

## Midas PRO6

Digital mixing system debuts

By Mark Frink

This September's PLASA Show at Earl's Court in London marks the introduction of several new products, including the much-anticipated sibling to Midas' flagship XL8 digital mixing system. The best way to learn about the PRO6, is by comparison to the XL8, which was code-named DL4 during its three-year development and why its components begin with the DL4 designation. The PRO6 was called the DL3, and its components all begin with DL3.

Both the PRO6 and the XL8 are networked mixing systems that rely on SuperMac and HyperMac to transport 24- and 192-channel bi-directional 24-bit/96 kHz digital audio over CAT5e, and of course, fiber. The components of either system are fully compatible and hybrid or custom systems are easily created, my favorite example, a PRO6 with additional I/O,

like a networked 24 x 24-channel DL451 that lives in an outboard RF rack.

In contrast to the XL8 control surface's five adjacent "bays" or work areas – a center pair of mix and output bays with two 8-channel input bays on the left and a third input bay on the right – the new PRO6 has a single 12-channel input bay on the left with the same fast access strip for the selected channel as on the XL8, plus a single 4-channel input bay on the right, again with its own fast strip. However it is still a dual operator console, with provision for a second operator to work simultaneously with a second cue bus. Whereas the XL8 has five vertical daylight-visible 15-inch DVI TFT LCD screens – one per bay – the PRO6 has two of these same screens.

What else is missing? Gone are the XL8's two rows per-channel of threshold dynamics controls for every input fader, along with dual

aux send encoders that scroll up and down by two or by eight, but those functions and much more remain accessible on each input bay's "fast strip" and users familiar with the XL8 will not miss them.

The XL8 has 96 primary input channels, while the PRO6 has 56. As fully featured mix systems, both incorporating 192 channels of bi-directional digital audio on their copper or fiber HyperMac snake, the capacities of either go far beyond those counts, but as a console mixing stage inputs those numbers are the best comparison. Each has additional returns, and point-to-point tie lines can be established independently of the mixer.

The XL8 has 16 matrixes that can also be driven like auxiliaries from inputs as well as from outputs, in addition to its 32 auxiliaries, for a total of 48 aux/groups when used in monitor console mode. The PRO6 has 16 matrixes and 16 auxiliaries for a total of 32 aux/groups. Instead of the 16 effects on the XL8, there are 8, but they are each 8 x 8 capable. The on-board Klark Teknik DN780 sounds better than the original standalone, and that's saying a lot. Console files written as 56 16 aux and 16 mtx with 8 effects can drop right onto either desk, fully compatible.

The PRO6 has 10 VCA groups compared to the XL8's 12, both have 8 mute groups, and the PRO6 has six "population groups" that bring a selected group of channels to the control surface's input bays together versus the XL8's eight. The "pop" groups are one of the more addictive features of both consoles, allowing the engineer to select a number of channels to auto-fill user definable



Midas PRO6 console control surface.

layers that are called up with a single keystroke. Both consoles make excellent use of color, with LCD display switches that both name and tint each channel or effect beautifully.

The PRO6 measures 54 by 32 inches and weighs 200 pounds, in comparison to the XL-8, whose control surface weighs 353 pounds and measures 68 x 54 inches. For further reference, a Yamaha PM5D console measures 61 x 37 inches and weighs 214 pounds, while a Yamaha PM1D's CS1D control surface measures 75 x 38 inches and weighs 265 pounds.

The standard single-surface configuration of the XL8 is comprised of four basic components besides its control surface: four 6U DL431 mic/line splitters, five 3U DL451 24-channel modular I/O units, two 3U DL461 router which takes the 24-channel bi-directional (AES50 "SuperMac") digital stage signals and ships them all to the console via 192-channel bi-directional HyperMac over CAT6 or multi-mode fiber, and 10 (9 active plus 1 spare) 1U DL471 DSP units, for a total of 52 rack spaces, not counting the Klark Teknik DN9331 Rapide moving fader graphic EQ controller.

By contrast the standard PRO6 system is comprised of just two individual components besides the console, totaling just 14 rack spaces (though XL8 components are compatible and can be easily added, including KT's Rapide and DN 9696 recorder). The PRO6 stage box is the 7U DL351, which holds eight of the various 8-way (Mic In, Line Out, TRS I/O or AES I/O) cards used in the XL8's 3-card DL451 I/O unit. It comes standard with seven 8-channel Mic In



*DL371 DSP and DL351 stage box.*

cards, for 56 stage inputs, and a single 8-channel Line Out card. It connects to the DSP frame with three AES50 CAT5 connections plus a fourth spare. All three components have on-board spare PSUs.

The other PRO6 remote component is the 7U DL371 DSP frame, which comes standard with five DSP cards. A sixth spare card can be added for redundancy and a seventh card will be offered for future expansion. The DSP frame connects to the console using 192-channel bi-directional HyperMac by either 100 meters of redundant CAT5 or 500 meters of redundant fiber, or both for double redundancy. There are four more AES50 connections for connections to additional components, and an Ethernet "tunnel" that also appears on the back of the PRO6 console.

While the XL8 is strictly a control surface, the PRO6 console incorporates digital audio. First there is the equivalent of an XL8's DL451 built into the right-hand side: three

modular I/O cards that come standard with eight pairs of line level TRS, 4 pairs of AES3 inputs and eight XLR line outputs. Besides the redundant HyperMac copper and fiber connections in the center, there are three more AES50 ports, again for connecting a KT DN 9696 or other expansion equipment, like an external DL451 for extra I/O. On the left there are six XLRs, two pairs of which are used for monitor A & B stereo outputs, and all six of which can be used for monitoring of 5.1 surround mixes. Yes kids, this is a surround desk. Get Roger Waters on the phone.

As with the XL8's fourth bay, the trackball and keyboard on the second bay of the PRO6 can be switched to operate up to three external computers via three KVM outputs, and its screens output can be sent to external displays.

How does it sound? It provides independent control of both the analog mic pre and a digital attenuator, so that the mic pres can be warmed up, while the faders can sit comfortably in a mix.

The bottom line is that the PRO6 is simpler to deploy because it has only three components, however due to full compatibility between the components of both systems, there's ample room for PRO6 customers to grow their system. And it's considerably less expensive. This console is poised to take over the digital desk market the same way Midas analog consoles did at the end of the last century. This is definitely not your dad's Midas. ■

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*Midas PRO6 console rear panels.*