Ashly Audio, Inc. | 847 Holt Road | Webster, NY 14580-9103 USA | US toll free: +1-800-828-6308 | tel: +1-585-872-0010 | fax: +1-585-872-0739 | sales@ashly.com | www.ashly.com | Ashly is a division of Jam Industries, Ltd.



# NXP SERIES

#### Power Amplifiers W/ Programmable Outputs And Protea™

Ashly's new line of *nX Power Amplifiers* feature lightweight, energy-efficient Class-D switching amplifier technology combined with a switch mode power supply. nX amplifiers are available in three product families (nX, nXe, nXp) and are designed to meet the most demanding live sound and fixed installation sound systems in stadiums, arenas, performance venues, worship spaces and convention centers.

**nXp Series** features *Protea*<sup>™</sup> *DSP* and is available in either 2 or 4-channel models. Use rear panel DIP switches to program each channel output for either High-Z (70V or 100V Constant Voltage) or Low-Z (stable down to 2 Ohms) operation. When in sleep mode, the nX amplifiers draw less than 1 Watt.

*nXp* is networkable with Ethernet control. It also has serial data control, aux preamp outputs, instant standby mode, preset recall, fault condition logic outputs, and optional network audio and digital audio capability all controlled using our *Protea™ Software Suite*. nXp amplifiers add 32-bit SHARC DSP processing (with 48kHz & 96kHz sampling) as standard equipment for comprehensive audio processing, with built-in signal generator for test tone and noise-masking. Swept load impedance monitoring is available on each amplifier channel output.

#### nXp Series Features:

- 2 and 4-channel high-output, lightweight amplifiers with programmable output on each channel (High-Z or Low-Z, selected via rear panel DIP switches)
- FIR Filter Ready
- Power-saving, Energy Management System<sup>+</sup> (Ashly EMS<sup>™</sup>) automatic
  <1W sleep-mode (defeatable)</li>
- Front panel power switch and level controls (can be disabled for security)
- Rear panel DIP switches per channel for selection of high pass filter, limiter, input gain, and High-Z or Low-Z speaker output configuration
- Remote DC level control on each input channel
- Switch mode power supply automatically detects 120V or 240V AC operation
- Extensive protection circuitry, continuously variable cooling fans
- Multiple independent internal power supplies provide increased channel separation and reliability
- Ethernet port for use with control and monitoring of amplifier functions, with front panel COM activity LED
- Serial data port for use with Ashly remote control devices, or optional RS-232 converter for third party controllers (INA-1)
- Use Protea<sup>™</sup> Software to remotely disable all front panel controls, including the on/ off switch, for a tamper-proof installation

	3	000 & 15	00 Watt	Models		800 & 4	00 Watt I	Models
nXp Series	nXp 3.04	nXp 3.02	nXp 1.54	nXp 1.52	nXp 8004	nXp 8002	nXp 4004	nXp 4002
Channels	4	2	4	2	4	2	4	2
*Max Output Power: Mea	isured in N	Natts, Per	Channel,	Low-Z Out	put, All Cl	hannels Di	riven	
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
*Low Z Output: Measured	l in Watts,	Bridge M	ode, All C	hannels D	riven			
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
*70V, 100V Output: Meas	ured in W	atts, All Cl	hannels D	riven				
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
Total Power Draw, Measu	red in Wa	tts: Total f	or all Cha	nnels				
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
Current Draw: Measured	in Amps, T	Total for a	ll Channel	s, 120VAC,	Divide by	2 for 240	V	
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
Max Current Draw: Meas	ured in An	nps, Typico	al Input, A	ll Channel	ls Driven, I	Divide by 2	2 for 240V	
1/2 Max Power @ 2 Ohms	29.5	14.7	16.0	8.0	8.8	4.6	5.0	2.6
Thermal Dissipation: BTU,	Thermal Dissipation: BTU/hr, Typical Input, Total for all Channels							
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
1/2 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.

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nXp 3.04 Rear Panel Configuration

Power Amplifiers w/ Programmable

OUTPUTS AND PROTEA<sup>TM</sup>

## NXP SERIES

#### Additional Features:

- Real-Time Clock with Event Scheduler
- Instant Standby Mode, 30% reduction in power consumption with on/off triggered by contact closure, software control, or event scheduler
- Programmable power-on delay
- Preset recall via contact closure, software control, remote control, or event scheduler
- Aux preamp outputs, and fault condition logic outputs
- Optional Cobranet<sup>®</sup> or Dante<sup>®</sup> network audio and AES3 digital audio input with pass-through
- Dynamics, gain, equalization, 2x4 or 4x4 matrix mixer, crossover, delay, metering, and signal generator functions for test and noise masking applications
- Precision swept load impedance monitoring of each amplifier channel for quick and easy diagnosis of sound system problems remotely via Ethernet
- Neutrik<sup>®</sup> Combo XLR 1/4" TRS jack plus Euroblock input connectors
- Neutrik<sup>®</sup> speakON<sup>®</sup> twist locking loudspeaker connectors for security, safety, and reliability
- Neutrik<sup>®</sup> powerCON<sup>®</sup> detachable AC mains connector
- Safety/Compliance: CE, FCC Class A, RoHS

