

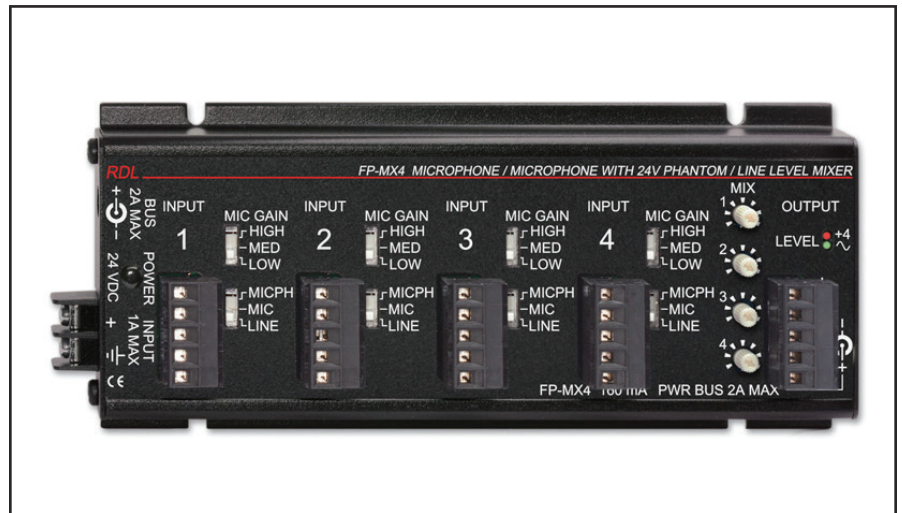


RDL®

High Performance Audio Products. Made in America.

FLAT-PAK™ SERIES Model FP-MX4 Mic / Line Mixer

- Four Channel Audio Mixer
- Balanced Microphone and Line Inputs
- Balanced Microphone and Line Outputs
- Switch Selectable 24 V Mic Phantom
- Three Switch Selectable Mic Gain Ranges
- Studio Quality, Low Noise Performance
- Convenience of RDL FLAT-PAKs



APPLICATION: The FP-MX4 is the ideal choice in many applications requiring mixing of microphone and line level sources at preset levels. Power connections are made using either the full-size barrier block terminals or a dc power jack located in one end panel. A second dc power jack is provided on the other end panel for connecting additional FLAT PAK modules.

The FP-MX4 is a single channel audio mixing module featuring four identical inputs. Each input section has a detachable terminal block, a source selection switch and a microphone gain switch. The output section provides four mixing potentiometers corresponding to the four inputs, a detachable terminal block for the audio outputs and a level indicator.

Either microphone or line level audio is connected to each input terminal block. Each input may be wired balanced or unbalanced. The source switch selects from three inputs types: **LINE** (line level at +4 dBu), **MIC** (microphone level without phantom), **MICPH** (microphone level with 24 V phantom). For either microphone input setting, a separate **MIC GAIN** switch selects: **LOW** (35 dB – 45 dB), **MED** (45 dB – 55 dB), **HIGH** (55 dB – 65 dB). Separate source and gain switches are provided for each input channel, allowing any combination of 4 sources to be used simultaneously. The microphone inputs feature RDL's exclusive low noise discrete preamplifier stage providing performance usually reserved for studio equipment.

The four mixing potentiometers are intended to be set at installation or to be adjusted occasionally. The shafts may be adjusted either using a small screwdriver or manually without any tools. Any unused channel may be turned completely off. 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.

Output level adjustment is simplified by the dual LED output meter which 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. The audio may be adjusted for maximum intensity of the green LED. Flashing of the red LED is equivalent to a VU meter needle swinging above the 0 level.

The FP-MX4's low profile and compact size permit mounting in confined spaces and in various locations in equipment racks. The location of the input/output jacks permits high-density mounting against flat surfaces while maintaining accessibility to the connectors. The wide variety of input signal levels and internal selectable phantom powering make the FP-MX4 ideal in diverse installations. The FP-MX4 may be mounted where needed, to rack sides or in an equipment rack (either the front or rear rack rails) using the RDL FP-RRR. Use the FP-MX4 individually, or combine it with other RDL products as part of a complete audio/video system.



