



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## RACK-UP<sup>®</sup> SERIES

### Model RU-MDA3

### Microphone Distribution Amp

#### ANYWHERE YOU NEED...

- XLR In/Out Microphone Distribution Amp
- Gain-Trim on Input
- Stand Alone or Rack Mountable Mic DA
- Front or Rear Panel Input
- Selectable Phantom Power on Input
- RF Filtered Inputs

#### *You Need The RU-MDA3!*



The RU-MDA3 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 mounting 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-MDA3 is the ideal choice where connectorized mic-level audio distribution is needed. The input may be strapped to provide phantom power through the standard XLR input connector. Input connections are also provided on the rear-panel full-sized barrier strip. The outputs are 150  $\Omega$  balanced, designed to drive short or long lines. Outputs are driven through XLR connectors on the front panel. When rack-mounted, a microphone signal may be hardwired to the unit's rear-barrier strip inside the rack, while the 3 outputs are available for XLR plugs on the front. Both the front-panel input XLR connector and the rear-panel input terminals are active at all times.

Gain-trim is provided on a front-panel control, accommodating a wide variety of dynamic or condenser microphones. The knurled adjustment is provided with a screwdriver slot so the gain-trim may be adjusted by hand or by screwdriver. Audio output connections may be wired unbalanced, as needed in certain systems. Individual outputs are isolated from each other so a mic-level signal *back-fed* into one output will not be present at the other outputs!

XLR input and output connectors are firmly attached to a steel front-panel for superior mechanical integrity. The 24 Vdc power supply input is provided on full-sized barrier strip connections on the rear panel. The RU-MDA3 may be operated on 12 Vdc with a decrease in headroom.

Wherever 1 in by 3 out connectorized microphone distribution with gain trim is needed to provide superior audio clarity, user adjustments, reliability, compactness and unsurpassed versatility, the RU-MDA3 is the ideal choice. Use the RU-MDA3 combined with other RDL RACK-UP, STICK-ON, TX™, or FLAT-PAK™ series products as part of a complete audio/video system.



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™



# RACK-UP<sup>®</sup> SERIES

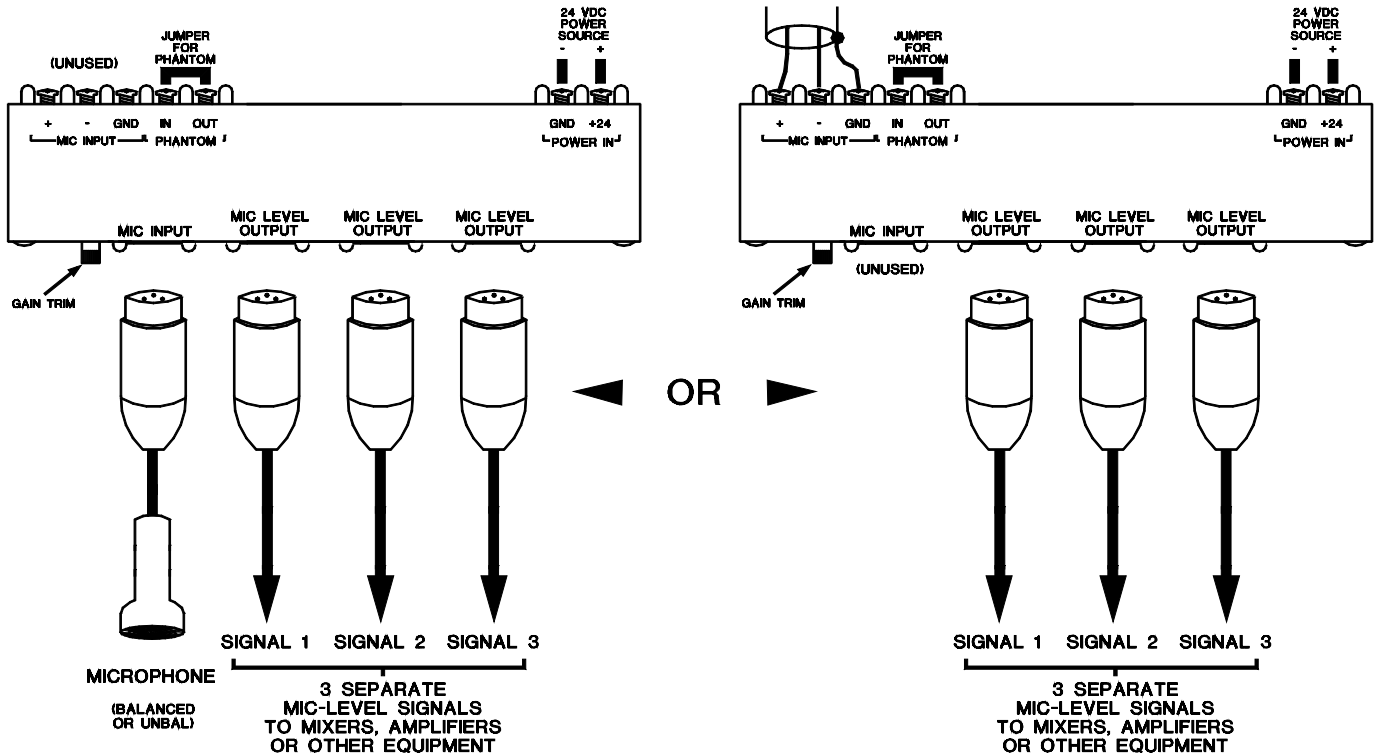
## Model RU-MDA3

### Microphone Distribution Amp

## 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.



**AUDIO INPUT:** The + and - balanced audio signal enters the unit through the front-panel XLR connector, or through the rear-panel barrier strip. Inputs are normally set up for dynamic mics (no phantom). If phantom power is desired, simply jumper the **PHANTOM** terminals on the barrier strip. Unbalanced audio may be connected to the + terminal, with the unbalanced shield connected to both the - and **GND** terminal (Pin 1).

**AUDIO OUTPUTS:** The + and - balanced audio signals from the mic driver amplifier are brought out to the front panel XLR connectors. The ground pin (Pin 1) of each of these XLRs is connected to circuit ground.

**PHANTOM VOLTAGE:** The RU-MDA3 provides filtered phantom voltage at 24 Vdc. (If the module is operated from a lower supply voltage, then the phantom will be the supply voltage.) If a microphone is used which required a greater phantom voltage, such as 48 volts, then an external phantom supply may be connected across the **PHANTOM-IN** terminal and the **GND** terminal.

#### TYPICAL PERFORMANCE

Input Connector:	Female XLR (3 pin), barrier strip
Input Impedance:	Matches 150 to 600Ω balanced microphones
Output Connectors:	Male XLR (3 pin)
Output Impedance:	150 Ω balanced
Gain Trim:	-5 dB to +15 dB (Front panel adjustable)
Frequency Response:	25 Hz to 20 kHz (+/- 0.5 dB)
THD+N:	< 0.050%
CMRR:	> 60 dB
Noise:	< -75 dB below -50 dBV output (reference 150 Ω source; unity gain)
Headroom:	> 18 dB
Power Requirement:	24 to 33Vdc @ 35 mA, Ground-referenced

Radio Design Labs Technical Support Centers  
U.S.A. (800) 933-1780, (928) 778-3554; Fax: (928) 778-3506  
Europe [NH Amsterdam] (+31) 20-6238 983; Fax: (+31) 20-6225-287