

DiGiCo Quantum638



DiGiCo announces the launch of its latest addition to the successful Quantum Range, the Quantum638 mixing console, previously codenamed 'Tarpon', with an optional Quantum638T version designed specifically for demanding theatrical productions. Combining the best elements of the SD7 and SD5 with the latest Quantum technology, the new desk gives theatre sound teams a familiar yet more powerful worksurface with quicker access to cue firing and Macros for musicals, plays, tours and installs where speed, redundancy and compact control are critical.

Boasting 256 input channels and 128 aux/sub-group busses, the new desk sits in the 'sweet spot' between the company's flagship Quantum852 and popular Quantum338 Pulse, a position previously occupied by the longstanding SD7 and SD5. Sporting three 17-inch (42cm) LCD high-resolution touchscreens, 38 100mm touch-sensitive motorised faders split into three worksurface sections with two dedicated Master faders, enhanced Macro buttons, InfoBar, and new usability features, the Quantum638 is notably available in single-engine and dual-engine versions, both with dual DMI card slots and hot-swappable PSUs, for a choice of preferred redundancy options.

Particularly well-suited for the theatre market when paired with DiGiCo's optional "T" theatre software extension, the Quantum638T version adds indispensable functions like Auto Update, Aliases, Players, advanced CG programming tools, and Matrix Nodal Delays for plays and musicals. With a footprint that is nearly identical to that of the SD7, the console is an ideal upgrade for theatres where there is a need for increased horsepower but real estate is at a premium. Larger, brighter screens—plus three 6.8-inch (17.3cm) TFT screens located adjacent to the fader bays - provide more workspace for enhanced productivity, and dual headphone

outputs allow the sound designer and audio engineer to each have individual control over what they choose to hear.

“We took the best elements of our time-tested SD7 and SD5, and combined them with the latest Quantum tech to create the ultimate Q6,” says DiGiCo Managing Director Austin Freshwater. “With its compact footprint and familiar operator-focused layout, the Quantum638 is an ideal worksurface for theatrical tours and installs, as well as live concerts, festivals, and houses of worship. Built for both today’s productions and tomorrow’s demands, our newest Quantum console provides a platform that feels familiar on day one, reducing operational effort under pressure and delivering modern capabilities without compromising trusted workflows.”

The Quantum638 marks the first time that DiGiCo has offered a Quantum console in both single- and double-engine configurations - the latter of which can be run in single-engine mode - giving users the flexibility to choose the architecture that best suits their workflow, applications, and budget. “Engineers often have strong preferences one way or the other, so providing both options within the same platform is a significant step for us,” says DiGiCo Head of Product Digby Shaw. “Customers who choose the dual-engine version can also operate it in single-engine mode if they wish, so it’s the best of both worlds.”

Compact without compromise, the advanced Quantum638 combines the extraordinary might of large-scale, seventh-generation FPGAs whilst putting everything an engineer would need within easy ergonomic reach. In addition to offering 256 input channels and 128 aux/sub-group channels, all with full processing, DiGiCo’s latest console offers a 48x48 matrix with full processing, plus comprehensive and coveted Quantum Range features, including 128 Nodal Processing instances, 64 insertable Mustard Processing strips, 16 Spice Rack slots, and True Solo functionality. As standard, the product is equipped with onboard Dante and other connectivity options, including a built-in Fourier Interface Card for native worksurface compatibility with Fourier Audio’s transform.engine platform.

Newly enhanced Macro buttons are found within easy reach, putting clear visual information exactly where it is needed, and there are four designated channel Macros, meaning the Macro moves with the channel depending on the console layout. The Quantum638 also sports assignable “Macroder” rotary encoder knobs, similar to those found on the Quantum852, that dynamically change their function to control programmable parameters on whichever channel is currently selected. Fans of DiGiCo’s SD7 will further appreciate seeing the line of Gain/Trim encoders found at the top of each channel strip, plus a choice of individually assignable Next buttons at hand. The inclusion of a new InfoBar ensures that critical information is always visible, be it snapshots, timecode, actual time, or warnings that can indicate when listening to copied audio or True Solo, as well as if the surface is offline or all touch is disabled.

Beyond the console’s three primary daylight-bright displays, comprehensive visual

monitoring is achieved via three custom-mounted, 14-inch, high-resolution LCD meterbridge screens, three bank switcher screens, and a total of 53 1.5-inch touch sensitive full-colour TFT LCD displays. Left, centre, and right worksurface sections each offer six layers of six banks, and all faders can be assigned to control any channels of any type. Also included are LR/LCR/LCRS/5.1 Master busses, 36 VCA-style or mute group-style control group channels, two solo busses, and an internal FX rack allowing users to pick from 34 different FX. Up to 48 stereo FX can be added, comprising of up to 32 floating-point reverbs and up to 48 delay/chorus/pitch/enhancer effects. An internal set of 32 32-band graphic EQs are also accessible.

The rear panel features 32-bit mic/line inputs, eight 32-bit line outputs, four AES/EBU inputs (eight channels), and four AES/EBU outputs (also eight channels), as well as a DSub37 GPI and DSub37 GPO (16 inputs and 16 outputs), one set of MIDI In/Thru/Out, and a set of XLR SMPTE LTC I/O. Additional connections include four switched Ethernet ports and eight sets of MADI I/O, giving up to eight MADI interfaces or up to four redundant MADI interfaces at 48kHz or four interfaces at 96kHz.

Each engine is equipped with a MultiMode Optocore interface, providing 504 additional audio paths at 48kHz and 96kHz, with HMA, OpticalCon, and ST connection types available. An optional second Optocore loop can be added to each engine, effectively doubling the audio paths. Measuring 1555mm (61.2" W) by 957mm (37.7" D) by 535mm (21.1" H), the robust and tour-friendly Quantum638 worksurface weighs 93kg (205 lbs). "Highly advanced in nature yet comfortably familiar by design, the Quantum638 is the next logical piece of the puzzle in DiGiCo's console line-up," Shaw adds. "Powered by Quantum and packed with features, our newest product provides everything that our operators have loved, re-engineered for what's next."

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