



RAM

Audio®

PREMIUM POWER AMPLIFIERS
W / S / ZETTA / T SERIES



RAM

Audio®

W Series Heavy Duty Power Amps





RAM Audio® introduces this new generation of professional touring amplifiers based on the field proven QuantaPulse™ Technology. These new devices feature two or four channel models, ready for rough handling in the touring world. For this purpose, V/W Series amps implement oversized high efficiency regulated power supply with PFC front end to deliver their full performances independently of mains status. This together with oversized high efficiency audio power stage, forced front to back cooling through a component-free path with removable front panel dust filters, improved rugged mechanical design with even weight distribution, full digital control from LCD display on the front panel. Resulting in: just power, reliability and robustness for your touring gigs!



Performance

- PFC QuantaPulse™ Regulated Dual SMPS
- Digital Control with extra large LCD display user interface
- Channel Temperature and Output Level Monitor in the LCD
- USB port for firmware update and DSP control
- 25 position Gain, Bridge mode, Input Links and ICL, front panel configurable
- Digital Potentiometers with Encoder control
- RAM Audio Power Management System
- Hi Efficiency, Heavy Duty Audio Power section for extreme use
- Easily removable front panel dust filters
- Efficient front to back cooling
- Optional low latency 24bits high performance FIR DSP with post-DSP signal links and Ethernet control. More info
- Optional RAM OCS Ethernet monitor and control system
- Optional AES/EBU Digital input
- Industry standard Neutrik® XLR and Speakon® connectors

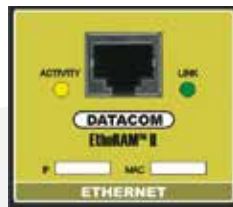
Display Menu features

- Channel Temperature: shows the percent of maximum temperature
- Display Mode: change between Channel Attenuation or VU meter mode
- Operating Time: shows the amplifier total time operation
- Preset Manager: to change quickly the amplifier preset configuration
- Input Links: you can Link the input signal to the next channel
- Amplifier Gain: change the gain for each channel from 26dB to 38dB
- Amplifier Mode: it configures the amplifier in Dual or Bridge mode
- Attenuators Link: to modify the output level for all channels simultaneously
- ICL Clip Limiter: you can turn on/off the ICL Clip Limiter for all channels
- Password protection: to prevent any modification of the configuration



Protections

- **ICL2™**: improved Intelligent Clip Limiting
- **PMS™**: Power Management System controls the amount of power that the amp delivers under different circumstances.
- **SSP™**: SOA Sentry Protection effectively limiting the power that the amp could deliver into an incorrect load or to a direct short-circuit
- Faulty Channel Management (FCM™)
- Soft-start, turn-on transients, Over-heating, DC, RF, short-circuit
- Overloaded power supply, Mains overvoltage



DSP Module (optional)

The Digital Signal Processor is real time fully programmable through USB or Ethernet network (optional) or directly from the front panel. There are two different versions: 4 Inputs/4 Outputs or 2 Inputs/2 Outputs totally free route configurable. Both versions include post-processor signal XLR output connectors to link the processed signal to another amplifier without DSP. You can save more than 50 presets directly in the amplifier. The main characteristics are:

- 56 bit double-precision floating-point DSP process
- 120dB dynamic range
- High performance 24bit, 512x Oversampling AD/DA Cirrus converters
- 0.6ms latency for IIR filters

Input Section:

- Gain, Mute and Phase inversion per input
- Input Delay: 0 to 118 meters (341ms) per input
- Input EQ: 31 EQs per input (Parametric, Shelving, LP, HP, BP, SB, AP)

Output Section:

- Crossover Filters: FIR (Linear-phase) and IIR (up to 48dB/oct, Butterworth/Linkwitz-Riley/Bessel)
- Output Delay: 0 to 18 meters (52ms) per channel
- Output EQ: 15 filters per channel (Parametric, Shelving, LP, HP, BP, SB, AP)
- Gain, Mute and Phase inversion per channel
- RMS and Peak power variable knee limiter per channel

- **AES/EBU Digital Input:** Input for digital audio signal AES/EBU (AES3) standard via Neutrik® XLR. Its Sample Rate Converter permits 16 or 24 bits resolution operation from 32kHz to 96kHz Sample Rate.

- **EtheRAM™ II Control Module:** permits the control and monitoring of an installed group of Power Amps, connected to a standard Ethernet network. For it you can use third party control system as Crestron®, AMX® or third party software as Stardraw Control®.

DSP - RAM OCS (Software)

High Performances FIR Digital Signal Processor

Presentation

The V/W Series Digital Signal Processor is real time fully programmable through Ethernet, USB or directly from the front panel. There are two different versions: 4 Inputs/4 Outputs or 2 Inputs/2 Outputs totally free route configurable. Both versions include post-processor signal XLR output connectors to link the processed signal to another amplifier without DSP. Optional AES3 digital input is available. The main characteristics are:

Features

- 48kHz 56 bit double-precision floating-point DSP process
- 120dB dynamic range
- High performance 24bit/192kHz 512x Oversampling AD/DA Cirrus converters
- 0.6ms latency time (2.67ms using FIR filters)

Input Section

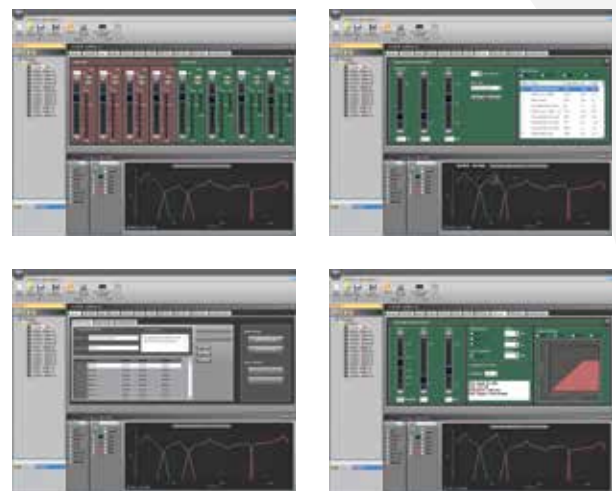
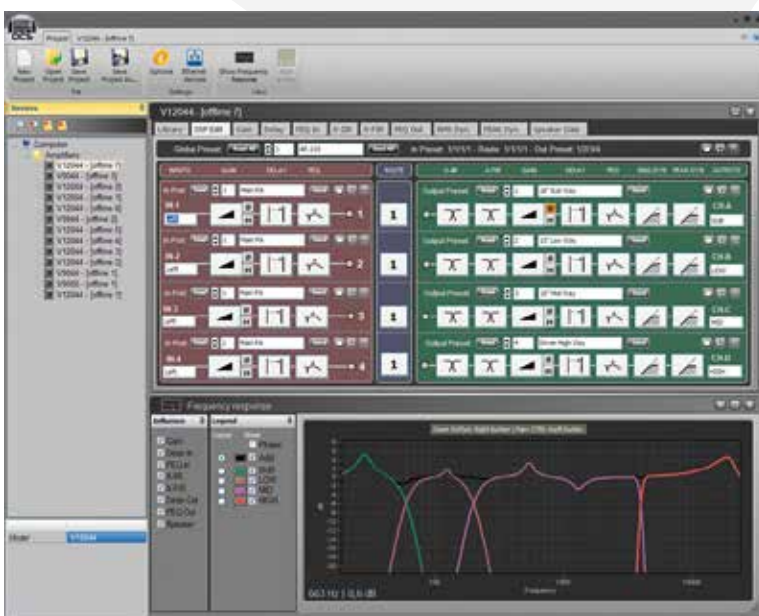
- Gain, Mute and Phase inversion per input
- Input Delay: 0 to 118 meters (341ms) per input
- Input EQ: 31 EQs per input (Parametric, Shelving, LP, HP, BP, SB, AP)