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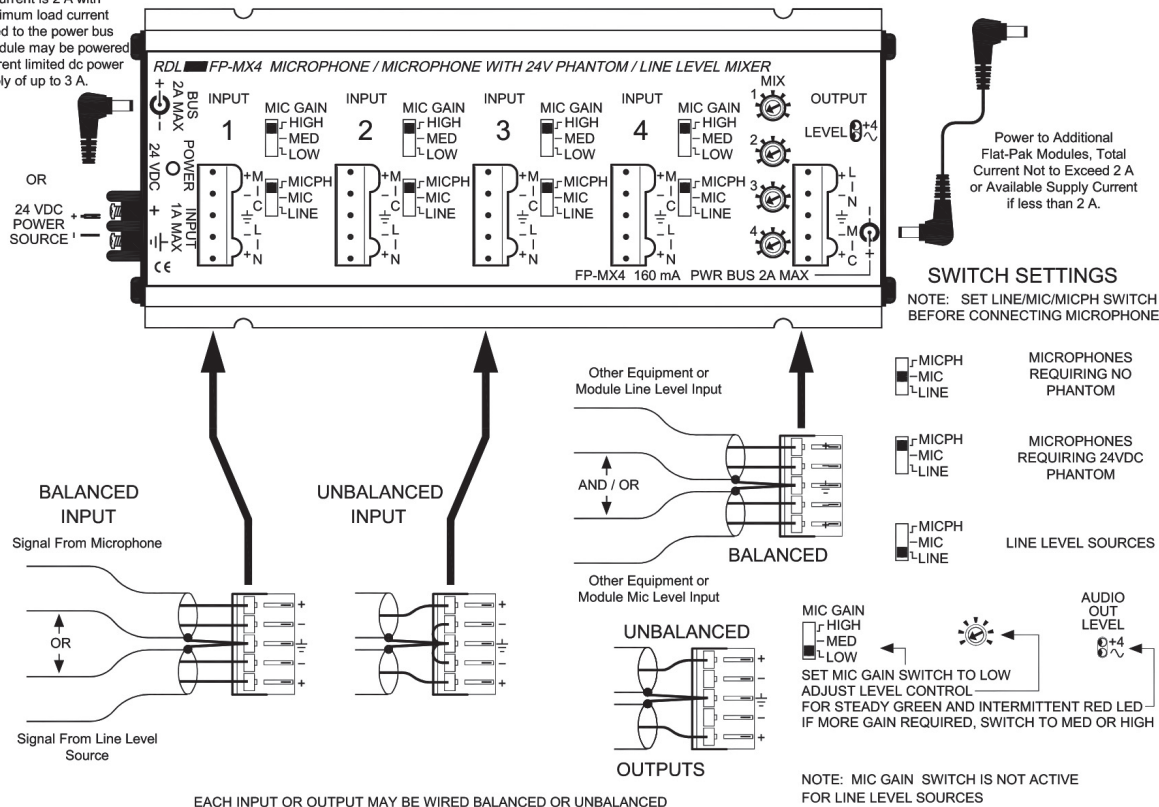
FLAT-PAK™ SERIES Model FP-MX4 Mic / Line Mixer

Installation/Operation



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

The maximum required input current is 2 A with the maximum load current connected to the power bus output. Module may be powered from a current limited dc power supply of up to 3 A.



TYPICAL PERFORMANCE

Microphone Inputs (4):
Microphone Input Level:
Line Inputs (4):
Line Input Level:
Gain Adjustments (4):
Frequency Response:

2 k Ω balanced, switchable 24 V phantom (IEC 61938: 2013)
Switch selectable ranges: -30 to -40 dBu, -40 to -50 dBu, < -50 dBu
10 k Ω balanced (may be wired unbalanced)
+4 dBu
Mic: Off to 65 dB gain (max. gain range); line: Off to 6 dB gain

THD+N:

Mic: 10 Hz to 30 kHz (+/- 0.25 dB)
Line: 10 Hz to 45 kHz (+/- 0.25 dB)

Residual Noise (below +4dBu output):

4 line level sources (unity gain): < -84 dB (wideband)
40dB Gain: Mic: -90 dB; all 4 mic level sources: < -82 dB (wideband); < -84 dB ("A" weighted)
50dB Gain: Mic: -86 dB; all 4 mic level sources: < -72 dB (wideband); < -76 dB ("A" weighted)
60dB Gain: Mic: -80 dB; all 4 mic level sources: < -65 dB (wideband); < -67 dB ("A" weighted)

Outputs (2):

Line: +4 dBu 150 k Ω balanced; mic: -45 dBu 150 k Ω balanced

Indicators (2)

Audio level meter

Power Requirement:

24 Vdc @ 160 mA, Ground-referenced

Overall Dimensions:

Height: 1.42 in. 3.61 cm
Width: 3.25 in. 8.26 cm
Length: 8.14 in. 20.68 cm

Safety Instructions/Consignes de sécurité/
Instrucciones de seguridad/Sicherheitshinweise:



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