

NXE MULTI-MODE AMPLIFIERS

POWER AMPLIFIERS W/ SELECTABLE OUTPUTS & ETHERNET CONTROL

NX Multi-Mode Power Amplifiers are designed to meet the most demanding live sound environments and fixed audio installations anywhere—performance venues, stadiums, arenas, convention centers as well as schools, store fronts, and worship spaces.

Available as three separate amplifier series, NX offers 2 or 4-channel models as NX (base model series), NXE (networkable), or NXP (networkable + DSP).

All NXE Models Include:

Ethernet Control using Protea™ NE software. Also, serial data control by Ashly programmable remotes or third party controllers, aux preamp outputs, instant standby mode, preset recall, fault condition logic outputs, optional Dante™, CobraNet™, or AES3 digital audio capability (factory-installed).

Real-Time Clock with Event Scheduler. Assign automatic execution of selected functions and tasks. The event scheduler is programmed using PnES software and stored in the amplifier.

Ashly Remote Control via iPad® app. Use our Ashly Remote free app available for custom design of secure wireless control over a network.

Class-D Switching Amplifier Technology. NXE features a switch-mode power supply which automatically detects 110 – 120VAC or 220 – 240VAC operation and makes NXE one of the lightest in its class.

Multi-Mode Operation. Selectable Outputs on each channel allow you to choose the desired output mode. Set the DIP-switch configuration for Low Impedance (2, 4, and 8 Ohm), or Constant Voltage (70V or 100V) and you're set to go.

Energy Efficiency. NXE has power-saving Ashly EMS™ (Energy Management System) which provides an automatic sleep-mode drawing less than 1 Watt (defeatable).

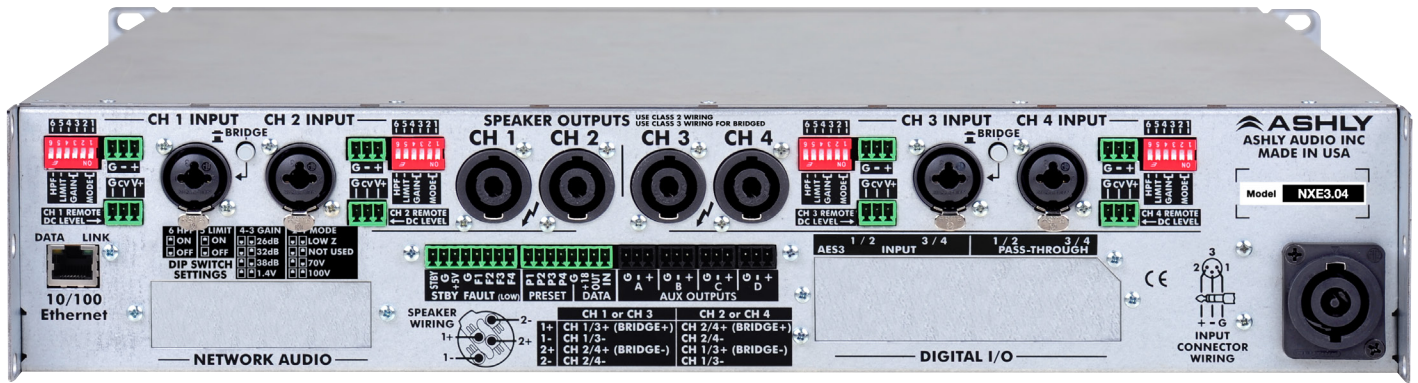
Multiple Internal Power Supplies. NXE provides increased channel separation and reliability.