Output Section

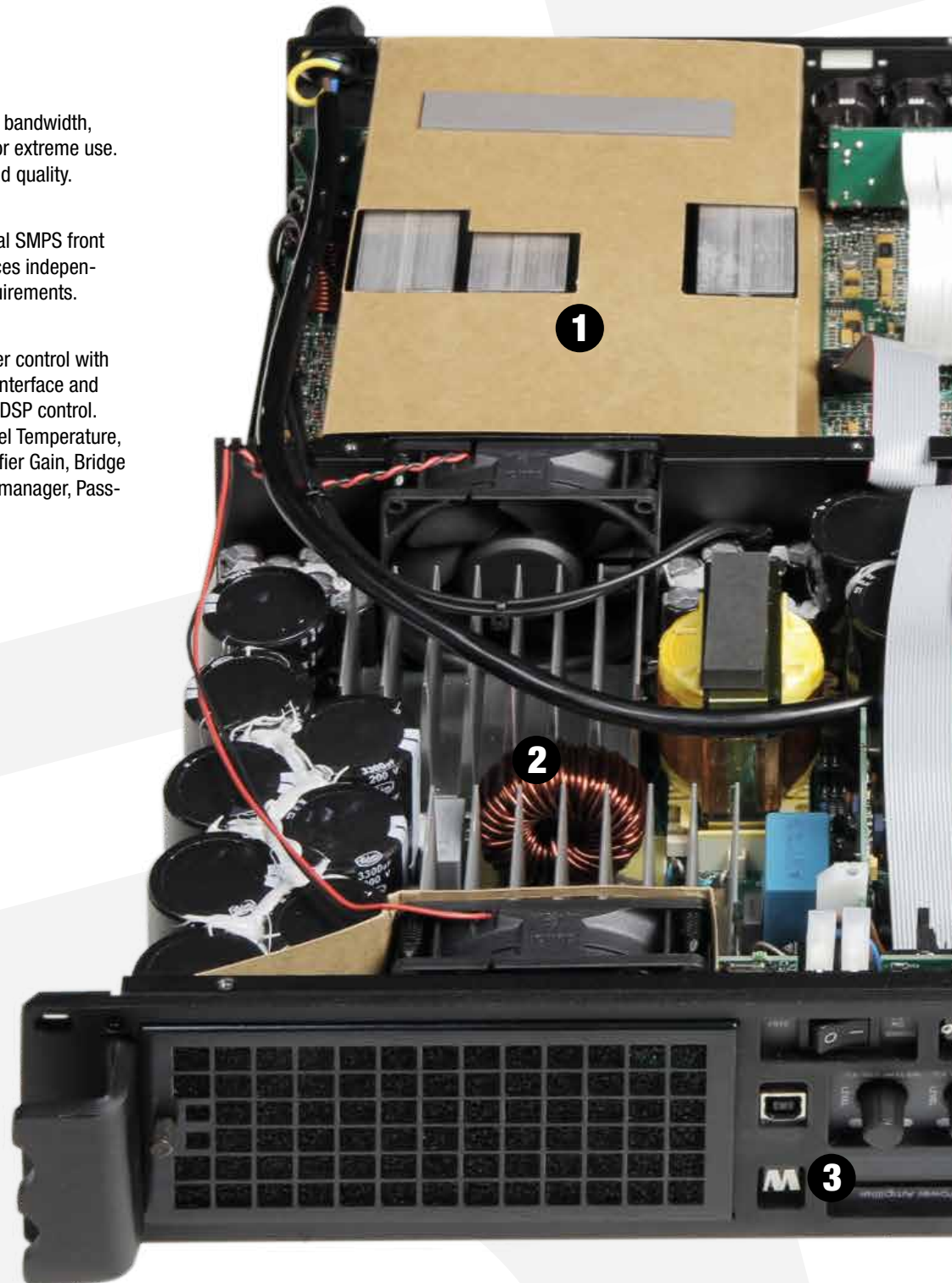
- Crossover Filters: FIR (Linear-phase) and IIR (up to 48dB/oct, Butterworth/Linkwitz-Riley/Bessel)
- Output Delay: 0 to 18 meters (52ms) per channel
- Output EQ: 15 filters per channel (Parametric, Shelving, LP, HP, BP, SB, AP)
- Gain, Mute and Phase inversion per channel
- RMS and Peak power variable knee limiter per channel

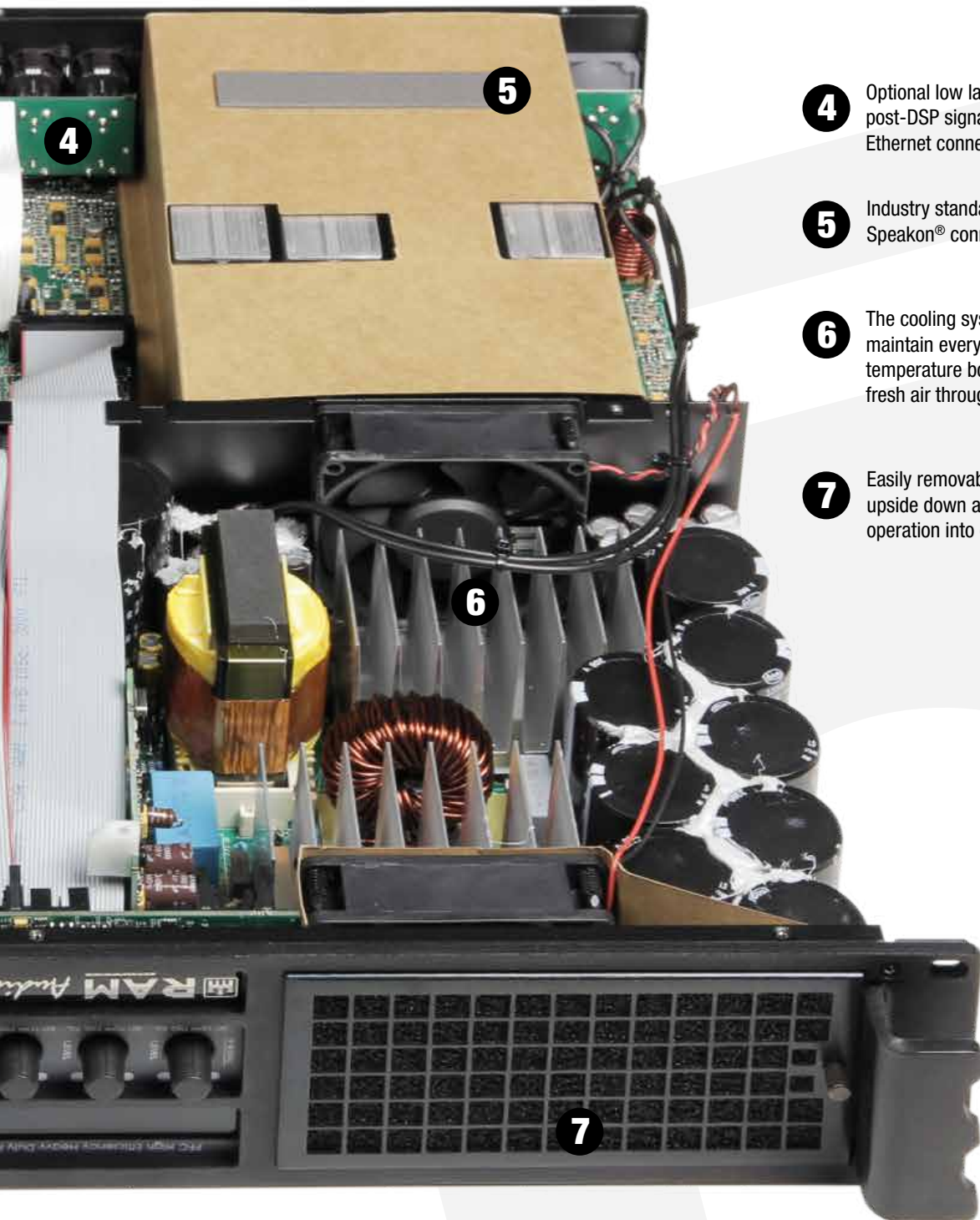
Library Manager

- 100 Output preset memories, to save any Output configuration independently for each channel
- 40 Input preset memories, to save any Input configuration independently for each channel
- 80 Global preset memories, to save a combination of Input, Route and Output presets for all channels
- Group management, to assign the same configuration simultaneously to different amplifiers



- 1** Oversized high efficiency and high bandwidth, Heavy Duty Audio Power section for extreme use. The responsible of audio power and quality.
- 2** PFC QuantaPulse™ Regulated Dual SMPS front end to deliver their full performances independently of mains status or load requirements.
- 3** Digital Potentiometers with Encoder control with extra large blue LCD display user interface and USB port for firmware update and DSP control. The display menu features: Channel Temperature, Operating Time, Input Links, Amplifier Gain, Bridge Mode, ICL Clip limiter, Preset DSP manager, Password protection.





4 Optional low latency high performance DSP with post-DSP signal links, AES/EBU Digital Input and Ethernet connection

5 Industry standard Neutrik® XLR (IN+LINK) and Speakon® connectors.

6 The cooling system is the guard who cares of maintain every power device into its operating temperature boundaries forcing into the case fresh air through an optimal path.

7 Easily removable front panel dust filters and the upside down assembly guarantees a reliable operation into dirty environments.

PFC QuantaPulse™ Power Supply

At the heart of the new W Series power amps lies our most recent state-of-the-art achievement: an evolved QuantaPulse EVO power supply that is designed to provide plenty of power when needed, but also monitors the audio amp's signals referring to its varying needs in the current supply demand and keeping the flow under control at all times. Bi-directional data flow, compactness, and proven reliability. These are just a few more advances that RAM Audio has brought to market, in order to give you greater peace of mind.

The amp's QuantaPulse EVO brain, in the line of our classic function controllers, watches over more parameters and is far more compact as a result of SMD technology. Communication between the power supply and the audio amplifier is absolute.

Active power factor correction (PFC) is utilized in switchmode power supplies to draw continuous sine wave AC current that is in phase with the available mains voltage. Significantly reducing AC current harmonics and energy consumption PFC maximizes efficiency resulting in increased output power and higher volume levels. In addition, PFC eliminates the effects of voltage fluctuations, extended power cable runs, inadequate power cable diameters and poor mains wiring.

