

**CE-234XL
PRO-AUDIO SYSTEM**

CEDARSLINK®

Professional 2/3/4 Way Crossover



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USER MANUAL | 

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This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

CAUTION:

1. Avoid Excessive Heat, Humidity, dust and vibration.
2. Avoid Physical Shocks.
3. Do Not Open The Case Or Attempt Repairs Or Modifications Yourself.
4. Clean With A Soft Dry Cloth.
5. Always Use The Correct Power supply.
6. The Product Should Be Serviced By Qualified Service Personnel.

INPUT:

Connectors: XLR
Type: Electronically balanced/unbalanced, Therefore filtered
Impedance: balanced >50K Ohms; unbalanced >25K Ohms
Max Input Level: +22dBu, balanced or unbalanced
CMRR: >40dB, typically >55dBu at 1KHz

OUTPUT:

Connectors: XLR
Type: Electronically balanced/unbalanced, Therefore filtered
Impedance: balanced 200 Ohms; unbalanced 100 Ohms
Max Output Level: +22dBu, balanced or unbalanced

PERFORMANCE:

Bandwidth: 20Hz to 20KHz, +0/-0.5 dB
Frequency Response: <3Hz to >90KHz, +0/-3dB
Signal-to-Noise: Ref, +4dBu, 22KHz measurement bandwidth
Stereo Mode : Low Output >94dB; Mid Output >93;
High Output >91dB
Mono Mode : Low Output >94dB;
Low-Mid Output >94dB;
High-Mid Output >92dB;
High Output >88dB

Dynamic Range: >106dB, unweighted, any output
THD + Noise: <0.004% at +4dBu, 1KHz
Inter channel Crosstalk: <-80dB, 20Hz to 20KHz

CROSSOVER FREQUENCIES:

Stereo Mode:
Low/High: 45 to 96Hz or 450Hz to 9.6KHz(x10 setting)
Low/Mid: 45 to 960Hz or 450Hz to 9.6KHz(x10 setting)
Mid/High: 45 to 960Hz or 450Hz to 9.6KHz(x10 setting)

Mono Mode:
Low/Low-Mid: 45 to 960Hz or 450Hz to 9.6KHz(x10 setting)
Low- Mid/High-Mid: 45 to 960Hz or 450Hz to 9.6KHz(x10 setting)
High-Mid/High: 45 to 960Hz or 450Hz to 9.6KHz(x10 setting)

Filter Type: linkwitz-Riley, 24dB/octave, state-variable

FUNCTION SWITCHES:

Front Panel:

Low Cut: activates 40Hz Butter worth, 12 dB/octave high-pass filter, one switch per channel

Phase Invert: Inverts the phase at the out, one switch per output

Rear Panel:

x10: Multiplies crossover frequency range by 10, one switch per channel

Mode: Selects stereo/mono and 2/3-way operation

LF SUM: Selects normal(strso) or mono-summed low frequency operation

Power Supply

Operating Voltage: 110VAC 50/60Hz, 220VAC 50/60Hz

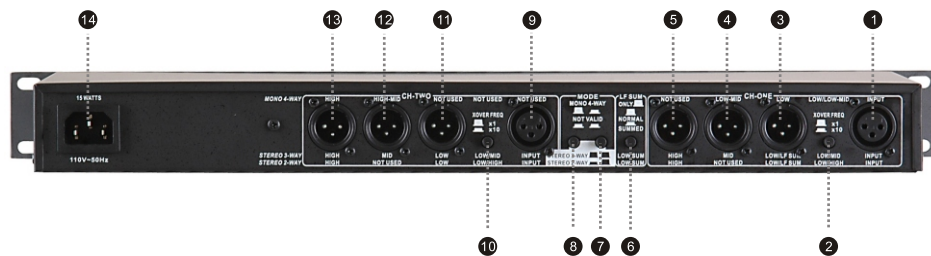
Mains Connection: IEC receptacle

Size & Weight

Size: 482mm(W) x 150mm(D) x 45mm(H)

