By GeorgePetersen

Large-Format Digital Consoles

When it comes to really big shows, sometimes size does matter. We checked out a some large format digital consoles and found models to fit nearly anyone's needs, especially if your channel count requirements hover in the near-100 (or more) range.

And in this rarefied world of large boards, customization is key, as these big guns typically come with a long list of user-selectable options and choices, making exact price comparisons difficult, unless you configure each model for your particular specific application. But when you're ready to go large, these are just the ticket.

And with that in mind, we took a peek into what's available in this market and uncovered a bountiful selection in a range of configurations and design approaches to fit any application, installation or touring need.

One of the more appealing aspects of the consoles listed here is that they're designed for flexibility and a decent amount of future-proofing. In fact, you may just be a firmware update or software upgrade away from an entirely new set of features and functionality, while on the hardware side, add-on I/O cards and DSP expansions can keep your investment current and up to date.

Allen & Heath iLive-176

Max Channels: 176

Mix Engine: 64x32 mix engine, RackExtra DSP and 8 effects

Max Sampling Rate: 48 kHz

Channel Faders: 32 faders

Onboard I/O: 32 modular I/O slots

Remote I/O: iDR-16,16x8; iDR-32, 32x16; iDR-48, 48x24; iDR-64, 64x32.

Frame Sizes: iLive-144, iLive-112 and iLive-80

Network Interfacing: Proprietary ACE (Audio and Control over Ethernet) link; MADI, EtherSound and Dante optional.

Footprint/Weight: 59.4 x 27.7-inches; 119 pounds

Notes: Optional Waves SoundGrid and Multitrack record out card.

allen-heath.com

Avid Profile

Max Channels: 96

Mix Engine: MixRack offers up to 96 inputs, 16 effects and 24 outputs

Max Sampling Rate: 48 kHz

Channel Faders: 24

Onboard I/O: MixRack adds 8 TRS line, 2-track ins, AES or S/PDIF

Remote I/O: Stage Rack: 48 x 8 (expandable to 48 x 48), use 2 for 96-in

Frame Sizes: Single 24 x 8 x 2 fader frame offered.

Network Interfacing: 75-ohm BNC digital snake; optional MADI cards.

Footprint/Weight: 45 x 31 inches; 90 pounds

Notes: Large plug-in complement; Optional Dugan Automix and Aviom A-Net cards.

avid.com

Lawo mc²36-40

Max Channels: Up to 184 external inputs/outputs

Mix Engine: 40-bit floating point DSP micro-core with 512 x 512 matrix, 432 subgroups, 32 aux sends.

Max Sampling Rate: 96k Hz

Channel Faders: 40

Onboard I/O: 32 mic/line inputs; 32 line outputs; (8) AES ins/outs.

Remote I/O: StageBox option with 32 mic/line ins, 32 line outs, (8) digital AES

Frame Sizes: 16, 24 and 40-fader frames available.

Network Interfacing: MADI, RAVENNA/AES67

Footprint/Weight: 62 x 34-inches; 139 pounds

Notes: Supports expansion and networking with other mc2 36/56/66 consoles or Lawo Nova audio routers.

lawo.com

Midas PRO X

Max Channels: Up to 168

Mix Engine: 108-Gigiflop NEUTRON Audio System Engine

Max Sampling Rate: 96k Hz

Channel Faders: 16

Onboard I/O: (8) mic/line ins, (8) line outs, (8) AES in/out pairs.

Remote I/O: DL151, 24 in; DL152, 24 out; DL153, 16-in/8-out; DL154, 8-in/16-out.

Frame Sizes: Single frame size offered

Network Interfacing: Ethernet, AES50

Footprint/Weight: 54 x 37-inches; 213 pounds

Notes: Two daylight-viewable 15" TFT screens; 192 bidirectional channel Hyper-MAC router; slated to ship in Q4 2014.

midasconsoles.com

Soundcraft Vi3000

Max Channels: 96 inputs to mix

Mix Engine: Onboard SpideCore DSP engine combines FPGA and SHARC DSP technology for 96 inputs to mix, with 24 mono/stereo buses.

Max Sampling Rate: 48k Hz

Channel Faders: 24

Onboard I/O: 32 mic/line ins; 32 line outs; (2) AES I/O pairs

Remote I/O: Optional 64-channel stagebox offered.

Frame Sizes: Single frame size offered.

Network Interfacing: Dante standard; MADI, RockNet, EtherSound optional.

Footprint/Weight: 57 x 32-inches; 119 pounds

Notes: FaderGlow and Vistonics rotary control/screen interface; UAD plug-ins optional.

soundcraft.com

SSL Live

Max Channels: 144 with full processing

Mix Engine: Tempest Optimal Core Processing; 192 mix paths; 36 x 36 matrix.

Max Sampling Rate: 96k Hz

Channel Faders: 24

Onboard I/O: 14 mic/line ins; 12 line outs; 4 AES ins/outs.

Remote I/O: Live I/O ML, 32 x 32 analog; Live I/O D, 32 x32 AES digital.