Technical Specifications

Model name:	RAMW6000	RAMW9000	RAMW12000	RAMW9004	RAMW9044	RAMW12004	RAMW12044
Output Power 1 kHz, 1.0% THD+N							
@ 2Ω	2x 3025 W	2x 4400 W	2x 5900 W	4x 2260 W	-	4x 3025 W	-
@ 4Ω	2x 1600 W	2x 2300 W	2x 3100 W	4x 1150 W	4x 2200 W	4x 1600 W	4x 2950 W
@ 8Ω	2x 820 W	2x 1200 W	2x 1600 W	4x 600 W	4x 1150 W	4x 820 W	4x 1550 W
Bridge @ 4Ω	6050 W	8800 W	11800 W	2x 4520 W	-	2x 6050 W	-
Bridge @ 8Ω	3200 W	4600 W	6200 W	2x 2300 W	2x 4400 W	2x 3200 W	2x 5900 W
Frequency Response Power Bandwidth ±0.25dB	20Hz-20kHz						
Phase Response @ 1 watt 20Hz-20kHz	±15 deg						
Total Harmonic Distortion 20Hz-20kHz	<0.05%						
Intermodulation Distortion SMPTE	<0.05%						
Damping Factor 20-500Hz @8Ω	>500						
Crosstalk 20Hz-20kHz	>80dB						
Voltage Gain	26dB to 38dB (0.5dB steps)						
Sensitivity Rated Power (26/32/38dB Gain)	4/2/1 V	4.9/2.5/1.2 V	5.7/2.8/1.4 V	3.5/1.7/0.9 V	4.8/2.4/1.2 V	4.1/2/1 V	5.6/2.8/1.4 V
Signal-to-Noise Ratio 20Hz-20kHz	113dB	115dB	116dB	112dB	115dB	113dB	116dB
Required AC Mains Operating Voltage (50Hz-60Hz) Power On Idling (@230V)	170V-265V AC 0.5 A						
1/8 Rated Power (@230V min. Z)	7A	10 A	13 A	11 A	10 A	14 A	13 A
Dimensions W x H x D (mm) W x H x D (inches)	483x89x460 19x3.5x18.1						
Weight Net (Kg-Lbs)	10-22.1	12-26.5	12-26.5	12-26.5	12-26.5	12-26.5	12-26.5
Protections	Protections Soft-start, Muting at turn-on/turn-off, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, Mains Overvoltage (up to 400V AC), ICL™, PMS™, SSP™ and FCM™						





RAM

Audio®



S Series

Professional Power Amplifiers





Modern power amplifiers have developed into light, powerful, versatile, rugged and reliable instruments designed to keep working in the most arduous conditions.

At RAM Audio, we have an enviable reputation in the industry, and continue to stay at the forefront of audio design by offering our many customers all those concepts combined with the following major advantage: a sensible price level for our pedigree products. This is made possible by our constant development of state-of-the-art designs, together with meticulous component selection and rigorous supervision of assembly quality.

The S Series of RAM Audio amplifiers distils all these features to fulfill all your needs, whether you're starting a P.A. amplifier project from scratch, or you need to upgrade your present sound reinforcement equipment.

In the S Series amps, you'll find five 2-channel models and five 4-channel models, all offering plentiful power levels at low distortion in the range of 1.5 to 6 kilowatts, yet weighing in around 8 kilos and 30 cm deep.



Features

- Ultra-compact and lightweight 2-U high
- Laser cut aluminum front panels with integrated carrying handles
- Neutrik® XLR input connectors, input and signal link in 2 channel models
- Input Link switch: allow daisy-chaining of the input signal
- Neutrik® Speakon® output connectors
- Detented sealed potentiometers for easy recall of volume settings
- ICL™, PMS™, Hi-temp, Signal indicators per channel
- Power on and Stand-by leds
- Highly versatile with multiple configuration and additional module options
- Full PC control via EtherAM (with EtherAM Control module)
- Switchable ICL™ clip-limiters per channel
- Switchable (30-50 Hz) sub-sonic highpass filter per channel
- Three-position gain selector (26, 32 or 38 dB)
- Dual or bridge mode selector
- Twin temperature controlled, back to front cooling fans
- Oversized power components (high SOA reserve specification)
- DSP modul optional

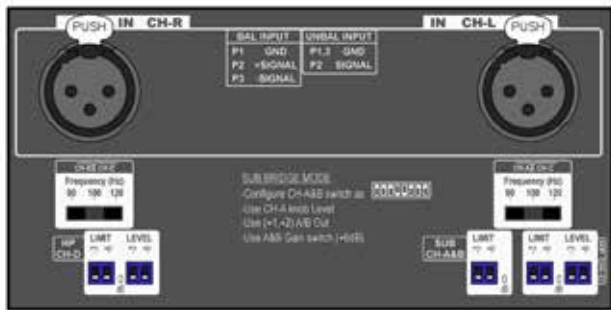
Protections

- PMS™: Power Management System controls the amount of power that the amp delivers under different circumstances.
- SSPT™: SOA Sentry Protection effectively limiting the power that the amp could deliver into an incorrect load or to a direct short-circuit
- ICL2™: improved Intelligent Clip Limiting
- Input signal muting at turn on
- Thermal overload protection
- Progressive Ramp input signal

Standard Signal Inputs Module: The S Series amps are equipped as standard with twin Neutrik® XLR, doubled by two other XLR connectors for linking purposes. In the 4 Channel models an XLR input per channel is provided with the signal linking facility.



S Series Input Module Options



Analog Processor Module: permits a very easy, user-friendly signal processing to enable the amp to set up a bi-amp system without any other outboard device. These are the Processor's main characteristics:

- 2-way stereo crossover (dual mono or single bridged sub output)
- 24dB/oct Linkwitz-Riley configurable crossover (90, 100 or 120Hz)
- Adjustable attenuation in the High-pass outputs (-3, -6 or -9dB)
- Adjustable Limiter, relative to Max. Output (-3, -6 or -9dB)

DSP44_S Module: Digital Signal Processor fully programmable through an USB port. These are the Processor's main characteristics:

- 4 Inputs/4 Outputs or 2 In/2 Out free route configurable.
- 24 bits/192 kHz 256x Oversampling Converters.
- Output Delay: 0 to 7.1 meters (20.69ms) per channel.
- XOver: Up to 48dB/oct Butterworth, Linkwitz-Riley and Bessel.
- EQ: 9 filters per channel (Parametric, Shelving, LP,HP,BP,SB).
- Gain, Mute and Phase inversion per channel.
- RMS Power and Peak Voltage output limiter per channel.
- Real Time operation from USB or front panel configuration.

• **EtherRAM Control Module:** permits the control and monitoring of an installed group of 2 channels S series Power Amps, connected to a standard EtherNet LAN using the onboard Datacom port via a Neutrik® RJ-45 connector. Also, it has a general purpose input and output connector to interface with third party controllers like an alarm system. It permits to control the turn on and to report the operating status.

• **AES/EBU Digital Input:** Input for digital audio signal for AES/EBU (AES3) standard via Neutrik® XLR, (extra Link XLR connector fitted). Its Sample Rate Converter permits 16 or 24 bits resolution operation at 32 to 48 KHz Sample Rate.

EtheRAM Control System

EtheRAM is a control system which permits, with just a computer, the control and monitoring of an installed group of DQX-E or S Power Amps, connected to a standard EtherNet LAN (local area network). The system can be used to switch-on remotely the amplifiers as well as to control their output levels, it can also be used as a monitoring system for all the Amps parameters. Finally, it can be used as a diagnosis tool to visualize the status of any acoustic system connected to the Amps.

The EtheRAM Control software, installed in any Windows system, permits the visualization and control of more than a hundred amps in real time, with a simple connection to a wired or a wireless EtherNet LAN. The system can be integrated in any existing EtherNet LAN and does not require any other external device to function. In other words, the system does not need any exclusive or specific network installation. Each Power Amp network-ready includes a DataCom port with a RJ45 connector (Neutrik®), through which the amp is connected to the EtherNet LAN via a standard switch.

Input Control and Monitoring:

- Input sensitivity selected: 26-32-38dB
- Pre/Post-fader signal level metering (dBu or Volts)
- Pre/Post-fader signal monitoring” servicing
- Front panel level knob position monitoring (dB)
- Level control
- Level monitoring (dB)
- Mute control
- Solo control

Output Monitoring:

- Output voltage metering (dB relative to true maximum voltage output)
- Output current metering (Amperes)
- Output power metering (Watts)
- Output Clip monitoring
- Output signal monitoring

Load Monitoring:

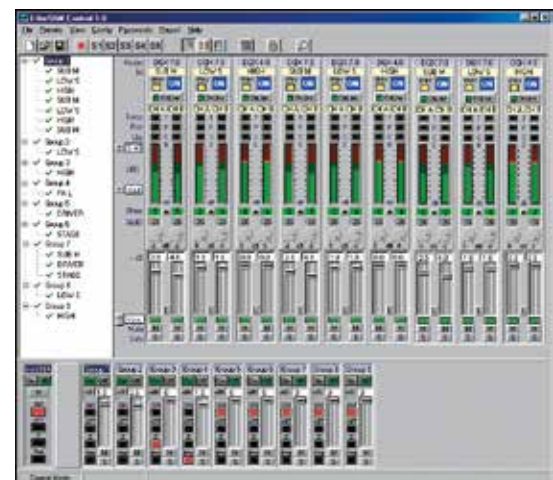
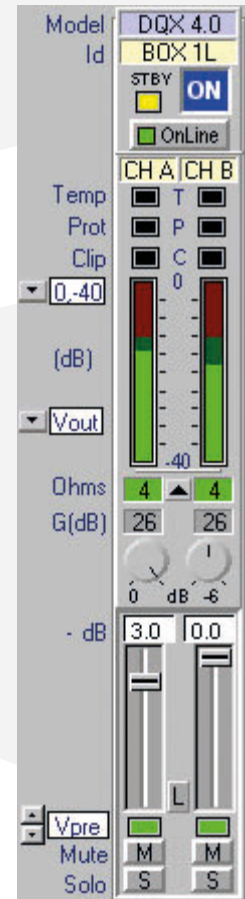
- Open/shorted load detection
- Adjustable threshold for detecting load opens and shorts
- Real time average minimum impedance (ohm)

General Parameters:

