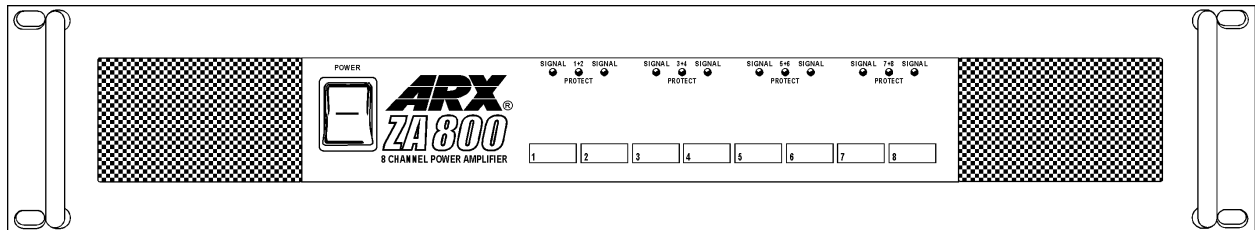


# ZA 800



## EIGHT CHANNEL POWER AMPLIFIER



The ARX ZA 800 is an all-new 8 channel power amplifier, ideal for paging systems, Foreground and Background music systems, A/V surround systems, Loudspeaker Multi-Zoning and other installations requiring multiple amplifier channels. Individual pairs of channels can be switched to run as single bridged mono channels for greater output into 8 ohm loads.

### 'AutoLink™' Input Looping

Our exclusive AutoLink design, first seen on the ARX Multi Q parametric equalizer, allows all eight channels to be linked as required.

Inserting a lead into Channel 1 input, for example, will automatically route that signal to channels 2, 3, 4, 5, 6, 7 and 8 as well.

However, if another lead is inserted into the Channel 3 Input, the link will break and start again, routing the new signal to channels 3, 4, 5, 6, 7 and 8. Inserting another lead at, say, Channel 5 will do the same. And so on.

In this way the ZA 800 can be easily and quickly configured for single and multiple zones without requiring a zone splitter.

### New Reliable Technology Inside

In the ZA 800, ARX design engineers have chosen a conventional toroidal transformer based Linear Power Supply and new 'state of the art' Power Amplifier Integrated Circuits, offering unprecedented amplifier and load protection.

This is coupled with our 'Headroom Enhance' circuitry based on our core ISC error correction technology. ISC (Interactive System Control) was developed by ARX for our range of Concert Series Loudspeaker Processors, and is now incorporated into all our Power Amplifiers and the SPL range of Integrated Powered Loudspeakers.

It provides maximum power output levels under all AC mains supply voltages and rated load conditions, eliminating Output Stage clipping.

### Comprehensive Protection circuitry onboard

Over the years ARX engineers have done intensive research into amplifier protection systems. The ZA 800 has a re-settable High Current switched protection circuit that instantly disconnect the speakers when a potentially damaging signal is detected.

New Input delay muting circuitry eliminates switch on/switch off noise.

### Safety First

The outputs are all fully isolated Speakon connectors, in keeping with all current Worldwide approval requirements for amplifier output connections. There are no bare Input or Output terminals, or low cost 'push terminals' used on this Professional product

### Version Options

**VR:** (Standard) For installation applications where tamper-proof operation is required, the VR version features rear panel accessible multi turn level controls.

**VF:** Where user adjustable level controls are required the VF version features multi-detent front panel mounted level controls

### Built to Last

Over 15 years ago, ARX was one of the first companies in the world to bring out a high powered amplifier (the legendary SS700) in only 2 rack spaces! A concept that has been embraced by virtually every amp manufacturer since then. Today, thousands of amplifiers later, we've probably had greater experience in getting more from less than just about anyone else!

Designed from the ground up using extensive computer modelling and a compact, efficient toroidal transformer, the ZA 800 has been designed to satisfy the most demanding professional applications. It is a distillation of our experience gained through years of making compact, powerful amplifiers.

### Features

- Eight discrete amplifier channels
- Toroidal transformer based linear power supply
- Headroom Enhance circuit for maximum output without amplifier clipping
- AutoLink input looping - no patch leads required for single input, multi output applications
- Switchable bridged mono channels
- Balanced jack inputs
- Insulated Speakon outputs
- Dual variable speed fans
- LED status display of all amplifier functions
- Flawless performance in any audio environment

## Specifications

The ARX ZA800 amplifier is designed around a Toroidal power transformer and heavy duty diode bridges for low induced noise and efficient power to weight ratio.