Specifications	Notes: OdBu = 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 & XLR Combo jack
Input Impedance	10k Ohms
Maximum Input Level	+21dBu
Speaker Output Connector	Neutrik <sup>®</sup> speakON <sup>®</sup>
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	Euroblock 3.5mm - 4 available
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 con- trolled axial fan(s)
Environmental	32–113 deg F, (0–45 deg, C) (noncondensing)

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

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

Remote Accessories	S	
WR-1	2-Channel Level Control	
WR-1.5	Level and Preset Recall	
WR-2	Four-Position Preset Recall 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	
RD/RW-8C	Serial Data Fader Remote	
Ashly Remote	Remote Control Application for Apple <sup>®</sup> iPad <sup>®</sup>	

Digital Input Options (Factory installed)		
OPAES2	2-Ch AES3 Input w/ AES3 pass-thru	
OPAES4	4-Ch AES3 Input w/ AES3 pass-thru	
CNM-2	CobraNet® Digital Interface	
OPDante	Dante <sup>®</sup> Digital Interface	
OPAVB	AVB Digital Interface (in development)	

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# Protea

### DIGITAL SIGNAL PROCESSING FOR NXP AMPLIFIERS

Protea is compatible with Microsoft® Windows 8, 7 (Vista/XP) 32 & 64 bit systems.

Audio professionals find our Protea<sup>™</sup> DSP to be very intuitive and easy to navigate—and you will too. No need to attend a one-week training class away from home to learn our software. Common sense layout of controls and features, on-line help, or a visit to the Technical Support page on our website provides answers to all of your questions. Protea<sup>™</sup> DSP is designed for the nXp Amplifier, Pema, ne Series Amplifiers and Processors, the ne24.24M Matrix Processor, and Protea System Processors.

Protea <sup>™</sup> DSP Specifications for	nXp Amplifiers		
All DSP functions can be linked to	1 of 16 link groups		
Input Source Selection			
Input Source Select Options	Analog, Auto (Net, AES3, Analog)		
Brick Wall Limiter			
Threshold	-20dBu to +20dBu		
Ratio	Infinite		
Attack	0.2mS/dB to 50 mS/dB		
Release	5mS/dB to 1000mS/dB		
Compressor			
Threshold	-20dBu to +20dBu		
Ratio	1.2:1 to infinite		
Attack	0.2mS to 50mS		
Release	5mS/dB to 1000mS/dB		
Detector	Peak/Average		
Attenuation Bus	2 available		
Metering	In, Out, Attenuation, Graphical		
Autoleveler Controls			
Target Level	-40dBu to +20dBu		
Action	Gentle, Normal, Aggressive, User-Defined		
Maximum Gain	0dB to +22dB		
Metering	Input, Gain, Attenuation		
Ratio	1.2:1 to 10:1		
Threshold Below Target	-30dB to 0dB		
Gain Increase/Decrease Rate	5mS/dB to 1000mS/dB		
Hold Time	0-6 Sec		
Ambient Noise Compensation: (	Dutput Only		
Max Gain	-20dB to +20dB		
Min/Base Gain	-40dB to +20dB		
Gain Change Rate	0.2S/dB to 20S/dB		
Link Group	16 Available		
ANC Input Channel	1-2 or 1-4		
Noise Threshold	-40dBu to +20dBu		
Program/Ambient Gain Ratio	0.3:1 to 3:1		
Metering	Input level, Attenuation, Average noise		
Ducking: High/Low Priority, Trigg	er, Filibuster, Ducked Program		
Trigger Threshold	-80dBu to +20dBu		
Ducking Release	5mS/dB to 1000mS/dB		
Ducking Depth	0dB to -30dB, -∞		
Enable Ducking at Matrix Mixer	Yes		
Metering	Input		

Gate			
Threshold	-80dBu to +20dBu		
Range	off, 100dB to 0dB		
Attack	0.2mS/dB to 50mS/dB		
Release	5mS/dB to 1000mS/dB		
Metering	Key Signal, Gate LED, Graphical		
Advanced Gate Controls			
Key Engage Enable	Yes		
Key Frequency	20Hz–20kHz		
Key Bandwidth	0.016 to 3.995 Octave		
Gain			
Gain (with/without VCA)	-50dB to +12dB, Off, Polarity Invert		
Digital VCA Groups	4 Available		
Remote RD8C Gain	Enable (per channel), 0dB to - $\infty$		
WR-5 (neWR-5) Remote Gain	0 to -50dB, Mute		
EQ: 31-Band			
Filter Type	Constant Q or Proportional		
Bandwidth	0.499oct to 0.25oct		
EQ: Parametric 2,4,6, or 10 Band			
Frequency	20–20kHz		
Level	-30dB to +15dB		
Q Value	0.016 to 3.995 Octave		
EQ: Hi/Low Shelf 6/12 dB/Oct			
Frequency	20Hz–20kHz		
Level	-15dB to +15dB		
EQ: All Pass			
Frequency	20Hz–20kHz		
EQ: Variable Q HP/LP			
Frequency	20Hz–20kHz		
Q Value	3.047-0.267		
EQ: Notch/Bandpass	·		
Frequency	20Hz–20kHz		
Q Value	92.436 to 0.267		
Feedback Suppressor: Only Avail	able with 48kHz Sampling Rate		
Filters	12		
In/Out (per filter)	Yes		
Lock (per filter) and Global Lock	Yes		
Filter Modes	Float, Restricted, Manual		
Filter Type	Notch, Parametric		
Filter Frequency Range	20Hz–20kHz		
Notch Filter	-∞		