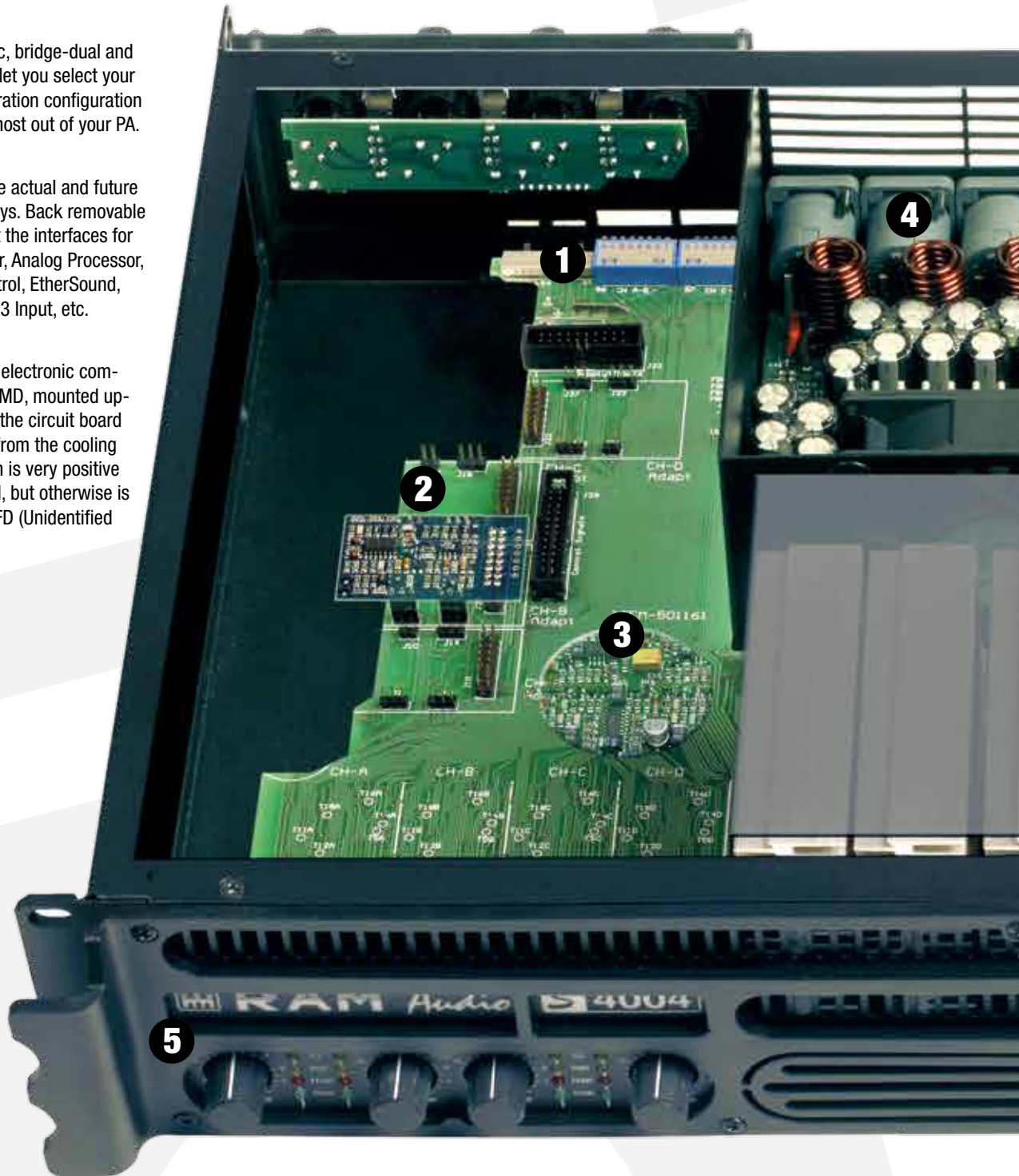
- On/Stby control mode selection
- Supply mode indication (Off/Stby/On)
- Fault status monitoring
- Temp protection status monitoring
- Operating temperature metering
- Model indication
- SN indication
- User-writable main reference
- User-writable channel references

Other Features:

Log file report (On/Stby/Off mode, Fault, Temp, excessive Clip, incorrect load, connection state), 10 direct presets, Passwords manager, amplifier groups tree visualization, sequential turn-on, 3 visualization modes, off-line operation option, instant emergency alarm visualization (Standby/Off, Fault, low gain, mismatch load), amplifier groups level, mute and solo control.



- 1** Gain, Subsonic, bridge-dual and ICL switches, let you select your preferred operation configuration to make the most out of your PA.
- 2** Location of the actual and future connection bays. Back removable plate can host the interfaces for DSP Processor, Analog Processor, EtherRAM Control, EtherSound, Cobranet, AES3 Input, etc.
- 3** All low power electronic components are SMD, mounted upside down on the circuit board and shielded from the cooling air flow, which is very positive where needed, but otherwise is a source of UFD (Unidentified Flying Dust).



Industry reference Neutrik® Speakon® connectors are directly soldered to the power supply board to shorten the output current path and its return, to dramatically improve the damping factor.



4 PFC QuantaPulse™ Regulated Dual SMPS front end to deliver their full performances independently of mains status or load requirements.

5 21 step detented level controls are integrated with four LEDs to display the amp status at a glance: ICL, PMS, SIGNAL and TEMP.

Newly designed short tunnel cooling system forces air directly onto the high efficiency heat-sinks and the o/p devices bolted directly to them.

QuantaPulse™ Power Supply

At the heart of the new S Series power amps lies our most recent state-of-the-art achievement: an evolved QuantaPulse EVO power supply that is designed to provide plenty of power when needed, but also monitors the audio amp's signals referring to its varying needs in the current supply demand and keeping the flow under control at all times. Bi-directional data flow, compactness, and proven reliability. These are just a few more advances that RAM Audio has brought to market, in order to give you greater peace of mind.



The amp's QuantaPulse EVO brain, in the line of our classic function controllers, watches over more parameters and is far more compact as a result of SMD technology. Communication between the power supply and the audio amplifier is absolute.

TECHNICAL SPECIFICATIONS

Model name:	RAMS1500	RAMS2000	RAMS3000	RAMS4000	RAMS6000	RAMS3004	RAMS4004	RAMS4044	RAMS6004	RAMS6044
Output Power 1kHz, 1.0% THD+N										
@ 2Ω	2x 880 W	2x 1190 W	2x 1570 W	2x 1950 W	2x 2950 W	4x 700 W	4x 980 W	-	4x 1440 W	-
@ 4Ω	2x 575 W	2x 790 W	2x 1100 W	2x 1380 W	2x 2025 W	4x 500 W	4x 670 W	4x 975 W	4x 1000 W	4x 1480 W
@ 8Ω	2x 325 W	2x 460 W	2x 630 W	2x 810 W	2x 1250 W	4x 300 W	4x 430 W	4x 690 W	4x 620 W	4x 1015 W
Bridge @ 4Ω	1760 W	2380 W	3140 W	3900 W	5900 W	2x 1400 W	2x 1960 W	-	2x 2880 W	-
Bridge @ 8Ω	1150 W	1580 W	2200 W	2760 W	4050 W	2x 1000 W	2x 1340 W	2x 1950 W	2x 2000 W	2x 2960 W
Pink Noise 12dB C.F.										
@ 2Ω	2x 975 W	2x 1360 W	2x 2060 W	2x 2460 W	2x 4225 W	4x 890 W	4x 1170 W	-	4x 2080 W	-
@ 4Ω	2x 610 W	2x 880 W	2x 1240 W	2x 1600 W	2x 2600 W	4x 580 W	4x 820 W	4x 1230 W	4x 1280 W	4x 2110 W
Frequency Response Power Bandwidth ±0.25dB										
						20Hz-20kHz				
Phase Response @ 1 watt 20Hz-20kHz										
						±15 deg				
Total Harmonic Distortion 20Hz-20kHz										
						<0.05%				
Intermodulation Distortion SMPTE										
						<0.05%				
Damping Factor 20-500Hz @8Ω										
						>500				
Crosstalk 20Hz-20kHz										
						>75 dB				
Voltage Gain										
						26/32/38 dB				
Sensitivity Rated Power @ 8Ω (V)										
	2.6/1.3/0.6	3.0/1.5/0.8	3.6/1.8/0.9	4.0/2.0/1.0	5.0/2.5/1.3	2.6/1.3/0.6	3.0/1.5/0.8	3.7/1.9/0.9	3.5/1.8/0.9	5.0/2.5/1.3
Signal-to-Noise Ratio 20Hz-20kHz										
	112 dB	113 dB	115 dB	116 dB	118dB	112dB	113dB	116dB	116dB	118dB
Required AC Mains 230 V - 50 Hz (idle)										
	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A	0.5 A
@ 4Ω (1/8 rated power)	4 A	4.8 A	6.2 A	7.5 A	10.5A	6 A	7.5 A	11A	10.5A	15A
Dimensions W x H x D (mm)										
						483 x 89 x 310				
W x H x D (inches)										
						19x3.5x12.2				
Weight Net (Kg- Lbs)										
	8-17.6	8-17.6	8.5-18.7	8.5-18.7	8.6-18.9	8.5-18.7	8.5-18.7	8.5-18.7	8.6-18.9	8.6-18.9
Protections Soft-start, Turn-on Turn-off transients, Muting at turn-on, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, ICL™, PMS™, SSP™, ICL™, PMS™, SSP™										

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RAM

Audio®



ZETTA Series

2 & 4 Channels Power Amplifiers





The RAM Audio ZETTA Series, is the result of an in depth study, in order to reach the best compromise between economy and performances, taking advantage of latest improvements in automated mixed surface mount and through hole electronic assembly.

ZETTA Series are a project based on an up-side-down mono-block approach offering an all-in-one power module that contains the entire amplifier assembly. Simplicity and effectiveness run hand by hand through the entire design to obtain an effectively skilled and workable product. The last generation QuantaPulse switching power supply allows to reach a new level of refined sensing and control of the power flow.

The cost-effective ZETTA Series amplifiers are packed with solid and convincing arguments for the professionals researching quality, reliability and value!

