



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## RACK-UP<sup>®</sup> SERIES Model RU-AFC2 Stereo Audio Format Converter

- Unparalleled Audio Performance
- Unbalanced to Balanced Audio Conversion
- Additional Summed MONO Out
- Switch-Selectable Ground Lift for XLR Output Jacks
- Balanced to Unbalanced Audio Conversion
- Unbalanced RCA Connections on Front Panel
- Balanced XLR Connections on Front Panel
- Balanced Connections on Rear Panel Detachable Terminal Blocks
- Front-Panel Multi-Turn LEVEL Trimmers
- Dual-LED VU Meter for Each Channel
- Gold-Plated Connectors
- Exceptional Headroom and Frequency Response
- 1/3 Rack, High Density Rack Mounting



The RU-AFC2 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. Optional brackets permit mounting a RACK-UP module above, below, or in front of any flat surface.

**APPLICATION:** The RU-AFC2 is a stereo bi-directional audio format converter. The bi-directional format allows the RU-AFC2 to fully convert the stereo input and stereo output of a consumer audio product to professional balanced standards. It can equally convert the stereo input and stereo output of a professional audio product to consumer unbalanced standards. The audio fidelity, low noise, low distortion and excellent crosstalk performance of the RU-AFC2 are ideally suited to the most critical applications. The RU-AFC2 has been carefully engineered in meticulous detail to provide the ultimate audio interface package available.

Unbalanced audio connections are available on front-panel RCA jacks. Balanced audio connections are available on front-panel XLR jacks and on rear-panel detachable terminal blocks. The shield connections of the XLR output jacks are connected to the case through a rear-panel ground-lift switch. The unbalanced to balanced section includes an additional MONO summed output on a rear-panel detachable terminal block which may be wired balanced or unbalanced. The mono output may be used to drive patch-bay jacks, powered monitors or subwoofer amplifiers.

Each of the left and right outputs is equipped with a dual-LED VU-meter. The intensity of the green LED is proportional to the audio level. The red LED flashes at the calibrated output level, -10 dBV unbalanced or +4 dBu balanced. An individual multi-turn level trimmer is provided on the front panel for each output channel.

The RU-AFC2 operates from ground-referenced 24 Vdc. Use the RU-AFC2 individually, or combine it with other RDL products as part of a complete audio/video system.



