



# PMQ240

## WaveDynamics™ quad-channel 100V power amplifier

### Highlights:

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- Lightweight class-D amplifier
- XLR input & linkthrough connections
- Terminal block output connections
- RS232 control
- Dante expansion port
- Advanced DSP and loudspeaker management
- 2.5" LCD display with intuitive user interface
- WaveDynamics™ speaker & set configurations



The PMQ series are professional 100V quad channel power amplifiers, providing a new standard for premium sound 100V amplification in public address applications. Their advanced features and availability in different output powers provide an enormous flexibility for numerous applications.

The PMQ240 is a four channel Class-D 100V power amplifier with an output power of 240 Watt for each channel. The WaveDynamics™ DSP processor combination with the 2.5" LCD display gives an unmatched user experience with intuitive functions overview for easy configuration.

Acoustics can be optimized using the filters selectable between Low / High & Band Pass and the 7-Band equalizer both with adjustable frequencies and Q-factor. Other provided functions are delay and dynamic bass boost. These settings can be custom configured using the front panel of the amplifier, whereby access can be given on two different levels (User & Administrator) using password or USB-key protection.

Configuration is made simple by the loudspeaker presets and full system configurations which can be selected from a library and uploaded with a USB flash drive. This ensures the best acoustical performance with a 'bullet-proof' loudspeaker protection.

A great input flexibility and source compatibility is offered by the input selection matrix and the XLR and terminal block signal connections. System integration is made easy using the RS-232 control port. Optional Dante™ interface is available for the WaveDynamics™ amplifiers. The installation of this network interface allows receiving and sending of low latency, high quality audio over a standard Ethernet network.

### Applications:

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- Bars, restaurants
- Retail
- Public facilities
- Corporate spaces
- Events
- Live performances

## System specifications:

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RMS Power		4 x 240 W
Frequency	Response ( $\pm 3$ dB)	20 Hz - 20 kHz
Signal / Noise		> 95 dB
THD+N (@ 1 kHz)		< 0.05% (1/2 Rated Power)
Crosstalk (@ 1 kHz)		> 70 dB
Technology		Class-D
Power	Supply	Switching mode
	Operating	230 ~ 240 V AC / 50 ~ 60 Hz
Inputs	Sensitivity (1W/1m)	-30 dB ~ +5 dB
	Impedance	10 k $\Omega$ balanced
Common mode rejection ratio		70 dB
Damping factor		> 200
Protection	Amplifier	DC Short circuit
		Over heating
		Over load
		Signal limiting
	Access	User & Administrator level (Through password and USB-key protection)
Cooling		Temperature controlled FAN
Operating temperature		0° ~ 40° @ 95% Humidity
Inputs	Connector	XLR & 3-pin Euro Terminal Block (3.81 mm)
Outputs	Connector	4-pin Euro Terminal Block (Pitch - 5.08 mm)

## Product Features:

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Dimensions	482 x 88 x 420 mm (W x H x D)
Weight	8.05 kg
Unit height	2 HE
Construction	Steel
Colours	Black

## Architects' and Engineers' Specifications:

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The amplifier is a constant voltage 100 Volt type featuring WaveDynamics™ audio processing technology with four independent controllable channels, each of them with an output power of 240 watt. The construction shall be transformerless, using Class-D amplifier technology and powered by a switching power supply.

Acoustics shall be adjustable using the integrated DSP which provides advanced processing functions to each channel such as parametric 7-band equalizing, filters selectable between low-pass, high-pass and band-pass with Butterworth, Linkwitz-Riley or Bessel characteristics. Other functions such as output power limiting, time alignment delay and dynamic bass boost shall also be implemented.

Each channel shall have integrated circuitry to protect against short-circuits or mismatched loads and over-heating. The operating temperature for each channel shall be continuously monitored and a speed-controlled fan will keep it within the operating range while minimising the acoustic noise. Additionally, the load shall be protected against DC faults and a clip limiter shall automatically reduce the input gain at onset of distortion.

Full system control and monitoring shall be possible from the front panel of the amplifier equipped with an AC power switch, a blue power indicator LED and channel operation indicator LED's. Two green signal LED's indicating the presence of an input signal and it's level exceeding the -20 dB level, a clip LED indicating the channel operation at maximum level and a protection LED indicating any fault detected shall be provided for each channel.

Additionally, a user-friendly and intuitive graphical interface shall be shown on a 2.5" LCD on front allowing control for each of its functions. System access shall be lockable with password and USB-key protection on two different (user & administrator) levels. Uploading of pre-made configurations and loudspeaker presets shall be possible from a USB flash drive.

Great input flexibility and source compatibility shall be provided through an input selection matrix in combination with the balanced signal input connections which are available as female XLR connectors and 3-pin terminal block connectors. The output connections shall be made by 4-pin terminal block connectors, allowing connectivity of multiple loudspeaker lines on one channel.

The amplifier shall operate on a 230~240 V AC / 50 Hz mains network and shall be equipped with a removable power cord having a standard shuko (CEE 7/7) AC plug. The connector on the amplifier chassis shall be a fused IEC C14 type.

The amplifier chassis shall be a two rackspace steel constructed 19" housing. Depth from mounting surface to rear supports shall be 420 mm and the weight shall not exceed 8.05 Kg.