

RACK-UP® 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.





RACK-UP[®] SERIES Installation/Operation Model RU-AFC2 Stereo Audio Format Converter 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. SIGNAL FROM OUTPUT OF CORRECT LEVEL WITH GREEN BRIGHT SIGNAL TO INPUT OF UNBALANCED EQUIPMENT AND RED FLASHING OCCASIONALLY UNBALANCED EQUIPMENT RU-AFC2 AUDIO FORMAT CONVERTER RD \bigcirc \bigcirc $^{\circ}$ $^{\circ}$ C -10 • 0 Ø . IN 0 0 0 0 LEVEL OUT GAIN 0 Ο • 0 0 OUTPUT A OUTPUT B INPUT A INPUT B в SET INPUT GAIN SET OUTPUT LEVEL FOR CORRECT FOR CORRECT LEVEL LEVEL ON DUAL-LED ON DUAL-LED METER METER CONNECT LINE OUTPUTS TO FRONT OR REAR CONNECT LINE INPUTS TO FRONT OR REAR RDL RU-AFC2 UNBALANCED TO BALANCED TO MADE IN U.S.A. UNBALANCED SECTION BALANCED SECTION XLR GROUND LIFT OUT MONO OUT A OUT B INPUT A - INPUT B NORM 24 VDC PWR $oldsymbol{eta}$ 0 C C ß Ø ස 0 හ 0 0 ß ß CE Ô -C-+ 4 ÷ + + _ ÷ + LOCK SWITCH IN TO DISCONNECT XLR OUTPUT SHIELDS FROM CHASSIS RELEASE SWITCH TO CONNECT XLR OUTPUT SHIELDS TO CHASSIS CONNECT 24 VDC POWER TO TERMINAL BLOCK OR POWER JACK BALANCED WIRING UNBALANCED WIRING ÷ 88 00 88 മ \square 0 CONNECT MONO OUTPUT TO MONO EQUIPMENT INPUT (EXAMPLE: MONO AMPLIFIER OR SUBWOOFER AMPLIFIER) **TYPICAL PERFORMANCE** Unbal to Bal Section: (Referred to -10 dBV input feeding +4 dBu) Bal to Unbal Section: (Referred to +4 dBu input feeding -10 dBV) Inputs (2): Unbalanced line-level, +25 dBV max. Inputs (2): Balanced line-level, +25 dBu max.

Input Connectors (2): Outputs (3): Output Connectors (4): Gain adjustment: Frequency Response: THD+N:

Frequency Response THD+N: Noise: Crosstalk: Headroom: detachable terminal block (mono sum) -25 dB to +9 dB (rel. +4 dBu) 10 Hz to 150 kHz (+/- 0.25 dB) < 0.005% < -90 dB (below +4 dBu) < -80 dB (20 Hz to 20 kHz) > 20 dB

+4 dBu balanced (left, right, mono sum), +25 dBu max. XLR (2) and/or detachable terminal block (left and right);

RCA Phono jack (left and right)

Power Requirement: GROUND-RE Ambient Operating Environment: 0° C to 55° C

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

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Input Connectors (3):

Output Connectors (2):

Frequency Response:

. Level adjustment:

Outputs (2):

CMRR:

THD+N:

Crosstalk:

Headroom:

Noise:

XLR (2) or detachable terminal block (left and right)

-10 dBV unbalanced (left and right), +17 dBV max.

RCA Phono jack (left and right)

-28 dB to +5 dB (rel. -10 dBV)

10 Hz to 150 kHz (+/- 0.25 dB)

< -100 dB (below -10 dBV)

< -90 dB (10 Hz to 20 kHz)

> 80 dB (50 to 120 Hz)

< 0.001%

> 20 dB