Parametric Filter	+15dB to -30dB
Filter Bandwidth	0.016 to 3.995 Octave
Detector Sensitivity	5 levels
Float Time	5 minutes to 24 hours
FIR Filter	
File Types	.fir or .csv
Crossover: 2 Way, 3 Way, 4 Way	y Crossover & High Pass/Low Pass Filters
Bessel & Butterworth Filters	12/18/24/48 dB/oct
Linkwitz-Riley Filter	12/24/48 dB/oct
Frequency	Off, 20Hz–20kHz
Delay: @ 48kHz Sampling Rate	(Input Time, Distance & Temperature)
Speaker Delay	0–21mS
Delay	0–682mS
Delay: @ 96kHz Sampling Rate	(Input Time, Distance & Temperature)
Speaker Delay	0–10.6mS
Delay	0-341mS
Audio Metering Tool	
Range	-60dBu to +20dBu
Increments	1dB
Peak Hold Indicator	Yes
Signal Generator Tool: Pink No	ise, White noise, Sine Wave
Signal Level	Off, -50dBu to +20dBu
Sine Wave Frequency	20Hz–12KHz
Matrix Mixer	·
Gain (0.5dB increments)	Off., -50 to +12dB
Mute	Per Channel
Auto-Mixer Enabled	Per Channel
Global Auto-Mixer Response	0.01Sec to 2Sec
Enable Ducking at Mixer	Yes
Ducking LED	Per Channel (if enabled)
Metering	Level, Auto-mixer Level
Processors	
Input A/D, Output D/A	24-Bit
DSP Processors	32-Bit Floating Point
Sample Rates	48kHz, 96kHz
Propagation Delay @ 48kHz:	1.42mS
Propagation Delay @ 96kHz:	0.71mS





## ARCHITECT & ENGINEERING SPECS

#### nXp3.04

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 120VAC or 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. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. 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 48mm), 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 exc

The power amplifier shall be an Ashly nXp3.04.

#### nXp3.02

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 120VAC or 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, laut condition logic outputs, optional network audio and AES3 digital audio capability. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. The amplifier shall have temperature dependent variable speed forced-air cooling. The unit shall weigh <22.7 lbs (10.3kg), measure 19<sup>o</sup>W x 3.5<sup>o</sup>H x 16.8<sup>o</sup>D (483mm x 428mm), and mount in a standard 19<sup>o</sup> 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

The power amplifier shall be an Ashly nXp3.02.

#### nXp1.54

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 120VAC or 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. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. 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

The power amplifier shall be an Ashly nXp1.54.

#### nXp1.52

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 120VAC or 240VAC mains, and a Neutrik<sup>®</sup> 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<sup>®</sup> XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik<sup>®</sup> 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. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. 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 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

The power amplifier shall be an Ashly nXp1.52.



## NXP SERIES

### ARCHITECT & ENGINEERING SPECS

#### nXp8004

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 120VAC or 240VAC mains, and a Neutrik<sup>®</sup> power-CON 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<sup>®</sup> XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik<sup>®</sup> 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. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. 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 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 w

The power amplifier shall be an Ashly nXp8004.

#### nXp8002

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 120VAC or 240VAC mains, and a Neutrik<sup>®</sup> power-CON 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<sup>®</sup> XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik<sup>®</sup> 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. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. 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 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 w

The power amplifier shall be an Ashly nXp8002.

#### nXp4004

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 120VAC or 240VAC mains, and a Neutrik<sup>®</sup> power-CON 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<sup>®</sup> XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik<sup>®</sup> 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. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. 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 submitt

The power amplifier shall be an Ashly nXp4004.

#### nXp4002

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 120VAC or 240VAC mains, and a Neutrik<sup>®</sup> power-CON 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<sup>®</sup> XLR/TRS combo jack and Euroblock, while output connectors shall be Neutrik<sup>®</sup> 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. The unit shall have 32-bit DSP processing at 48kHz or 96kHz sampling rate. DSP functions shall include swept load impedance, gain, dynamics including autoleveler and ambient noise compensation, equalization including graphic, parametric, feedback suppressor, and FIR filters, a matrix mixer including automixing, crossover, delay, and a signal generator. 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 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 w

The power amplifier shall be an Ashly nXp4002.