

# XP Series

## Power Amplifiers



XP7000

XP5000

XP3500

XP2500

XP1000



XP7000 Rear Panel

### *Five superb amplifiers optimized for installation use.*

- Advanced circuit design and anti-vibration measures inherited from the PC-1N series deliver tight, solid lows, extraordinary midrange presence, and precisely defined highs.
- Exclusive Yamaha EEEngine technology achieves unmatched efficiency.
- +4dBu/26dB/32dB gain switch for flexible level matching.
- Lightweight, compact 2U design for easy handling and installation.
- Monitor and Remote terminals for remote monitoring and control.
- Precision 1-dB/step detented attenuators.
- XLR and Euroblock input terminals.
- Speakon and 5-way binding post output terminals.
- Frequency-switchable high-pass filter for subsonic noise reduction or subwoofer matching.
- Comprehensive protection circuits, indicators and variable-speed cooling.
- Ideal matches for the DME64N/24N Digital Mixing Engines and Installation Series speakers.
- XP7000 can be used to drive 70V lines (stereo), while XP3500 is compatible with 100V lines (bridged) for high-impedance multi-speaker systems.

## XP Series

### GENERAL SPECIFICATIONS

| Model                |  |                | XP7000   | XP5000    | XP3500               | XP2500                 | XP1000                             | XP7000                 | XP5000    | XP3500                 | XP2500   | XP1000   |
|----------------------|--|----------------|--|-----------|----------------------|------------------------|------------------------------------|------------------------|-----------|------------------------|----------|----------|
|                      |  |                | 120V/240V  |           |                      |                        |                                    | 230V                   |           |                        |          |          |
| Output Power         | 1kHz, THD+N = 1%                                   | 4Ω             | 1100W x 2  | 750W x 2  | 590W x 2             | 390W x 2               | 165W x 2 (120V)<br>155W x 2 (240V) | 1100W x 2              | 750W x 2  | 590W x 2               | 390W x 2 | 155W x 2 |
|                      |  | 8Ω             | 750W x 2   | 525W x 2  | 390W x 2             | 275W x 2               | 135W x 2 (120V)<br>120W x 2 (240V) | 750W x 2               | 525W x 2  | 390W x 2               | 275W x 2 | 125W x 2 |
|                      |  | 8Ω bridge      | 2200W  | 1500W     | 1180W                | 780W                   | 330W (120V)<br>310W (240V)         | 2200W                  | 1500W     | 1180W                  | 780W     | 310W     |
|                      | 1kHz, 20ms burst                                   | 2Ω             | 1600W x 2  | 1300W x 2 | 1000W x 2            | 650W x 2               | 250W x 2                           | 1600W x 2              | 1300W x 2 | 925W x 2               | 650W x 2 | 250W x 2 |
|                      |  | 4Ω bridge      | 3200W  | 2600W     | 2000W                | 1300W                  | 500W                               | 3200W                  | 2600W     | 1850W                  | 1300W    | 500W     |
|                      | 20Hz ~ 20kHz,<br>THD+N = 0.1%                      | 4Ω             | 950W x 2   | 700W x 2  | 450W x 2             | 300W x 2               | 125W x 2 (120V)<br>110W x 2 (240V) | 950W x 2               | 700W x 2  | 435W x 2               | 295W x 2 | 115W x 2 |
|                      |  | 8Ω             | 700W x 2   | 500W x 2  | 350W x 2             | 250W x 2               | 110W x 2 (120V)<br>100W x 2 (240V) | 690W x 2               | 500W x 2  | 350W x 2               | 250W x 2 | 100W x 2 |
|                      |  | 8Ω bridge      | 1900W  | 1400W     | 900W                 | 600W                   | 250W (120V)<br>220W (240V)         | 1900W                  | 1400W     | 870W                   | 590W     | 230W     |
|                      | Constant Voltage                                   | 100V Line      | -  | -         | 625W/16Ω<br>(Bridge) | -                      | -                                  | -                      | -         | 625W/16Ω<br>(Bridge)   | -        | -        |
| 70V Line             |  | 625W x 2/8Ω    | -  | -         | -                    | -                      | 625W x 2/8Ω                        | -                      | -         | -                      | -        |          |
| Voltage Gain         | RL=8Ω  |                | 26dB/32dB  |           |                      |                        |                                    | 26dB/32dB              |           |                        |          |          |
|                      |  | +4dBu position | 35.7dBu  | 34.2dBu   | 32.7dBu              | 31.2dBu                | 27.2dBu                            | 35.6dBu                | 34.2dBu   | 32.7dBu                | 31.2dBu  | 27.2dBu  |
| Input Sensitivity    | RL=8Ω  |                | +4dBu  |           |                      |                        |                                    | +4dBu                  |           |                        |          |          |
|                      |  | 26dB position  | +13.7dBu   | +12.2dBu  | +10.7dBu             | +9.2dBu                | +5.2dBu                            | +13.6dBu               | +12.2dBu  | +10.7dBu               | +9.2dBu  | +5.2dBu  |
|                      |  | 32dB position  | +7.7dBu  | +6.2dBu   | +4.7dBu              | +3.2dBu                | -0.8dBu                            | +7.6dBu                | +6.2dBu   | +4.7dBu                | +3.2dBu  | -0.8dBu  |
| S/N Ratio            | 20Hz~20kHz, DIN AUDIO                              |                | 104dB  | 103dB     | 102dB                | 100dB                  | 96dB                               | 104dB                  | 103dB     | 102dB                  | 100dB    | 96dB     |
| Power Consumption    | 1/8 power (4Ω pink noise)                          |                | 650W   | 500W      | 450W                 | 320W                   | 170W                               | 650W                   | 500W      | 450W                   | 320W     | 170W     |
