



DATASHEET

IOS-XL

High-Definition I/O with SoundGrid DSP Server

OVERVIEW

DiGiGrid IOS-XL is a comprehensive audio interface with a built-in extreme SoundGrid DSP server that adds realtime plugin processing power to your system. Ideal for professional and personal production environments alike, the IOS-XL is the all-in-one solution for Studio and Live.

Together with the SoundGrid Studio System, DiGiGrid IOS-XL enables you to mix and monitor in real time using hundreds of SoundGrid-compatible Waves and third-party plugins, with incredibly low latency of only 0.8 milliseconds.



KEY FEATURES

Compliant with the SoundGrid Studio ASIO/Core Audio driver

Built-in Extreme i7 SoundGrid DSP server

8 mic/line inputs, 8 line outputs

2 Independent headphone outputs

MIDI, S/PDIF and AES/EBU connectors

Connects via a single Ethernet cable

Quick-view front panel input metering

High-definition AD/DA conversion

Use Live or in the Studio

2U Rackmount unit



DiGiGrid audio interfaces give you the freedom to connect all your DAWs and hardware devices quickly and easily, and the power to run up to hundreds of plugins in real time. Waves, the world's leading developer of audio plugins, and DiGiCo, the world's leading manufacturer of professional mixing consoles, have joined forces to create the most advanced audio interfaces on the market, with award-winning preamps and superior networking and processing capabilities.

TECHNICAL SPECIFICATIONS

SIGNAL PROCESSING

Internal SoundGrid DSP Server (SoundGrid Extreme V3 Server Equivalent)

Optional SRC on AES / S/PDIF inputs

64 channels of plugin processing at 48kHz or 96kHz

The table below indicates the number of plugins that can be inserted into StudioRacks and loaded to DiGiGrid DGS-XL before the system reaches DSP overload (85%) or fails to play audio fluently (clicks, dropouts, corruption).

Plugin	44.1kHz	96kHz
API 2500 (Mono)	512	414
API 550 (Mono)	512	512
API 560 (Mono)	115	95
AudioTrack(Mono)	512	512
C6 Multiband Compressor (Mono)	173	85
CLA-2A Compressor / Limiter(-Mono)	448	218
CLA-3A Compressor / Limiter(-Mono)	512	221
CLA-76 Compressor / Limiter(-Mono)	512	464
dbx® 160 Compressor / Limiter (Mono)	74	100
DeEsser(Mono)	512	512
Dorrough Stereo (Stereo)	512	512
H-Comp Hybrid Compressor(-Mono)	512	384
H-Delay Hybrid Delay(Mono)	512	256
H-EQ Hybrid Equalizer(Mono)	197	204
H-Reverb Hybrid Reverb* (Stereo)	16	11
IR1 Convolution Reverb*(Stereo)	61	25
IR-Live Convolution Reverb*(Stereo)	90	33
InPhase**(Mono)	184	184
J37 Tape(Mono)	104	116
Kramer HLS Channel(Mono)	290	104
Kramer Master Tape(Mono)	113	54

Plugin	44.1kHz	96kHz
L2 Ultramaximizer(Mono)	512	400
LoAir(Mono)	512	376
MaxxVolume(Mono)	512	512
NLS Non-Linear Summer(Mono)	512	230
PuigChild Compressor(Mono)	512	220
PuigTec EQPIA(Mono)	200	136
REDD 17(Mono)	272	69
Renaissance Bass(Mono)	512	404
Renaissance Channel(Mono)	512	358
Renaissance Compressor(Mono)	512	512
Renaissance Equalizer (REQ6) (Mono)	512	512
Renaissance Reverb(Stereo)	210	114
Renaissance Vox(Mono)	512	512
Scheps 73(Mono)	272	238
SSL E-Channel(Mono)	512	405
SSL G-Channel(Mono)	512	405
SSL G-Equalizer(Mono)	512	512
SSL G-Master Buss Comp(-Mono)	512	405
TG 12345(Mono)	62	75
TransX Multi(Mono)	512	294
TransX Wide(Mono)	512	512
Vitamin Sonic Enhancer(Mono)	240	144

A&E SPECIFICATION

The DiGiGrid IOS-XL shall be an audio interface with a built in DSP server to run Soundgrid audio plugins in real-time.

The front of the unit shall have two headphone outputs (1/4" TRS), each with its own analogue level control. There shall also be 8 sets of quick-view metering and indicator LEDs, showing whether a signal is present, if it is clipping and if phantom power has been turned on for each of the 8 analogue inputs. The front of the unit shall also have a power button for turning the device on and off.

The rear of the unit shall have 8 mic/line inputs (XLR/TRS combo), 8 line outputs (TRS or 25-pin D-con), 1 AES/EBU XLR input (2 channels), 1 AES/EBU XLR output (2 channels), 1 S/PDIF input (RCA) and 1 S/PDIF output (RCA). There shall be a software option to switch between using the AES/EBU or S/PDIF inputs. The rear shall also have 4 switched RJ45 ethernet ports for connection to other SoundGrid devices, Word Clock I/O, MIDI I/O, an AC PSU, a USB port (for support only) and a reset switch.

The clock synchronisation source shall be chosen from Word Clock, AES/EBU, S/PDIF, SoundGrid (sync over ethernet) or internal.

