

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

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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 | 6.7kg (14.8lbs) | | |
| Included Accessories | Power cable, Ferrite core, Rubber stoppers (4), Operation Manual | | |

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

Specifications

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Analog Input Characteristics

| Input Terminal | Actual Load Impedance | For Use With Nominal | GAIN | Input level | | Connector in Console |
|----------------|-----------------------|----------------------|--------|-----------------|-----------------|------------------------------|
| | | | | Nominal | Max.before clip | |
| ANALOG INPUT | 20kΩ (BAL) | 150Ω Lines | 0dB | +4dBu (1.23 V) | +24dBu (12.28V) | D-SUB Connector 25P (Female) |
| | | | +12dB | -10dBV (0.32 V) | +10dBV (3.16V) | |
| | 10kΩ (UNBAL) | 600Ω Lines | 0dB | +4dBu (1.23 V) | +24dBu (12.28V) | D-SUB Connector 25P (Female) |
| | | | +12 dB | -10dBV (0.32 V) | +10dBV (3.16V) | |

Analog Output Characteristics

| Output Terminal | Actual Source Impedance | For Use With Nominal | GAIN SW | Output level | | Connector in Console |
|-----------------|-------------------------|----------------------|---------|----------------|-----------------|------------------------------|
| | | | | Nominal | Max.before clip | |
| ANALOG OUTPUT | 75Ω (BAL) | 10kΩ Lines | 0dB | +4dBu (1.23 V) | +24dBu (12.28V) | D-SUB Connector 25P (Female) |
| | | | -6dB | | +18dBu (6.16 V) | |

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

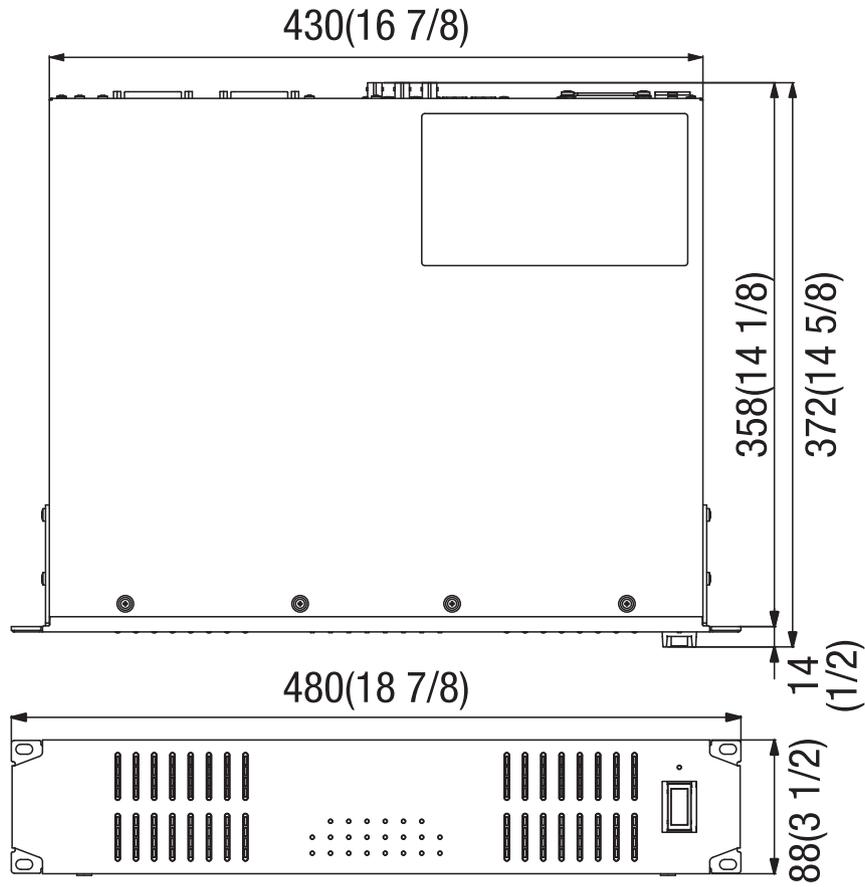
| Terminal | Level | Connector in Console |
|-----------------|-------------------|----------------------|
| WORD CLOCK | IN | TTL/75Ω terminated |
| | OUT | TTL/75Ω |
| System Link Out | 1.0±0.2Vp-p/75Ω*3 | BNC Connector |

*2 Hi Speed CML

*3 AES-3id

Dimensions

Unit: mm (inch)



Architectural and Engineering Specifications

The Yamaha Nio500-A8D8 shall be a Nuage I/O unit with 8 analog inputs and outputs and 8 AES/EBU digital inputs and outputs for use with the Yamaha Nuage Advanced Production System. The Nio500-A8D8 shall have 24 bit/192 kHz hardware operation to ensure that the full performance of the Nuendo/Cubase DAW is utilized. The Nio500-A8D8 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 6.7 kg.

*All information subject to change without notice.

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