

# BUC 102

TWO CHANNEL BALANCED AND  
UNBALANCED AUDIO CONVERTER

**VERSA**<sup>®</sup>  
TOOLS

- Balanced and unbalanced stereo audio conversion
- Audio line driver
- Professional and consumer audio interfacing
- Variable gain controls
- Input and output captive screw connectors
- Versatile mounting options



The Extron BUC 102 provides signal matching between balanced and unbalanced equipment, and serves as an audio line driver. Compatible with professional and consumer audio devices, the BUC 102 can be used to transmit and receive audio over long distances.



**Extron® Electronics**

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# DESCRIPTION

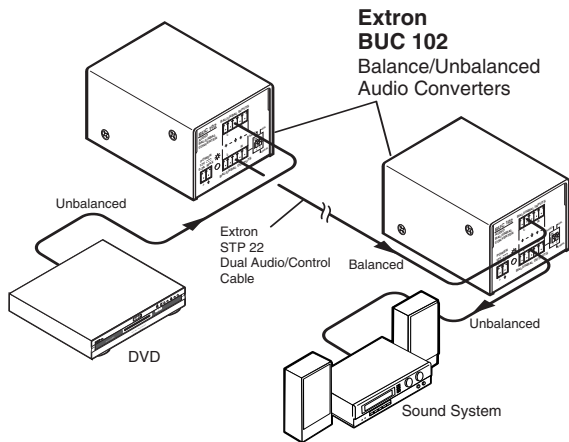
The Extron **BUC 102** Balanced and Unbalanced Audio Converter provides signal matching between unbalanced and balanced audio equipment. In addition to serving as an interface between professional A/V systems and consumer products, the BUC 102 is a high-quality line driver for sending and receiving audio signals over long distances.

Inputs and outputs for the BUC 102 are on captive screw connectors. User controls include variable gain adjustments and a gain compensation switch to maintain consistency between consumer and professional audio levels. Part of the VersaTools® line of small, economical, integrator friendly products, the BUC 102 is housed in a 1U, one-eighth rack width metal enclosure.

# FEATURES

- **Active audio circuitry** – Active, op amp-based circuitry provides wide frequency response, low noise, immunity to interference (EMI), and the ability to drive signals over long cables.
- **Captive screw connections** – Audio inputs and outputs are on captive screw connectors for easy installation.
- **Professional and consumer audio levels** – The BUC 102 enables correct interfacing of consumer and professional equipment with proper gain offsets.
- **Variable gain controls** – Independent gain control (mute to +20 dB) on each channel allows for precise level adjustment and provides signal boost for long runs.
- **Flexible mounting options** – The BUC 102 is housed in a 1U, one-eighth rack width metal enclosure and can be mounted under or through a desk or in a rack.
- **External international power supply** – The supplied autoswitchable external power supply provides worldwide power compatibility (part # 70-055-01).

# APPLICATION DIAGRAM



# SPECIFICATIONS

## AUDIO

Gain .....	Unity (0dB) when the BUC 102 is set to the default gain adjustment and the DIP switch is set to match the output wiring.
Gain adjustment range.....	Mute to +20dB, when DIP switch is set to match the output wiring.
Frequency response .....	20 Hz to 20 kHz, <math>\pm 0.15\text{dB}</math>
THD + Noise .....	0.05% @ 1 kHz at nominal level
S/N (unweighted) .....	>90dB, bal., at maximum output,
Stereo channel separation .....	>80dB @ 1 kHz, >60dB @ 20 kHz
CMRR.....	>72dB @ 20 Hz to 20 kHz

## AUDIO INPUT

Number/signal type .....	1 set of stereo, bal./un bal.
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole
Impedance .....	>20k ohms un bal., 40k ohms bal., DC coupled
Nominal level.....	-10 dBV (316 mVrms) or +4dBu (1.23 Vrms)
Maximum level .....	+20dBu (7.75 Vrms), bal. or un bal., at 1%THD+N, 0dB gain

NOTE: 0dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV  $\approx$  2dBu.

## AUDIO OUTPUT

Number/signal type .....	1 set of stereo, bal./un bal.
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole
Impedance .....	100 ohms un bal., 50 ohms bal.
Gain error.....	$\pm 0.5\text{dB}$ channel to channel
Nominal level.....	-10 dBV (316 mVrms) or +4dBu (1.23 Vrms)
Maximum level (Hi-Z) .....	>+25dBu (13.78 Vrms), bal., at 1%THD+N with 100k ohm load
Maximum level (600 ohm).....	>+18dBu (6.16 Vrms), bal., at 1%THD+N (The level of an un bal. signal will be 6dB lower.)

## GENERAL

External power supply .....	100VAC to 240VAC, 50/60 Hz, 5 watts, external, autoswitchable; to 12 VDC, 1 A, regulated
Power input requirements .....	12VDC, 0.2 A
Rack mount .....	Yes, with optional rack shelf, part #60-190-01, 60-604-01, 60-190-20, or 60-604-20. Also furniture-mountable with optional under-desk mounting kit #70-212-01, or it can be attached to a projector mount with optional kit #70-217-01.
Enclosure type .....	Metal
Enclosure dimensions .....	1.7" H x 2.2" W x 3.0" D (1U high, one-eighth rack wide) 4.3 cm H x 5.6 cm W x 7.6 cm D (Depth excludes connectors.)
Product weight .....	0.2 lbs (0.1 kg)
Shipping weight.....	2 lbs (0.9 kg)
Listings .....	UL, CUL
Compliances .....	CE, FCC Class A, VCCI, AS/NZS, ICES

NOTE: All nominal levels are at  $\pm 10\%$ , and all specifications are tested at unity gain unless otherwise noted.

Model	Part Number
BUC 102 .....	60-651-01

Specifications are subject to change without notice.



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