Overview

Outstanding sound, innovative features, and extensive scalability in an innovative audio interface

Rear Panel

Features

- Designed and constructed to bring out the full sonic potential of the Nuendo/Cubase DAW software.
- Three models: 16-channel analog, 16-channel digital, and 8-channel analog + 8-channel digital.
- Up to 24 bit/192 kHz hardware operation in the Nuage I/O units, with extremely low jitter and outstanding AD/DA resolution.
- True Integrated Monitoring™ reduces monitoring latency to well below the perception threshold.
- True Integrated Monitoring™ works flawlessly with Nuendo Control Room monitoring features, a 16 monitor bus cascade, and a 16x16 monitor matrix.
- Up to eight Nuage I/O units can be cascaded and provide a maximum of 128 channels.

Specifications   1/2

General Specifications

Sampling Frequency	Internal	44.1kHz/48kHz/88.2kHz/96kHz/176.4kHz/192kHz	
	External	44.1kHz 1041675	±200ppm
		48kHz 1041675	±200ppm
		88.2kHz 1041675	±200ppm
		96kHz 1041675	±200ppm
		176.4kHz 1041675	±200ppm
		192kHz 1041675	±200ppm
Frequency Response		±0.5dB, 20Hz-20kHz, ref to the nominal output level @1kHz, Input&Output Gain: 0dB, Input level +4dBu(typ)	
THD+N*[1]		Less than 0.005%, input to output, GAIN: 0dB	
Dynamic Range		120dB typ.,ADC 120dB typ.,DAC	
Crosstalk@1kHz		-100dB, CH1-16 , adjacent inputs	
Power Requirements (wattage)		51W	
Power Requirements (voltage and hertz)		US/Canada: 120V 60Hz Japan: 100V 50/60Hz China: 110-240V 50/60Hz Korea: 220V 60Hz Other: 110-240V 50/60Hz	
Dimensions (W x H x D)		480mm x 88mm x 369 mm (18-7/8" x 3-1/2" x 14-1/2")	
Net Weight		6.4kg (14.1lbs)	
Included Accessories		Power cable, Ferrite core, Ruber stoppers (4), Operation Manual	

*1 These characteristics are measured with A-weighting filter and/or 30kHz LPF.

Specifications   2/2

Digital I/O Characteristics

Terminal	Format	Data length	Level	Connector in Console
AES/EBU	AES/EBU Professional use	24bit	RS422	D-SUB Connector 25P (Female)
Primary/Secondary	Dante	24bit	1000Base-T	RJ-45 x 2
Cascade	-	32bit	LVDS*2	RJ-45 x 2

Control I/O Characteristics

Terminal		Level	Connector in Console
WORD CLOCK	IN	TTL/75Ω terminated	BNC Connector
	OUT	TTL/75Ω	BNC Connector
System Link Out		1.0±0.2Vp-p/75Ω*3	BNC Connector

*2 Hi Speed CML
*3 AES-3id

Dimensions

Unit: mm (inch)

430(16 7/8)

358(14 1/8)

372(14 5/8)

14 (1/2)

480(18 7/8)

88(3 1/2)
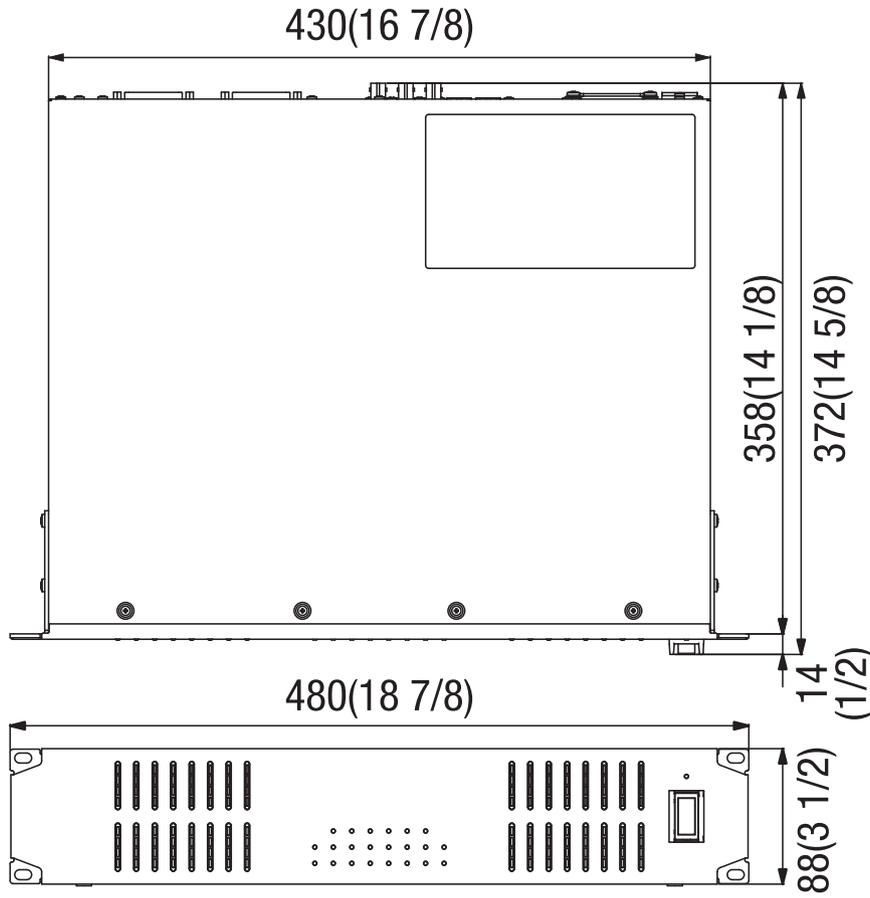
Architectural and Engineering Specifications

The Yamaha Nio500-D16 shall be a Nuage I/O unit with 16 AES/EBU digital inputs and outputs for use with the Yamaha Nuage Advanced Production System. The Nio500-D16 shall have 24 bit/192 kHz hardware operation to ensure that the full performance of the Nuendo/Cubase DAW is utilized. The Nio500-D16 shall include JetPLL™ jitter reduction technology for low jitter and high AD/DA resolution. Advanced audio interface DSP hardware and "True Integrated Monitoring™" shall reduce monitoring latency to below the threshold of perception. True Integrated Monitoring™ shall be compatible with the Nuendo/Cubase Control Room monitoring. 32 monitor bus cascade and a 16 x 16 monitor matrix shall provide expandability and easy setup. Full 7.1 channel surround monitoring support shall be provided to take maximum advantage of the Nuendo DAW's advanced surround mixing capabilities. Built-in DSP based bass management, delay, and level adjustment functionality shall be included to facilitate surround monitoring setup for any studio. Dante audio networking technology shall be included for high-quality, ultra-low latency audio transmission via standard Ethernet cables and to allow easy setup. A secondary port shall support redundant audio network connections. It shall be possible to cascade up to eight Nuage I/O units to provide as many as 128 channels for large-scale systems (the analog Nio500-A16, digital Nio500-D16, and analog + digital Nio500-A8D8 can be combined as required). Dimensions shall be 480 (W) x 88 (H) x 369 (D) mm. Weight shall be 6.4 kg.