Features

- Unmatched audio quality hi efficiency Class H design
- 2/4 Channels models from 1000W up to 4000W
- Ultra light weight 6kg, compact package 25cm deep
- Last generation QuantaPulse™ switch mode power supply
- Power Management System (PMS™) and Clip Limiter (ICL™)
- Up-side-down design to avoid fan dust acumulation
- Industry standard Neutrik® XLR and Speakon® connectors
- Comprehensive protection set (ICL, PMS, SSP, turn-on, Temp, DC....)
- Detented sealed potentiometers
- Dual or bridge mode operation
- Temperature controlled, back to front cooling fan

Protections

- PMS™: Power Management System controls the amount of power that the amp delivers under different circumstances.
- SSP™: SOA Sentry Protection effectively limiting the power that the amp could deliver into an incorrect load or to a direct short-circuit
- ICL2™: improved Intelligent Clip Limiting
- Input signal muting at turn on
- Thermal overload protection

Technical Specifications

Model name.:	RAMZ210	RAMZ215	RAMZ220	RAMZ236	RAMZ420	RAMZ430	RAMZ440
Type:	2-channel	2-channel	2-channel	2-channel	4-channel	4-channel	4-channel
Output power (1 kHz 2 ohms):	2 x 500 W	2 x 750 W	2 x 1000 W	2 x 1800 W	4 x 500 W	4 x 750 W	4 x 1000 W
Output power (1 kHz 4 ohms):	2 x 400 W	2 x 700 W	2 x 1000 W	2 x 1750 W	4 x 400 W	4 x 700 W	4 x 1000 W
Output power (1 kHz 8 ohms):	2 x 200 W	2 x 370 W	2 x 520 W	2 x 920 W	4 x 210 W	4 x 370 W	4 x 520 W
Output power (1 kHz 4 ohms, bridged mode):	1000 W	1500 W	2000 W	3600 W	2 x 1000 W	2 x 1500 W	2 x 2000 W
Output power (1 kHz 8 ohms, bridged mode):	800 W	1400 W	2000 W	3500 W	2 x 800 W	2 x 1400 W	2 x 2000 W
Circuit concept:	class AB	class H	class H	class H	class AB	class H	class H
Frequency response:	20 - 20,000 Hz						
THD:	< 0,05 %						
S/N ratio:	116 dB						
Damping Factor:	> 400						
Crosstalk:	> 75 dB						
Voltage gain:	32 dB						
Input sensitivity:	1.9 dB						
Input impedance:	10 kohms						
Protection:	Soft start, power on/off transients, power on muting, overheating, DC voltage, high frequency, short circuit, open outputs, mismatching						
Controls:	Power, 2 x volume, dual/bridge switch						
Indicators:	Power LED						
Line input connectors:	2 x XLR	2 x XLR	2 x XLR	2 x XLR	4 x XLR	4 x XLR	4 x XLR
Speaker output connections:	2 x Speakon	2 x Speakon	2 x Speakon	2 x Speakon	4 x Speakon	4 x Speakon	4 x Speakon
Cooling system:	Fan						
Power supply:	30 - 240 V AC						
Power consumption full load:	11 A						
Width:	483 mm						
Height:	89 mm						
Depth:	250 mm						
Weight Net (Kg- Lbs)	5-10	5-10	6-12	6-12	6-12	6-12	6-12









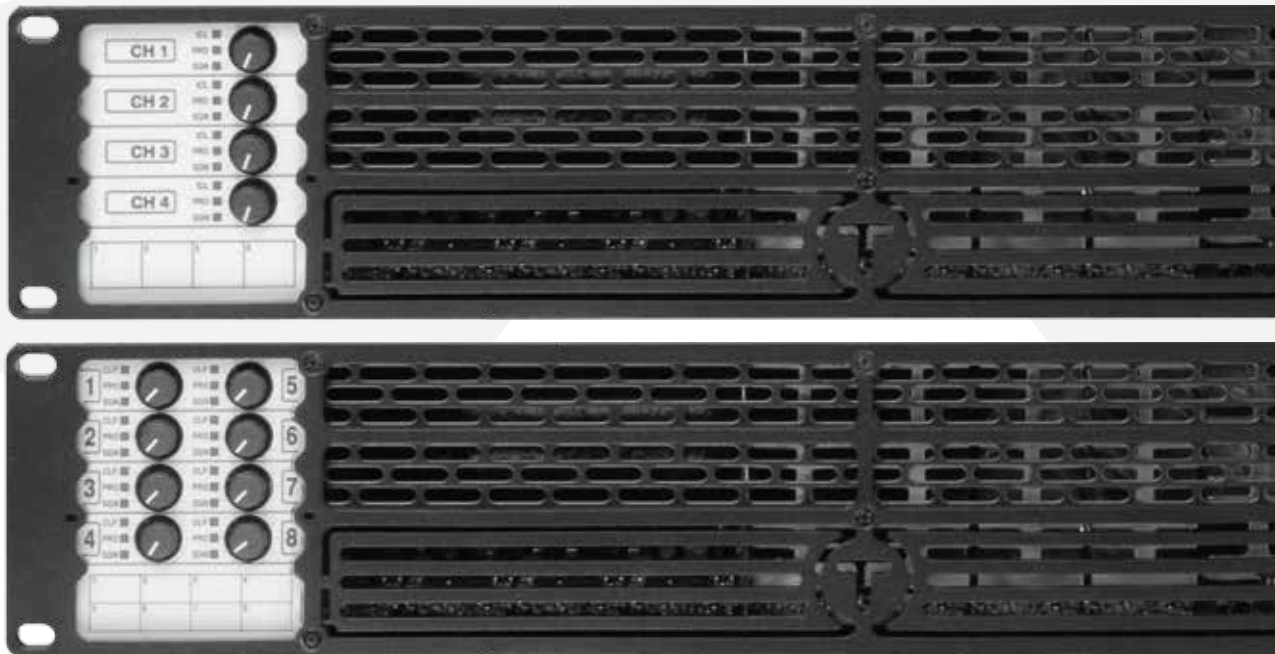
RAM

Audio®



T Series

Multichannel Installed Sound





The T Series multichannel power amplifiers utilize extremely efficient dual power rail Class H topology and fast-switching high performance Fairchild power transistors with a wide SOA (safe operating area) for exceptional reliability.

T Series amplifiers feature an oversized heat dissipation system for maximum thermal stability and safe operation with no time limit. Twin temperature controlled variable speed fans keep the T Series amps cool when running at high output levels while minimizing noise during low power operation.

Multichannel Power with Minimum Footprint

The T Series multichannel power amplifiers have been designed especially for installation and networked audio systems.

T Series amplifiers* are available with 4 and 8 discrete channels and output ratings from 160 to 320 Watts per channel providing optimum solutions for multizoning. They feature Euroblock inputs, terminal strip outputs and a rugged 2U rackmountable chassis with 4 mm front panel.

*Also available as GPIO versions with remote and emergency paging switching.

Performances

- Eight and four channel models with 300W and 150W per channel
 - Minimal footprint and mass around 200mm depth and 6 Kg
 - Optional Add-on card to interface with third party alarm systems with GPIO connections
 - FCM™ Faulty Channel Management system to avoid entire device shutdown
 - State-of-the-art layout for maximum performance and reliability
 - Highly oversized thermal dissipation design for maximum reliability
 - Superb distortion and noise figures
 - Low-Noise cooling fan
- All channels bridgeable by pairs
 - Selectable gain in four channel groups (26, 32 and 38dB)
 - Subsonic filter per channel (35Hz user selectable)
 - Temperature and signal dependant, intelligent cooling system for minimal noise
 - Optimal heat extraction due to the air tunneled enclosure and insulator-less power devices attachment to the heatsink
 - Direct connector-less output for maximum quality loudspeaker control
 - High grade engineering inside with the latest SMD technology
 - Balanced Inputs with 0.1% tolerance resistors for a precise noise rejection
 - Critical electronic and mechanical parts selection
- Innovative protection systems, FCM™ Faulty Channel Management and SSP™ SOA Sentry Protection
 - Detented and optionally tamper-proof volume potentiometers
 - Hi efficiency, two steps Class H Audio topology
 - Protection, Signal and Clip indicators per channel
 - Power On and Standby general indicators
 - Extremely compact, fully featured QuantaPulse power supply
 - Low current consumption and heat generation allowing less demanding conditions for multiple amplifier installations
 - Factory preset worldwide mains voltage power supply
 - Laser cut four millimeters aluminium front panel
 - Rugged 2U steel chassis



Protections

- PMS™: Power Management System. This is a complete set of protections that monitors the main amp parameters, in order to draw from the power supply only the precise amount of current required to maintain safe operation during hazardous or extreme working conditions. This system controls the amount of power that the amp delivers under two basic circumstances:
 - When internal temperatures rise to near thermal shutdown point due to abnormal operating conditions.
 - Excessive mains current consumption under laboratory conditions or in conditions of prolonged acoustic howl-round.
- SSP™: SOA Sentry Protection effectively limiting the power that the amp could deliver into an incorrect load or to a direct short-circuit. This avoids power transistor failure.
- ICL2™: improved Intelligent Clip Limiting, to avoid speaker failure and provide more acceptable sound quality even when clipping occurs. With the ICL™ system you don't lose the music punch but the speakers are kept under control.
- FCM™ Faulty Channel Management system to avoid entire device shutdown

