



Australian Monitor

Opal 2802 POWER AMPLIFIER

Australian opals are among the most beautiful and sought-after iridescent gems in the world. Of all the known precious stones, only opal can show the complete range of spectral hues in a glorious balance.

The Australian Monitor Opal 2802 is a gem among amplifiers, the culmination of countless hours of dedicated research and development.

Without sacrificing Australian Monitor's legendary quality or design, the new and affordable Opal 2802

response combined with a high slew rate, and high damping factor for accurate loudspeaker driver control.

Construction

Built to the highest standards the Opal 2802 utilises a 2 unit high, modular monocoque chassis. Its symmetrical construction features heavy gauge aluminium front and rear panels integrated with a rigid folded steel pan and steel side bracing.



brings within everyone's reach superlative sonic performance, unmatched dynamics and of course our renowned "all terrain" construction techniques.

Audio Reproduction

The Australian Monitor design team have drawn on a wealth of experience in sophisticated audio circuit designs for CD mastering facilities, music recording studios and other esoteric audio monitoring situations. In the new Opal 2802 they have created one of the finest high definition audio signal paths available, exhibiting dazzling transients, timbral accuracy and outstanding sonic integrity.

The MOSFET-based circuit design with double-balanced current-mirror drive circuit provides wide bandwidth, ultra low THD / IMD, super fast transient

Cooling

Four custom aluminium alloy heatsinks, providing a 6.0 metre perimeter with over 500,000 square mm of convection cooling area. Internal airflow is assisted by a signal-dependent, silent axial fan, providing "on demand" cooling.

Power Supply

At the heart of the Opal 2802 is a high efficiency 800VA toroidal mains transformer, the current source for two massive 15,000 microfarad computer grade reservoir capacitors. While maintaining high power output, this topology minimises ELF emissions to ensure your safety.

Preliminary Specification

Output Power

E.I.A. 1 kHz, <0.05% THD
(pre-stress at rated power for 5 min)

Both channels driven

Bridge mode

8 ohm 4 ohm

200W 280W
560W

Voltage Gain

@ 1 kHz

29 dB
(x27)

Signal / Noise ratio

linear (30 kHz)

100 dB

Distortion

@ 0.5 dB below clipping re 4 ohms

THD @ 1 kHz

IMD SMPTE

< 0.005%

< 0.015%

Slew rate

35V μ S

Crosstalk

@ 1 kHz

< -90 dB

Frequency Response

20 Hz - 20 kHz

\pm 0.5 dB

Damping factor

250:1

Input Impedance

Line to Line, Balanced

25 kohm

Weight

net
packed

33 lb / 15 kg
37 lb / 17 kg

Input Sensitivity

For 280W output / 4 ohm

1.23 Vrms
(+4 dBu)

Dimensions

excluding handles

H x W x D

3.5 x 19 x 14.8 inch

88 x 482 x 375 mm

Input CMRR

@ 1 kHz

> 70 dB

(19 inch EIA rack mounting, 2 units high)

CAUTION!

WARNING!
DO NOT EXPOSE TO JETTER
FLAME OR MOISTURE

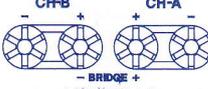
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO
QUALIFIED PERSONNEL ONLY.



Australian Monitor
53 College Street
Gladesville NSW 2111
Serial No. [REDACTED]

Opal 2802

SPEAKER OUTPUTS
280 Watts/4 Ohm (Stereo)
560 Watts/8 Ohm (Bridge)



4 Ohm Min (Stereo)
8 Ohm Min (Bridge)

MAINS -
8 Amp/80-80ip Fuse (20mm)



230/240V \sim 50/60Hz
1100W

CH-B ACTIVE BALANCED INPUTS CH-A



INPUT SENSITIVITY
+6dB (1.23V) @ 1kHz
+0dB (1.23V) @ 1kHz
+180 Watts/8 Ohms

INPUT IMPEDANCE
25k Ohm @ 1kHz

PUSH TO BRIDGE



Pin 1 = Hot (Red)
Pin 2 = -ve (Black)
Pin 3 = +ve (Blue)

Features

- Buffered 21 position front-panel stepped attenuators
- Balanced XLR inputs
- Symmetrical construction for even weight distribution
- 1 Watt / Clipping status indicators
- Binding post outputs
- Bridge switch
- Silent convection cooling with fan assist under heavy load

Protection

- Input overvoltage protection
- Fault protection and indication
- Internal fuses on each supply rail
- Overload protection and indication
- Short circuit protection and indication
- Radio frequency interference suppression
- Independent thermal sensing on each channel with safety mute

Options

1. 70 / 100 Volt line transformer
2. HP-1 / LP-1 Filter cards
3. Speakon output connectors

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