



# QA SERIES

Models 1004/2004/3004/4004 | Power Amplifiers

**quest**<sup>™</sup>  
engineering

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**The Quest Engineering QA series;  
the no compromises, no gimmick utility  
workhorse for professionals.**



## **A Design Pedigree that Sets a New Standards in Quality and Value**

The new series QA amplifier range has been designed and engineered to a standard that takes it well into the upper register of high fidelity pro audio amplifiers. Like the models before it, thousands of hours of research and real world testing ensure the QA range will live long in the tough world of permanent installation and touring.

## **Features that Professionals Demand**

The word 'professional' gets thrown around a lot these days. There is a base set of standards, without which no amplifier should be called "professional." Professionals look beyond a paint job and marketing spin to the design engineering and build quality. This is where the QA series sells itself.

## **Power for Today's Systems**

To suit the needs of today's power hungry systems, the QA Series offers a wide choice of power levels. Despite their compact size,

the QA Series features precisely designed and optimized power supplies, which are free of the switching distortion associated with many multi-stage circuits used in other compact amplifiers.

## **Engineered for a Hard Life**

QA series amplifiers are built to work hard in the tough environment of pro audio. Industrial spec multi-speed fans and generous heat sinks will keep the output stage cool when driven hard. Service and maintenance is easy as the internal architecture is laid out for easy access by a qualified technician.

## **Protect Your Speakers**

Clean and stable power is the secret to long speaker life. A high current power supply and the generous quantity of high head room output devices are behind the exceptional bass response of the QA series amplifiers. If a possibility of system clipping exists, independent switch-able limiters will limit both PEAK and RMS power to prevent distortion of the output stage. It will not seriously affect audio quality but it will help protect your speakers.

You need real power, easy service and long lifespan under severe conditions?

Then you need a Quest QA series amplifier.

And best of all, you don't have to compromise sonic performance.

The QA series is the most accurate reproduction of an audio signal you've ever going to hear from a concert class audio amplifier.



## Built to Last

QA series amplifiers are manufactured to a standard accepted as desirable practice for a concert standard power amplifier. Heavy gauge cold rolled steel chassis, machined aluminium billet front, vibration proof fittings and an emphasis on over engineering guarantees years of trouble free service in demanding environments.

## Electronic Insurance

Reliability is designed into the internal architecture, not just tacked on at the output. Short circuit, thermal, DC and current limiting protection are supported by a gain stage that is inherently stable into both inductive and resistive loads. For the non technical, this means that your amplifier's sonic performance and reliability will not be degraded by multiple passive cross-over networks, often found in high powered mobile disco or live music applications.

## Easy Service

Design and layout for easy service, not easy manufacture. A minimum of disassembly required for testing and maintenance means low operating costs and long life.

## Features

### 1. Input Stage

Parallel XLR inputs and low noise gain stage, silent switch on/off circuitry reduces potential speaker damage in the event of intermittent power.

### 2. Power Supply

The high current power supply is manufactured to function reliably at high temperatures and well exceeds industry standards. This results in smooth bass response and considerable dynamic headroom.

### 3. Industrial Spec Fans

Dual heavy duty cooling fans guarantee long life of all electronic components.

### 4. Speakon Connections

International AES standard Speakon connectors wired for two channel and Bridge mono operation simplify speaker connections.

### 5. Limiter

A switchable high speed limiter acts as a final speaker protection but can be disconnected where sensing speaker system controllers are required.

### 6. Built in Switch-able X-overs

High and low pass filters on each channel make the versatile QA series even more flexible with a sub-mid/high frequency dividing network.

### 7. Selectable Gain Settings

Adjustable input switching for 1.4V, 32 dB or 26 dB make system calibration easy.

### 8. Easy Access Air Filters

User serviceable air filters are easy to maintain for trouble free operation.