QuantaPulse™ Power Supply

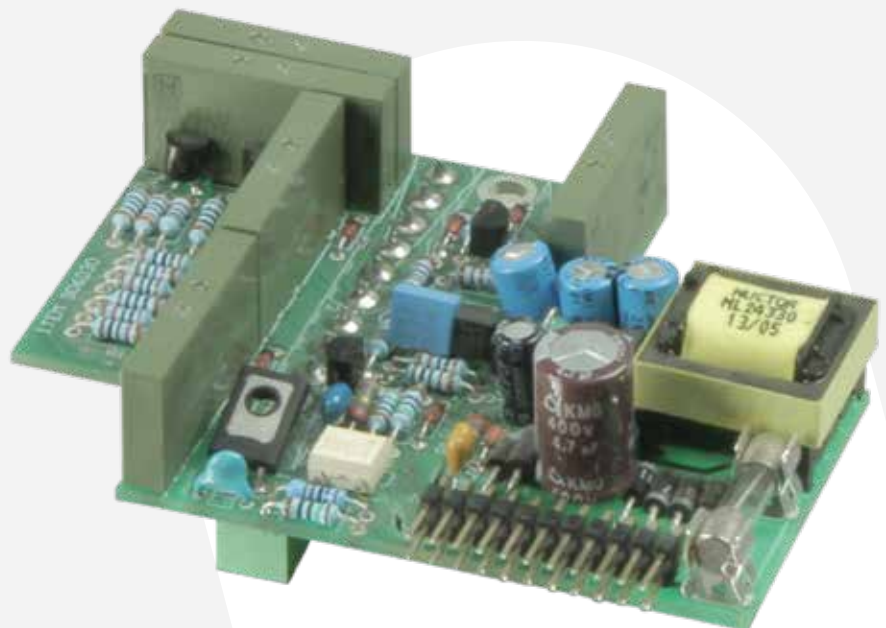
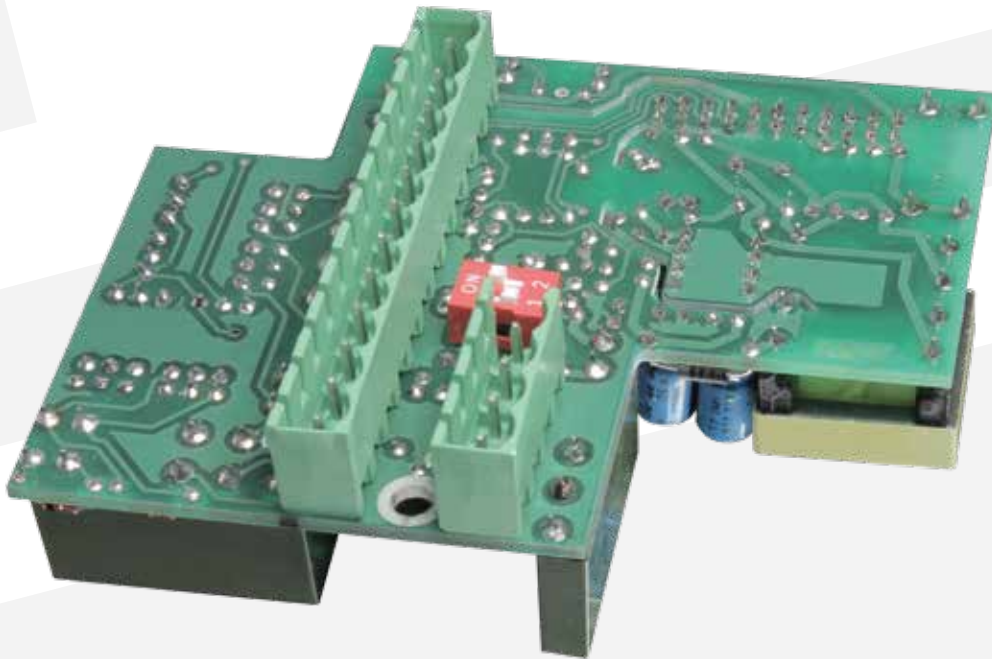
At the heart of the new T Series power amps lies our most recent state-of-the-art achievement: an evolved QuantaPulse EVO power supply that is designed to provide plenty of power when needed, but also monitors the audio amp's signals referring to its varying needs in the current supply demand and keeping the flow under control at all times. Bi-directional data flow, compactness, and proven reliability. These are just a few more advances that RAM Audio has brought to market, in order to give you greater peace of mind.

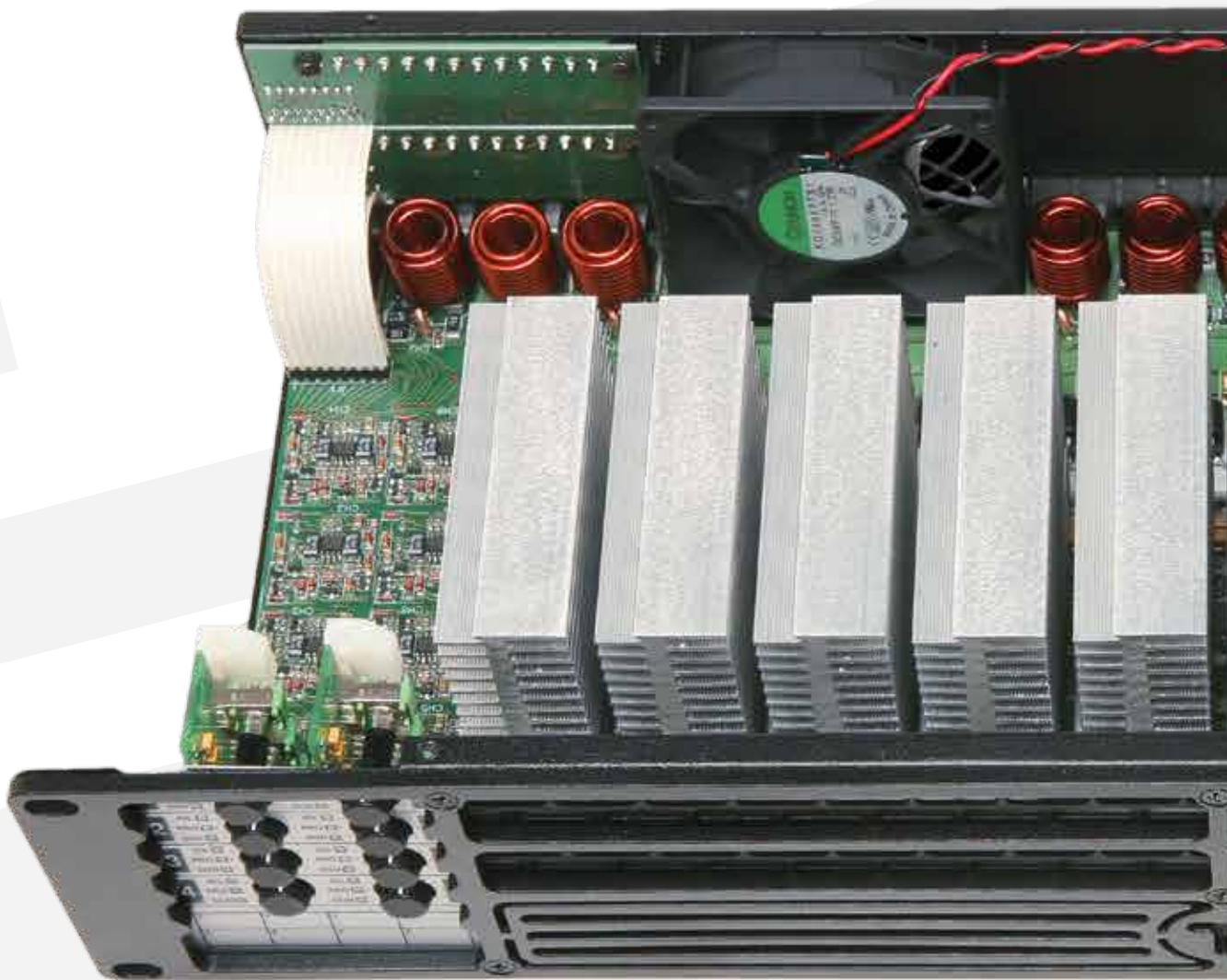
The amp's QuantaPulse EVO brain, in the line of our classic function controllers, watches over more parameters and is far more compact as a result of SMD technology. Communication between the power supply and the audio amplifier is absolute.

GPIO Module Option

At the back of the amplifier are located remote on/off connections to switch-on the amplifier from a third party controller or alarm system. The amplifier power switch must be activated to enter in the stand-by mode, indicated by the corresponding front panel led, being ready for a power-on command from the external circuitry.

Relay contacts are provided too for easy an inexpensive remote monitoring that can be routed to a supervisor control system to switch a spare amplifier or to any other control action.







Technical Specifications

Model name:	RAMT604	RAMT1204	RAMT1208	RAMT2408
Output Power Continuous Average Power RMS, 1kHz, 1.0% THD+N				
@ 4Ω	4x 160 W	4x 320 W	8x 150 W	8x 300 W
@ 8Ω	4x 115 W	4x220 W	8x100 W	8x 195 W
Bridge @ 8Ω	2x 320 W	2x 640 W	4x 300 W	4x 600 W
Pink Noise 12dB Crest Factor@ 4Ω	4x 210 W	4x 415 W	8x 180 W	8x 370 W
Circuit concept:			class H	
Frequency Response Power Bandwidth ±0.25dB			20Hz	
Phase Response @ 1 watt 20Hz-20kHz			±15 deg	
Total Harmonic Distortion 20Hz-20kHz			<0.05%	
Intermodulation Distortion SMPTE			<0.05%	
Crosstalk 20Hz-20kHz			>70 dB	
Voltage Gain	26/32/38 dB	26/32/38 dB	26/32/38 dB	26/32/38 dB
Sensitivity Rated Power @ 8Ω	1.5/0.8/0.4 V	2.1/1.0/0.5 V	1.4/0.7/0.4 V	2.0/1.0/0.5 V
Signal-to-Noise Ratio 20Hz-20kHz	107 dB	110 dB	107 dB	110 dB
Required AC Mains 230 V - 50 Hz (idle)	0.5A	0.5A	0.5A	0.5A
@ 8Ω (1/8 rated power)	1 A	1.5 A	1.4 A	2.6 A
Dimensions W x H x D (mm)			483x89x210	
W x H x D (inches)			19x3.5x8.27	
Weight Net (Kg- Lbs)	5.4- 11.8	5.4- 11.8	6.2- 13.5	6.2- 13.5
Protections	Soft-start, Turn-on Turn-off muting, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, ICL™, SSPT™ and FCM™.			