nXe Series	3000 & 1500 Watt Models				800 & 400 Watt Models			
	nXe 3.04	nXe 3.02	nXe 1.54	nXe 1.52	nXe 8004	nXe 8002	nXe 4004	nXe 4002
Channels	4	2	4	2	4	2	4	2
<i>*Max Output Power: Measured in Watts, Per Channel, Low Impedance Output, All Channels Driven</i>								
2 Ohms	3,000	3,000	1,500	1,500	800	800	400	400
4 Ohms	2,000	2,000	1,500	1,500	800	800	400	400
8 Ohms	1,250	1,250	1,250	1,250	800	800	400	400
<i>*Low Impedance Output: Measured in Watts, Bridge Mode, All Channels Driven</i>								
4 Ohms	6,000	6,000	3,000	3,000	1600	1600	800	800
8 Ohms	4,000	4,000	3,000	3,000	1600	1600	800	800
<i>*70V, 100V Constant Voltage Output: Measured in Watts, All Channels Driven</i>								
70V (per channel)	2,450	2,450	1,500	1,500	800	800	400	400
100V (per channel)	1,250	1,250	1,250	1,250	800	800	400	400
<i>Total Power Draw, Measured in Watts: Total for all Channels</i>								
Sleep Mode	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Standby Mode	70	40	70	40	40	25	40	25
Idle (no signal)	100	55	100	55	70	40	70	40
<i>Current Draw: Measured in Amps, Total for all Channels, 120VAC, Divide by 2 for 240VAC</i>								
Sleep Mode	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Standby Mode	1.30	0.70	1.30	0.70	0.70	0.38	0.70	0.38
Idle (no signal)	1.85	1.00	1.85	1.00	1.30	0.70	1.30	0.70
<i>Max Current Draw: Measured in Amps, Typical Input, All Channels Driven, Divide by 2 for 240VAC</i>								
½ Max Power @ 2 Ohms	29.5	14.7	16.0	8.0	8.8	4.6	5.0	2.6
<i>Thermal Dissipation: BTU/hr, Typical Input, Total for all Channels</i>								
Sleep mode	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Standby mode	238	136	238	136	136	85	136	85
Idle (no signal)	340	187	340	187	238	136	238	136
½ Max Power @ 2 Ohms	2,720	1,360	1,700	850	970	495	595	305

* Measurements based on CEA-2006/490A, 20ms 1kHz 1% THD+N, 480ms 1kHz -20dB.

‡ <1W sleep mode can be defeated for applications that are subject to third-party performance standards that prohibit a sleep mode, including those used for Mass Notification and Emergency Communication Systems and those subject to ANSI/UL 2572.

Note: When making a true comparison of energy efficiency, one must look at the Thermal Dissipation (BTU/hr) numbers for a product. All other efficiency, i.e. "percentage" numbers are not standards based, and therefore may be marketing hype. Ashly Audio builds highly efficient Class-D amplification with SMPS that will equal or surpass the competition on BTU/hr thermal output (unused energy given off as heat). Please check our published BTU/hr specifications for more information.



Rear Panel Configuration (4-Channel nXe Shown)

NXE Additional Features:

- Selectable 80Hz Hipass filter, limiter, and input gain per channel, via rear panel
- Remote DC level control per channel
- Extensive protection circuitry, continuously variable cooling fans
- Ethernet port for software control and monitoring of amplifier functions, with front panel COM activity LED
- Serial data port available for Ashly WR-5 and RD-8C programmable remote control (optional RS-232 converter INA-1 available for third party controllers)
- Instant Standby Mode, 30% reduction in idle power consumption, triggered by contact closure, software control, or event scheduler
- Preset recall via contact closure, software control, remote control, or event scheduler
- Programmable power-on delay
- Aux preamp line outputs for driving other amplifiers
- Fault condition logic outputs, per channel
- Neutrik® Combo XLR – 1/4" TRS jack plus Euroblock input connectors
- Neutrik® speakON® twist locking loudspeaker connectors
- Neutrik® powerCON® detachable AC mains connector
- Safety/Compliance: cTUVus, CE, FCC, RoHS