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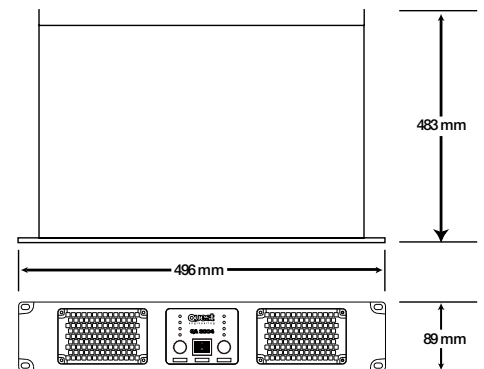
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Power Amplifiers

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## Limited Warranty

Quest electronics are covered in defects in workmanship or materials for a period of 2 years from the original date of purchase. Warranty does not cover cosmetic or finish and does not apply to any items which have failed due to abuse, accidents, modifications, or any type of misuse. Unauthorized repair shall void the warranty and all warranty repairs must be carried out by Quest Engineering or an authorized distributor/service centre. Quest Engineering reserves the right to change specifications without notice.



## QA Series Specifications\*

	QA 1004	QA 2004	QA 3004	QA 4004
Rated Power (2 x 8 Ohms)	290 W per channel @ 1 kHz at <0.1% T.H.D. both channels driven	490 W per channel @ 1 kHz at <0.1% T.H.D. both channels driven	660 W per channel @ 1 kHz at <0.05% T.H.D. both channels driven	1,090 W per channel @ 1 kHz at <0.05% T.H.D. both channels driven
Rated Power (2 x 4 Ohms)	575 W per channel @ 1 kHz at <0.1% T.H.D. both channels driven	870 W per channel @ 1 kHz at <0.1% T.H.D. both channels driven	1100 W per channel @ 1 kHz at <0.05% T.H.D. both channels driven	2,000 W per channel @ 1 kHz at <0.05% T.H.D. both channels driven
T.H.D.	<0.1% @ 250 W per channel from 20 Hz to 20 kHz	>0.1% @ 400 W per channel from 20 Hz to 20 kHz		>0.5% @ 400 W per channel from 20 Hz to 20 kHz
Minimum Load Impedance	4 Ohms – Sign wave			4 Ohms – Sign wave
Phase Response	+5 to -15 from 20 Hz to 20 kHz			+20 to -25 from 20 Hz to 20 kHz
Input Impedance	20k Ohms, balanced; 10k Ohms, unbalanced			20k Ohms balanced 10k Ohms unbalanced
Cooling	Two temperature dependant variable speed 80mm high output DC fans			Two temperature dependant variable speed 120mm high output DC fans
Controls	Two front panels attenuators, rear panel mode switch and gain select switch			Two front panels attenuators, rear panel mode switch and gain select switch
Hi Pass: Linkwitz-Reilly (24 db/Octave)	Off/35/80 Hz			Off/35/80 Hz
Low Pass: Linkwitz-Reilly (24 db/Octave)	Off/80/110 Hz			Off/80/110 Hz
Voltage Gain @ 0.775V	29 dB or 24 dB	32 dB or 26 dB	35 dB or 29 dB	38 dB or 32 dB
Crosstalk	>-60 dB @ 1 kHz at rated power @ 8 Ohms		>-60 dB @ 1 kHz at rated power @ 8 Ohms	>-60 dB @ 1 kHz at rated power @ 8 Ohms
Hum and Noise	>-105 dB, "A" weighted referenced to rated power @ 8 Ohms	>-107 dB, "A" weighted referenced to rated power @ 8 Ohms	>-107 dB, "A" weighted referenced to rated power @ 8 Ohms	>-104 dB, "A" weighted referenced to rated power @ 8 Ohms
Slew Rate	>30V/us		>40V/us	>44V/us
Damping Factor (8 Ohms)	>500:1 @ 20 Hz - 1 kHz	>700:1 @ 20 Hz - 1 kHz		>800:1 @ 20 Hz - 1 kHz
Protection	Thermal, DC, turn-on bursts, subsonic, incorrect loads			Thermal, DC, turn-on bursts, subsonic, incorrect loads
Connectors	XLR, Speakon speaker output, 240/230 V 16 amps IEC mains			XLR, Speakon speaker output, 240/230 V 20 amps IEC mains
Construction	Cold Steel Rolling + Machined aluminium front panel			Cold Steel Rolling + Machined aluminium front panel
Dimensions	89 x 483 x 496 mm			132 x 483 x 496 mm
Net Weight	17 kg	21 kg	23 kg	35 kg
Packaged Shipping Weight	20 kg	23 kg	26 kg	38 kg