Weight: 3Kg

Rear Panel Functions



STEREO 2-WAY:

- 1 9 INPUTS
- 2 10 CROSSOVER FREQUENCY x10 SWITCH
- 3 CH -1 LOW OUTPUTS OR LF SUMMED OUTPUTS
- 4 12 NOT USED
- 5 13 HIGH OUTPUTS
- 6 LF SUMMED SWITCH
- 7 8 MODE SWITCH
- 11 CH -2 LOW OUTPUTS

STEREO 3-WAY:

- 1 9 INPUTS
- 2 10 CROSSOVER FREQUENCY x10 SWITCH
- 3 CH -1 LOW OUTPUTS OR LF SUMMED OUTPUT
- 4 12 MID OUTPUTS
- 5 13 HIGH OUTPUTS
- 6 LF SUMMED SWITCH
- 7 8 MODE SWITCH
- 11 CH -2 LOW OUTPUTS

MONO 4-WAY:

- 1 INPUTS
- 2 CROSSOVER FREQUENCY x10 SWITCH
- 3 LOW OUTPUTS OR LF SUMMED OUTPUTS
- 4 LOW-MID OUTPUTS
- 5 11 NOT USED
- 6 LF SUMMED SWITCH
- 7 8 MODE SWITCH
- 10 NOT USED
- 12 HIGH-MID OUTPUTS
- 13 HIGH OUTPUTS
- 14 POWER INPUT

Safety Information

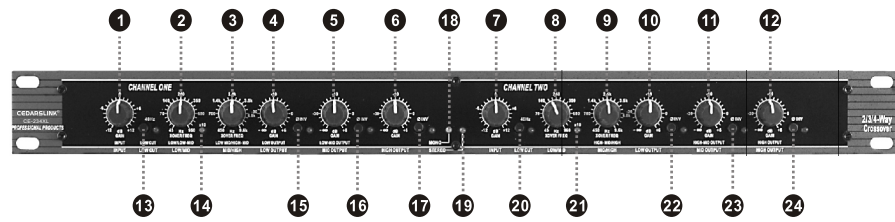
WARNING:

1. Read all the instructions before using the product.
2. Follow all instructions and heed all warnings.
3. Protective Ground.
Before turning the product ON, make sure that it is connected to ground. This is to prevent the risk of electric shock. Never cut internal or external ground wiring from the protective ground terminal.
4. Handle Cables Carefully.
Always plug and unplug cables-including the AC cord-by gripping the connector, not the cord.
5. Make Sure Power Is Off Before Making Or Removing Connections.
Always turn the power OFF prior to connecting or dis connecting cables. This important to prevent damage to the unit itself as well as other connected equipment.
6. Use The Recommended Fuse Type.
To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the ac outlet.

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Front Panel Functions



STEREO 2-WAY MODE

In 2-way stereo mode the controls are marked BELOW the horizontal blue line. Channel One and Channel Two functions are identical in the stereo mode. Front panel controls not described in this section are not active in stereo 2-way operation.

- 1 7 **INPUT GAIN:** Controls the INPUT level with +/- 12 dB of gain.
- 13 20 **LOW CUT:** Switch for selecting the 40 Hz high pass filter. An LED indicates the selection.
- 2 8 **LOW / MID *:** Selects crossover point between LOW and HIGH frequencies.
- 14 21 **X 10 LED:** Indicates that the LOW/HIGH crossover frequency range is 450Hz To 9.6 kHz.
- 4 10 **LOW OUTPUT:** Controls the Low frequency output level with a range of -∞ to +6 dB.
- 15 22 **PHASE INVERT:** Switch for reversing the polarity on the Low Output. An LED Indicates that the phase is inverted.
- 6 12 **HIGH OUTPUT:** Controls the High frequency output with a range of -∞ to +6 dB.
- 17 24 **PHASE INVERT:** Switch for reversing the polarity on the High Output. An LED indicates that the phase is inverted.
- 19 **STEREO:** LED indicating stereo mode operation.