### Input Connectors

Balanced Jack wired: Tip + Hot, Ring – Cold, Sleeve Audio Ground; AutoLink input looping

### Bridged Mono mode

Individual pairs of channels can be switched to single bridged mono channels for greater output into 8 ohms

### Output Connectors

Neutrik Speakon, wired as follows:

- Connector 1 - Channel 1 (1+, 1-), Channel 2 (2+, 2-)
- Connector 2 - Channel 3 (1+, 1-), Channel 4 (2+, 2-)
- Connector 3 - Channel 5 (1+, 1-), Channel 6 (2+, 2-)
- Connector 4 - Channel 7 (1+, 1-), Channel 8 (2+, 2-)

### Input Impedance

40 Kohms Balanced

### Input Sensitivity

.775 Vrms (0 dB)

**Input CMRR @ 1KHz** >70dB

**Slew Rate** 35V/μS

**Distortion** 0.01%, 1 watt @ 1 KHz

**Damping Factor** 200:1

**Channel Separation: @ 1KHz** -88dB

**Frequency response:**

@ rated output: 20Hz - 20KHz ±0.4dB

### Metering:

LED status indicators for Signal and Protection shut down

### Protection Features

- Unique 'Headroom Enhance' circuit provides maximum output levels without clipping
- DC sensing
- 'SilentStart/SilentStop' Input/Output muting at turn on/off

### Cooling

Internal heatsink and twin variable speed DC cooling fans

### AC Power

Supplied 'zone-specific' 100/120/220/240V AC with removable power lead

### Weight

14 Kg (30 lbs)

### Size

Standard 2 rack units high and 19" (482mm) wide

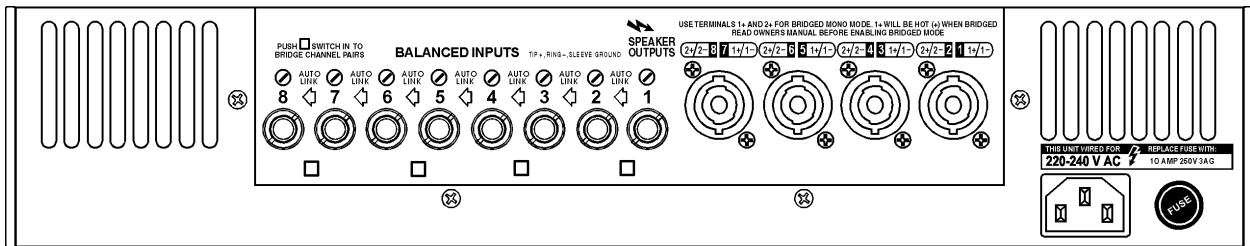
**Depth:** 16" (400mm)

Add 1" (25mm) to depth behind front panel to allow for rear rack mount ears and connectors.

Add 1" (25mm) to depth before front panel to allow for handles and controls.

### Construction

All steel chassis and front panel, with Lexan front print. Front panel power switch and (on VF models) level controls. Rear rack mount ears for four point racking in high stress installations



## Rear Panel

- Balanced Jack inputs with 'AutoLink' for input looping
- Bridged mono switches
- 20 turn level controls (VR model)
- Neutrik Speakon outputs
- Removable power lead with IEC 3 pin connector

## Power Chart Watts RMS per Channel

MODEL	8 OHMS	4 OHMS	8 OHMS BRIDGED MONO
ZA 800	75	100	200

## Architectural Specifications



Our policy is one of continuous improvement, and therefore designs may change without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given.



The amplifier shall be a 2 rack unit high Eight channel unit 16" (405mm) deep.

The amplifier shall be of all steel monocoque construction, with front and rear rack mounting points.

Input connectors shall be Balanced TRS Jacks, wired Tip + Hot, Ring – Cold, Sleeve Audio Ground. Input connectors shall be normalised 1 through 6.

Output connectors shall be Neutrik Speakon, wired as follows: Connector 1/ Channel 1 (1+, 1-), Channel 2 (2+, 2-), Connector 2/ Channel 3 (1+, 1-), Channel 4 (2+, 2-), Connector 3/ Channel 5 (1+, 1-), Channel 6 (2+, 2-), Connector 4/ Channel 7 (1+, 1-), Channel 8 (2+, 2-)

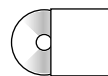
Specifications available on CD ROM. Latest updates available at: [www.arx.com.au](http://www.arx.com.au)

Input Impedance shall be 40 Kohms Balanced, with a CMRR of >70dB @ 1 KHz.

There shall be LED status indicators for Signal present and Protection functions. Protection features shall consist of headroom enhancing soft limit circuitry, 2 x fans, DC sensing, and Input/Output muting at turn on and turn off.

The Output power per channel shall be 75 watts RMS into a 4 ohm load.

The amplifier shall be the ARX ZA 800.



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