



CLX-52 STEREO PEAK COMPRESSOR / LIMITER

The **CLX-52** is a 2-channel, universal peak-sensitive automatic gain control (AGC) device with exceptional audio performance, precise controls and rugged durability.

The CLX-52 uses an “infinite soft-knee” characteristic and timing based on compression ratio. This, combined with a dual release time, allows program density to increase as the input signal increases. The result is a peak controller with very low noise, smooth sound, and excellent stereo tracking without the usual “constricted” limiter sound.

Front panel controls allow you to set input gain, threshold, ratio, attack time, release time and output level. Additional front panel features are an in/out switch for each channel, stereo tie switch and eleven-step LED meters for gain reduction and input or output level. All audio connections are XLR, 1/4” TRS and euroblock. Each channel has a TRS insert detector patch point which can be used as a “ducking” input, or in conjunction with an equalizer to produce frequency-sensitive limiting.

A unique feature of CLX-52 is the incorporation of a Double Release Time Constant. When a conventional compressor/limiter is adjusted for slow release times, transients such as mic “pops” may cause a severe reduction in gain followed by a slow fade up, making the action of the limiter very obvious.

With the Double Release Time Constant, release from gain reduction after a brief transient is always fast, with a slower release after a sustained overdrive. The CLX-52 is a versatile and highly listenable compressor/limiter suitable for use in professional sound reinforcement, recording and broadcasting.

CLX-52 Features:

- Double Release Time Constant
- Peak compression circuitry
- Compression ratio variable from 2:1 thru ∞ :1
- Precision 11-step LED gain reduction, input/output meters
- Over 60dB of gain reduction
- Extremely low noise and distortion
- Calibrated threshold control
- Detector loop patch point
- Input/output meter switch
- Stereo tie switch
- Active balanced inputs
- Servo-balanced outputs
- XLR, TRS 1/4”, and Euroblock connectors
- Universal 100-240VAC internal power supply
- Safety/Compliance: eTUV_{us}, CE, FCC, RoHS

Specifications	Note: <i>0dBu = 0.775 VRMS</i>
Input Impedance	20k Ohms, Active balanced
Output Impedance	132 Ohms, Servo balanced
Max Input Level	+23dBu
Max Output Level	+23dBu
Gain Range	± 15 dB
Output Gain	∞ to +18dB
Frequency Response	20Hz–20kHz, ± 0.2 dB
Distortion	<0.01%, 0dBu, 1kHz <0.15% THD, +15dBu, 20Hz–20kHz
Dynamic Range	>110dB (20Hz–20kHz), unweighted
Output Hum/Noise	-96dBu, Unweighted
Connectors	XLR, 1/4” TRS, Euroblock
Function	
Threshold	-40dB – +22dB
Ratio	2:1 to ∞ :1
Attack	200 μ s – 20ms
Release	100ms – 3sec
Weights, Dimensions & Power	
Dimensions	19”L x 1.75”H x 8”D (483mm x 43.7mm x 203mm)
Unit Weight	7.8lbs (3.54kg)
Shipping Weight	10lbs (5kg)
Power Requirements	100–240V, 50-60Hz–30W





CLX-52

ARCHITECT & ENGINEERING SPECS

The unit shall be a dual channel compressor limiter with independent gain, threshold, ratio, attack, release, and output level adjustments. It shall have a detector patch point allowing for the connection of an external equalizer in the detector loop to produce frequency selective limiting; or allows the connection of an external microphone source to produce voice-over-compression. It shall have front panel mounted switches for engaging/defeating the compressor/limiter functions. It shall have front panel switches for selecting input or output meter display. It shall have XLR, 1/4", and Euroblock connectors on inputs and outputs. Performance specifications shall meet or exceed the following: Gain control shall be $\pm 15\text{dB}$. Threshold shall be adjustable from -40dB to $+22\text{dB}$. Ratio shall be adjustable from 2:1 to infinity. Attack time shall be adjustable from 200uSec to 20mSec. Release time shall be adjustable from 100mSec to 3 seconds. The output level shall be adjustable from minus infinity to $+20\text{dB}$. The maximum in-out level shall be $+23\text{dBu}$. The input impedance shall be 20K ohm balanced. The output impedance shall be 132 ohm servo-balanced. The frequency response shall be 20Hz to 20KHz, $\pm 0.2\text{dB}$. Distortion shall be $<0.01\%$ THD, 1KHz @ 0dBu , and $<0.15\%$ THD @ $+15\text{dBu}$ from 20Hz to 20KHz. Hum and noise shall not exceed -96dBu @ unity gain. The unit shall operate at 100 - 240VAC $\pm 5\%$, 50-60Hz. The unit shall be designed for mounting in a standard EIA 19" rack (19" L x 1.75" H x 8" D) and shall have a shipping weight of 8 lbs. No other unit shall be acceptable unless submitted data from and independent research lab verifies that the above size/performance specifications are met.

The unit shall be a **CLX-52 Compressor Limiter** manufactured by Ashly Audio, Inc.