ADM 24 Controller

Audio Digital Management



Features

- Two Inputs and four Outputs: configurable as two way stereo and three or four way mono processor
- 24 bits/96 kHz A/D and D/A converters
- 32 bits floating point DSPs. 56 bits internal resolution
- Optional AES/EBU, SPDIF Digital Input. It includes bit rate frequency converter (32kHz-96kHz 24 Bits)
- USB and EtherNet port connection to PC

Input/ Output Configuration

- Gain control
- Delay Line: 0 to 20 meters
- EQ: 29 full configuration filters per input (Parametric, Shelving, LowPass, HiPass, BandPass, StopBand, AllPass)
- Free Routing
- Output Delay: 0 to 7 meter
- Crossovers: Up to 8th Order (48dB/Oct). Butterworth, Linkwitz-Riley and Bessel
- Output EQ: 9 full configuration filters (Parametric, Shelving, LowPass, HiPass, BandPass, StopBand, AllPass)
- Gain, Mute and Phase inversion
- RMS and Peak Compressor/Limiter with adjustable knee, which permits a progressive limitation threshold offering a more transparent effect when compared with conventional limiters. Absolutely distortion free Dynamics Control
- Noise Gate
- Possibility to use the acoustic system parameters, magnitude and phase, and refer to the system's Total Electro-acoustic response so that "you hear what you see"

Technical Specifications

Model name:	RAMADM24
Input Impedance:	12 kohm Balanced
Output Impedance:	50 ohm Balanced
Dynamic Range:	120dB
THD:	<0.0018% @-1 dBFS
Crosstalk:	-90dB
Storing Memories:	50
Switching Power Supply:	Universal 85V-265V AC, 50Hz-60Hz

RAM Audio Item List

Item No.	Amplifiers	Price in Euro RRP
RAMADM24	ADM 24 - 19" DSP Controller	1.985,00
RAMDSP22S	DSP 22 S - DSP Module for S Series 2-Channel Professional Power Amplifiers	879,00
RAMDSP22W	DSP 22 W - DSP Module for W Series 2-Channel Professional Power Amplifiers	1.104,00
RAMDSP22WE	DSP 22 WE - Ethernet Module for RAMDSP22W	1.225,00
RAMDSP44S	DSP 44 S - DSP Module for S Series 4-Channel Professional Power Amplifiers	995,00
RAMDSP44W	DSP 44 W - DSP Module for W Series 4-Channel Professional Power Amplifiers	1.225,00
RAMDSP44WE	DSP 44 WE - Ethernet Module for RAMDSP44W	1.349,00
RAMGPIOS	NEW GPIO S - GPIO Module for S Series Professional Power Amplifiers	198,00
RAMGIOT	NEW GPIO T - GPIO Module for T Series Professional Power Amplifiers	136,00
RAMS1500	S 1500 - PA Power Amplifier 2 x 880 W 2 Ohms	1.249,00
RAMS1500DSP	NEW S 1500 DSP - PA Power Amplifier 2 x 880 W 2 Ohms incl. DSP Module	2.704,00
RAMS1500DSPGPIO	NEW S 1500 DSP GPIO - PA Power Amplifier 2 x 880 W 2 Ohms incl. DSP and GPIO Module	2.954,00
RAMS1500GPIO	NEW S 1500 GPIO - PA Power Amplifier 2 x 880 W 2 Ohms incl. GPIO Module	1.840,00
RAMS2000	S 2000 - PA Power Amplifier 2 x 1190 W 2 Ohms	1.349,00
RAMS2000DSP	NEW S 2000 DSP - PA Power Amplifier 2 x 1190 W 2 Ohms incl. DSP Module	2.832,00
RAMS2000DSPGPIO	NEW S 2000 DSP GPIO - PA Power Amplifier 2 x 1190 W 2 Ohms incl. DSP and GPIO Module	3.082,00
RAMS2000GPIO	NEW S 2000 GPIO - PA Power Amplifier 2 x 1190 W 2 Ohms incl. GPIO Module	1.968,00
RAMS3000	S 3000 - PA Power Amplifier 2 x 1570 W 2 Ohms	1.559,00
RAMS3000DSP	NEW S 3000 DSP - PA Power Amplifier 2 x 1570 W 2 Ohms incl. DSP Module	3.100,00
RAMS3000DSPGPIO	NEW S 3000 DSP GPIO - PA Power Amplifier 2 x 1570 W 2 Ohms incl. DSP and GPIO Module	3.350,00
RAMS3000GPIO	NEW S 3000 GPIO - PA Power Amplifier 2 x 1570 W 2 Ohms incl. GPIO Module	2.236,00
RAMS3004	S 3004 - PA Power Amplifier 4 x 700 W 2 Ohms	1.696,00
RAMS3004DSP	NEW S 3004 DSP - PA Power Amplifier 4 x 700 W 2 Ohms incl. DSP Module	3.444,00
RAMS3004DSPGPIO	NEW S 3004 DSP GPIO - PA Power Amplifier 4 x 700 W 2 Ohms incl. DSP and GPIO Module	3.694,00
RAMS3004GPIO	NEW S 3004 GPIO - PA Power Amplifier 4 x 700 W 2 Ohms incl. GPIO Module	2.414,00
RAMS3004XOVER	NEW S 3004 X OVER - PA Power Amplifier 4 x 700 W 2 Ohms incl. Analog Processor Module	2.414,00
RAMS4000	S 4000 - PA Power Amplifier 2 x 1950 W 2 Ohms	1.840,00
RAMS4000DSP	NEW S 4000 DSP - PA Power Amplifier 2 x 1950 W 2 Ohms incl. DSP Module	3.460,00
RAMS4000DSPGPIO	NEW S 4000 DSP GPIO - PA Power Amplifier 2 x 1950 W 2 Ohms incl. DSP and GPIO Module	3.708,00
RAMS4000GPIO	NEW S 4000 GPIO - PA Power Amplifier 2 x 1950 W 2 Ohms incl. GPIO Module	2.594,00
RAMS4004	S 4004 - PA Power Amplifier 4 x 980 W 2 Ohms	1.983,00
RAMS4004DSP	NEW S 4004 DSP - PA Power Amplifier 4 x 980 W 2 Ohms incl. DSP Module	3.806,00
RAMS4004DSPGPIO	S 4004 DSP GPIO - PA Power Amplifier 4 x 980 W 2 Ohms incl. DSP and GPIO Module	4.056,00
RAMS4004GPIO	NEW S 4004 GPIO - PA Power Amplifier 4 x 980 W 2 Ohms incl. GPIO Module	2.776,00
RAMS4004XOVER	S 4004 X OVER - PA Power Amplifier 4 x 980 W 2 Ohms inkl. Analogem Prozessor-Modul	2.776,00
RAMS4044	S 4044 - PA Power Amplifier 4 x 975 W 4 Ohms	1.983,00
RAMS4044DSP	NEW S 4044 DSP - PA Power Amplifier 4 x 975 W 4 Ohms incl. DSP Module	3.806,00
RAMS4044GPIO	NEW S 4044 GPIO - PA Power Amplifier 4 x 975 W 4 Ohms incl. GPIO Module	2.776,00
RAMS4044XOVER	NEW S 4044 X OVER - PA Power Amplifier 4 x 975 W 4 Ohms incl. Analog Processor Module	2.776,00
RAMS6000	S 6000 - PA Power Amplifier 2 x 2950 W 2 Ohms	2.319,00
RAMS6000DSP	NEW S 6000 DSP - PA Power Amplifier 2 x 2950 W 2 Ohms incl. DSP Module	4.072,00
RAMS6000DSPGPIO	S 6000 DSP GPIO - PA Power Amplifier 2 x 2950 W 2 Ohms incl. DSP and GPIO Module	4.320,00
RAMS6000GPIO	NEW S 6000 GPIO - PA Power Amplifier 2 x 2950 W 2 Ohms incl. GPIO Module	3.206,00
RAMS6000PS	NEW S 6000 PS - Power Supply for RAMS6000	n.a.
RAMS6004	S 6004 - PA Power Amplifier 4 x 1440 W 2 Ohms	2.448,00
RAMS6004DSP	NEW S 6004 DSP - PA Power Amplifier 4 x 1440 W 2 Ohms incl. DSP Module	4.402,00
RAMS6004DSPGPIO	S 6004 DSP GPIO - PA Power Amplifier 4 x 1440 W 2 Ohms incl. DSP and GPIO Module	4.652,00
RAMS6004GPIO	NEW S 6004 GPIO - PA Power Amplifier 4 x 1440 W 2 Ohms incl. GPIO Module	3.372,00
RAMS6004XOVER	NEW S 6004 X OVER - PA Power Amplifier 4 x 1440 W 2 Ohms incl. Analog Processor Module	3.372,00
RAMS6044	S 6044 - PA Power Amplifier 4 x 1480 W 4 Ohms	2.448,00
RAMS6044DSP	NEW S 6044 DSP - PA Power Amplifier 4 x 1480 W 4 Ohms incl. DSP Module	4.402,00

