

Specifications

NetPA Ultra Series 1004, 1004-70V, 1004-100V

Audio System

Voltage Gain

Line Outputs..... Unbalanced output: -6 dB;
Balanced output: 0 dB

Frequency response

Through DSP..... 20 Hz to 20 kHz, ± 0.5 dB
Through amplifier..... 20 Hz to 20 kHz, ± 1 dB

THD + Noise

Through DSP..... $< 0.01\%$ @ 1 kHz at maximum output level
Through amplifier..... 0.1% @ 1 kHz at 3 dB below clipping

S/N

Mic/line in to line out..... 90 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Mic/line in to speaker out..... 90 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Mic/line in to digital out..... 90 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Digital in to line out 100 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Digital in to speaker out 100 dB, 20 Hz to 20 kHz at maximum output (unweighted)

Crosstalk < -90 dB @ 1 kHz, fully loaded

Volume control..... -100 dB to 0 dB (control 0 to 100 in 0.1 dB steps)

Audio Input (Mic/Line Inputs)

Number/signal type..... 4 mono, mic/line, balanced/unbalanced
Connectors..... (2) 3.5 mm captive screw connectors, 6 pole, mono, balanced/unbalanced
Impedance..... $> 10k$ ohms balanced/unbalanced
Nominal level..... -60 dBV, +4 dBu, -10 dBV adjustable via input gain
Maximum level..... +21 dBu at rated THD+N when input gain is set to 0 dB
Equivalent input noise < -120 dBV (1 μ Vrms) at 40 dB input gain
CMRR..... > 60 dB typical
Input gain adjustment..... -18 dB to +60 dB in 0.1 dB steps, adjustable per input

Audio Line Output

Number/signal type..... 4 mono, line, balanced/unbalanced
Connectors..... (2) 3.5 mm captive screw connector, 6-pole
Impedance..... 100 ohms balanced, 50 ohms unbalanced
Gain error..... ± 0.1 dB channel to channel
Maximum level (Hi-Z)..... $> +21$ dBu balanced; +15 dBu unbalanced

Audio Processing

D/A conversion 24 bit, 48 kHz

AT Port – Audio Transport

Transmission type Dante/AES-67, software selectable
Connectivity 1 RJ-45 connector, 1-port 100 Mbps to Dante interface
Inputs 4 channels Rx
Outputs 4 channels Tx
Audio format 24-bit uncompressed, selectable at 44.1, 48, 88.2, and 96 kHz sampling rate
Latency..... Deterministic, based on user selection: 1.0 ms (default), 2.0 ms, 5.0 ms

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV \approx 2 dBu

Specifications • NetPA Ultra Series 1004 (Continued)

Audio Speaker Output

Number/signal type

- NetPA U 1004 4 channels, 4 or 8 ohms
- NetPA U 1004-70V 4 channels, 70 V
- NetPA U 1004-100V 4 channels, 100 V

Connectors (2) 5 mm screw lock captive screw connector, 4-pole

NOTE: These connectors accept wires of 22 AWG to 12 AWG.

Load impedance

- NetPA U 1004 4 ohms minimum
- NetPA U 1004-70V 50 ohms minimum
- NetPA U 1004-100V 100 ohms minimum

Amplifier type Class D

Output power

- NetPA U 1004 100 watts per channel, 4 or 8 ohms, 1 kHz, <0.1% THD
- NetPA U 1004-70V 100 watts per channel, 70 V, 1 kHz, <0.1% THD
- NetPA U 1004-100V 100 watts per channel, 100 V, 1 kHz, <0.1% THD

High pass filters

NetPA U 1004-70V/100V only .. 80 Hz, 12 dB per octave rolloff (On by default, Changeable via software)

Control/Remote

Control port (1) 3.5 mm captive screw connector, 5-pole

Serial

- Serial host control port 1 bidirectional RS-232
- Baud rate and protocol 38400 baud, 8 data bits, 1 stop bit, no parity
- Pin configurations Pin 1 = Tx, Pin 2 = Rx, Pin 3 = GND

Standby

- Standby power control Contact Closure
- Pin configuration Pin 4 = GND, pin 5 = STANDBY

USB control ports 1 rear panel female USB mini B

USB standards USB 2.0, high speed

Ethernet host port 1 RJ-45 female connector

Ethernet data rate 10/100 Base-T

Program control Configuration program for Windows®
Extron Simple Instruction Set (SIS™)

