

Product Guide**A 4380** 250W 100V Public Address Power Amplifier

A 4380 250W 100V Public Address Power Amplifier



Overview

This booster amplifier is ideal for installations requiring high power zone amplifiers. Simply choose a power rating according to the wattage required for each zone. This high power model is ideal for use in shopping centres, pedestrian precincts, public transport facilities and convention centres. The A 4380 operates on both 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.

The circuit design includes protection features in case of output over voltage, over current and over temperature conditions. All are self resetting once the fault condition has been removed. Visual indication via front panel LEDs show amplifier status at all times. On demand fan cooling ensures reliable operation at all times. A dedicated nominal 24V DC 1A output is provided on the rear to power ancillary devices.

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® Phase 4® 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, which spins very slowly to maintain an optimum operating temperature and to minimise ambient noise. In quiescent or ordinary cycle paging mode the fan is inoperative.

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 'Overload' LED flashes, indicating a fault with the speaker circuit.

Key Features

- ✓ Australian made
- ✓ 10 year manufacturer warranty with local product support
- ✓ Multi-stage thermally cued fan cooling
- ✓ LED signal presence and peak indicators
- ✓ Input signal presence indicator
- ✓ Output peak limited
- ✓ 2U 19" rack mount (ears included)
- ✓ 3 Pin XLR input, 3 Pin XLR loop output
- ✓ Rear mounted level control
- ✓ 100V, 70V and 4 - 16Ω output terminals
- ✓ Thermal and overload protection
- ✓ 240V AC or 24V DC operation
- ✓ 1A 24V ancillary device power output

About Redback® Public Address Amplifiers

Redback amplifiers are proudly designed, engineered and manufactured in Australia.

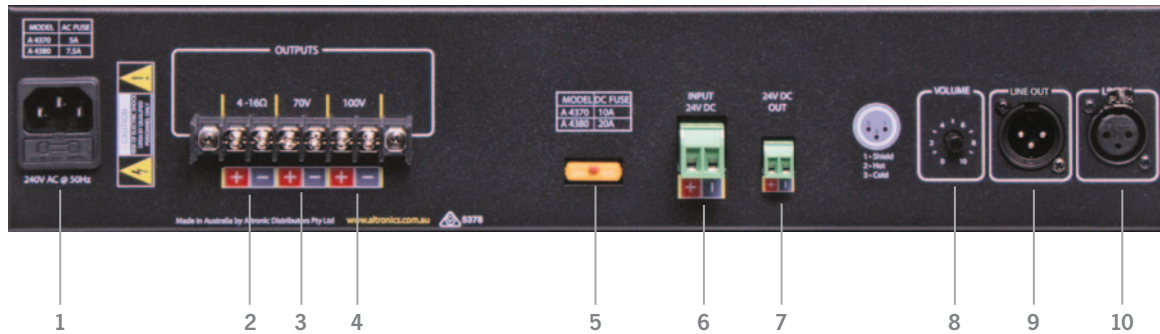
Each unit is covered by a comprehensive 10 year parts and labour warranty. Redback® offers rock solid reliability from over 30 years experience in the commercial sound industry. Redback® offer locally available servicing and parts, plus the ability to offer feedback direct to the manufacturer.

Product Guide

A 4380 250W 100V Public Address Power Amplifier



Rear Panel



1	240V AC input	5	DC blade fuse	9	XLR 3 pin balanced (line out)
2	4-16Ω speaker terminals	6	24V DC input terminal	10	XLR 3 pin balanced (line in)
3	70V line speaker terminals	7	Charging output for backup battery		
4	100V line speaker terminals	8	Volume control		

Specifications

Electrical

Power output:	250W watts RMS
Distortion:	< 0.5% @ 1kHz
Output line:	100V, 70V or 4-16Ω
Signal to noise ratio	>90dB
Frequency response:	50Hz - 15kHz, -3dB
Input sensitivity:	500mV
Power supply:	240V AC or 24V DC
Current draw:	250mA Standby, 17A Full load
240V AC power:	IEC power connector
24V DC power	Screw terminal
Protection:	7.5A AC, 20A DC fuse per channel
LED indicators:	Over temperature, Over current, Shutdown, Overload, Signal, Peak, Power, 240V AC, 24V DC

Controls

Volume 1:	Controls line 1
Power:	On/Off switch

Mechanical

Dimensions:	423W x 340D x 88H mm
Weight:	≈19kg

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: We do not recommend using this amplifier with a combination of low impedance and 100V line speakers.

Architect Specifications

A 4380

The amplifier shall have a power output of 250 watts RMS. The unit shall have a balanced 3 pin XLR line input. Frequency response shall be 50Hz – 15 kHz (-3dB).

A volume control shall be positioned on the rear panel. The front panel shall have a power switch, power LED indicator, signal presence LED indicator, signal peak limiting LED indicator, overtemperature LED indicator, overcurrent LED indicator and shutdown LED indicator.

The unit shall operate from 240V AC or 24V DC and each shall be individually fuse protected. It shall have multi stage thermally cued fan cooling. The unit shall have automatic output limiting in event of overload or overdrive. The unit shall have automatic shutdown and restart in the event of overtemp conditions. The unit shall provide a 24V 1A power output for ancillary devices.

The amplifier shall be capable of delivering full power of 100V RMS into a 40 ohm (250W) inductive load with less than 0.5% distortion measured at 1 kHz and with a signal to noise ratio of less than 90dB below rated output. The speaker outputs shall be 100V, 70V and 4-16 ohms provided via screw terminals. The output voltage shall be limited to 100V RMS to provide speaker protection. A 3 pin XLR line out socket shall be provided on the rear panel.

The amplifier shall be housed in a high quality 2RU metal chassis suitable for rack mounting.

The amplifier shall be a REDBack model A 4380.



Made in Australia by Altronic Distributors Pty. Ltd.

Ph: 1300 780 999 Fax: 1300 790 999 Internet: www.altronics.com.au

© 2014 Altronic Distributors Pty. Ltd. Specifications subject to change without notice. E&OE. Revision date: 14/10/2014.