

# Lawo crystal



At a Special Launch Event on October 24th, 2023, streamed live from its studio at the company's headquarters in Rastatt/Germany, Lawo unveiled its new crystal versatile broadcast console for broadcast applications. This IP-native mixing system is based on the open RAVENNA/AES67 Audio-over-IP networking standards and complies with SMPTE ST2110-30/-31 for audio, and ST2022-7 for redundancy. Powered by the Lawo Power Core Engine, crystal supports expandable I/O, accommodating AES67, MADI, analog, AES3 as well as Dante audio sources and destinations.

Available with 6, 8 and 14 faders, and with two distinct modes of operation - Power Core and Controller - crystal is the perfect companion for a variety of broadcast applications that straddle radio and a variety of audio production workflows: small to mid-sized on-air studios; regional studios; news and commentary suites; smaller production studios; MCR control and OB vehicles; podcast recording studios; remote production applications; backup and disaster recovery sites; DAW control and integration as well as workflow uniformization.

Firmly rooted in Lawo's acclaimed diamond philosophy, crystal's design feels instantly familiar and straightforward, giving professionals a highly intuitive mixing console. The new crystal is the seamless synergy of physical and virtual operation with intelligent, context-sensitive controls that fall naturally to hand. crystal allows users to summon the power of diamond from a more compact and cost-effective package and leverage Lawo's high-quality audio and workflow expertise.

The IP-native crystal is available in both a light and a dark finish. Both versions offer a wealth of shades and hues that allow users to tailor the desk to their exacting needs. Adding optional Virtual Extensions increases the availability of immediate information for every function. Silent, motorized faders inspired by Lawo's acclaimed mc<sup>2</sup> audio production consoles and precise encoders permit flawless

integration with program automation and playout systems - perfect for multiple-layer operations involving voice tracking, remote production, or DAW control. Programmable, color-coded LED button and encoder lighting highlights common control functions. Much more than helpful meter bridges, optional Virtual Extension modules feature full-HD TFT displays for extended information and touch control. Ember+ and HTML5 integration enables control of third-party hardware and software.

Like diamond, crystal features Lawo's LUX user interface that puts users first with a familiar and consistent interface across the entire Lawo product portfolio. crystal employs smart algorithms that speed up production workflows. A host of assistive mixing technologies enable operators to produce compelling, engaging programming. The AutoMix function automatically maintains the balance of multi-mic productions, and AutoMix Grouping allows this intelligent automatic mixing to be applied to multiple independent source groups. AutoGain, an automatic gain setting function, optimizes guest and host mic levels with a single button press.

Thanks to an unlimited number of snapshots and DSP profiles that can be stored and recalled from any networked console, individual talent profiles or customized show setups are available anywhere - even to operators working remotely from home studios, OB setups, etc. Shared user rights and snapshot management across all studios involving crystal/diamond/virtual interfaces is also available.

True to its name, crystal's Power Core mode allows operators to use the console in combination with a Power Core engine, Lawo's software-defined, high-density DSP mixing engine and modular I/O device. In this mode, crystal supports the Power Core Compact license for single 6-fader or extended 14-fader setups, and the Power Core MAX license. Accommodating up to four consoles, one Power Core with the MAX license allows four studios to share its processing power and business logic in a variety of configurations.

Controller mode caters to requests for a small IP-native extension panel for mc<sup>2</sup> audio production consoles. A crystal Main or Fader module can be used as a control panel for an mc<sup>2</sup>/A\_\_UHD Core-based back-end. In Controller mode, crystal is the perfect tool for second-row/grams mixer applications, as a dedicated control surface for an otherwise headless system, and for leveraging the shared processing options of a single A\_\_UHD Core via a Pooling 4/8/16/32 license. This opens up new possibilities in distributed production workflows, or for backup purposes. When used as a companion in an mc<sup>2</sup> system, literally any console strip can be mapped to the crystal surface. A sophisticated rights-management system gives engineers the power to tailor access to console features based on multiple user groups, or on a user-by-user basis.

crystal obviously also integrates with HOME, Lawo's management platform for IP-based media infrastructures. HOME helps connect, manage and secure all aspects of live production environments, providing centralized microservices for swift, effective interaction of engineers with their tools. HOME turns an array of devices,

setups, sites, hubs and data centers into a powerful, agile network - quickly and in a perfectly secure way.

“The new crystal serves the power of diamond in a more compact and cost-effective package, courtesy of Lawo’s high-quality audio and workflow expertise,” said Johan Boqvist, Lawo’s Product Evangelist, Audio Infrastructure. “Conforming to Lawo’s standard for hardware and software integration on a native IP platform, crystal truly shines like a diamond.”

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