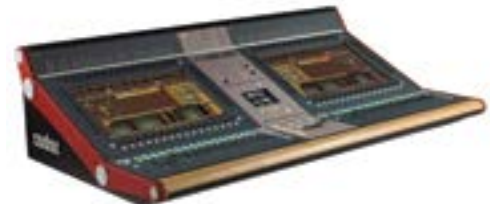**Frame Sizes:** Single frame size offered.

Network Interfacing: MADI; proprietary Blacklight technology handles up to 256 channels.

Footprint/Weight: 47 x 35 inches; 194 pounds

Notes: New SSL SOLSA software offers offline editing/storage of console setups.

solidstatelogic.com

Cadac CDC eight-32

Max Channels: 128 with full processing

Mix Engine: Proprietary DSP platform using 32/40-bit floating point SHARC processors.

Max Sampling Rate: 96k Hz

Channel Faders: 24

Onboard I/O: Card slots offer up to 64-in/64-out

Remote I/O: CDC I/O 6448 (64 ins/48 analog outs); CDC I/O 3216 (32 mic ins/16 analog outs)

Frame Sizes: Dual screen 32 fader or single screen 16 fader.

Network Interfacing: Megacomms bidirectional transfer of up to 128 in/128 out over BNC coax to stagebox(s).

Footprint/Weight: 64 x 35.5-inches; 246 pounds.

Notes: Dual 24" HD touch screens; 40 configurable output buses.

cadac-audio.com

DiGiCo SD7

Max Channels: 253 input channels

Mix Engine: Stealth Digital Processing mix/routing engine for 256 processing channels and 128 buses, plus effects.

Max Sampling Rate: 96k Hz (192k ready)

Channel Faders: 36

Onboard I/O: 12 mic/line inputs, 12 XLR line outs and six pairs of AES/EBU I/O

Remote I/O: SD-Rack, 56 ins/outs; SD-Mini Rack, 32 ins/outs; SD-Nano, 16 AES streams in/out.

Frame Sizes: Up to two EX-007 24-fader expanders can be added.

Network Interfacing: MADI

Footprint/Weight: 59 x 34.5-inches; 236 pounds.

Notes: Waves SoundGrid Module option

digico.biz

Innovason Eclipse GT

Max Channels: 104

Mix Engine: Mix Box DSP engine enables mixing of up to 104 inputs into 48 mix buses simultaneously.

Max Sampling Rate: 48k Hz

Channel Faders: 48

Onboard I/O: 16 line ins/outs on D25-subs; (6) slots for I/O modules.

Remote I/O: DioCore 64 in/64 out; Stage Box 64 in/out to optical or coax; SR-16 Mini Stage Box with 16 in/out.

Frame Sizes: Single Eclipse GT frame offered.

Network Interfacing: Options include Ethersound, AES, MADI or Aviom A-Net.

Footprint/Weight: 46 x 30.5-inches; 99 pounds.

Notes: M.A.R.S. option offers built-in 64-track recording.

innovason.com

Stage Tec Aurus

Max Channels: 300

Mix Engine: ADSP 21160 SHARC-based; up to 300 inputs/128 buses

Max Sampling Rate: 96k Hz

Channel Faders: 96, max.

Onboard I/O: 2 mic/line and 2 AES I/O's; additional can be added.

Remote I/O: Modular, with up to 256 channels per unit.

Frame Sizes: 24 to 96 fader frames

Network Interfacing: MADI, Dante, Stage Tec Nexus optical

Footprint/Weight: 40 version is 92 x 44-inches; 235 pounds.

Notes: Extensive line of Nexus routers available.

stagetec.com

Studer Vista 5 SR

Max Channels: 84 mono inputs; 20 stereo inputs

Mix Engine: SC Core Live processor with up to 9 DSP cards

Max Sampling Rate: 48k Hz (with 96k-ready converters)

Channel Faders: 20

Onboard I/O: 8 mic ins, 16 line ins, 48 line outs, 16 AES I/Os

Remote I/O: Stagebox with 84 mic/line ins, 8 outs and 8 AES I/Os

Frame Sizes: Single frame size offered

Network Interfacing: MADI, CobraNet, EtherSound, Aviom A-Net.

Footprint/Weight: 59 x 30-inches; 150 pounds

Notes: Vistonics technology with rotary encoders through control screens; live virtual surround panning.

studer.ch

Yamaha PM5D-EX

Max Channels: 96 plus 12 stereo

Mix Engine: 32-bit, with 58-bit accumulator.

Max Sampling Rate: 96k Hz

Channel Faders: 28

Onboard I/O: 48 mic/line ins, 24 outs, 8 matrix

Remote I/O: DSP5D: 48 + 8 x 24; SB168-ES; 16 x 8

Frame Sizes: Single frame size offered.

Network Interfacing: CobraNet, EtherSound, MADI, Dante, Abion A-Net

Footprint/Weight: 61 x 37-inches; 214 pounds

Notes: EX version adds DSP5D Digital Mixing System for the I/O and processing capacity of two PM5D consoles.

yamahaca.com

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