The dimensions of the IOS-XL shall be: 482.6 (w) x 356 (d) x 88.1 (h) mm
The weight of the IOS-XL shall be: 7kg

AUDIO SPECIFICATIONS

Sample Rate: 44.1kHz / 48kHz / 88.2kHz / 96kHz
Internal Latency: 0.8ms
Analogue Inputs
Input Impedance: Mic: 2K Ω / Line: 8K Ω Ohms
Gain Range: Mic: -20dB to +60dB in 0.5dB steps / Line: -30dB to +50dB in 0.5dB steps
Maximum Input Level: Mic: +26dBu / Line: +36dBu
Mic Equivalent Input Noise: > -126 dB (150 Ω source, Gain +60dB)
Harmonic Distortion: Typically <0.01% @ unity gain, 10dB input @ 1kHz
Frequency Response: +/-0.5dB (20Hz to 20kHz)
Channel Separation: Better than 90dB (40Hz to 15kHz)
Analogue Outputs
Maximum Output Level: +22dBu
Residual Output Noise: <90dB (20Hz to 20kHz)
Frequency Response: +/-0.5dB (20Hz to 20kHz)
Output Impedance: 50 Ω
Channel Separation: Better than 90dB (40Hz to 15kHz)
Harmonic Distortion: Typically <0.01% @ +10dB Output @ 1kHz

REAR

8 x mic/line inputs (XLR/TRS combo)
8 x line outputs (TRS)
1 x 25-pin D-con (line outputs)
4 x SoundGrid RJ45 Ethernet ports (switched)
1 x AES/EBU I/O (2 input channels and 2 output channels)
1 x S/PDIF I/O (RCA)
1 x Word Clock I/O (BNC)
1 x MIDI I/O (2 x 5 pin DIN)
1 x AC PSU
1 x USB 2.0 (Type A)
1 x Reset switch

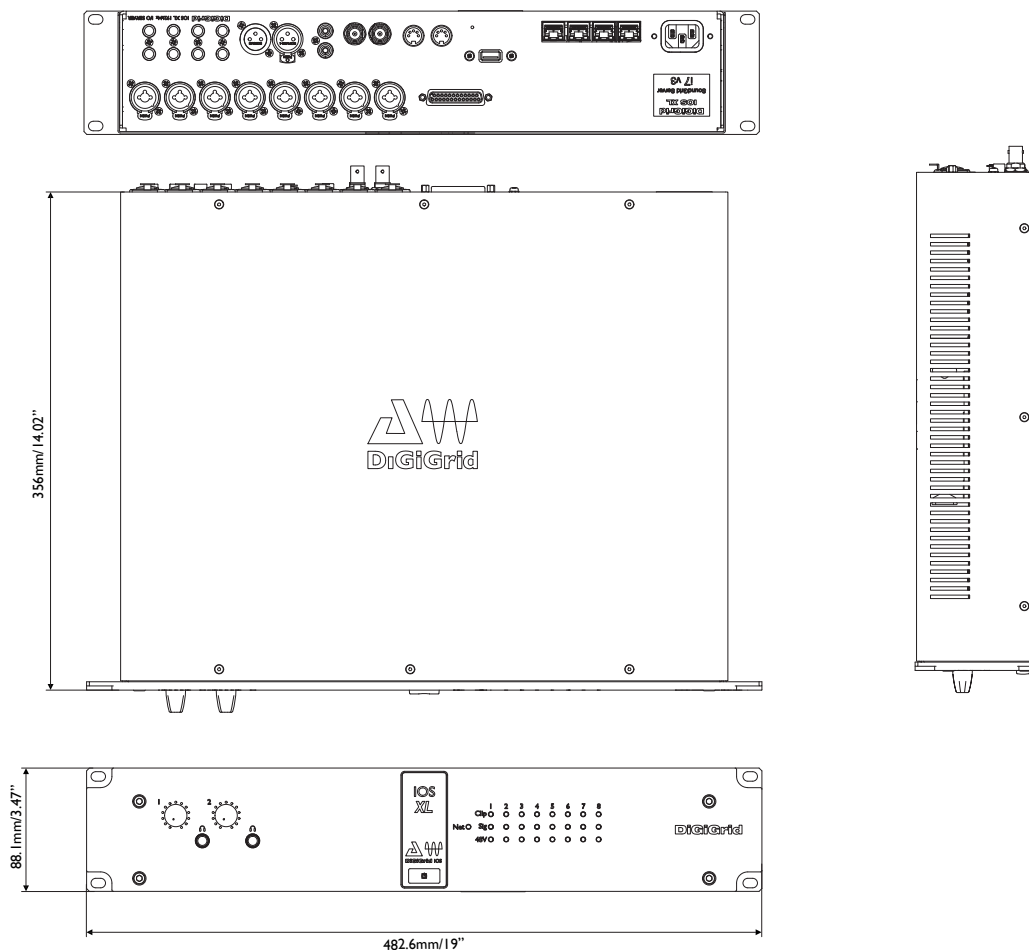
FRONT

2 x Headphone outputs (1/4" TRS) with independent analogue level controls
8 x Quick-view metering and status indicators
1 x Power button

SoundGrid audio networking gives you the freedom to connect multiple I/Os, mixing consoles, DAW computers and DSP servers to the same system, all using standard Cat 5e/Cat 6 Ethernet cables. Boasting state-of-the-art AD/DA convertors, DiGiGrid intergaces ensure high fidelity with uncompromising dynamic range, plus the ease and flexibility of the SoundGrid network.

LINE DRAWING

All dimensions in mm



PHYSICAL

Dimensions: 482.6mm (w) x 356mm (d) x 88.1mm (h)

Weight: 7kg (9kg boxed)

Power Requirements: 100-240 VAC, 2.0A, 50/60Hz

Product Code: X-DG-IOS-XL

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