



# A 1920A 60W A 1930A 120W 100V Line Amplifier Modules



These modules are designed for use in emergency evacuation systems and are powered by an external 24V DC source. They accept a line level audio input and produce a 100V line output via a transformer. The modules feature short circuit, overload and thermal cutout protection, and are constructed on a steel chassis. Designed with reliability and robust performance in mind, these modules are the ideal audio power source for evacuation systems, or any application which requires a DC powered 100V line amplifier.

## FEATURES

- Powered by 24V DC
- 100V line audio output
- Line level audio input
- Short circuit, overload, and thermal cutout protection
- Fire Indicator Board ready
- Bolt-in chassis construction
- Australian designed and assembled

## INSTALLATION

### Connecting the Audio Source

The input connector for the audio source is the 3 way screw terminal block, J1 (see figure 1 for the PCB location and pinouts). This input may be used with balanced (3 wire) or unbalanced (2 wire) audio sources. When connecting an unbalanced (2 wire) source, jumper the ground and -ve connections on the terminal connector.

The amp module's input is suitable for impedances between  $600\Omega$  and  $10k\Omega$ . The high impedance of  $10k\Omega$  enables multiple amplifier units to be paralleled together when driven from a low impedance source ie  $600\Omega$ .

Connect 24-28V DC to the power supply input as per fig.1. Ensure that the power supply is capable of providing the necessary current (see specifications).

Connect the output load to the terminals shown in fig.1. Ensure that the speaker load impedance is not less than the specified minimum (see specifications).

Facility for external power on and overload LEDs has been made on the PCB. Note the polarity shown in fig.1.

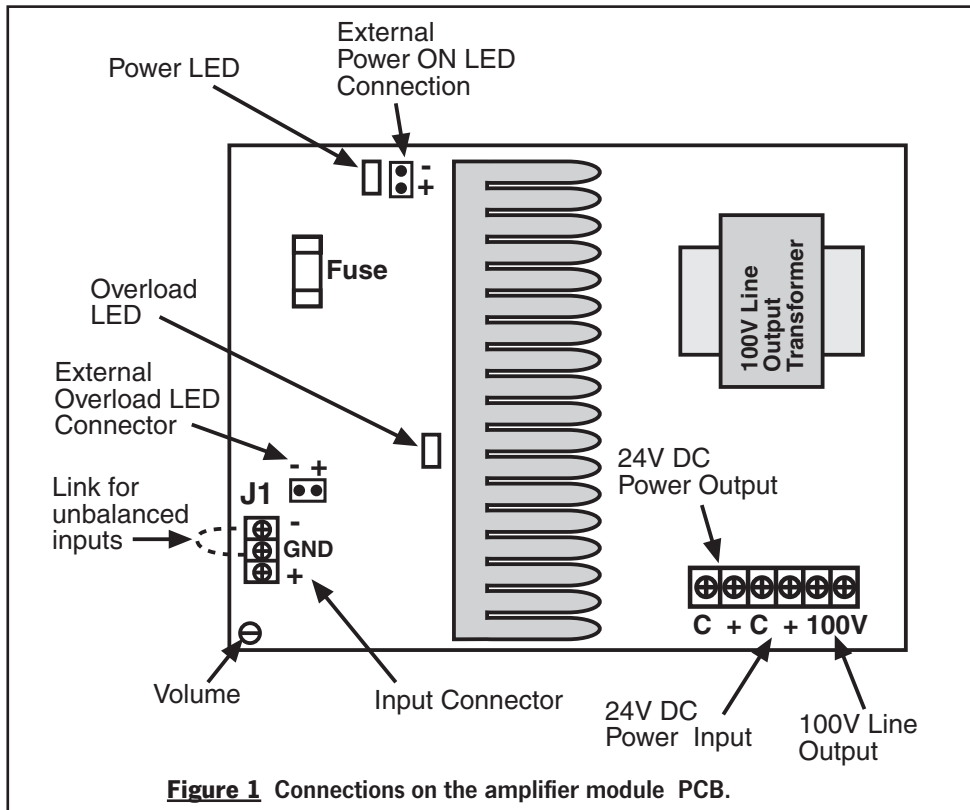
The overload LED will illuminate when the unit shuts down due to excessive temperature rise and/or excessive load on the speaker outputs. In this condition check the unit for adequate ventilation. Check also speaker types and ratings to ensure the amplifier is not overloaded, and that there are no shorts on the speaker line.

## TROUBLESHOOTING

Fuse blows: Check speaker loads and replace fuse with correct type and rating (see specifications)

Fuse continually blows: Disconnect load, apply power. If fuse blows again, refer unit to authorised service centre.

# REDBACK A 1920A / A 1930A Amplifier Modules



## SPECIFICATIONS

**Output Power:** \

**Current Draw:**

**Freq. Response:**

**Distortion:**

**Signal to Noise Ratio:**

**Sensitivity:**

**Min. Speaker Load Impedance:**  $\Omega$

**Input Impedance:**

**Fuse Rating and Type:**

## Model A 1920A 60W

60W RMS

3.8A at full load

100mA Quiescent

46Hz - 18kHz

< 0.3%

-90dB

600mV RMS

166 $\Omega$

10k $\Omega$

4A M205

## Model A 1930A 120W

120W RMS

8A at full load

220mA Quiescent

46Hz - 15kHz

< 0.6%

-94dB

600mV RMS

83 $\Omega$

10k $\Omega$

7.5A M205