

Electro-Voice TGX10 4 x 2500W DSP Amplifier with OMNEO/AES/EBU

| OUTPUT POWER | | | | |
|---|---|--------|--------|--------|
| Load impedance | 2 Ω | 2.7 Ω | 4 Ω | 8 Ω |
| Maximum Output Power ¹ All channels driven | 2600 W | 3000 W | 2500 W | 1250 W |
| Number of amplifier channels | 4 | | | |
| Maximum Output Voltage | 150 V peak | | | |
| Maximum Output Current | 53 A peak | | | |
| AMPLIFIER | | | | |
| Voltage Gain ref.1 kHz | 32.0 dB, adjustable 24-40 dB | | | |
| Input Sensitivity ref. to Max. Output Voltage | 10.7 dBu (2.66 V), adjustable 2.7-18.7 dBu | | | |
| THD 3 dB below Max., AES17, 1 kHz | < 0.05 % | | | |
| IMD-SMPTE, 60 Hz, 7 kHz | < 0.05 % | | | |
| DIM100, 3.15 kHz, 15 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 (±0.5 dB) | | | |
| Damping Factor, 20 Hz to 200 Hz, 8 Ω | > 400 | | | |
| Output Stage Topology | Class D, fixed frequency | | | |
| Signal to Noise Ratio | | | | |
| 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 | | | |
| 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 | | | |
| AES3 in to Speaker Out, 48 kHz/96 kHz | 1.00 ms/0.66 ms | | | |
| Dante Network Latency | typ. 1.00 ms | | | |
| Signal Processing | 32/40 bit, floating point | | | |
| 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, Level Meters, Impedance Measurement, & Load Monitoring | | | |
| Memory | | | | |
| DSP Presets | 1 Factory + 20 User | | | |
| Speaker-Pool Presets | 30 speaker settings | | | |

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| Source Supervision & Fallback | AES3 Lock & OMNEO/Dante network supervision, switchover to alternative Source Selection |
| CONNECTIVITY | |
| Analog Audio Input/Thru | |
| Type | AES3 Lock & OMNEO/Dante network supervision, switchover to alternative Source Selection |
| Maximum Input Level | +24 dBu |
| Input Impedance, active balanced | 20 k Ω |
| Reference level equal to digital input | +21 dBu for 0 dBFS |
| Digital Audio Input/Thru | |
| Type | 2 x 3-pin XLR (alternative use of Analog In/Thru) |
| Format | AES3 (AES/EBU) |
| Input Sample Rates | 32 to 192 kHz, internal Sample-Rate-Converter |
| Thru Connector | active buffered, direct bypass if device is unpowered |
| Network | |
| Type | 2 x Neutrik etherCON/RJ45, redundant PRIMARY/SECONDARY |
| Format | 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 |
| Front side Service Port | 1 x USB Type A |
| Mains Input | 1 x Neutrik powerCON-HC |
| Speaker Output | 4 x NL4 |
| GENERAL | |
| User Interface | |
| Display | 320 x 240 pixel, 3.5" color TFT" |
| Front panel indicators | Full color LED illuminated ring |
| Front panel operating elements | Rotary encoder, Capacitive Touch Screen |
| Rear panel indicators | 2 x LED (AES3 Input mode active, Amp-Find) |
| Rear panel operating elements | Mains switch |
| Power Requirements | 100 V to 240 V, 50 Hz to 60 Hz AC |
| Power Consumption | |
| Rated Power Consumption | 1200 W |
| $\frac{1}{8}$ Maximum Output Power at 4 Ω | 1765 W |
| Idle Mode (no input signal) | 80 W |
| Standby Mode | < 18 W |
| 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 $^{\circ}$ C to +40 $^{\circ}$ C (+40 $^{\circ}$ F to +105 $^{\circ}$ F) |
| IEC Protection Class | Class I (grounded) |
| Electromagnetical Environment | E1, E2, E3 |
| Color | Black |
| 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) |

Amplifier at rated conditions; all channels driven, 4 Ω loads, analog input, 32 dB gain, 48 kHz sample rate, unless otherwise specified.

¹Test signal for max. output power according ICHA-202 (dynamic-Headroom, burst 1 kHz/20 ms on/480 ms off/low level -20 dB).

