

VAL audio

X Series

High Performance Stereo Professional
Power Amplifiers

The X series is our High performance range of Power amplifiers. This traditionally designed range of power amplifiers feature the latest Class H technology and hence have very little heat dissipation. They offer legendary performance and reliability. They are 5 models – the X2000, X3000, X4000, X5002 and X6002. The X2000, X3000 and X4000 come in a compact 2U chassis. The more powerful X5002 and X6002 come in a 3U frame. The design of the X5002 and X6002 make them ideally suited for low frequency and subwoofer applications. They feature rock solid and robust power supplies with high current drive and have extremely high damping factors. The X5002 produces 2 x 2750 watts @ 2 ohms and has a damping factor > 1500. The X6002 produces a whopping 2 x 3300W @ 2 ohms and has a very high damping factor of > 2500. VAL audio X series are designed for the most demanding user from live touring to fixed installation applications.



X Series

| Model | 8U Stereo | 4U Stereo | * 2U Stereo | * 4U Bridged |
|-------|--------------|--------------|----------------|-----------------|
| X2000 | 500W | 750W | 1000W | 2000W |
| X3000 | 650W | 1050W | 1500W | 3000W |
| X4000 | 850W | 1350W | 2000W | 4000W |
| X5002 | 1300W | 2000W | 2750W | 5500W |
| X6002 | 1550W | 2500W | 3300W | 6600W |

* EIA 1KHz, 1% THD / EIA 1KHz, 0.1% THD

KEY FEATURES

- Unmatched sonic quality and reliability in a compact package
- High damping factor - X2000, X3000, X4000 ≥ 500 , X5002 ≥ 1500 and X6002 ≥ 2500 .
- High efficiency Class H output topology that lowers AC current consumption and cooling requirements.
- Linear power supply with High-current toroidal transformers for greater 2 ohm power.
- Comprehensive protection circuitry. DC, Short circuit, open circuit, thermal, ultrasonic, RF, Input / Output over load, soft startup, Active limiter protection
- Premium components used – Neutrik XLR & Speakon, WIMA capacitors, RUBYCON / Toshiba power capacitors, CARLING hydraulic-magnetic breakers, ALPS switches, ON SEMI metal bipolar transistors.
- High reliability – 184 point check points in 9 Quality control steps on the production line followed by 36 hours burning at clip level.
- Smart Overheat management giving the X series the ability to perform in high temperature environments without thermal shutdown.
- Selectable input gain facility (0.775V, 26dB, 36dB)
- 3 selectable modes (Stereo, parallel and bridge) via DIP switches.
- Neutrik male XLR input with XLR female loop facility.
- 3 x Neutrik speakon for output.
- Study side handles for carrying.

SPECIFICATIONS

| MODEL | X2000 | X3000 | X4000 | X5002 | X6002 |
|--|---|---------------------------------|--------------------------------|-----------------------------------|-----------------------------------|
| | STEREO MODE, Both Channels Driven | | | | |
| 8 ohms FTC 20 Hz - 20 kHz, 0.1% THD EIA 1 kHz, 0.1% THD | 450W 500W | 600W 650W | 750W 850W | 1200W 1300W | 1400W 1550W |
| 4 ohms FTC 20 Hz - 20 kHz, 0.1% THD EIA 1 kHz, 0.1% THD | 650W 750W | 950W 1050W | 1200W 1350W | 1800W 2000W | 2200W 2500W |
| 2 ohms FTC 20 Hz - 20 kHz, 0.1% THD EIA 1 kHz, 0.1% THD | 900W 1000W | 1250W 1500W | 1600W 2000W | 2400W 2750W | 3000W 3300W |
| | BRIDGE-MONO MODE | | | | |
| 8 ohms FTC 20 Hz - 20 kHz, 0.1% THD EIA 1 kHz, 0.1% THD | 1300W 1500W | 1900W 2100W | 2400W 2700W | 3600W 4000W | 4400W 5000W |
| 4 ohms EIA 1 kHz, 0.1% THD | 2000W | 3000W | 4000W | 5500W | 6600W |
| Frequency Response | 20 Hz - 20 kHz, 8 ohms, LF filter bypassed, +0/-1 dB 5 Hz - 50 kHz, 8 ohms, LF filter bypassed, +0/-3 dB | | | | |
| Damping Factor | >= 500@8ohms | | | >=1500@8ohms | >=2500@8ohms |
| Distortion (SMPTE-IM) | <0.02% | | | | |
| Distortion (Typical) 20Hz-20kHz: 10dB below rated power 1 kHz and below: full rated power | <0.02% <0.02% | | | | |
| Output Circuitry | CLASS H Topology | | | | |
| Input Sensitivity | 0.775V, 26dB, 32dB | 0.775V, 26bB, 36dB | | | |
| S/N ratio (rated power) | >= 107 dB | | | | |
| Input Impedance | 20k ohm balanced, 10k ohm unbalanced | | | | |
| Controls Front | AC power switch, Ch. 1 and Ch. 2 gain control | | | | |
| Controls Rear: | 10-pole DIP switch featuring Input sensitivity, switches for selecting Stereo, Parallel, or Bridge mode and grounding on/off. | | | | |
| Connectors Input: | XLR female each channel, parallel XLR male output | | | | |
| Connectors Output: | Speakon® output - CH A, CH B and Bridge output, | | | | |
| Cooling | Continuously variable-speed fan, back-to-front air flow | | | | |
| Amplifier Protection | DC, Short circuit, open circuit, thermal, ultrasonic, RF, Input / Output over load, soft startup, Active limiter protection | | | | |
| Power Requirements | 3.8A, 230C AC(±10%), 50-60Hz | 5.6A, 230C AC(±10%), 50-60Hz | 7A, 230C AC (±10%), 50-60Hz | 9.9 A, 230C AC(±10%), 50-60Hz | 11.5 A, 230C AC(±10%), 50-60Hz |
| Rack space | 2U | | | 3U | |
| Dimensions (WxHxD) | 482x88x453mm 19.0"x3.5"x17.8" | | | 482x132x499mm 19.0"x5.2"x19.7" | 482x132x506mm 19.0"x5.2"x20.0" |
| Weight | 17Kg (37.5lbs) | 20Kg (44.0lbs) | 22Kg (84.5lbs) | 35Kg (77.2lbs) | 41Kg (90.4lbs) |

