

K7 1K2 SERIES



Australian Monitor
High Performance Mosfet Power Amplifiers

Introduction

Australian Monitor K-Series Amplifiers present quality without compromise and combine thorough mechanical and electronic design with functionality.

Compact design, robust construction and reduced weight have resulted in two high quality yet affordable products to complement the existing Australian Monitor range.

Their performance allows the finer sonic details to be distinguished at any power level into loads that would test many of the best power amplifiers currently available.

The K-Series are serious tools for any professional electro-acoustic application where continuous performance to specification is essential.

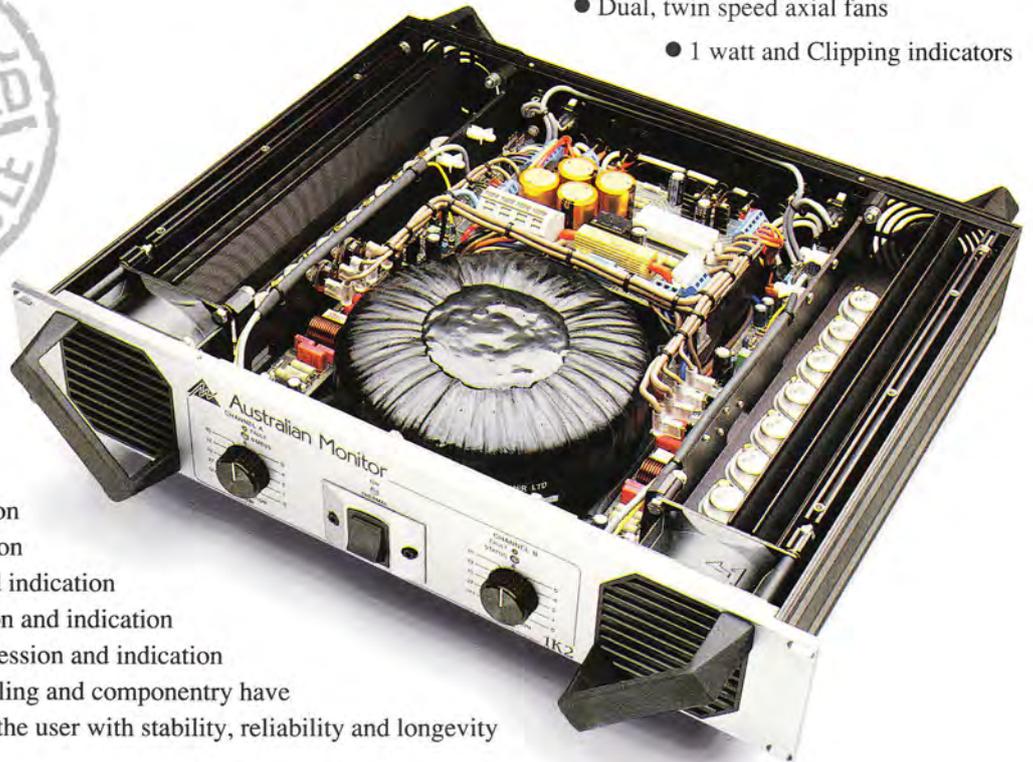


Protection

- Mains circuit breaker
- Independent rail fuses
- Input muting at turn on
- Input over voltage protection
- R.F. Interference suppression
- Short circuit protection and indication
- Thermal overload protection and indication
- Mains inrush current suppression and indication
- Layout, grounding, decoupling and componentry have been optimized to provide the user with stability, reliability and longevity

Features

- 2U high, heavy duty custom alloy chassis
- Modular construction – easy service
- Symmetrical layout – even weight distribution
- High efficiency toroidal mains transformer
- Well regulating, high energy linear power supply
- Binding posts and Speakon output connectors
- Stereo, bridged and mono operation
- Balanced inputs and buffered attenuators
- Signal strapping connectors on both channels
- Plug-in signal modifiers (active filters, limiters, etc.)
- 21 position detented attenuators
- Only high quality componentry used
- Output condition fault indicator
 - Efficient front to back cooling
 - Dual, twin speed axial fans
 - 1 watt and Clipping indicators



K-Series Power Specifications

1K2	EIA at 1kHz 0.05% THD	FTC 20Hz – 20kHz <0.1% THD	K7	EIA at 1kHz 0.05% THD	FTC 20Hz – 20kHz <0.1% THD
8 Ω Stereo	390 watts	360 watts	8 Ω Stereo	255 watts	240 watts
4 Ω Stereo	600 watts	550 watts	4 Ω Stereo	400 watts	350 watts
8 Ω Bridged	1200 watts	1100 watts	8 Ω Bridged	800 watts	700 watts

Outputs quoted are for 240 volt / 225 volt and 110 volt units at their specified mains voltage on load.
NOTE: 110 volt units operating at 120 volts will have a 12% increase in their EIA power specifications.



*K-Series contractor backpanel
with rear panel attenuators and standard K-Series backpanel*

Power Supplies

Exhibiting excellent load regulation the massive toroidal mains transformer forms the heart of the K-Series high energy, high current capable, linear power supplies. The accompanying high temperature rated computer grade power electrolytic capacitors (105°) and heavy duty wiring (with a minimum of interconnections) maximize power transfer to any current hungry load for extended periods at **high duty cycles**. Elevated driver stage supplies are utilized to ensure adequate drive to the gates of the lateral mosfet output devices. Twin regulated power supplies are provided for the pre-amp circuitry.