Specifications	Notes: 0dBu = 0.775 VRMS
Voltage Gain	Selectable at 26dB, 32dB, 38dB, or 1.4V
Damping Factor	>250 (8 Ohms load <1kHz)
Input High Pass Filter	80Hz 2nd order
Distortion (SMPTE, typical)	<0.5%
Distortion (THD-N, typical)	<0.5% (8 Ohms, 10dB below rated power, 20Hz–20kHz)
Channel Separation	-75dB (dB from full output, 1kHz)
Signal-to-Noise (20Hz–20kHz, unweighted)	>114dB (all 3.0x models) >111dB (all 1.5x models) >108dB (all 800x models) >105dB (all 400x models)
Frequency Response	20Hz–20kHz, +/-0.05dB
Balanced Input Connector	Euroblock 3.5mm, 1/4" TRS and XLR Combo jack
Input Impedance	10k Ohms
Maximum Input Level	+21dBu
Speaker Output Connector	Neutrik® speakON®
Control Network	Compatible w/ standard 100MB Ethernet
AUX Output Connector	Balanced Euroblock 3.5mm
AUX Output Maximum Level	+21dBu
Remote Standby Contact Closure	Euroblock 3.5mm, close contact to GND for standby mode
Preset Recall Contact Closure	Euroblock 3.5mm, close contact to GND for preset 1-4 recall
Data Connection	Euroblock 3.5mm - Gnd, +18V, In, Out
Fault Condition Logic Outputs	Fault indicated by loss of 1Hz "heartbeat" pulse signal
Remote DC Level Control	Euroblock 3.5mm - Gnd, CV, V+ per input
Attenuators (per channel)	Front panel, software, offset link group, and remote. Fully off = Mute
Amplifier Protection	Inrush current limitation, temperature monitoring, output over-power protection, mains fuses
Cooling	Continuously variable temperature controlled axial fan(s)
Environmental	32–113 deg F, (0–45 deg, C) (noncondensing)

Power Requirements (50 – 60Hz)		
Nominal (Automatic Sensing SMPS)	110 – 120VAC	220 – 240VAC
Operating Range	70 – 135VAC	140 – 270VAC
Minimum power-up	85VAC	170VAC
Power Cable Connector	20A powerCON® (32A powerCON® 3.04 model only)	

Weights and Dimensions	
Unit Weight	1.54/3.04: 28.7lbs (13kg) 1.52/3.02: 22.7lbs (10.3kg) 4002/8002: 22.2lbs (10.1kg) 4004/8004: 25.9lbs (11.7kg)
Shipping Weight	1.54/3.04: 35.2lbs (16kg) 1.52/3.02: 29.2lbs (13.3kg) 4002/8002: 28.7lbs (13.1kg) 4004/8004: 32.4lbs (14.8kg)
Unit Dimensions (all models)	19"W x 3.5"H x 16.84"D (483mm x 89mm x 428mm)
Shipping Dimensions	24.5"W x 22"H x 5.25"D (622mm x 559mm x 133mm)

Front Panel LED Indicators	
POWER (white)	Switch: On, Off, Standby (flashing)
PROTECT (red)	On (fault condition or shut down), Off
SLEEP (blue)	On, amplifier is asleep from audio inactivity
DISABLE (yellow)	On, power switch & front panel attenuators are disabled
COM (green)	On, for Ethernet data or Device ID
Per Channel	
CLIP/MUTE (red)	Clip @ 1dB below full output / Mute
SIGNAL (green)	-18dB below rated output
CURRENT (green)	Proportional to output
TEMP (yellow)	On dim at 90% max operating temperature, full bright + protect at 100%
BRIDGE (green)	On, Off

Remote Accessories	
WR-1	2-Channel Level Control
WR-1.5	Level and Preset Recall
WR-2	Four-Position Switch
WR-5*	Programmable Button Controller
neWR-5*	Programmable Network Button Controller
FR-8	8-Channel Network Fader Remote
FR-16	16-Channel Network Fader Remote
Ashly Remote	Remote Control Application for Apple® iPad®

Digital Input Options (Factory installed)	
Dante® Digital Interface (NXE, NXP only) part number: OPDante	PRIMARY SECONDARY Dante INTERFACE CARD
CobraNet® Digital Interface (NXE, NXP only) part number: CNM-2	PRIMARY SECONDARY CNM-2
AES3 2-ch input w/ AES3 pass-thru (2-ch models only) part number: OPAES2	1/2 1/2
AES3 4-ch input w/ AES3 pass-thru (4-ch models only) part number: OPAES4	1/2 3/4 1/2 3/4

*Function is limited to Mute and Preset Recall ©2017 All features, specifications and graphical representations are subject to change or improvement without notice and may not represent the final product.



