SESCOM HUMBUCKET Built with IL-19 Hum Eliminating Isolation Transformers User Manual

DESIGNED BY AUDIO ENGINEERS FOR AUDIO ENGINEERS
SES-HUMBUCKET
All-In-One Hum Eliminator Built with IL-19
Hum Eliminating Isolation Transformers

Contents

DESCRIPTION

The Sescom Humbucket is an all-in-one hum eliminator built to eliminate hum in any and all of your applications! The Sescom Humbucket uses our famous Sescom hum eliminating isolation transformer, as found in the classic line of IL-19 devices. These transformers are known for complete transparency through the entire audio band, while effectively isolating signals from the issues that can cause ground loops. The Humbucket also allows for connector and signal conversion from balanced to unbalanced and from unbalanced to balanced for your various applications. Hand assembled in the US by Sescom engineers.

FEATURES

- Built with Famous IL-19 Hum Eliminating Isolation Transformers
- Transparency Throughout the Entire Audio Band
- Removes Ground Loops
- Allows for Connector and Signal Conversion from Balanced to Unbalanced and from Unbalanced to Balanced
- Device type: Passive, Transformer-Balanced
- Number of Channels: Up to 4 Simultaneous (2 Balanced, 2 Unbalanced) | Up to 2 Simultaneous in Bridge Mode (Converting Balanced/Unbalanced)
- Connectors:
  - Inputs: XLR-F/ ¼” TRS Combo Jack x2; RCA x2; 3.5mm TRRS x1; 3.5mm TRS x1
  - Outputs: XLR-M x2; ¼” TRS x2; RCA x2; 3.5mm TRRS x1; 3.5mm TRS x1

SPECIFICATIONS

- Frequency Response: 20Hz-20KHz (+/-.5dB)
- Extended Frequency Response: 20Hz – 48KHz (+/- 1dB)
- Maximum Input Level: > 24dBu
- THD+N (Total Harmonic Distortion plus Noise): .025% @ 1KHz/1dBu
- Impedance Ratio: 1:1
- Self-Noise: < -130dBV
- Crosstalk: < -98dBV @ 1kHz/1dBu
- Ground Loop Isolation: All Channels
- Dimensions (LxWxH): 7 x 3 x 9.5”
- Weight: 4.13lbs (1871.07g)

FORMAT CONVERSIONS

- XLR to TRS (2 channels)
- XLR to RCA (2 channels)
- XLR to stereo TRRS (Tip or Ring or both if using 2 inputs)
- XLR to stereo Mini TRS (Tip or Ring or both if using 2 inputs)
- TRS to XLR (2 channels)
- TRS to RCA (2 channels)
- TRS to stereo TRRS (Tip or Ring or both if using 2 inputs)
- TRS to stereo Mini TRS (Tip or Ring or both if using 2 inputs)
- RCA to XLR (2 channels)
- RCA to TRS (2 channels)
- RCA to stereo TRRS (Tip or Ring or both if using 2 inputs)
- RCA to stereo Mini TRS (Tip or Ring or both if using 2 inputs)
- TRRS to 2 XLR
- TRRS to TRS
- TRRS to 2 RCA
- TRRS to Mini TRS
- Mini TRS to 2 XLR
- Mini TRS to TRS
- Mini TRS to 2 RCA
- Mini TRS to TRRS

SIGNAL ISOLATION & CONVERSION

The Sescom Humbucket uses our famous Sescom isolation transformer, as found in the classic line of IL19 devices. These transformers are known for complete transparency through the entire audio band, while effectively isolating signals from the issues that can cause ground loops.
To use the Humbucket for signal isolation, leave the BRIDGE switches in the down position and simply connect your inputs and your corresponding outputs:

