## PC-1N Series

## **Power Amplifiers**



PC9501N



PC6501N



PC4801N



PC3301N



PC2001N





PC9501N Rear Panel

# New benchmarks for quality, reliability, and versatility in professional power applications.

- In-depth analysis and circuit innovation, meticulous part selection, and advanced circuit mounting methods deliver outstanding sound quality with the lowest possible distortion.
- Advanced EEEngine technology achieves high-quality sound and exceptional power output with dramatically reduced power consumption.
- Selectable stereo, dual mono and bridged mono modes for maximum versatility.
- A comprehensive selection of rear-panel terminals and connectors for versatile connectivity.
- An impressive array of protection circuitry and indicators ensure stable operation and accurate monitoring.
- Built-in high-pass (subsonic) filter cuts frequencies below 20 Hz.
- Can be connected to a Yamaha ACU16-C Amplifier Control Unit (optional) and computer to allow monitoring and control of amplifiers and speakers.
- Monitor and control multiple amplifiers on a CobraNet™ network via the Yamaha NHB32-C Network Hub/Bridge.
- The PC3301N has been specially designed for use as a distribution amplifier in installations, and is capable of driving high-impedance loads with multiple parallel-connected 100-volt line speakers.
- Ideal matches for the DME64N/24N Digital Mixing Engines and Installation Series speakers.