|                      | Idle   |                | 35W  | 35W       | 30W                  | 25W                    | 20W                                | 35W                    | 35W       | 30W                    | 25W      | 20W      |
|                      | Standby  |                | 5W   | 5W        | 5W                   | 5W                     | 5W                                 | 5W                     | 5W        | 5W                     | 5W       | 5W       |
| THD+N                | 20Hz~20kHz, 1/2 power, RL=4Ω                       |                | Less than 0.1%   |           |                      |                        |                                    |                        |           |                        |          |          |
| Frequency Response   | RL=8Ω, Po=1W, 20Hz - 20kHz                         |                | +0dB, -1.0dB   |           |                      |                        |                                    |                        |           |                        |          |          |
| Crosstalk            | 1kHz, half power, 8Ω<br>Att. max, input 600Ω shunt |                | Less than -70dB  |           |                      |                        |                                    |                        |           |                        |          |          |
| Damping Factor       | RL=8Ω, 1kHz  |                | More than 350  |           |                      | More than 200          |                                    | More than 350          |           | More than 200          |          |          |
| Maximum Input Level  |  |                | +22dBu   |           |                      |                        |                                    |                        |           |                        |          |          |
| Input Impedance      |  |                | 20kΩ (balanced), 10kΩ (unbalanced)   |           |                      |                        |                                    |                        |           |                        |          |          |
| Controls             | Front Panel  |                | POWER switch x 1 (push on/push off), Attenuator x 2 (31position)   |           |                      |                        |                                    |                        |           |                        |          |          |
|                      | Rear panel   |                | MODE switch x 1 (STEREO/BRIDGE/PARALLEL), HPF switch x 2 (20Hz/55Hz/OFF) (12dB/oct), GAIN switch x 1 (+4dBu/26dB/32dB)   |           |                      |                        |                                    |                        |           |                        |          |          |
| Connectors           | Input  |                | XLR-3-31 type x 2, Euroblock connector x 2 pairs (balanced)  |           |                      |                        |                                    |                        |           |                        |          |          |
|                      | Output   |                | Neutrik® SPEAKON® NL4 x 2, 5-way binding post x 2 pairs  |           |                      |                        |                                    |                        |           |                        |          |          |
|                      | Monitor/Remote                                     |                | D-SUB 15P x 1  |           |                      |                        |                                    |                        |           |                        |          |          |
| Indicators           |  |                | POWER/STANDBY x 1 (Green/Orange), PROTECTION x 1 (Red), TEMP x 1 (Red) heatsink temp ≥ 85°C, SIGNAL x 2 (Green), CLIP/LIMIT x 2 (Red)  |           |                      |                        |                                    |                        |           |                        |          |          |
| Load Protection      |  |                | POWER switch on/off mute, DC-fault: Amplifier shuts down automatically (XP7000, XP5000 Operation not restored automatically)<br>Output Relay Off (XP3500, XP2500, XP1000 returns automatically), Clip limiting: THD ≥ 0.5% |           |                      |                        |                                    |                        |           |                        |          |          |
| Amplifier Protection |  |                | Thermal: Output Mute (heatsink temp ≥ 90°C) (Operation not restored automatically), VI limiter (RL ≤ 1Ω): Limit the output   |           |                      |                        |                                    |                        |           |                        |          |          |
| Cooling Fan          |  |                | Variable-speed fan x 2   |           |                      | Variable-speed fan x 1 |                                    | Variable-speed fan x 2 |           | Variable-speed fan x 1 |          |          |
| Power Requirements   |  |                | 120V, 220V-240V; 50Hz/60Hz   |           |                      |                        |                                    |                        |           |                        |          |          |
| Dimensions (WxHxD)   |  |                | 480 x 88 x 456mm (18-7/8" x 3-7/16" x 17-15/16")   |           |                      |                        |                                    |                        |           |                        |          |          |
| Weight               |  |                | XP7000, XP5000, XP2500: 14kg (30.9lbs), XP3500: 15kg (33.1lbs), XP1000: 12kg (26.5lbs)   |           |                      |                        |                                    |                        |           |                        |          |          |
| Included Accessories |  |                | Security cover x 1, Euroblock connector x 2 (3P), Owner's manual   |           |                      |                        |                                    |                        |           |                        |          |          |

\* Half power = 1/2 power output level

### DIMENSIONS

unit : mm