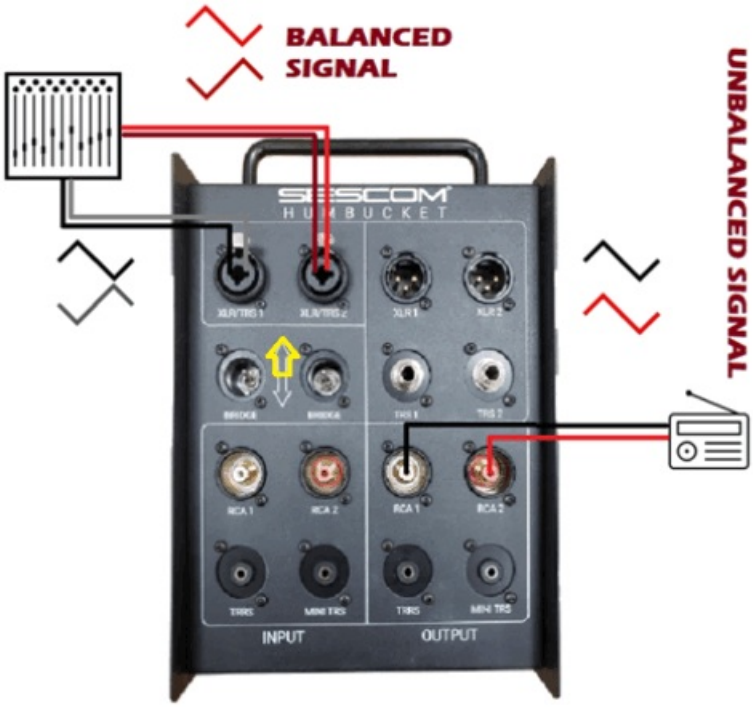
- For XLR signals (mic or line level), connect your source to XLR/TRS 1 and connect XLR 1 in the OUTPUT section to an XLR cable going to your destination.
- For TRS signals (mic or line level), connect your source to XLR/TRS 1 and connect TRS 1 in the OUTPUT section to a TRS cable to your destination.
- For unbalanced RCA signals, connect your source to RCA 1, RCA 2 or both, if stereo, and connect another RCA cable or set of cables to RCA 1 & 2 in the output section.
- For TRRS signals, like you would find on the output of a mobile phone, connect to the TRRS jack in the input section and connect the TRRS jack in the OUTPUT section to your destination. Note that these jacks send stereo audio, but they do not support the mic signal from a TRRS headset.
- For stereo signals over mini (1/8” or 3.5mm) TRS cables, simply use the MINI TRS jacks.

For signal conversion leave the BRIDGE switches down (for now). Note that all the below scenarios will still offer ground loop isolation, in addition to format conversion:

- To convert XLR to TRS, you can plug an XLR cable into an XLR/TRS jack on the INPUT side and use the corresponding TRS jack on the OUTPUT side.
- To convert TRS to XLR, simply plug your TRS source into an XLR/TRS jack in the INPUT section and take the output from the corresponding XLR jack in the OUTPUT section.
- To convert stereo RCA to TRRS or MINI TRS, plug your source into the RCA 1 and RCA 2 jacks in the INPUT section and take the output from either the TRRS or MINI TRS jack in the OUTPUT section.
- To convert from TRRS or MINI TRS to RCA, plug into the TRRS or MINI TRS jack in the INPUT section and taking your output from RCA 1 and RCA 2 in the OUTPUT section.

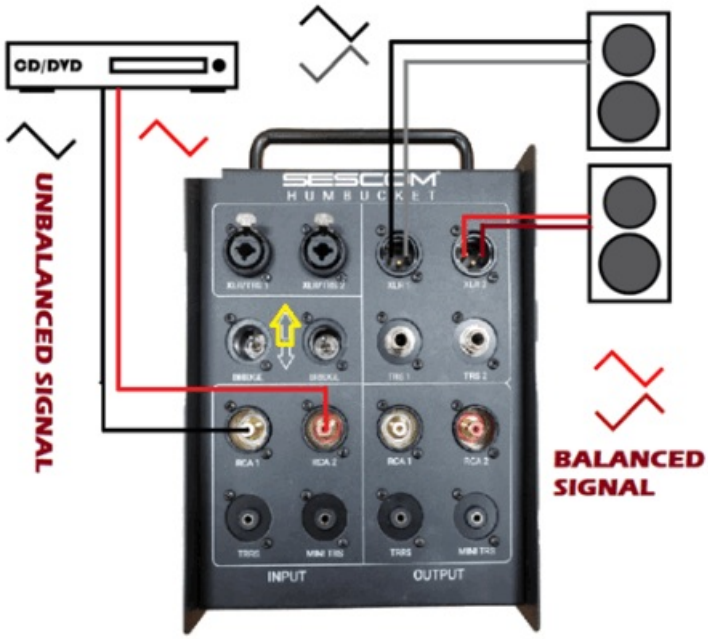
For balanced to unbalanced and unbalanced to balanced conversions, flip the BRIDGE switches to the Up (on) position. This unifies the balanced and unbalanced sections of the input side of the HUMBUCKET. You have the option to use this feature on channel 1, channel 2, or both channels simultaneously.
This feature uses the isolation transformer as a signal transformer – in addition to ground loop isolation, you have audiophile-grade, passive, transformer-balanced signal conversion!

