



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## FLAT-PAK™ SERIES

### Model FP-UBC6

### Unbalanced to Balanced Converter

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



The FP-UBC6 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-UBC6 is the ideal choice for multiple channel connectorized conversion from unbalanced to balanced audio. This module features six identical channels, making it ideally suited to converting consumer 6-channel surround sound into the professional audio format. Each input channel is unbalanced, connected through a gold plated phono jack. 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-UBC6 circuitry features low noise and distortion, excellent headroom and crosstalk performance and the superior audio clarity for which RDL products are known.

Power may be connected to the FP-UBC6 through either a terminal block or a dc power input jack. The input voltage to the module is carried through to the output dc jack permitting additional modules to be powered from the same power supply.

Wherever convenient, economical, high performance six channel audio format conversion is required, the FP-UBC6 is the ideal choice. Use the FP-UBC6 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

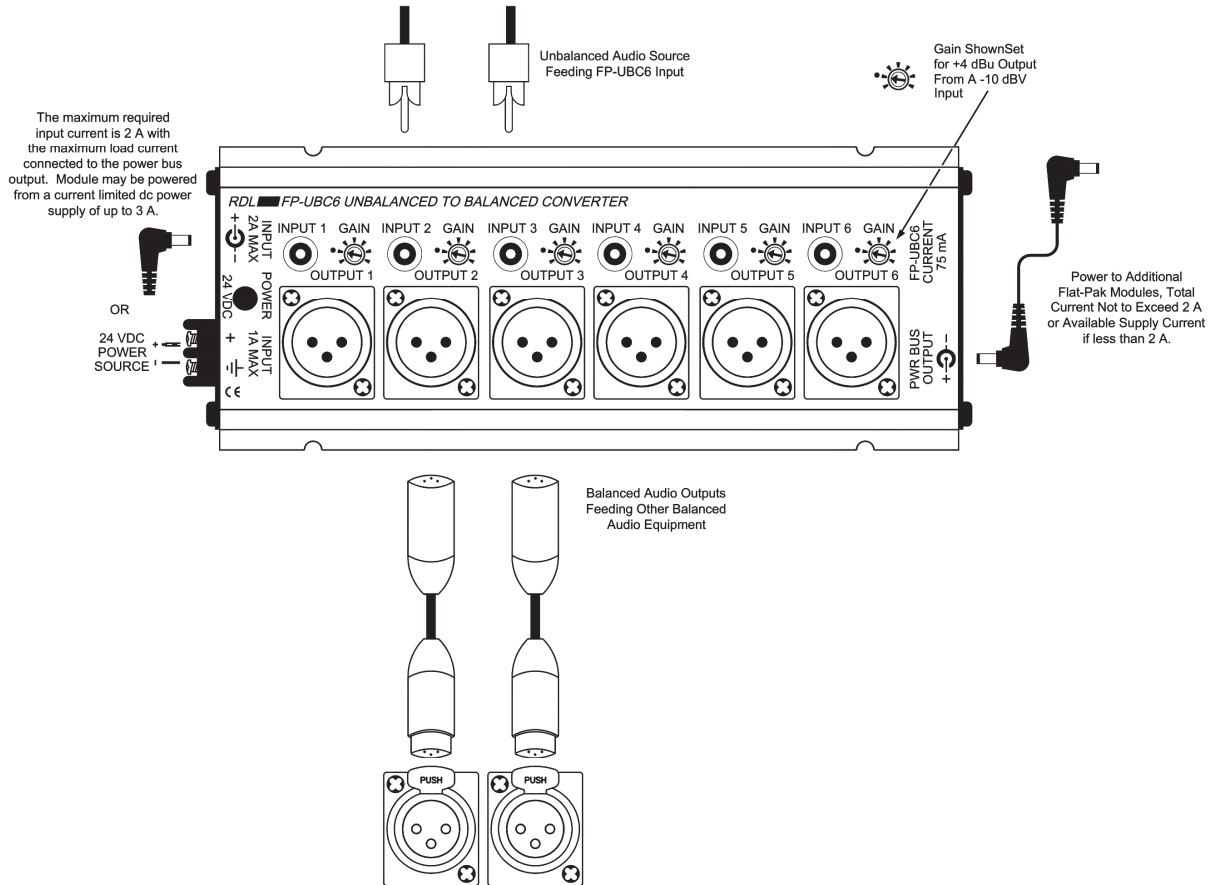
## Model FP-UBC6

### Unbalanced to Balanced 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

Amps per FP-UBC6:  
Gain:

Input level:  
Input impedance:  
Input configuration:  
Output impedance:  
Output configuration:  
Frequency Response:  
Total Harmonic Distortion:  
IMD:  
Output Level:  
Headroom:  
Noise:  
Crosstalk:  
Power Requirement:  
Overall Dimensions:

6 identical circuits  
-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 k $\Omega$   
Unbalanced  
150  $\Omega$  balanced, drives 600  $\Omega$  or 10 k $\Omega$  lines  
Balanced or unbalanced  
20 Hz to 40 kHz (+/- 0.25 dB)  
< 0.05%; typ. 0.01% (1 kHz)  
< 0.02%  
+4 dBu  
> 18 dB (at rated output level of +4 dBu)  
< -90 dB referred to +4 dBu (20 Hz to 20 kHz)  
Better than -80 dB (20 Hz to 20 kHz)  
24 Vdc @ 75 mA, Ground-referenced  
Height: 1.29 in. 3.28 cm  
Width: 3.25 in. 8.26 cm  
Length: 8.55 in. 21.72 cm

Radio Design Labs Technical Support Centers

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