### PC-1N Series

#### GENERAL SPECIFICATIONS

| Madal   |  |              | DOCTOAN   | DOCESAN   | DOACCAN   | DOGGGG               | DOGGGG   | DOOCOAN   | DOCTOAN   | DOAGGAN   | DOGGGG               | DOGGGG   |
|---|--|--------------|---|-----------|-----------|----------------------|----------|-----------|-----------|-----------|----------------------|----------|
| Model   |  |              | PC9501N   | PC6501N   | PC4801N   | PC3301N              | PC2001N  | PC9501N   | PC6501N   | PC4801N   | PC3301N              | PC2001N  |
|   |  |              |   |           | 120V/240V | 1                    |          |           | 1         | 230V      | 1                    |          |
| Output Power                                  | 1kHz, THD+N = 1%                                   |              | 1600W x 2   | 1100W x 2 | 850W x 2  | 600W x 2             | 400W x 2 | 1650W x 2 | 1150W x 2 | 800W x 2  | 700W x 2             | 450W x 2 |
|   |  | 8Ω           | 1000W x 2   | 700W x 2  | 550W x 2  | 350W x 2             | 230W x 2 | 1050W x 2 | 750W x 2  | 500W x 2  | 400W x 2             | 250W x 2 |
|   |  | 8Ω bridge    | 3200W   | 2200W     | 1700W     | 1200W                | 800W     | 3300W     | 2300W     | 1600W     | 1400W                | 900W     |
|   | 1kHz, 20ms burst                                   | 2Ω           | 2300W x 2   | 1500W x 2 | 1200W x 2 | 800W x 2             | 500W x 2 | 2300W x 2 | 1600W x 2 | 1200W x 2 | 900W x 2             | 600W x 2 |
|   |  | 4Ω bridge    | 4600W   | 3000W     | 2400W     | 1600W                | 1000W    | 4600W     | 3200W     | 2400W     | 1800W                | 1200W    |
|   | 20Hz ~ 20kHz,                                      | 4Ω           | 1400W x 2   | 930W x 2  | 725W x 2  | 525W x 2             | 325W x 2 | 1500W x 2 | 930W x 2  | 700W x 2  | 550W x 2             | 400W x 2 |
|   | THD+N = 0.1%                                       | 8Ω           | 925W x 2  | 650W x 2  | 475W x 2  | 330W x 2             | 200W x 2 | 950W x 2  | 650W x 2  | 475W x 2  | 350W x 2             | 230W x 2 |
|   |  | 8Ω bridge    | 2800W   | 1860W     | 1450W     | 1050W                | 650W     | 3000W     | 1860W     | 1400W     | 1100W                | 800W     |
|   | High Impedance                                     | 100V Line    | -   | -         | -         | 625W/16Ω<br>(Bridge) | -        | -         | -         | -         | 625W/16Ω<br>(Bridge) | -        |
| Voltage Gain                                  | in RL=8Ω   |              | 32dB  |           |           |                      |          | 32dB      |           |           |                      |          |
| Input Sensitivity                             | RL=8Ω  |              | +9.2dBu   | +7.7dBu   | +6.7dBu   | +4.7dBu              | +2.9dBu  | +9.5dBu   | +8.0dBu   | +6.2dBu   | +5.3dBu              | +3.2dBu  |
| S/N Ratio                                     | 20Hz~20kHz, DIN A                                  | AUDIO        | 106dB   | 105dB     | 103dB     | 101dB                | 100dB    | 106dB     | 105dB     | 103dB     | 101dB                | 100dB    |
| Power Consumption                             | 1/8 power (4Ω pink noise)                          |              | 750W/1000W  | 700W/800W | 450W/600W | 450W/500W            | 350W     | 1100W     | 800W      | 600W      | 500W                 | 350W     |
|   | Idle   |              | 55W   | 40W       | 40W       | 40W                  | 40W      | 55W       | 40W       | 40W       | 40W                  | 40W      |
| THD+N   | <b>1+N</b> 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 800 More than 500 More than 800 More than 50  |           |           |                      |          |           |           |           |                      |          |
| Maximum Input Level                           |  |              | +22dBu  |           |           |                      |          |           |           |           |                      |          |
| Input Impedance                               |  |              | 20k $\Omega$ (balanced), 10k $\Omega$ (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 1 (ON/OFF) (Fc=20Hz, 12dB/oct), AMP ID switch x 1 (6P DIP) |           |           |                      |          |           |           |           |                      |          |
| 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   |           |           |                      |          |           |           |           |                      |          |
|   | Data Port  |              | RJ45 x 2  |           |           |                      |          |           |           |           |                      |          |
|   | Power  |              | AC Inlet x 1  |           |           |                      |          |           |           |           |                      |          |
| Indicators                                    |  |              | POWER/STANDBY x 1 (Green/Orange), PROTECTION x 1 (Red), TEMP x 1 (Red) heatsink temp ≥ 85°C, REMOTE x 1 (Green)   |           |           |                      |          |           |           |           |                      |          |
| Level Meters                                  |  |              | 10 point LED meter x 2  |           |           |                      |          |           |           |           |                      |          |
| Load Protection                               |  |              | POWER switch on/off mute, DC-fault: Amplifier shuts down automatically, Clip limiting: THD ≥ 0.5%                 |           |           |                      |          |           |           |           |                      |          |
| Amplifier Protection                          |  |              | Thermal (heatsink temp $\geq 90^{\circ}$ C), VI limiter (RL $\leq 1\Omega$ )                                      |           |           |                      |          |           |           |           |                      |          |
| Cooling Fan                                   |  |              | Variable-speed fan x 2  |           |           |                      |          |           |           |           |                      |          |
| Power Requirements                            |  |              | 120V, 60Hz; 220V-240V, 50Hz/60Hz  |           |           |                      |          |           |           |           |                      |          |
| Dimensions (WxHxD)                            |  |              | 480 x 88 x 456mm (18-7/8" x 3-7/16" x 17-15/16")  |           |           |                      |          |           |           |           |                      |          |
| Weight  |  |              | 12.5kg (27.6lbs) (PC9501N: 13kg (28.6lbs))  |           |           |                      |          |           |           |           |                      |          |
| Included Accessories                          |  |              | Power cable x 1, Security cover x 1, Euroblock connector x 2 (3P), Owner's manual                                 |           |           |                      |          |           |           |           |                      |          |

<sup>\*</sup> Half power = 1/2 power output level

#### DIMENSIONS

25 30 370 30 25 480 unit : mm