

L1

Dual Monaural Line-Stage



"Nothing strengthens authority so much as silence."

Leonardo da Vinci

On the face of it, all a line-stage has to do is allow you to select between sources and set the system level. Sounds simple? Yet, not only is the quality and performance of the line-stage an absolutely key factor in determining overall system performance, there are fewer contenders for state-of-the-art line-stage honors than in any other product category. Maybe designing the best possible line-stage isn't quite so simple after all...

Any great line-stage must possess transparency, ultra-low-noise performance and absolute stability. It must anchor the incoming signals and deliver them onwards, propelled from a firm footing that ensures dynamic and musical authority. It must pass the source signals in your system, without limitation or disturbance, leaving no trace of itself on their passage. Any great line-stage needs to be the next best thing to sonically and musically invisible, the hi-fi equivalent of effortlessly enacting its own audio super power.

Like all CH Precision products, the L1 uses fully discrete, balanced and complementary design, ultra-short signal paths and exactly selected components. It is fed from heavily regulated and filtered power supplies, is wide-bandwidth, high slew-rate and DC coupled. But in this critical application, that's not enough. It's one thing to eliminate unnecessary components from the signal path and eliminate DC offset at the inputs, but the L1 takes things much, much further than that. Completely separate left and right channel circuit boards prevent crosstalk, while a super sophisticated, software driven R-2R network for each channel employs precision metal-film resistors and allows precise level control in 0.5dB steps with the minimum possible number of components. DC offset is monitored and eliminating not just at the inputs but throughout the volume control ladder and at multiple points throughout the entire circuit. That makes the L1 not just one of the quietest line-stages ever built, it makes it one of the quietest in operation too.

For a company that is renowned for the flexibility and configurable nature of its products, it is ironic that one of our most musically vital components is also our least adaptable. Although the L1 line-stage has an inherently modular topology, it offers only line-level inputs and comes fully loaded as standard. But that doesn't mean that the L1 isn't scalable and upgradable, with the option to add a second chassis for true-monaural operation and one or two X1 external power supplies. Of course, the L1 is fully controllable via the CH-Control App, its inputs can be labeled, you can set overall gain as well as individual input offsets and you can even select a DC blocking capacitor on any input if necessary. But at heart, in terms of signal transfer the L1 is as stripped down and purist as it can possibly be. You can hear that in its performance; you will hear it in any system that's built around an L1, whether in one, two, three or four-box form. As elegant in design as it is sophisticated in operation, as musically commanding as it is unobtrusive, the L1 brings a whole new sense to the motto, "We hide with pride!"

"The L1 goes calmly about its business, the anchor to which the system's absolute spatial and temporal stability are tied, the root of its remarkably low noise floor and sudden dynamic response. In many ways it's the understated star turn that sums up the whole system."

ROY GREGORY, HI-FI PLUS MAGAZINE

Modularity

- Dual Monaural (Left & Right channels in a single enclosure), 8 inputs
- True Monaural (one channel per enclosure), 8 or 16 inputs

Inputs and Outputs

- 8x line-level inputs (4x balanced XLR, 2x single-ended RCA, 2x single-ended BNC)
- 4x pre-amplifier outputs (2prs balanced XLR, 1pr single-ended RCA, 1pr single-ended 75 Ohm BNC)

Volume Control

- 20bits R-2R ladder network
- 118dB range in 0.5dB steps, from -100dB to +18dB
- Tight tolerance high-grade metal film resistors

Analog Signal Path

- Balanced XLR, single-ended RCA & BNC inputs and outputs
- Powerful discrete output buffer to drive long interconnects and/or multiple amplifiers
- Ultra-low-noise, high-bandwidth, high-slew-rate design
- Pure class A, fully-symmetrical topology
- Fully discrete, transistor based circuitry
- Switchable absolute phase and mono settings

Power Supply

- Dedicated discrete regulated linear power supplies
- Ultra low noise, high accuracy regulation
- Shunt regulators for all audio stages
- Can be powered from the X1 External Power Supply

Optional Hardware

- L1 Enclosure – the addition of a second L1 enclosure transforms the L1 into a True Monaural line pre-amplification system, with separate enclosures for each channel
- Monaural Analog Preamplifier Board – in a True Monaural system (with two enclosures), each enclosure is able to receive an extra preamplifier board. This turns the L1 into a True Monaural Extended system, providing the preamplifier with 16 as opposed to 8 inputs, if required



"This exceptional... line-level preamplifier is a contender for Best in Solid-State. A true reference-quality unit..."

THE ABSOLUTE SOUND, EDITOR'S CHOICE AWARDS 2017