NXE SERIES

ARCHITECT & ENGINEERING SPECS

nXe3.04

The unit shall be a 4 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 3,000W per channel at Low Z, 2,450W per channel in 70V mode, and 1,250W in 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <28.7 lbs (13kg), measure 19"W x 3.5"H x 16.8"D (483mm x 89mm x 428mm), and mount in a standard 19" rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe3.04**.

nXe3.02

The unit shall be a 2 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 3,000W per channel at Low Z, 2,450W per channel in 70V mode, and 1,250W in 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <22.7 lbs (10.3kg), measure 19"W x 3.5"H x 16.8"D (483mm x 89mm x 428mm), and mount in a standard 19" rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe3.02**.

nXe1.54

The unit shall be a 4 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 1,500W per channel at Low Z and 70V modes, and 1,250W in 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <28.7 lbs (13kg), measure 19"W x 3.5"H x 16.8"D (483mm x 89mm x 428mm), and mount in a standard 19" rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe1.54**.

nXe1.52

The unit shall be a 2 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 1,500W per channel at Low Z and 70V modes, and 1,250W in 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <22.7 lbs (10.3kg), measure 19"W x 3.5"H x 16.8"D (483mm x 89mm x 428mm), and mount in a standard 19" rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe1.52**.



NXE SERIES

ARCHITECT & ENGINEERING SPECS

nXe8004

The unit shall be a 4 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 800W per channel at Low Z, 70V, and 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <25.9 lbs (11.7kg), measure 19”W x 3.5”H x 16.8”D (483mm x 89mm x 428mm), and mount in a standard 19” rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe8004**.

nXe8002

The unit shall be a 2 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 800W per channel at Low Z, 70V, and 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <22.2 lbs (10.1kg), measure 19”W x 3.5”H x 16.8”D (483mm x 89mm x 428mm), and mount in a standard 19” rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe8002**.

nXe4004

The unit shall be a 4 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 400W per channel at Low Z, 70V, and 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <25.9 lbs (11.7kg), measure 19”W x 3.5”H x 16.8”D (483mm x 89mm x 428mm), and mount in a standard 19” rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe4004**.

nXe4002

The unit shall be a 2 channel multi-mode amplifier capable of driving 2 Ohm loads at full power. The maximum rated output power shall be 400W per channel at Low Z, 70V, and 100V mode. There shall be an automatic but defeatable sleep mode consuming <1W, and instant standby mode controlled by contact closure or software. A switch mode power supply shall auto-detect 110 – 120VAC or 220 – 240VAC mains, and a Neutrik® powerCON shall be used for the AC cord. Each channel shall have selectable output mode of Low Z, 70V, or 100V, an 80Hz high-pass filter, input limiter, and input gain settings of 26dB, 32dB, 38dB, or 1.4V. Each channel shall have remote DC level control. Input connectors shall be Neutrik® XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik® speakON. The unit shall have a front panel power switch and level controls that can be disabled. LEDs shall indicate Protect, Sleep, Disabled, Com, and Bridge mode status, as well as Temperature, Output Current, Output Signal, and Clipping/Mute status per channel. The unit shall have Ethernet control with a real-time clock for event scheduling. The unit shall have serial data remote control, aux preamp outputs, preset control, fault condition logic outputs, optional network audio and AES3 digital audio capability with the addition of a 4-Channel DAC card. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <22.2 lbs (10.1kg), measure 19”W x 3.5”H x 16.8”D (483mm x 89mm x 428mm), and mount in a standard 19” rack. There shall be a five year warranty for units purchased in the US. No other unit shall be acceptable unless all specifications represented herein are met or exceeded and submitted in writing by an independent testing agent.

The power amplifier shall be an Ashly **nXe4002**.

