



RDL[®]
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

STICK-ON[®] SERIES

Model ST-CX1S

Subwoofer Filter

ANYWHERE YOU NEED...

- Active Subwoofer Equalization
- Isolated Stereo Inputs
- Adjustable Low-frequency Boost
- Very Low Noise & Distortion Filter
- STICK-ON Convenience
- RDL SupplyFlex™ Power Input Configuration



You Need The ST-CX1S!

The ST-CX1S is a subwoofer signal equalizer in the STICK-ON series of products from Radio Design Labs. Various mounting options permit installation right where you need it, or use it with RDL racking accessories. The ST-CX1S offers flexibility in equalization adjustment, with the exceptional performance RDL products are known for.

APPLICATION: The ST-CX1S features two separate isolated balanced-bridging inputs, which may each be wired balanced or unbalanced. The output driver is 150 Ω balanced which can drive low or high impedance balanced or unbalanced lines. The module operates at unity gain at 63 Hz (balanced input to balanced output). A **BOOST** control permits adjustment of the output at 32 Hz from flat to +5.5 dB.

The ST-CX1S line-level stereo inputs are intended to bridge existing line-level feeds, and are totally isolated from each other to produce no degradation of an existing stereo signal. A mono input may be connected to either one of the two inputs (and the other input remains unused). The output from the ST-CX1S feeds the line-level input of the power amplifier being used to drive the subwoofer.

This module is the ideal companion to the RDL ST-CX2 active two-way line level crossover. The ST-CX2 modules provide line-level audio for amplified two-way systems plus a loop-through output to feed an RDL ST-CX1S if a subwoofer is included in the system design.

The ST-CX1S features RDL's SupplyFlex power input configuration for operation directly from ground-referenced, floating or bipolar 24 Vdc power.

Whether adding a subwoofer amplifier/speaker to an existing system, or designing an audio system with subwoofers, the ST-CX1S is the ideal choice. Its extremely low noise and low distortion makes it suitable for the most demanding applications. Whenever used in conjunction with other RDL RACK-UP[®], STICK-ON, TX[™], or FLAT-PAK[™] series products, the ST-CX1S can be part of the most versatile and high performance sound systems!



STICK-ON® SERIES

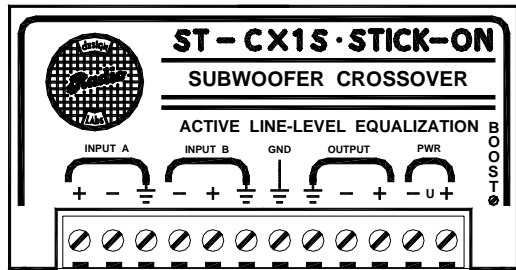
Model ST-CX1S

Subwoofer Filter

Installation/Operation



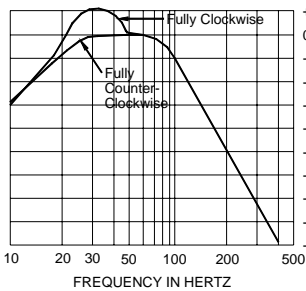
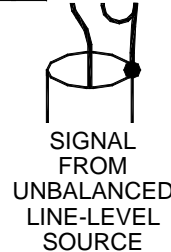
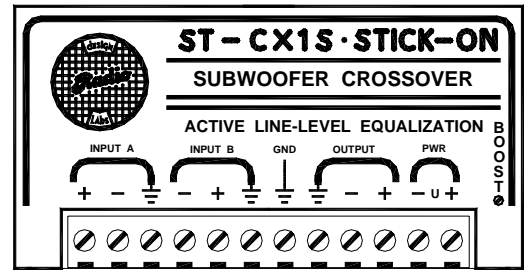
EN55103-1 E1-E5; EN55103-2 E1-E4
 Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



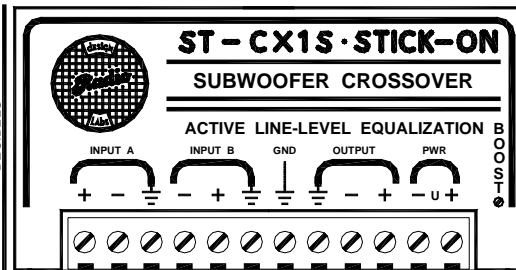
AUDIO WIRING



USE BOTH INPUTS FOR STEREO SOURCE



BOOST ADJUST Adjust for desired low frequency boost. This control is factory set to match the JBL Model 4645 THX approved subwoofer (THX is the registered trademark of Lucasfilm, Ltd.). This is a 25-turn control which sets the boost at 30 Hz. It may be turned counterclockwise for subwoofers not requiring this boost.



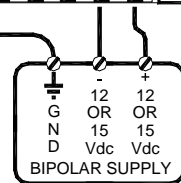
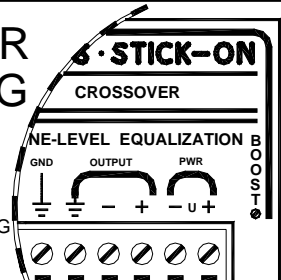
POWER WIRING

OPTIONAL JUMPER (WHEN USING GROUND-REFERENCED POWER SUPPLY)

24 VDC POWER SOURCE

DO NOT GROUND NEGATIVE FOR FLOATING OR BIPOLAR POWER INSTALLATION

OR GROUND NEGATIVE FOR GROUND-REFERENCED POWER INSTALLATION



TYPICAL PERFORMANCE

Input/Output Level: +4 dBu line level
 Input Impedance: 50 kΩ
 Input Configuration: Balanced or unbalanced, bridging
 Output Impedance: 150 Ω
 Output Configuration: Balanced or unbalanced line level
 Output Bandwidth: 22 Hz to 80 Hz, adjustable boost per curve
 High Freq. Attenuation: Per curve, > 45 dB at 400 Hz
 Gain: Unity at 63 Hz; adjustable flat to 5.5 dB at 32 Hz

Headroom: 18 dB minimum at 30 Hz (maximum boost), 22 dB typical
 THD+N: < 0.05%
 CMRR: > 60 dB at 60 Hz or above
 Residual Noise: < 90 dB below operating level; 95 dB typical
 Power Requirement: 24 to 33 Vdc @ 30 mA, Ground-referenced or Floating
 Dimensions: Height: 1.55 in. 3.94 cm
 Width: 3.00 in. 7.62 cm
 Depth: 0.65 in. 1.65 cm