

Electro-Voice IPX10:4 DSP Power Amplifier 4x2500W with OMNEO/Dante/FIR Drive/32A powerCON Power Connector

OUTPUT POWER				
Low-Z mode: Load Impedance	2 Ω	2.7 Ω	4 Ω	8 Ω
Maximum Output Power ¹				
Normal Mode, all channels driven	2600 W	3000 W	2500 W	1250 W
Bridge	-	-	5200 W	5000 W
Parallel	5000 W	4000 W	2500 W	1250 W
Parallel-Bridge	10400 W	12000 W	10000 W	5000 W
Direct Drive Mode: Nominal Voltage	70 V	100 V	140 V ²	200 V ²
Maximum Output Power ¹	2500 W	2500 W	5000 W	5000 W
Number of Amplifier Channels	4			
Maximum Output Voltage, Normal mode, per channel	150 Vpeak			
Maximum Output Current, Normal mode, per channel	53 Apeak			
AMPLIFIER				
Voltage Gain				
Low-Z mode, ref.1kHz	32.0 dB, adjustable 20.0-44.0 Db			
Direct Drive mode	33.2/36.2/39.2/42.2 dB for 70/100/140/200 V			
Input Sensitivity				
Low-Z mode, Max. Output Voltage	10.7 dBu (2.66 V), adjustable -1.3-22.7 dBu			
Direct Drive mode	6 dBu (1.55 V), fixed			
THD3 dB below max, AES17, 1 kHz	< 0.05 %			
DIM 1003.15 kHz, 15 kHz	< 0.15 %			
IMD-SMPTE60 Hz, 7 kHz	< 0.05 %			
Crosstalk ref. 1 kHz, 12 dB below Max, 8 Ω	< -80 dB			
Frequency Responseref. 1 kHz, analog into speaker out	20 Hz to 20 kHz (±0.5 dB)			
Damping Factor 20 Hz to 200 Hz, 8Ω	> 400			
Output Stage Topology	Class D, fixed frequency			
Signal to Noise Ratio Amplifier				
A-weighted, analog input	112 dB			
A-weighted, digital input	115 dB			
Output Noise				
A-weighted, analog input	< -70 dBu			
A-weighted, digital input	< -73 dBu			
CONNECTIVITY				
Analog Audio Input/Thru				
Type	2 x 6-pin Euroblock, male			
Maximum Input Level	+21 dBu			
Input Impedance, active balanced	20 kΩ			
Reference level equal to digital input	+21 dBu for 0 dBFS			

Speaker Output	1 x 8-pin Euroblock, 6 mm, female
GENERAL	
Power Consumption	
Rated power consumption (see BTU table)	1200 W
→ Maximum Output Power at 4 Ω	1765 W
Idle Mode (no input signal)	80 W
Standby Mode	< 16 W
Dimensions (W x H x D), mm	483 x 88.1 x 514.2
Weight	15.0 kg (33.0 lb)
Shipping Weight	17.2 kg (37.8 lb)
DIGITAL SIGNAL PROCESSING	
Sampling rate	48 kHz/96 kHz, OMNEO/Dante synchronized
Signal delay/latency Analog In to Speaker Out, 48 kHz/96kHz	0.70 ms/0.53 ms
Dante Network Latency	typ. 1.00 ms
Signal Processing	
User EQ	12 filters per channel, selectable as PEQ, Lo-Shelv, Hi-Shelv, Lo-ShelvQ, Hi-ShelvQ, Hi-Pass,Lo-Pass & Notch; 2 filters of them with additional asymmetric filter type
User Delay	0 to 2000 ms per channel (units: μs, ms, s, cm, m, inches, feet)
Array EQ	5 filters per channel, selectable as PEQ, Lo-Shelv, Hi-Shelv, Lo-ShelvQ, Hi-ShelvQ, Hi-Pass, Lo-Pass, & All-Pass
Array Delay	0 to 500 ms per channel (units: μs, ms, s, cm,m, inches, feet)
Speaker EQ	10 filters per channel, selectable as PEQ, Lo-Shelv, Hi-Shelv, Hi-Pass, Lo-Pass & All-Pass
Speaker X-Over	Hi-Pass, & Lo-Pass per channel,6/12/18/24/30/36/42/48 dB Bessel/Butterworth,12/24/48 dB Linkwitz-Riley; Alignment Delay, 0 to 20 ms per channel
Speaker FIR	Up to 1025 taps, Linear Phase Filter, Linear Phase Brickwall X-Over
Speaker Limiters	Peak Anticipation Limiter & RMS/TEMP Limiterper channel
Other Functions	Source Selection & Mix, Level, Mute, Polarity, Sine & Noise Generator, Pilot Tone Generator & Detection, Level Meters, Impedance Measurement & Load Monitoring
Memory	
DSP Presets	1 Factory + 20 User
Speaker-Pool Presets	30 Speaker Settings
Source Supervision & Fallback	Pilot Tone supervision at Analog & OMNEO/Dante inputs, switch over to alternative Source Selection
CONNECTIVITY	
Network	
Type	2 x Neutrik EtherCON/RJ45, redundant PRIMARY/SECONDARY
General	1000base-T/100base-TX, integrated switch
Network Audio Inputs	8 channels, 48/96 kHz, OMNEO/Dante format
Network Audio Outputs (Monitor)	2 channels, 48/96 kHz, OMNEO/Dante format
Mains Input	1 x Neutrik powerCON-HC
GPIO Control Port	
Type	1 x 8-pin Euroblock, male
Ports & Operating Modes	3 x GPIO, switchable Analog In/Digital In/Digital Out
Analog Input Range	0 V to +13 V, 40 kΩ input resistance
Digital Input Limits	ON: < 1.5 VOFF: > 2.0 V, internal Pull Up (10 kΩ)
Digital Outputs	ON: Output switched to GND, max. 200 mA OFF: Open Collector (40 kΩ to GND)
Reference Voltage Output	+10 V, max. 200 mA, supervised, short circuit protected
READY/FAULT contact	Galvanic isolated relay, max. 30 VDC/500mADC
GENERAL	

User Interface	
Display	Black/white OLED 256 x 64 pixel
Front panel indicators	4 x status LEDs (POWER, STANDBY, FAULT, OMNEO)
Front panel operating elements	3 buttons (UP, ENTER, DOWN)
Rear panel indicators	1 x status LED (STATUS)
Rear panel operating elements	Mains Switch
Power Requirements	100 V to 240 V, 50 Hz to 60 Hz AC
Power Supply Topology	Switching Mode Power Supply with digital controlledPower Factor Correction
Protections	Audio Limiters, High Temperature, DC, HF, Short Circuit, Back-EMF, Peak Current Limiters, Inrush Current Limiters, Turn-on Delay, Mains Circuit Breaker Protection, Mains Over-/Undervoltage Protection
Cooling	Front-to-rear, temperature controlled fans, supervised
Ambient Temperature Limits	+5 °C to +40 °C (+40 °F to +105 °F)
IEC Protection Class	Class I (grounded)
Electromagnetical Environment	E1, E2, E3
Color	Black
Amplifier at rated conditions, Low-Z Normal operation mode, all channels driven, 4 Ω loads, Analog input, 32dB Gain, 48 kHz sample rate, unless otherwise specified. ¹Test signal for max. output power according IHFA-202 (Dynamic-Headroom, burst 1 kHz/20 ms on/480ms off/low level -20 dB). ²Available in Bridge operation mode only.	