* although this control is labeled as LOW/MID, it operates as the crossover frequency control between low and high frequencies in stereo 2-way operation.

STEREO 3-WAY MODE

In 3-way stereo operation the controls are marked BELOW the horizontal blue line. Channel One and Channel Two functions are identical in the stereo mode. LEDs are disabled for controls which are nonfunctional in this mode.

- 1 7 **INPUT GAIN:** Controls the INPUT level with +/- 12 dB of gain.
- 13 20 **LOW CUT:** Switch for selecting the 40 Hz high pass filter. An LED indicates the selection.
- 2 8 **LOW / MID *:** Selects crossover point between the LOW and MID frequencies.
- 14 21 **X 10 LED:** Indicates that the LOW/MID crossover frequency range is 450Hz To 9.6 kHz.
- 3 9 **MID / HIGH:** Selects crossover point between the MID and HIGH frequencies.

Front Panel Functions

- 4 10 **LOW OUTPUT:** Controls the Low frequency output level with a range of -∞ to +6 db.
- 15 22 **PHASE INVERT:** Switch for reversing the polarity on the Low Output. An LED Indicates that the phase is inverted.
- 5 11 **MID OUTPUT:** Controls the MID frequency output with a range of -∞ to +6 dB.
- 16 23 **PHASE INVERT:** Switch for reversing the polarity on the Mid Output. An LED Indicates that the phase is inverted.
- 6 12 **HIGH OUTPUT:** Controls the High frequency output with a range of -∞ to +6 dB.
- 17 24 **PHASE INVERT:** Switch for reversing the polarity on the High Output. An LED Indicates that the phase is inverted.
- 19 **STEREO:** LED indicating stereo mode operation.

MONO 4-WAY MODE

In 4-way Mono operation the controls are marked ABOVE the horizontal blue line. Front panel controls not described in this section are not active in mono 4-way mode. LEDs are disabled for controls which are nonfunctional in mono 4-way mode.

- 1 **INPUT GAIN:** Controls the INPUT level with +/- 12 dB of gain.
- 13 **LOW CUT:** Switch for selecting the 40 Hz high pass filter. An LED indicates the selection.
- 2 **LOW / LOW-MID :** Selects crossover point between LOW and LOW-MID Frequencies.
- 14 **X 10 LED:** Indicates that the LOW/LOW-MID crossover frequency range is 450Hz to 9.6 kHz.
- 3 **LOW-MID / HIGH-MID:** Selects crossover point between LOW-MID and HIGH-MID frequencies.
- 9 **HIGH-MID / HIGH:** Selects crossover point between HIGH-MID and HIGH Frequencies.
- 4 **LOW OUTPUT:** Controls the Low frequency output level with a range of -∞ to +6 db.
- 15 **PHASE INVERT:** Switch for reversing the polarity on the Low Output. An LED Indicates that the phase is inverted.
- 5 **LOW-MID OUTPUT:** Controls the LOW-MID frequency output with a range of -∞ to +6 db.
- 16 **PHASE INVERT:** Switch for reversing the polarity on the Low -Mid Output. An LED Indicates that the phase is inverted.
- 11 **HIGH-MID OUTPUT:** Controls the HIGH-MID frequency output with a range of -∞ to +6 db.
- 23 **PHASE INVERT:** Switch for reversing the polarity on the High -Mid Output. An LED Indicates that the phase is inverted.
- 12 **HIGH OUTPUT:** Controls the High frequency output with a range of -∞ to +6 dB.
- 24 **PHASE INVERT:** Switch for reversing the polarity on the High Output. An LED Indicates that the phase is inverted.
- 18 **MONO:** LED indicating MONO mode operation.