack adapter. A power interconnect cable is supplied with each RU-MX4 allowing the rack mounted mixers to run from a single 24 Vdc power supply.

The RU-MX4 provides one balanced output, switchable for mic or line level. The balanced XLR output and the unbalanced phono jack output may be used at the same time.

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 tabs lock into a pocket behind the front panel laminate to produce a professionally labeled appearance.

Each input channel is equipped with a front-panel dual-LED VU meter that follows standard VU ballistics. A green LED illuminates at 15 dB below the optimum input gain, becoming progressively brighter with increasing audio level. The adjacent red LED illuminates when the input gain exceeds the correct operating level.

The final mix is displayed on an LED string VU meter featuring a visually comfortable arc motion. The outputs may be fed directly from the final mix, or may be routed through the integral compressor/limiter. A rear-panel switch allows the soft-knee compressor to be switched in or out. When active, the compressor/limiter begins acting as signals exceed 6 dB below the normal output level, and maintain an average +4 dBu output level for excessive signal levels up to 20 dB. An optional security cover (RU-MX4SC) is available to prevent user access to the rear panel switches. The RU-MX4 is electronically balanced. A factory installed output isolation transformer is available by ordering the RU-MX4T.

Wherever a mixer is needed to provide superior audio clarity, user adjustments, reliability, compactness and unsurpassed versatility, the RU-MX4 is the ideal choice.



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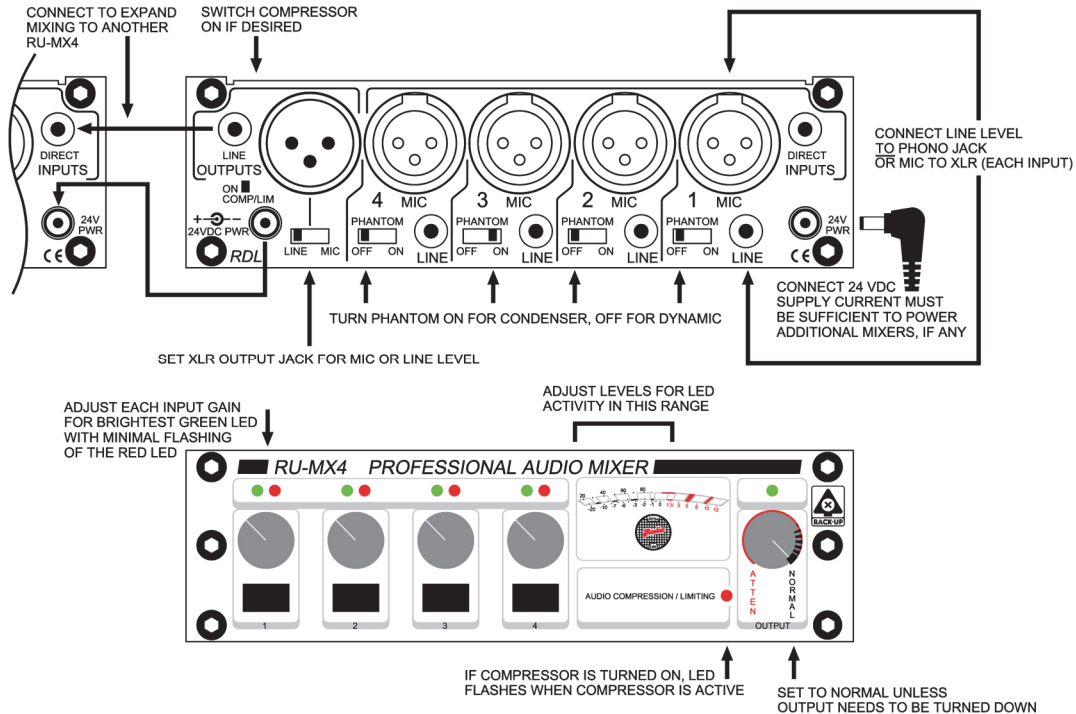
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RACK-UP® SERIES
Model RU-MX4
Pro Audio Mic/Line Mixer

Installation/Operation

CE Declaration of Conformity available from rdlnet.com.
Sole EMC specifications provided on product package.
Specifications are subject to change without notice.



TYPICAL PERFORMANCE

Microphone Inputs (4):	2 kΩ balanced, switchable 24 V phantom (IEC 61938: 2013)
Mic Input Level for +4 dBu output:	-58 to -20 dBu (PHANTOM OFF or ON HI gain) -41 to -4 dBu (PHANTOM ON LO gain)
Line Inputs (4):	2 kΩ unbalanced
Line Input Level:	-25 dBV to +20 dBV for +4 dBu output; -10 dBV nominal
Gain Adjustments (5):	Mic: Off to 62 dB gain (PHANTOM OFF); Off to 62 dB gain (PHANTOM ON HI GAIN); Off to 46 dB gain (PHANTOM ON LO GAIN)
Output Attenuator:	Line: Off to 27 dB gain
Frequency Response:	0 dB to infinity
THD+N:	80 Hz to 30 kHz (+/- 1.5 dB), <-10 dB @ 20 Hz (integral high-pass filter)
Residual Noise (below +4dBu output):	20 Hz to 30 kHz (+/- 0.25 dB)
40dB Gain, LO GAIN :	< 0.1% (80 Hz to 20 kHz)
50dB Gain, HI GAIN :	< 0.02%
60dB Gain, HI GAIN :	4 line level sources (unity gain): < -82 dB (wideband)
Outputs (2):	Mic: -79 dB; all 4 mic level sources: < -73 dB (wideband); < -76 dB ("A" weighted)
Indicators (18):	Mic: -79 dB; all 4 mic level sources: < -73 dB (wideband); < -76 dB ("A" weighted)
	Mic: -70 dB; all 4 mic level sources: < -64 dB (wideband); < -66 dB ("A" weighted)
	+4 dBu 150 Ω balanced (switchable MIC or LINE); -10 dBV unbalanced
	Dual-LED VU meter for each input
	COMPRESSION/LIMITING active LED
	POWER LED
	8-segment bar mode string LED audio mix level meter, 0 dB = +4 dBu
	VU ballistic: -20 dB, -10 dB, -6 dB, -2 dB, 0 dB, +3 dB; Peak reading: +8 dB, +12 dB
Power Requirement:	24 Vdc @ 150 mA, Ground-referenced
Overall Dimensions:	Height: 1.7 in. 4.3 cm
	Length: 5.8 in. 15.0 cm

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