- To convert from XLR or TRS to RCA, simply plug your balanced source into the combo jack and take your output from the RCA jack.



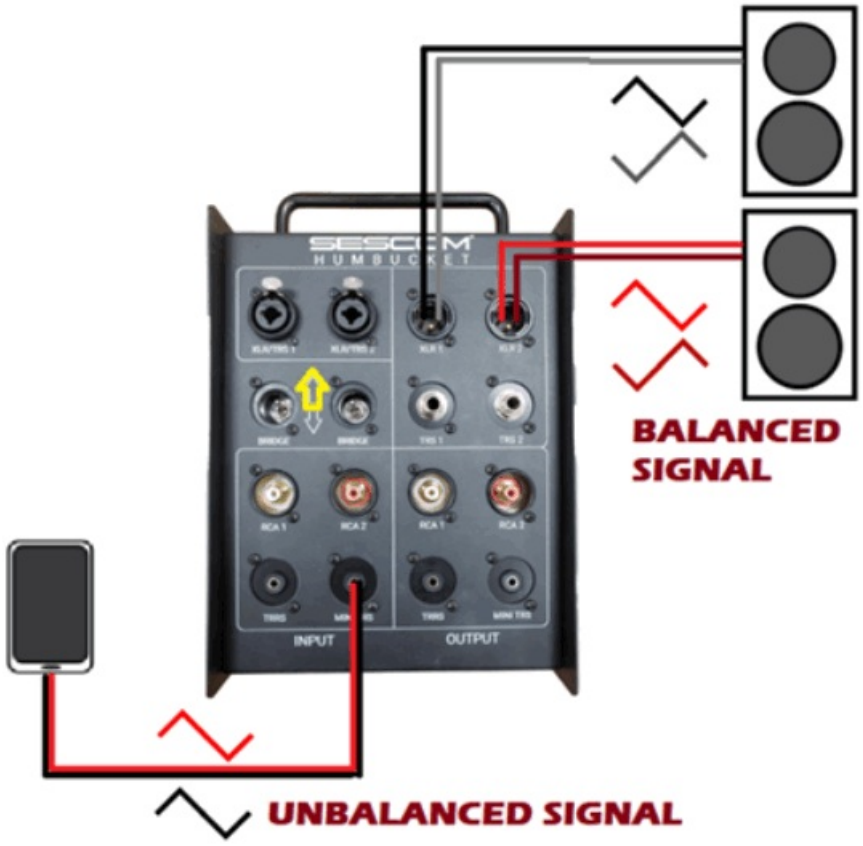
MIXING BOARD TO STEREO AUX PORT

- You can convert from RCA to XLR or TRS by plugging into one of the RCA jacks and taking your output from the corresponding XLR or TRS jack.



CD PLAYER to POWERED SPEAKERS

- You can go from a TRRS or MINI TRS phone or laptop output to stereo balanced XLR or TRS by plugging your mini TRS/TRRS cable into the appropriate jack and taking your output from the TRS or XLR jacks, or one of each.



SMARTPHONE to POWERED SPEAKERS

- To convert from XLR or TRS to TRRS or MINI TRS, plug your balanced cables into the XLR/TRS jacks and take your output from the TRRS or MINI TRS jacks in the OUTPUT section.

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Documents / Resources

	SESCOM HUMBUCKET Built with IL-19 Hum Eliminating Isolation Transformers [pdf] User Manual HUMBUCKET Built with IL-19 Hum Eliminating Isolation Transformers, HUMBUCKET, Built with IL-19 Hum, Eliminating Isolation Transformers, Isolation Transformers, Transformers