



Design for Live

For rental companies and high profile venues, dLive is the ultimate digital mixing system, with all the processing tools, networkability, flexibility and next generation workflow to excel in the most challenging and prestigious live sound environments.

### Welcome

dLive is a step change in Allen & Heath digital mixing, built on a phenomenally powerful new technology platform – the XCVI core. The comprehensive dLive ecosystem encompasses apps, software, expanders, remotes and personal mixers, plus TCP/IP and options for all the main networking protocols, allowing it to adapt to and excel in virtually any live sound scenario. dLive incorporates the DEEP processing suite of embedded plugins, featuring superb emulations of the very best analogue FX and processing. Our Harmony UI ensures a supremely transparent workflow, with effortless gesture control and perfect integration of touchscreens and hands-on controls. The new hardware is as bulletproof as it is beautiful, with dual redundancy and hot swappable PSUs throughout.

### **XCVI** Core

The power of dLive emanates from the XCVI Core – pioneered by the Allen & Heath R&D team using next generation FPGA technology, with 36 parallel virtual processing cores generating enough power for 160x64 channels of processing at 96kHz sampling rate. Six parallel mixing engines within the Core calculate over 10,000 cross points per sample, while the FPGA router has capacity for 3,000 x 3,000 audio paths. The massive power of XCVI (25 billion operations per second) allows dLive to deliver 128 full processing inputs and 16 stereo FX returns, a configurable 64 bus architecture, variable bit depth for ultimate precision and noise performance, a virtually infinite mix headroom thanks to a 96bit accumulator, and class leading latency at an ultra-low 0.58ms.

# **DEEP Processing**

Our DEEP processing philosophy combines the pristine quality and wide choice of boutique plug-ins with the convenience, phase coherency and low latency of onboard processing. It's no secret that we have a passion bordering on obsession for crafting painstakingly faithful digital emulations of the most revered analogue outboard equipment. The portfolio of embedded plug-ins and proven algorithms developed for our iLive and GLD Chrome systems spans FX, Graphic EQs, Compressors, Multiband Compressors, Dynamic EQs and more. By popular demand, all have been translated across to dLive. Thanks to the power of the XCVI Core we have been able to take this further, creating hugely potent DSP kernels within the FPGA and allowing us to integrate DEEP processing into every input and mix processing channel. This gives access to an array of compressor and EQ models that can be inserted on the fly without burning FX slots and without the setup, latency and licence hassles associated with external plug-ins they're right there, where you need them, whenever you need them.

# dLive Ecosystem

dLive is so much more than a mixer. It is a fully developed ecosystem with over 800 system inputs and 800 outputs. The MixRack houses the XCVI core and is the brain of any dLive system. This brain is supported by surfaces, apps, software, TCP/IP control and IP remotes, all of which provide different means of controlling the mixer. Up to five 128ch I/O ports for a range of audio networking cards including all major digital protocols, the DX32 modular I/O expanders, plus full compatibility with our ME personal mixing system all extend the reach of the system. With so many control and expansion possibilities, dLive's inherently flexible architecture enables it to conquer practically any mixing challenge.

# Harmony User Interface

Where many digital systems try to recreate the experience of using an analogue mixer, dLive is a true digital native, drawing on our familiarity with the ubiquitous smartphones and tablets that we all use without thinking. The single or twin 12" capacitive touchscreens on the dLive surfaces feel instantly familiar, responding to every pinch, swipe, drag and drop exactly how you'd expect them to. Bespoke 'widget' areas can also be set up on the screens to keep track of scenes, meters, FX and other custom controls. The screen is framed by a set of one knob / one function rotary controls, allowing the creativity and immediacy of tactile control over key processing functions, working in harmony with the visual feedback displayed on the screen. The rotary knobs have been prototyped 20+ times to achieve optimal grip and precision control, and feature RGB illumination, with colours mapped to functions for instant visual orientation.

#### **Built to Endure**

Maybe it's no coincidence that our lead mechanical designer on the dLive project used to be a tank commander. All dLive consoles have been designed to deliver the optimal balance between strength and weight, employing higher grade metal on the sides and folded steel at key points for added rigidity. Not only does every console, MixRack and expander have dual power supply slots for redundancy, but we've also employed the same rugged, hot-swappable PSU design across the range for maximum peace of mind and minimum inventory. Dual redundancy is also built into every audio connection throughout the system.

We have also paid particular attention to console illumination, conducting rigorous trials to ensure that dLive excels in the sunny, outdoor settings where many digital consoles become almost unusable.





