



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

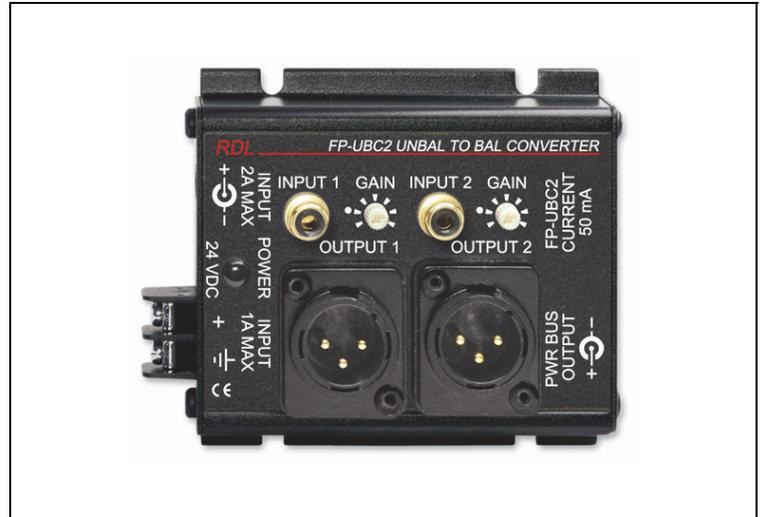
SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## FLAT-PAK™ SERIES

### Model FP-UBC2

### Unbalanced to Balanced Converter

- Stereo Unbalanced to Balanced Audio Conversion
- Connectorized Audio Converter
- Low Noise and Distortion
- Cabinet, Shelf or Rack Mounting
- Convenience of RDL FLAT-PAKs



The FP-UBC2 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-UBC2 is the ideal choice for connectorized conversion from unbalanced to balanced audio. This module features two identical channels. Gold-plated phono jacks are utilized for each unbalanced input channel. Each output is balanced, connected through an XLR jack. A gain trim potentiometer is provided for each channel.

The normal gain setting is indicated for the trimming potentiometer. This setting produces a +4 dBu balanced output for a -10 dBV unbalanced input. The gain is adjustable -5 dB to +10 dB from the normal gain. Therefore, a +4 dBu output signal is possible from input signals ranging from -20 dBV to -5 dBV.

The FP-UBC2 circuitry features low noise, low distortion, excellent headroom and crosstalk performance and the superior audio clarity for which RDL products are known.

Power may be connected to the FP-UBC2 through either a terminal block or a dc power input jack. The input voltage to the module is carried through to an output dc jack permitting additional modules to be powered from the same power supply.

Wherever convenient, economical, high performance, connectorized two-channel audio format conversion is required, the FP-UBC2 is the ideal choice. Use the FP-UBC2 individually, or combine it with other RDL RACK-UP®, STICK-ON®, TX™, or FLAT-PAK series products as part of a complete audio/video system.

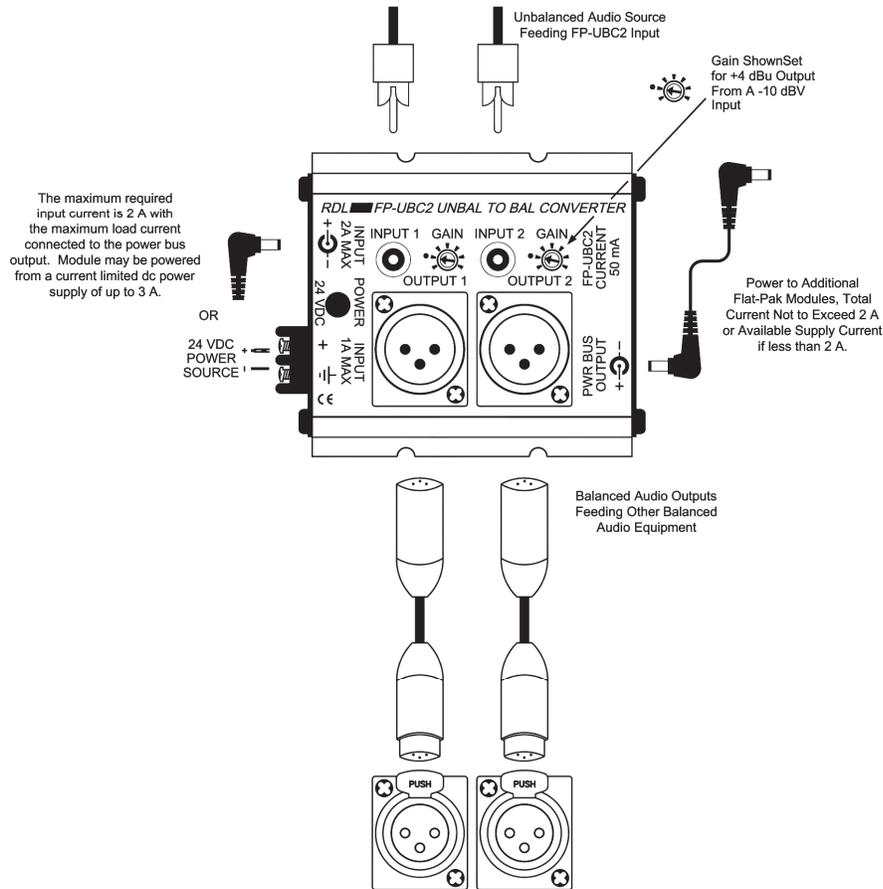
# FLAT-PAK™ SERIES

## Model FP-UBC2

### Unbalanced to Balanced Converter

## Installation/Operation

**CE** 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

Amps per FP-UBC2:  
Gain:

Input level:  
Input impedance:  
Input configuration:  
Output impedance:  
Output configuration:  
Frequency Response:  
THD+N:  
IMD:  
Output Level:  
Headroom:  
Noise:  
Crosstalk:  
Power Requirement:  
Overall Dimensions:

2 identical circuits (stereo or dual mono operation)  
-5 dB to +10 dB adjustable (relative to +4 dBu output for -10 dBV input);  
(separate controls for each channel)  
-20 dBV to -5 dBV (for +4 dBu output)  
10 kΩ  
Unbalanced  
150 Ω balanced, drives 600 Ω or 10 kΩ lines  
Balanced or unbalanced  
20 Hz to 40 kHz (+/- 0.25 dB)  
Better than -70 dB (20 Hz to 20 kHz); typ <-80 dB (1 kHz)  
< 0.05%; typ. 0.01% (1 kHz)  
< 0.02%  
+4 dBu  
> 18 dB (at rated output level of +4 dBu)  
< -85 dB referred to +4 dBu (20 Hz to 20 kHz)  
24 Vdc @ 50 mA, Ground-referenced  
Height: 1.29 in. 3.28 cm  
Width: 3.25 in. 8.26 cm  
Length: 4.07 in. 10.34 cm

Radio Design Labs Technical Support Centers

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