

# Phase5® 125W 100V Public Address Mixer Amplifier



# Overview

Designed in conjunction with Australia's leading PA professionals to cater for the needs of multi-source installations. This redesigned unit offers the ability to monitor amplifier status via the colour LCD screen, plus custom labelling of inputs. The A 2711 optional USB & SD card module provides music playback when fitted.

Engineered for professional PA installations, the A 4275C delivers 125W RMS power. Frequency response extends from 50Hz to 15kHz ±3dB at a total harmonic distortion (THD) of less than 0.5% @ 1kHz. Voice/Vox muting, including three levels of input priority, bass and treble controls and phantom powering capability enable unparalleled flexibility for a wide scope of applications such as schools, shopping centres, workshops, mine sites and office buildings. Operates from 240V AC mains or 24V DC permitting battery backup operation during mains power failure. Output can be 100V line, 70V line or low impedance ( $4 - 16\Omega$ ) loads.

# LCD status readout.

Indicates input and output levels, amplifier status; including heatsink temperature, overload and over current conditions. 240V AC or 24V DC operation. Also allows custom labelling of input sources via USB keyboard.

# Flexible input configuration.

Each input can be configured for either balanced microphone or line use. A dip switch is supplied for each input providing the following features: • Phantom power on/off • Mic or line • 100mV or 1V • Vox muting on/off (priority)

# Three levels of priority.

Priority selection is by a dip switch on the rear panel: Input 1 over 2-6, input 2 over 3-6 and input 3 over 4-6.

# **Protection & Limiting**

In the event of an overload, the output current is limited by the internal circuitry, thus reducing the output voltage at the speaker terminals. Input limiting restricts the output to 110V regardless of input level. This prevents dangerously high voltages from damaging the loudspeaker. The circuit includes thermal overload shutdown, over current and overload protection plus fuses on both AC and DC supply rails.

# Key Features

- ✓ Australian made
- ✓ 10 year manufacturer warranty with local product support
- ✓ VU meter on LCD screen
- ✓ Output peak limited
- ✓ Multi-stage thermally cued fan cooling
- ✓ 2U 19" rack mount
- ✓ Record out terminals
- ✓ Remote volume facility
- ✓ Optional alert, evac & chime tone generator (A 4573)
- ✓ Vox activated 24V DC output
- ✓ 6 inputs with 3 pin XLR or 2 x RCA sockets
- ✓ Phantom powering available on all inputs
- ✓ Three levels of priority
- ✓ Option for mic/line to operate vox muting on inputs 1 to 3
- ✓ Push to talk (PTT) terminals on rear panel
- ✓ Bass and treble tone controls
- Power amp line out connector
- $\checkmark$  Terminals for 100V line, 70V line and 4 16 $\Omega$  loads
- ✓ 240V AC or 24V DC power operation
- ✓ Thermal & fuse overload protection
- ✓ Built in short circuit protection
- ✓ 300mA trickle charge facility for 24V DC batteries
- ✓ Master volume can be configured as pre or post line out

# About Redback<sup>®</sup> 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<sup>®</sup> offers rock solid reliability from over 45 years experience in the commercial sound industry. Redback<sup>®</sup> offer locally available servicing and parts, plus the ability to offer feedback direct to the manufacturer.

**REDBACK** 

# Product Guide A 4275C Phase5® 125W 100V Public Address Mixer Amplifier

# Rear Panel



# Specifications

Electrical				
Power output:	125 Watts RMS			
Distortion:	< 0.5% @ 1kHz			
Output line:	100V, 70V or 4-16 $\Omega$			
Signal to noise ratio (Limiting by-passed)				
Mic inputs:	Typically 75dB below rated output.			
Line inputs:	Typically 81dB below rated output.			
Line output:	$600\Omega$ balanced, 0dBV			
Mic input frequency respo	nse: 50Hz - 12kHz, -3dB			
Line input frequency respo	onse: 50Hz - 15kHz, -3dB			
Input sensitivity:	100mV-1V (line), 3mV balanced (mic)			
Power supply:	240V AC or 24V DC			
Current draw:	350mA standby, 8A full load @ 24V DC			
240V AC power:	IEC power connector			
24V DC power:	Screw terminal			
Protection:	5A AC, 10A DC fuses			
Vox muting:	60dB below rated output			
LED indicators:	Power, fault, all other indicators on LCD			

### Controls

Master Volume:	r Volume: Controls all output leve	
Line Inputs:	Volume	
Bass:	±10dB @ 100Hz	
Treble:	±10dB @ 10kHz	
Power:	On/Off switch	

## Mechanical

Dimensions:	483W x 380D x 88H mm (410D inc.	handles)
Weight:		≈14.5kg

## **Optional Add Ons**

Α	2711	MP3 USB/SD Audio Module	

A 4573 Alert/Evac Tone Module

A 2280B Remote Volume Wallplate

Connections							
	Mic 1-6	Line 1-6	Send/Return				
Inputs	3 pin XLR female (balanced)	Stereo RCA	RCA sockets				
	Speakers	Tape Out	Preamp Out				
Outputs	Screw terminals for 100V line, 70V line and 8-16Ω	Mixed mono Dual RCA sockets	3 pin XLR male (balanced), RCA socket				

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

## Architect Specifications

#### A 4275C

The amplifier shall have a power output of 125 Watts RMS. The unit shall have 6 inputs. All inputs shall consist of one balanced XLR microphone input and dual RCA line input. In addition, a local music input shall have a 3.5mm stereo line unbalanced input. Frequency response shall be 50Hz - 12 kHz (-3dB) for microphone inputs and 50Hz - 15 kHz (-3dB) for line inputs.

The unit shall have separate volume controls for each microphone / line input and tone controls providing 10dB cut or boost at 100Hz and 10dB cut or boost at 10kHz.

The unit shall operate from 240V AC or 24V DC with a LED indicator, and be fuse protected. The unit shall have overload protection via DC fuses.

The amplifier shall be capable of delivering full power of 100V RMS into a 333 ohm (125W) inductive load with less than 0.5% distortion measured at 1 kHz and with system hum and noise typically -75dB with all volume controls at minimum. The speaker outputs shall be 100V and 4-16 ohms provided via screw terminals. Tape output shall be provided via dual RCA sockets. Internal muting shall be provided by the VOX muting circuit. Muting should be configurable so that input 1 shall over-ride inputs 2, 3 and local music or input 2 shall override input 3 and local music.

Amplifier status readout shall be provided via front panel LCD readout. The amplifier shall be housed in a high quality 2RU metal chassis suitable for rack mounting. The amplifier shall be a REDBACK PHASE 5 model A 4275C.