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

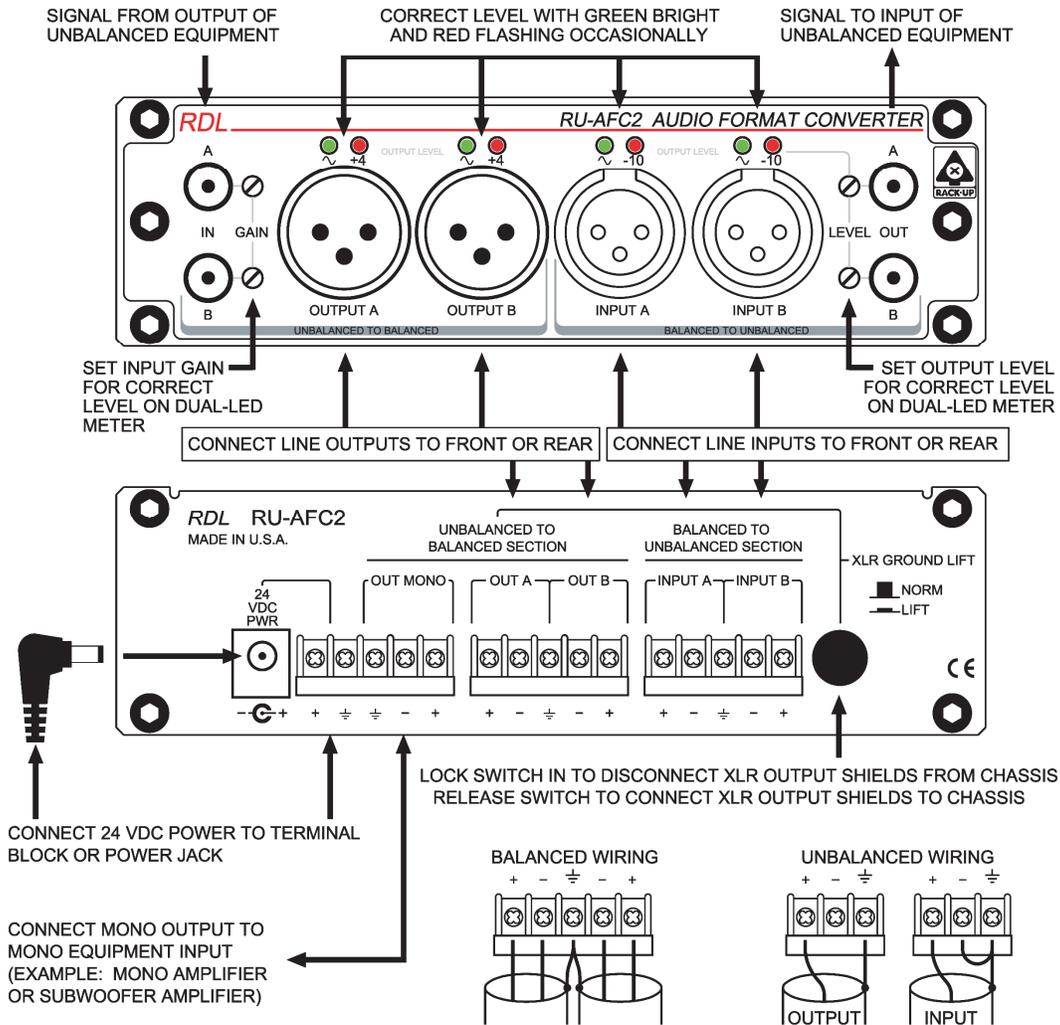


**RACK-UP® SERIES**  
**Model RU-AFC2**  
**Stereo Audio Format Converter**

**Installation/Operation**



Declaration of Conformity available from [rdlnet.com](http://rdlnet.com).  
Sole EMC specifications provided on product package.  
Specifications are subject to change without notice.



**TYPICAL PERFORMANCE**

Unbal to Bal Section:

Inputs (2): Unbalanced line-level, +25 dBV max.  
Input Connectors (2): RCA Phono jack (left and right)  
Outputs (3): +4 dBu balanced (left, right, mono sum), +25 dBu max.  
Output Connectors (4): XLR (2) and/or detachable terminal block (left and right); detachable terminal block (mono sum)  
Gain adjustment: -25 dB to +9 dB (rel. +4 dBu)  
Frequency Response: 10 Hz to 150 kHz (+/- 0.25 dB)  
THD+N: < 0.005%  
Noise: < -90 dB (below +4 dBu)  
Crosstalk: < -80 dB (20 Hz to 20 kHz)  
Headroom: > 20 dB

Bal to Unbal Section:

Inputs (2): Referred to +4 dBu input feeding -10 dBV  
Input Connectors (3): Balanced line-level, +25 dBu max.  
Outputs (2): XLR (2) or detachable terminal block (left and right)  
Output Connectors (2): -10 dBV unbalanced (left and right), +17 dBu max.  
Level adjustment: RCA Phono jack (left and right)  
CMRR: -28 dB to +5 dB (rel. -10 dBV)  
Frequency Response: > 80 dB (50 to 120 Hz)  
THD+N: 10 Hz to 150 kHz (+/- 0.25 dB)  
Noise: < 0.001%  
Crosstalk: < -100 dB (below -10 dBV)  
Headroom: < -90 dB (10 Hz to 20 kHz)  
> 20 dB

Power Requirement: GROUND-REFERENCED, 24 Vdc @ 60 mA (idle), 100 mA (max)  
Ambient Operating Environment: 0° C to 55° C

**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**