

7. Technical Specifications

Processing	
Input Processing Channels	32 Input Channels, 8 Aux Channels, 8 FX Return Channels
Output Processing Channels	8 / 16
16 aux buses, 6 matrices, main LRC	100
Internal Effects Engines (True Stereo / Mono)	8 / 16
Internal Show Automation (structured Cues / Snippets)	500 / 100
Internal Total Recall Scenes (incl. Preamplifiers and Faders)	100
Signal Processing	40-Bit Floating Point
A/D Conversion (8-channel, 96 kHz ready)	24-Bit, 114 dB Dynamic Range, A-weighted
D/A Conversion (stereo, 96 kHz ready)	24-Bit, 120 dB Dynamic Range, A-weighted
I/O Latency (Console Input to Output)	0.8 ms
Network Latency (Stage Box In > Console > Stage Box Out)	1.1 ms
Connectors	
MIDAS PRO Series Microphone Preamplifier (XLR)	16
Talkback Microphone Input (XLR)	1
RCA Inputs / Outputs	2 / 2
XLR Outputs	8
Monitoring Outputs (XLR / ¼" TRS Balanced)	2/2
Aux Inputs/Outputs (¼" TRS Balanced)	6 / 6
Phones Output (¼" TRS)	1 (Stereo)
AES50 Ports (KLARK TEKNIK SuperMAC)	2
Expansion Card Interface	32 Channel Audio Input / Output
ULTRANET P-16 Connector (No Power Supplied)	1
MIDI Inputs / Outputs	1 / 1
USB Type A (Audio and Data Import / Export)	1
USB Type B, rear panel, for remote control	1
Ethernet, RJ45, rear panel, for remote control	1
Mic Input Characteristics	
Design	MIDAS PRO Series
THD+N (0 dB gain, 0 dBu output)	< 0.01% unweighted
THD+N (+40 dB gain, 0 dBu to +20 dBu output)	< 0.03% unweighted
Input Impedance (Unbalanced / Balanced)	10 kΩ / 10 kΩ
Non-Clip Maximum Input Level	+23 dBu
Phantom Power (Switchable per Input)	+48 V
Equivalent Input Noise @ +45 dB gain (150 Ω source)	-125 dBu 22 Hz-22 kHz, unweighted
CMRR @ Unity Gain (Typical)	> 70 dB
CMRR @ 40 dB Gain (Typical)	> 90 dB

Input/Output Characteristics	
Frequency Response @ 48 kHz Sample Rate	0 dB to -1 dB 20 Hz – 20 kHz
Dynamic Range, Analogue In to Analogue Out	106 dB 22 Hz - 22 kHz, unweighted
A/D Dynamic Range, Preamplifier and Converter (Typical)	109 dB 22 Hz - 22 kHz, unweighted
D/A Dynamic Range, Converter and Output (Typical)	109 dB 22 Hz - 22 kHz, unweighted
Crosstalk Rejection @ 1 kHz, Adjacent Channels	100 dB
Output level, XLR Connectors (Nominal / Maximum)	+4 dBu / +21 dBu
Output Impedance, XLR Connectors (Unbalanced / Balanced)	50 Ω / 50 Ω
Input impedance, TRS Connectors (Unbalanced / Balanced)	20 kΩ / 40 kΩ
Non-Clip Maximum Input Level, TRS Connectors	+21 dBu
Output Level, TRS (Nominal / Maximum)	+4 dBu / +21 dBu
Output Impedance, TRS (Unbalanced / Balanced)	50 Ω / 50 Ω
Phones Output Impedance / Maximum output Level	40 Ω / +21 dBu (Stereo)
Residual Noise Level, Out 1-16 XLR Connectors, Unity Gain	-85 dBu 22 Hz-22 kHz, unweighted
Residual Noise Level, Out 1-16 XLR Connectors, Muted	-88 dBu 22 Hz-22 kHz, unweighted
Residual Noise Level, TRS and Monitor out XLR Connectors	-83 dBu 22 Hz-22 kHz, unweighted
DN32-LIVE USB Interface	
USB 2.0 high speed, type-B (audio/MIDI interface)	1
USB input / output channels, duplex	32, 16, 8, 2
Windows DAW applications (ASIO, WASAPI and WDM audio device interface)	Win 7 32/64-bit, Win10 32/64-bit
Mac OSX DAW applications (Intel CPU only, no PPC support, CoreAudio)	Mac OSX 10.6.8**, 10.7.5, 10.8, 10.9, 10.10, 10.11, 10.12
DN32-LIVE SD Card Interface	
SD card slots, SD/SDHC	2
SD/SDHC supported file system	FAT32
SD/SDHC card capacity, each slot	1 to 32 GB
Battery for power blackout protection (optional)	CR123A Lithium cell
SD card input / output channels	32, 16, 8
Sample rates (console clock)	44.1 kHz / 48 kHz
Sample word length	32 bit PCM
File format (uncompressed multi-channel)	WAV 8, 16 or 32 channels
Maximum recording time (32 ch, 44.1 kHz, 32-bit on two 32 GB SDHC media)	200 min
Typical performance recording or playback	32 channels on class 10 media, 8 or 16 channels on class 6 media
Display	
Main Screen	5" TFT LCD, 800 x 480 Resolution, 262k Colours
Channel LCD Screen	128 x 64 LCD with RGB Colour Backlight
Main Meter	18 Segment (-45 dB to Clip)
Power	
Switch-Mode Power Supply	Auto-Ranging 100-240 VAC (50/60 Hz) ± 10%
Power Consumption	70 W
Physical	
Standard Operating Temperature Range	5°C – 40°C (41°F – 104°F)
Dimensions	478 x 617 x 208 mm (18.8 x 24.3 x 8.2")
Weight	14.3 kg (31.5 lbs)

** OSX 10.6.8 Core Audio supports up to 16x16 channel audio