RAMS6044DSPGPIO	S 6044 DSP GPIO - PA Power Amplifier 4 x 1480 W 4 Ohms incl. DSP and GPIO Module	4.652,00
RAMS6044GPIO	NEW S 6044 GPIO - PA Power Amplifier 4 x 1480 W 4 Ohms incl. GPIO Module	3.372,00
RAMS6044XOVER	NEW S 6044 X OVER - PA Power Amplifier 4 x 1480 W 4 Ohms incl. Analog Processor Module	3.372,00
RAMT1204	T 1204 - PA Power Amplifier 4 x 320 W 4 Ohms	1.140,00
RAMT1204GPIO	NEW T 1204 GPIO - PA Power Amplifier 4 x 320 W 4 Ohms incl. GPIO Module	1.624,00
RAMT1208	T 1208 - PA Power Amplifier 8 x 150 W 4 Ohms	1.325,00
RAMT1208GPIO	NEW T 1208 GPIO - PA Power Amplifier 8 x 150 W 4 Ohms incl. GPIO Module	1.862,00
RAMT2408	T 2408 - PA Power Amplifier 8 x 300 W 4 Ohms	1.590,00
RAMT2408GPIO	T 2408 GPIO - PA Power Amplifier 8 x 300 W 4 Ohms incl. GPIO Module	2.198,00
RAMT604	T 604 - PA Power Amplifier 4 x 160 W 4 Ohms	1.023,00
RAMT604GPIO	T 604 GPIO - PA Power Amplifier 4 x 160 W 4 Ohms incl. GPIO Module	1.474,00
RAMW12000	W 12000 - PA Power Amplifier 2 x 5900 W 2 Ohms	3.838,00
RAMW12000DSP	NEW W 12000 DSP - PA Power Amplifier 2 x 5900 W 2 Ohms incl. DSP Module	6.296,00
RAMW12000SPAES	W 12000 DSP AES - PA Power Amplifier 2 x 5900 W 2 Ohms incl. DSP Module with AES/EBU Digital Input	6.422,00
RAMW12000DSPE	NEW W 12000 DSP E - PA Power Amplifier 2 x 5900 W 2 Ohms incl. DSP + Ethernet Module	6.452,00
RAMW12000DSPEAES	W 12000 DSP E AES - PA Power Amplifier 2 x 5900 W 2 Ohms incl. DSP with AES/EBU Digital Input + Ethernet Module	6.578,00
RAMW12004	W 12004 - PA Power Amplifier 4 x 3025 W 2 Ohms	4.220,00
RAMW12004DSP	NEW W 12004 DSP - PA Power Amplifier 4 x 3025 W 2 Ohms incl. DSP Module	6.942,00
RAMW12004SPAES	NEW W 12004 DSP AES - PA Power Amplifier 4 x 3025 W 2 Ohms incl. DSP Module with AES/EBU Digital Input	7.098,00
RAMW12004DSPE	NEW W 12004 DSP E - PA Power Amplifier 4 x 3025 W 2 Ohms incl. DSP + Ethernet Module	7.098,00
RAMW12004DSPEAES	W 12004 DSP E AES - PA Power Amplifier 4 x 3025 W 2 Ohms incl. DSP with AES/EBU Digital Input + Ethernet Module	7.254,00
RAMW12044	W 12044 - PA Power Amplifier 4 x 2950 W 4 Ohms	4.220,00
RAMW12044DSP	NEW W 12044 DSP - PA Power Amplifier 4 x 2950 W 4 Ohms incl. DSP Module	6.942,00
RAMW12044SPAES	W 12044 DSP AES - PA Power Amplifier 4 x 2950 W 4 Ohms incl. DSP Module with AES/EBU Digital Input	7.098,00
RAMW12044DSPE	NEW W 12044 DSP E - PA Power Amplifier 4 x 2950 W 4 Ohms incl. DSP + Ethernet Module	7.098,00
RAMW12044DSPEAES	W 12044 DSP E AES - PA Power Amplifier 4 x 2950 W 4 Ohms incl. DSP with AES/EBU Digital Input + Ethernet Module	7.254,00
RAMW6000	W 6000 - PA Power Amplifier 2 x 3025 W 2 Ohms	2.689,00
RAMW6000DSP	NEW W 6000 DSP - PA Power Amplifier 2 x 3025 W 2 Ohms incl. DSP Module	4.830,00
RAMW6000SPAES	NEW W 6000 DSP AES - PA Power Amplifier 2 x 3025 W 2 Ohms incl. DSP Module with AES/EBU Digital Input	4.954,00
RAMW6000DSPE	NEW W 6000 DSP E - PA Power Amplifier 2 x 3025 W 2 Ohms incl. DSP + Ethernet Module	4.986,00
RAMW6000DSPEAES	W 6000 DSP E AES - PA Power Amplifier 2 x 3025 W 2 Ohms incl. DSP with AES/EBU Digital Input + Ethernet Module	5.110,00
RAMW9000	W 9000 - PA Power Amplifier 2 x 4400 W 2 Ohms	3.325,00
RAMW9000DSP	NEW W 9000 DSP - PA Power Amplifier 2 x 4400 W 2 Ohms incl. DSP Module	5.640,00
RAMW9000SPAES	NEW W 9000 DSP AES - PA Power Amplifier 2 x 4400 W 2 Ohms incl. DSP Module with AES/EBU Digital Input	5.922,00
RAMW9000DSPE	NEW W 9000 DSP E - PA Power Amplifier 2 x 4400 W 2 Ohms incl. DSP + Ethernet Module	5.798,00
RAMW9000DSPEAES	W 9000 DSP E AES - PA Power Amplifier 2 x 4400 W 2 Ohms incl. DSP with AES/EBU Digital Input + Ethernet Module	5.922,00
RAMW9004	W 9004 - PA Power Amplifier 4 x 2260 W 2 Ohms	3.710,00
RAMW9004DSP	NEW W 9004 DSP - PA Power Amplifier 4 x 2260 W 2 Ohms incl. DSP Module	6.290,00
RAMW9004SPAES	NEW W 9004 DSP AES - PA Power Amplifier 4 x 2260 W 2 Ohms incl. DSP Module with AES/EBU Digital Input	6.446,00
RAMW9004DSPE	W 9004 DSP E - PA Power Amplifier 4 x 2260 W 2 Ohms incl. DSP + Ethernet Module	6.446,00
RAMW9004DSPEAES	W 9004 DSP E AES - PA Power Amplifier 4 x 2260 W 2 Ohms incl. DSP with AES/EBU Digital Input + Ethernet Module	6.602,00
RAMW9044	W 9044 - PA Power Amplifier 4 x 2200 W 4 Ohms	3.710,00
RAMW9044DSP	NEW W 9044 DSP - PA Power Amplifier 4 x 2200 W 4 Ohms incl. DSP Module	6.290,00
RAMW9044SPAES	NEW W 9044 DSP AES - PA Power Amplifier 4 x 2200 W 4 Ohms incl. DSP Module with AES/EBU Digital Input	6.446,00
RAMW9044DSPE	NEW W 9044 DSP E - PA Power Amplifier 4 x 2200 W 4 Ohms incl. DSP + Ethernet Module	6.446,00
RAMW9044DSPEAES	W 9044 DSP E AES - PA Power Amplifier 4 x 2200 W 4 Ohms incl. DSP with AES/EBU Digital Input + Ethernet Module	6.602,00
RAMXOVERS	NEW X OVER S - Analog Processor Module for S Series 4-Channel Professional Power Amplifiers	198,00
RAMZ210	NEW Zetta 210 - PA Power Amplifier 2 x 500 W 2 Ohms	799,00
RAMZ215	NEW Zetta 215 - PA Power Amplifier 2 x 750 W 2 Ohms	899,00
RAMZ220	NEW Zetta 220 - PA Power Amplifier 2 x 1000 W 2 Ohms	949,00
RAMZ236	NEW Zetta 236 - PA Power Amplifier 2 x 1800 W 2 Ohms	1.099,00
RAMZ420	Zetta 420 - PA Power Amplifier 4 x 500 W 2 Ohms	1.199,00
RAMZ430	Zetta 430 - PA Power Amplifier 4 x 750 W 2 Ohms	1.299,00
RAMZ440	Zetta 440 - PA Power Amplifier 4 x 1000 W 2 Ohms	1.349,00

Protection Systems

PMS™ - Power Management System

This is a complete set of protections that monitors the main amp parameters (load status, signal input, temperature, current, etc.) in order to draw from the power supply only the precise amount of current required to maintain safe operation during hazardous or extreme working conditions. This system controls the amount of power that the amp delivers under three basic circumstances:

- 1.- The power-on sequence, where output is inhibited until the amp circuits are ready to operate. This routine is repeated at every restart, not just when the power switch is activated.
- 2.- When internal temperatures rise to near thermal shutdown point due to unfavourable operating conditions. Here the system takes control, restricting current so as to maintain operational continuity at the precise power level which the amp is capable of withstanding at that particular moment.
- 3.- Excessive mains current consumption. This event only occurs either under laboratory conditions (long term sinusoidal signal testing with dummy loads) or, for example, in field applications in conditions of prolonged acoustic howl-round. Here PMS takes control to avoid any damage to the speakers and to prevent the mains breaker from tripping or the fuses blowing.

ICL2™ - Intelligent Clip Limiter

The RAM Audio ICL2 is an anticlip system to avoid speaker failure and provide more acceptable sound quality even when clipping occurs. With the ICL2 system you don't lose the music "punch" but the speakers are kept under control.

SSP™ - SOA Sentry Protection

SOA Sentry protection effectively limits the power that the amp could deliver into an incorrect load or to a direct short-circuit. This avoids power transistor failure.

FCM™ - Faulty Channel Management

Faulty Channel Management system to avoid entire device shutdown.







RAM Audio®

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