

Product Guide**A 4031C** 30W 100V Public Address Amplifier

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Overview

This PA amplifier has been designed to meet the requirements of small to medium sized professional public address installations. Features such as push to talk (PTT) auxiliary muting, three combined balanced line microphone / stereo line inputs, tape out, and separate bass and treble controls give this amplifier a wide scope of installation applications, including schools, public halls, workshops and sporting complexes. This unit features thermal overload shutdown, over current and short circuit protection.

High Performance

Frequency response extends from 40Hz to 10kHz at a total harmonic distortion (THD) of less than 0.5%. Output may be 100V line or low impedance (8 - 16Ω) speaker loads.

VOX Muting Functionality

The VOX circuit allows telephone paging via line input one or two (selectable internally). When paging via the telephone, all other line inputs are muted (ie. background music). Features variable sensitivity and time delay settings.

Key Features

- ✓ **Australian made**
- ✓ **10 year manufacturer warranty with local product support**
- ✓ 3 Inputs suitable for either microphone or line level, or for use as microphone and line level coupled together
- ✓ Bass and treble controls (on both microphone and auxiliary inputs)
- ✓ Full 30W RMS output (100V and 4 -16Ω outputs)
- ✓ Push to talk muting
- ✓ Protection against over-voltage, over current, thermal run-away and short circuit load
- ✓ Internationally accepted IEC mains socket (240V AC operation only)
- ✓ Stereo RCA sockets for all auxiliary inputs (configured to mono internally allowing standard stereo equipment to be directly connected)
- ✓ Fully balanced microphone inputs
- ✓ Tape output, suitable for recording, or for connection to a second amplifier

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 40 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 input	5	RCA stereo line (input 3)	9	XLR 3 pin balanced (input 2)
2	100V line terminals	6	RCA stereo line (input 2)	10	XLR 3 pin balanced (input 1)
3	8-16Ω terminals	7	RCA stereo line (input 1)	11	DIN 5 pin unbalanced (input 1)
4	RCA stereo tape output	8	XLR 3 pin balanced (input 3)	12	6.35mm jack unbalanced (input 1)

Specifications

Electrical

Power Output:	30 watts RMS
Distortion:	< 0.5% @ 1kHz
Output Line:	100V or 8 - 16Ω
Signal to Noise Ratio:	Typically 75dB below rated output
Frequency response mic:	52Hz - 10kHz, -3dB
Frequency response line:	40Hz - 10kHz, -3dB
Mic 1 sensitivity:	2.6mV balanced or 3.2mV unbalanced
Mic 2 & 3 sensitivity:	2.6mV balanced
Line inputs sensitivity:	150mV
240V ac power:	IEC power connector
Power supply:	240V AC
Protection:	800mA AC, 3A x 2 DC internal
Muting:	PTT and VOX via microphone (-79dB)
Indicators:	Power

Controls

Volume 1:	Controls mic 1 / line 1
Volume 2:	Controls mic 2 / line 2
Volume 3:	Controls mic 3 / line 3
Bass:	±10dB @ 100Hz
Treble:	±13dB @ 10kHz

Mechanical

Dimensions:	300W x 220D x 74H mm
Weight:	≈4.8kg

Connections

	Mic 1	Mic 2 & 3	Line 1, 2 & 3
Inputs	6.35mm (unbalanced) 5 pin DIN (unbalanced) 3 pin XLR fem. (balanced)	3 pin XLR fem. (balanced)	Stereo RCA

Notes: The 5 pin din has facility for PTT (push to talk) muting. The PTT contacts will mute input 2 (mic 2 and aux 2) and input 3 (mic 3 and aux 3). The PTT contacts will not mute Aux 1 input. We recommend that you connect only one microphone at a time to input 1.

	Speakers	Tape Out
Outputs	Screw terminals for 100V line and 8-16Ω	Stereo RCA

Notes: Minimum impedance for 100V loads is 333Ω (when only the 100V output is used). We do not recommend using this amplifier with a combination of low impedance and 100V line speakers.

Architect Specifications

The amplifier shall have a power output of 30 watts RMS. The unit shall have 3 inputs, each input consisting of one balanced XLR microphone input and dual RCA line input. In addition, microphone 1 input shall have a 5 pin DIN balanced input and a 6.35mm jack unbalanced input. Frequency response shall be 52Hz – 10kHz (-3dB) for microphone inputs and 40Hz – 10 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 13dB cut or boost at 10kHz.

The unit shall operate from 240V AC 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 (30W) inductive load with less than 0.5% distortion measured at 1 kHz and with system hum and noise typically -72dB with all volume controls at minimum. The speaker outputs shall be 100V and 8 ohms provided via screw terminals.

The amplifier shall be a REDBACK model A 4031C.

Made in Australia by Altronic Distributors Pty. Ltd.

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