Cooling

Each amplifier assembly is individually cooled by a two speed axial fan drawing "fresh" air from the front of the unit and passing through the heat exchange tunnel before being exhausted to the rear. Each channels heat exchanger has a perimeter of 59 inches (1.5 meters) and a directly cooled surface area of 700in² – 450,000mm². This uninhibited path through the tunnel reduces the amount of dust that would normally be deposited in such units. A louvre grill heads the entry to the air tunnel to reduce the intrusion of large foreign particles and the entry of precipitation.



*Contractor with
rear panel
attenuators (top)
Contractor/utility
(middle)
Touring (bottom)*

Construction

The 2 unit high fully modular construction is crafted from custom alloy extrusions. Multiple point interconnection of these modules creates a robust and highly rigid chassis which will withstand the most arduous abuse. The symmetrical and open layout yields even weight distribution and total accessibility should servicing be required.

Plug in Signal Modifiers

A variety of plug in signal modifiers are available for the K-Series to further enhance their versatility. Active high and low pass filters for band pass or bi-amp applications, clip-limiters and loudness contours are just some of the cards which can be included or "retro" fitted after purchase.

Installation Options

In addition to the standard format the K-Series are offered in a variety of configurations to optimize cost and user requirements.

Contractor – These units feature barrier strip and female XL type connectors for input termination. A rear panel attenuator version is also available for tamper-proof applications.

Utility – These units feature single female XL input connectors on each channel. The contractor and utility versions offer all the features, construction, protection and performance of the standard K-Series and are supplied with single speed fans, color coded binding posts on 3/4" centers for each speaker output, and exclude the front panel carry handles.

Technical Specifications

1K2



Output power	Watts per channel	Damping factor	500:1 @ 1kHz 8 ohms
F.T.C. 20Hz-20kHz	8Ω 360w both channels driven	Output impedance	0.015 ohms @ 1kHz
@ < 0.1% THD	4Ω 550w both channels driven	Input impedance	25k ohms, balanced
Continuous capability	8Ω 420w single 390w stereo	Input sensitivity	1.2 volts (+4dB) 8Ω, 1.04 volts (+2.6dB) 4Ω
1kHz, < 0.05% THD	4Ω 680w single 600w stereo	Input CMRR	> 80dB @ 1kHz
Capability	2Ω 800w single 680w stereo	Voltage gain	33dB/45x @ 1kHz
Dynamic power	4Ω 800w single 750w stereo	Rise time	2.4μs for 80% of leading edge 145v pk-pk 20kHz square wave re 8ohms
Bridged power	8Ω 1200w, 4Ω 1350w mono	Slew rate	50v/μs
Distortion @ 0.5dB below clipping re 4 ohms		Noise	100dB linear (30kHz), 105dB A weighted
THD	< 0.005% @ 1kHz 4 ohms	Crosstalk	90dB @ 1kHz
IMD SMPTE	< 0.015% @ 60Hz - 7kHz 4:1	Weight net	42lbs/19kg
IMD CCIF	< 0.008% @ 14kHz-15kHz 1:1	Weight shipping	47.5lbs/21.5kg
Frequency response	20Hz-20kHz ±0.15dB	Dimensions W x H x D	2U, standard rack mounting
-3dB points	5Hz-95kHz, 0dB = 1kHz	excluding handles	19 x 3.5 x 14.8inches / 482 x 88 x 375mm
		including handles	19 x 3.5 x 17.9inches / 482 x 88 x 455mm

K7



Output power	Watts per channel	Damping factor	500:1 @ 1kHz 8 ohms
F.T.C. 20Hz-20kHz	8Ω 240w both channels driven	Output impedance	0.015 ohms @ 1kHz
@ < 0.1% THD	4Ω 350w both channels driven	Input impedance	25k ohms, balanced
Continuous capability	8Ω 280w single 250w stereo	Input sensitivity	1.2 volts (+4dB) 8Ω, 1.04 volts (+2.6dB) 4Ω
1kHz, < 0.05% THD	4Ω 440w single 400w stereo	Input CMRR	> 80dB @ 1kHz
Capability	2Ω 500w single 430w stereo	Voltage gain	31dB/37x @ 1kHz
Dynamic power	4Ω 530w single 460w stereo	Rise time	2.4μs for 80% of leading edge 127v pk-pk 20kHz square wave re 8ohms
Bridged power	8Ω 800w, 4Ω 860w mono	Slew rate	42v/μs
Distortion @ 0.5dB below clipping re 4 ohms		Noise	100dB linear (30kHz), 104dB A weighted
THD	< 0.005% @ 1kHz 4 ohms	Crosstalk	90dB @ 1kHz
IMD SMPTE	< 0.015% @ 60Hz - 7kHz 4:1	Weight net	37.5lbs/17kg
IMD CCIF	< 0.008% @ 14kHz-15kHz 1:1	Weight shipping	43lbs/19.5kg
Frequency response	20Hz-20kHz ±0.15dB	Dimensions W x H x D	2U, standard rack mounting
-3dB points	5Hz-95kHz, 0dB = 1kHz	excluding handles	19 x 3.5 x 14.8inches / 482 x 88 x 375mm
		including handles	19 x 3.5 x 17.9inches / 482 x 88 x 455mm



Australian Monitor

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