

Electro-Voice IPX20:4 DSP Power Amplifier 4x5000W 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 | 5200 W | 6000 W | 5000 W | 2500 W |
| Bridge | n.a. | | | |
| Parallel | 10000 W | 8000 W | 5000 W | |
| Parallel-Bridge | n.a. | | | |
| Direct Drive Mode: Nominal Voltage | 70 V | 100 V | 140 V | |
| Maximum Output Power ¹ | 3550 W | 5000 W | 5000 W | |
| Number of Amplifier Channels | 4 | | | |
| Maximum Output Voltage, Normal mode, per channel | 210 V _{peak} | | | |
| Maximum Output Current, Normal mode, per channel | 84 A _{peak} | | | |
| AMPLIFIER | | | | |
| Voltage Gain | | | | |
| Low-Z mode, ref. 1 kHz | 32.0 dB, adjustable 20.0-44.0 dB | | | |
| Direct Drive mode | 33.2/36.2/39.2 dB for 70/100/140 V | | | |
| Input Sensitivity | | | | |
| Low-Z mode, Max. Output Voltage | 13.7 dBu (3.73 V), adjustable 1.7-25.7 dBu | | | |
| Direct Drive mode | 6 dBu (1.55 V), fixed | | | |
| THD 3 dB below max, AES17, 1 kHz | < 0.05 % | | | |
| DIM 100 3.15 kHz, 15 kHz | < 0.15 % | | | |
| IMD-SMPTE 60 Hz, 7 kHz | < 0.15 % | | | |
| Crosstalk ref. 1 kHz, 12 dB below Max, 8 Ω | < -80 dB | | | |
| Frequency Response ref. 1 kHz, analog in to speaker out | 20 Hz to 20 kHz (\pm 1.0 dB) | | | |
| Damping Factor 20 Hz to 200 Hz, 8 Ω | > 400 | | | |
| Output Stage Topology | Class D, fixed frequency | | | |
| Signal to Noise Ratio Amplifier | | | | |
| A-weighted, analog input | 115 dB | | | |
| A-weighted, digital input | 118 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 k Ω | | | |
| 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) | 2250 W | |
| 1/8 Maximum Output Power at 4 Ω | 2850 W | |
| Idle Mode (no input signal) | 110 W | |
| Standby Mode | < 19 W | |
| Dimensions (W x H x D), mm | 483 x 88.1 x 514.2 | |
| Weight | 18.3 kg (40.3 lb) | |
| Shipping Weight | 20.5 kg (45.1 lb) | |
| DIGITAL SIGNAL PROCESSING | | |
| Sampling rate | 48 kHz/96 kHz, OMNEO/Dante synchronized | |
| Signal delay/latency Analog In to Speaker Out, 48 kHz/96 kHz | 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 Limiter per 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, switchover 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 V | OFF: > 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/500 mADC | |

| 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 controlled Power 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-/Under voltage 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, 32 dB Gain, 48 kHz sample rate, unless otherwise specified. | |
| ¹ Test signal for max. output power according IHFA-202 (Dynamic-Headroom, burst 1 kHz/20 ms on/480 ms off/low level -20 dB). | |