CLEANBoxPro

Two Channel Pro/Consumer Level Converter

ARTcessories

The CLEANBoxPro provides two channels of unbalanced to balanced level conversion and two channels of balanced to unbalanced level conversion in a rugged, compact, and portable unit. Balanced lines offer increased immunity to external electrical noise, such as hum. Since a balanced system minimizes induced noise, it is the preferred method of connecting audio gear, especially when long lengths of cable are used.

One section of the CLEANBoxPro converts two channels of consumer-level unbalanced input signals into two channels of pro line-level balanced output signals. It has two RCA jack inputs and a stereo mini-phone jack input connected in parallel. The balanced output feeds two XLR male jacks.

The other section of the CLEANBoxPro converts two channels of line-level balanced input signals into two channels of consumer unbalanced output signals. It has two XLR female input jacks. The unbalanced output feeds two RCA jacks and a stereo mini-phone jack connected in parallel.

Each section has stereo level controls to optimize signal levels. An LED indicator lights when power is applied.

The CLEANBoxPro can be an invaluable tool in application areas including (but not limited to!): home or professional recording studios, live sound, PA, permanent installs, DJ, AV, consumer HiFi, podcasting and broadcasting. The CLEANBoxPro can be used with: mixers, audio processors, laptop computers, computer sound cards, CD/DVD players, video gaming machines, MP3 player/recorders, powered monitors and digital audio workstations.

FEATURES:

- XLR connectors for balanced inputs and outputs
- RCA phono jacks and stereo 1/8" mini-phone jacks for unbalanced inputs and outputs
- Unbalanced **output** level control
- Balanced **output** level control

- Rugged extruded aluminum case
- Lighted On/Off switch
- Comes with external power supply for operation with AC mains
- Low noise, low distortion circuitry

SPECIFICATIONS:

Frequency Response	20 Hz – 20 kHz, ± 1 dB
Total Harmonic Distortion	< .01% @ 1 kHz
Signal to Noise Ratio	> 90 dB
Common Mode Rejection Ratio	> 40 dB
Input Impedance	
Balanced	20k Ohms
Unbalanced	100k Ohms
Output Impedance	
Balanced	100 Ohms
Unbalanced	300 Ohms
Maximum Gain	
Balanced to Unbalanced	-6 dB
Unbalanced to Balanced	+21 dB
Maximum Input Level	+21 dBu
Maximum Output Level	
Balanced	+21 dBu
Unbalanced	+15 dBu
Power	7.5-12 V AC/DC, < 150 mA
Dimensions	1.85 H x 4.6 W x 4.3 D (in)
	47 H x 117 W x 109 D (mm)
Weight	1.10 lbs / 0.50 kg
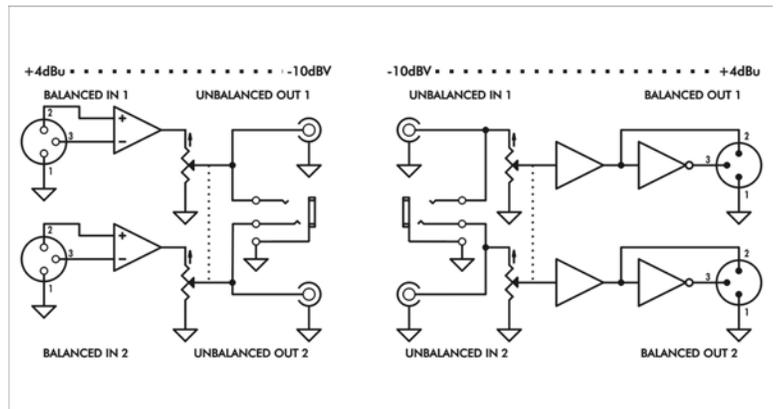
INSTALLATION and OPERATION:

Unbalanced-to-Balanced: RCA / mini-phone to XLR

1) Connect the left and right stereo outputs of the consumer audio unit (CD/DVD player, MP3 player, computer sound card, etc.) to the CLEANBoxPro's **-10dBV UNBALANCED INPUT 1** & **2** RCA connectors or to the **–10 dBV UNBAL INPUT** 1/8" phone jack, using the appropriate cable.
2) Connect the CLEANBoxPro's **+4dBu BALANCED OUTPUT 1** & **2** male XLR connectors to the balanced inputs of the pro audio unit (e.g. a power amplifier or two channels of a mixer) with two low-impedance balanced XLR cables.
3) With power applied, adjust the **BALANCED OUTPUT LEVEL** control as required for best signal strength and clarity.

Balanced-to-Unbalanced: XLR to RCA / mini-phone

1) Connect the left and right balanced outputs from your pro audio unit (e.g. mixer or processor) to the CLEANBoxPro's **+4dBu BALANCED IN 1** & **2** female XLR connectors with two low-impedance balanced XLR cables.
2) Connect the CLEANBoxPro's **-10dBV UNBALANCED OUTPUT 1** & **2** RCA connectors or **–10 dBV UNBAL OUTPUT** 1/8" phone jack to the left and right inputs on your consumer audio unit (computer sound card, digital recorder, stereo sound system, etc.) with the appropriate cable.
3) With power applied, adjust the **UNBALANCED OUTPUT LEVEL** control for best signal strength and clarity.

Inline Balanced or Unbalanced Level/Gain Control

1) Loop **unbalanced outputs** to **unbalanced inputs** to provide an inline **balanced** level / gain control.
2) Loop **balanced outputs** to **balanced inputs** to provide an inline **unbalanced** level / gain control.