

A 4390A - 500W 100V Public Address Amplifier



Overview

This booster is ideal for installations requiring a high power zone amplifier. Ideal for use in shopping centres, pedestrian precincts, public transport facilities and convention centres. Operates on 240V AC and 24V DC for battery backup operation. Input is via 3 pin balanced XLR (500mV). Level control is rear mounted to prevent tampering or accidental adjustment.

High Performance

Frequency response extends from 50Hz to 15kHz at a total harmonic distortion (THD) of less than 0.5%. Output is 4 to 16 ohm, 70V and 100V line.

Thermally Cued Fan Cooling

Redback® amplifiers incorporate on demand, multi-staged thermally cued fan forced cooling. The output power stage is thermally monitored enabling automatic operation of a long life cooling fan to force air through a specially designed heatsink tunnel to maintain correct operating temperature.

Protection Features

Over temperature sensing is employed to shut down the amplifier in extreme over heat conditions, eg extreme over load and /or over drive misuse. Re-start is automatic once normal temperatures are attained.

The output voltage is limited to 110V maximum RMS voltage irrespective of load impedance to prevent damage to speaker load. Standard 100V line PA amplifiers can deliver up to 180 volts or more under conditions of high drive and very light loading. This output over voltage can quickly destroy any loudspeakers connected.

In the event of an overload, the output current is limited by the internal circuitry, thus reducing the output voltage at the speaker terminals. The front panel LEDs indicate the fault type.

All protection features are self resetting once fault condition has been removed.

Key Features

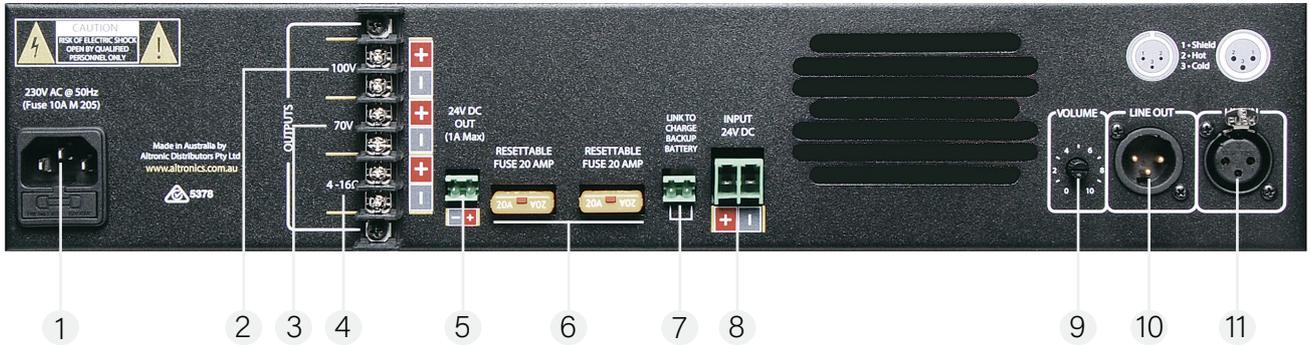
- Australian made
- 10 year manufacturer warranty with local support
- Multi-stage thermally cued fan cooling
- Input signal presence indicator
- Output peak limited
- 2U 19" rack mount (ears included)
- 3 pin XLR input, 3 pin XLR loop out
- Level control rear mounted
- 100V, 70V and 4 - 16Ω outputs
- Thermal and overload protection
- 240V AC, or 24V DC operation
- 300mA 24V battery trickle charge

About Redback® Public Address Products

Redback® products are proudly designed, engineered and manufactured in Australia.

Each unit is covered by a comprehensive 10 year parts and labour warranty. Redback® offers rock solid reliability from over 45 years experience in the commercial sound industry. Redback® offer locally available servicing and parts, plus the ability to offer feedback direct to the manufacturer.

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Rear Panel

- 1 240V AC IEC input & AC fuse
- 2 100V line terminals
- 3 100V line terminals
- 4 4-16Ω terminals
- 5 24V DC output
- 6 Protection blade fuses (DC)
- 7 24V DC charge link
- 8 24V DC charge link
- 9 Volume Control
- 10 XLR 3 pin male balanced line out
- 11 XLR 3 pin male balanced line in

Specifications

Electrical	
Power output	500 Watts RMS
Distortion	< 1.0% @ 1kHz
Output line	100V, 70V or 4-16Ω
Signal to noise ratio	>90dB
Frequency response	50Hz - 15kHz, -3dB
Line output	600Ω balanced, 0dBV, 3 pin XLR
Speaker connection	Screw terminals
Trickle charge	Screw terminals
Inputs	3 pin XLR (500mV)
24V-30V DC power	Screw terminals
240V AC power	IEC power connector
Indicators	Mains, 24 DC, Power, Signal presence, Over temp, Over current, Shut down, Peak limiting
Current Draw	500mA Standby, 35A Full @ 24V DC
Power supply	240V AC or 24V DC (nominal)
Protection	10A AC and 2 x 20A DC
Controls	
Volume 1	Controls line 1
Power	On/Off switch
Mechanical	
Dimensions	≈ 483W x 380D x 88H
Weight	≈ 22kg

Connections

Inputs	Line In	
	3 pin XLR female (balanced)	
Outputs	Speakers	Line Out
	Screw terminals for 100V line, 70V line and 4-16Ω	3 pin XLR male (balanced)

Notes: This amplifier should not be used with low impedance and 100V line speakers together