



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

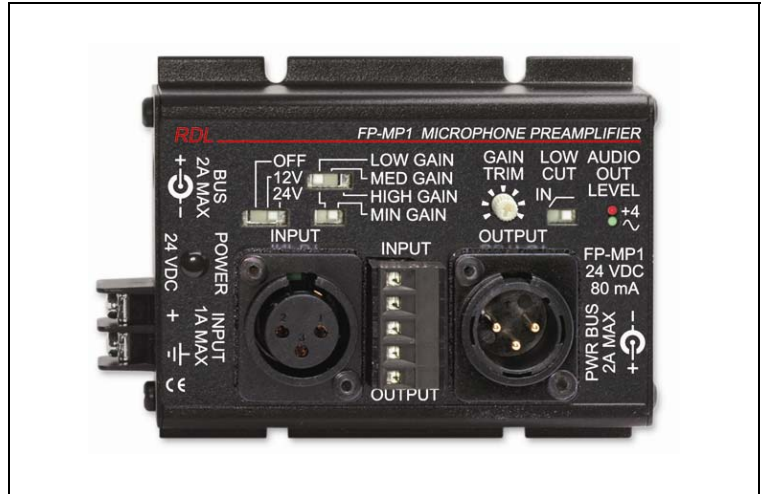
## FLAT-PAK™ SERIES

### Model FP-MP1

### Microphone Preamp

#### ANYWHERE YOU NEED...

- Professional Low Noise Performance
- Switchable Internal Phantom Voltage
- XLR and Terminal Block Connections
- Selectable Input Level Ranges
- Adjustable Gain with LED Metering
- Ultra-Compact All Metal Construction
- Convenience of RDL FLAT-PAKS



#### You Need The FP-MP1!

The FP-MP1 is part of the group of versatile FLAT-PAK products from Radio Design Labs. The unique FLAT-PAK case can be directly screwed or bolted to cabinets or shelves. Optionally available rack-mounting accessories permit single or multiple FLAT-PAK module mounting. All FLAT-PAK modules are supplied with a power interconnect cable for daisy-chaining multiple modules from a single power supply.

**APPLICATION:** The FP-MP1 is the ideal choice in most applications where mic to line preamplification is desired. 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-MP1 features an XLR microphone input jack and an XLR line level output. The module also provides a plug-in terminal block for direct wiring to the input and output. A front-panel switch permits the installer to direct phantom voltage to the input connectors. This 3-position switch provides **24V**, **12V** or **PHANTOM OFF**. Two switches select the input gain range thereby permitting the connection of standard or high output level microphones. A low frequency roll-off filter is selected by another front-panel switch. Each of these switches is recessed to avoid inadvertent actuation. Final gain adjustment is set using a front-panel single turn trimmer while observing the LED output level meter. The dual LED output meter follows standard VU ballistics. The intensity of the green LED progresses from minimum at -11 dBu to full intensity at +4 dBu. Flashing of the red LED is equivalent to a VU meter needle swinging above the **0** level.

RDL's exclusive low noise discrete preamplifier circuitry produces studio quality low noise performance in an economical preamplifier. The XLR and plug-in terminal block connections make the FP-MP1 the ideal choice for both rack mounted hardwired installations and remote use with standard audio cables. The FP-MP1's low profile and compact size permit mounting in confined spaces and in various locations in equipment racks. Standard rack mounting is accomplished using the RDL FP-RRA Rack Adapter. The location of the input/output jacks permits high density mounting against flat surfaces while maintaining accessibility to the connectors.

Wherever a high quality microphone preamplifier is needed to provide reliability, compactness and unsurpassed versatility, the FP-MP1 is the ideal choice. Use the FP-MP1 individually, or combine it with other RDL products as part of a complete audio/video system.

## FLAT-PAK™ SERIES

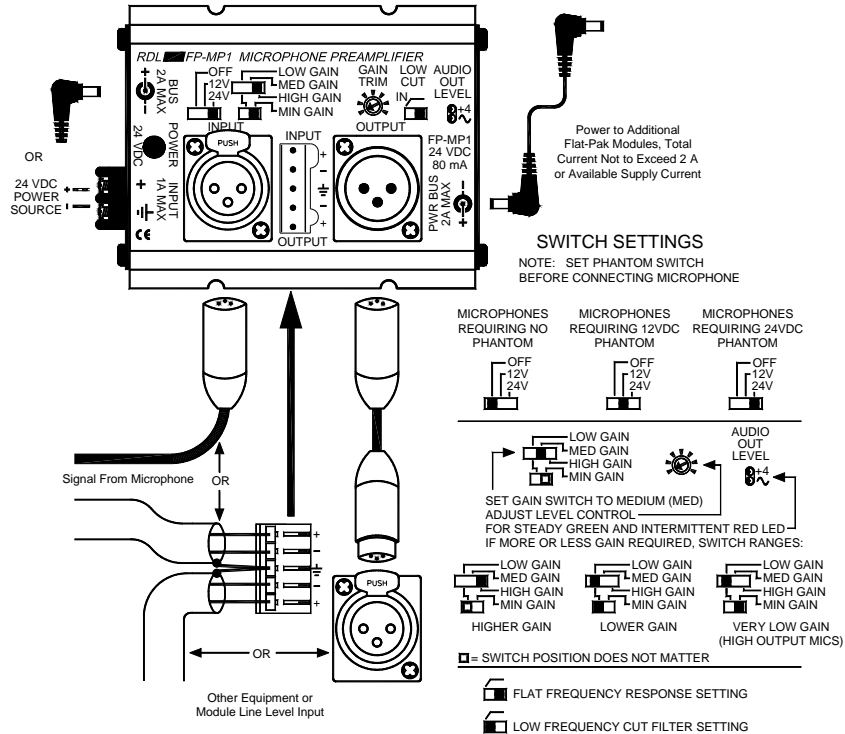
### Model FP-MP1

### Microphone Preamplifier

## 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

Input Impedance:	3 k $\Omega$ (balanced)
Gain Range (4):	MIN: 19 dB to 38 dB (switch selectable) LOW: 26 dB to 45 dB (switch selectable) MED: 36 dB to 55 dB (switch selectable) HIGH: 46 dB to 65 dB (switch selectable)
Input Clipping Level:	+4 dBu
Headroom:	20 dB (above +4 dBu)
Low-Cut Filter:	80 Hz, 6 dB/octave (switch selectable)
Phantom Voltages:	12 V, 24 V (switch selectable)
Phantom Voltage and Buildout Standard:	IEC 1938: 1996-12
CMRR:	> 60 dB (100 Hz to 5 kHz)
Frequency Response:	20 Hz to 20 kHz (+/- 0.2 dB)
THD + N:	< 0.1% (+4 dBu, all gain settings)
IMD:	< 0.1%
Noise:	< -70 dB (below +4 dBu @ 60 dB gain – wideband) < -72 dB (below +4 dBu @ 60 dB gain – A weighted) < -80 dB (below +4 dBu @ 50 dB gain – wideband) < -130 dB (gain + residual noise below +4 dBu)
Equivalent Input Noise:	
Connector type:	XLR female (input); XLR male (output); 5 position plug-in terminal block (input and output)
Audio Level Indicators (2):	Red LED: Output level > +4 dBu Green LED: -10 to +4 dBu (variable intensity)
Power Requirement:	24 Vdc @ 100 mA, Ground-referenced
Overall Dimensions:	Height: 1.42 in. 3.61 cm Width: 3.25 in. 8.26 cm Length: 4.64 in. 11.79 cm