General

Power supply Internal. Input: 100-240 VAC, 50-60 Hz, 0.5 A

Power consumption and thermal dissipation

| NetPA U 1004 | | 115 VAC, 60 Hz | | | | 230 VAC, 50 Hz | | | |
|---|-----|-----------------|-------------------|---------------------|--------|-----------------|-------------------|---------------------|--------|
| | | AC Line Current | AC Power Consumed | Thermal Dissipation | | AC Line Current | AC Power Consumed | Thermal Dissipation | |
| Condition | | A | W | W | BTU/hr | A | W | W | BTU/hr |
| Active (1/8 power), all channels driven | 8 Ω | 0.6 | 68.3 | 18.3 | 62 | 0.4 | 67.1 | 17.1 | 58 |
| | 4 Ω | 0.7 | 71.6 | 21.6 | 74 | 0.4 | 70.3 | 20.3 | 69 |
| Quiescent (idle) | | 0.1 | 10.6 | 10.6 | 36 | 0.1 | 10.4 | 10.4 | 35 |
| Standby | | < 0.1 | < 4 | < 4 | < 14 | < 4 | < 4 | < 4 | < 14 |

Specifications • NetPA Ultra Series 1004 (Continued)

| NetPA U 1004-70V | | 115 VAC, 60 Hz | | | | 230 VAC, 50 Hz | | | |
|---|------|-----------------|-------------------|---------------------|--------|-----------------|-------------------|---------------------|--------|
| | | AC Line Current | AC Power Consumed | Thermal Dissipation | | AC Line Current | AC Power Consumed | Thermal Dissipation | |
| Condition | | A | W | W | BTU/hr | A | W | W | BTU/hr |
| Active (1/8 power), all channels driven | 70 V | 0.7 | 71 | 21 | 72 | 0.4 | 69.5 | 19.5 | 67 |
| Quiescent (idle) | | 0.1 | 11.4 | 11.4 | 39 | 0.1 | 11.1 | 11.1 | 38 |
| Standby | | < 0.1 | < 4 | < 4 | < 14 | < 4 | < 4 | < 4 | < 14 |

| NetPA U 1004-100V | | 115 VAC, 60 Hz | | | | 230 VAC, 50 Hz | | | |
|---|-------|-----------------|-------------------|---------------------|--------|-----------------|-------------------|---------------------|--------|
| | | AC Line Current | AC Power Consumed | Thermal Dissipation | | AC Line Current | AC Power Consumed | Thermal Dissipation | |
| Condition | | A | W | W | BTU/hr | A | W | W | BTU/hr |
| Active (1/8 power), all channels driven | 100 V | 0.7 | 72.5 | 22.5 | 77 | 0.4 | 71.1 | 21.1 | 72 |
| Quiescent (idle) | | 0.1 | 11.6 | 11.6 | 40 | 0.1 | 11.4 | 11.4 | 39 |
| Standby | | < 0.1 | < 4 | < 4 | < 14 | < 0.1 | < 4 | < 4 | < 14 |

Temperature/Humidity

| | |
|------------------|--|
| Storage | -40 to +158 °F (-40 to +70 °C) / 10% to 90%, non-condensing |
| Operating | +32° to +122° F (0° to +50° C) / 10% to 90%, non-condensing |
| Cooling | Convection, no vents |
| Protection | Clip limiter, thermal, short circuit, DC output |
| Indication | Limiter/Protect LED indicates the onset of clip limiting, thermal cycling, or a short circuit. Over Temp LED indicates when the amplifier exceeds the recommended operating temperature for optimal unit longevity. Power LED indicates power state, DC output protection (see NetPA Ultra Series User Guide for details). |

Mounting

| | |
|--------------------------------------|---|
| Rack mount | Yes, with included brackets or optional 1U rack shelf |
| Enclosure type | Metal |
| Enclosure dimensions | 1.7" H x 8.7" W x 10.5" D (1U high, half rack wide) (43 mm H x 221 mm W x 267 mm D) |
| Product weight | 3.8 lbs (1.7 kg) |
| Vibration | ISTA 1A in carton (International Safe Transit Association) |
| Regulatory compliance | |
| Safety | CE, c-UL, UL. Meets UL 60065, IEC 60065, and BSEN 60065 for AV equipment |
| EMI/EMC | CE, C-tick, EN 55103-1, EN 55103-2, FCC Class B, ICES, VCCI Class B |
| Environmental | Complies with the appropriate requirements of ENERGY STAR® (ENERGY STAR qualified amplifier), RoHS, WEEE. |
| Product warranty | 3 years parts and labor |
| Everlast power supply warranty | 3 years parts and labor |

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

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