



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## FLAT-PAK™ SERIES Model FP-DFC2 Digital Format Converter

### ANYWHERE YOU NEED...

- Conversion from SPDIF to AES/EBU
- Conversion from AES-3ID to AES/EBU
- Exclusive **SURE-LOK™** Auto-Recovery
- Automatic Sample Rate Detection
- Coaxial or Optical Input
- Valid Signal **LOCK** LED Indicator
- Transformer Isolated Output
- Full Operation up to 24 bit / 192 kHz
- Cabinet, Shelf or Rack Mounting

### **You Need The FP-DFC2!**

The FP-DFC2 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.

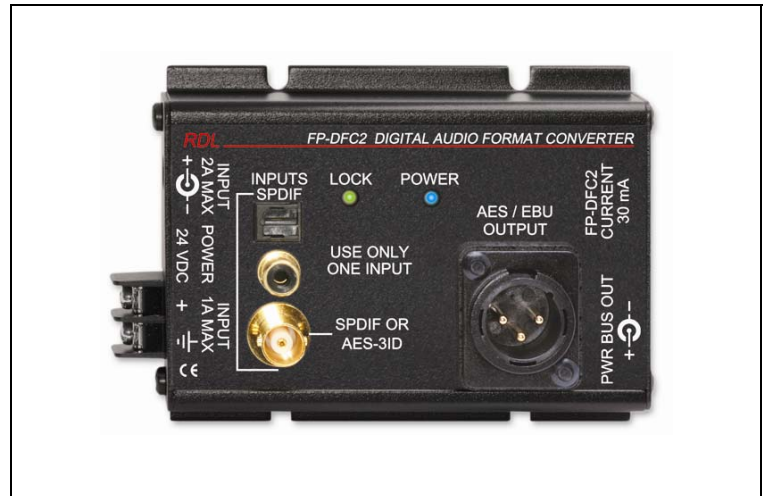
**APPLICATION:** The FP-DFC2 is the ideal choice in many applications where an SPDIF source must be connected to AES/EBU professional digital audio equipment. The digital input and output connections are made on the top panel jacks. Power connections are made using either the full-size barrier block terminals or a dc power jack located in an end panel. A second dc power jack is provided on the other end panel for connecting additional Flat-Pak modules.

Three jacks are provided for SPDIF inputs: Phono, BNC and Optical. The BNC jack can also receive an AES-3ID signal. Any one of these input jacks may be used. The AES/EBU output connects through an XLR jack. The electrical output is transformer isolated. The input signal is decoded and reassembled in the AES/EBU format. All header information common to both SPDIF and AES/EBU standards is inserted in the output data stream. An LED indicator is illuminated when a valid, locked digital input signal is being converted to the output.

A frequent problem encountered with consumer and professional quality digital audio equipment is unpredictable latch-up when digital signals are switched or connected to a digital input. **SURE-LOK™** auto-recovery circuitry unique to the FP-DFC2 monitors the most frequent causes of latch-up and reinitiates digital signal lock, bringing a new higher level of stability to digital audio format conversion under the variety of conditions encountered in professional environments.

The FP-DFC2 has several unique features which set it apart from other professional converter devices: 1] All header information common to both formats is provided in the AES/EBU output, not just selected information. 2] Anti-latch-up control circuits provide highly stable operation. 3] The electrical output is transformer isolated. 4] The FP-DFC2's design permits it to be easily mounted, particularly in confined spaces and in various locations in equipment racks.

Wherever convenient, economical, high performance digital audio format conversion is required, the FP-DFC2 is the ideal choice. Use the FP-DFC2 individually, or combine it with other RDL products as part of a complete audio/video system.



# FLAT-PAK™ SERIES

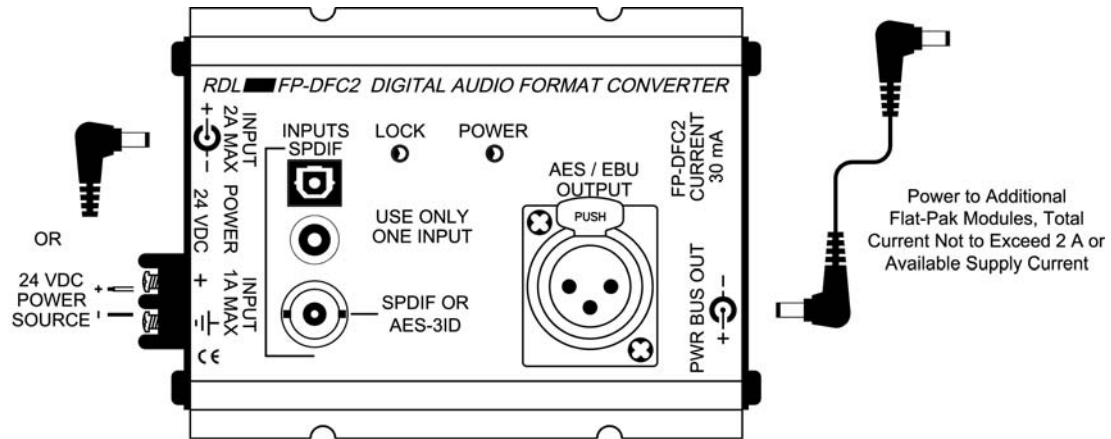
## Model FP-DFC2

### Digital Format Converter

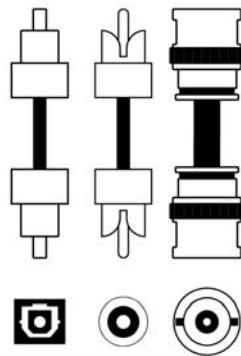
## Installation/Operation



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.



Consumer SPDIF Source  
Use only one of the available inputs at a time



Professional AES/EBU Outputs to Other AES/EBU Equipment

### TYPICAL PERFORMANCE

Inputs (3):	75 Ω, SPDIF (phono or BNC) or optical, AES-3ID (BNC)
Output:	AES/EBU balanced XLR transformer isolated
Sample Rate:	32 kHz to 192 kHz
Resolution:	16 to 24 bits
Standards:	IEC958, SPDIF and EIAJCP340/1201; AES3-1992 Amendment 3-1999
Indicators (2):	LED <b>LOCK</b> indicator (locked to a valid signal); <b>POWER</b>
Power Requirement:	24 Vdc @ 30 mA, Ground-Referenced
Overall Dimensions:	Height: 1.34 in. 3.40 cm
	Width: 3.25 in. 8.26 cm
	Length: 4.81 in. 12.22 cm

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rule. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.