

Product Guide**A 4210** 80VA Hearing Induction Loop Amplifier

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Overview

Induction Loop amplifiers, also known as T-loop or Hearing Loop amplifiers, are installed to greatly enhance the listening experience of people using hearing aids. The hearing loop, as its name suggests, is basically a loop of wire which surrounds a designated area to transmit audio to a hearing aid. An audio source is fed into the Amplifier, and the output of the amplifier then sends a high current signal into the loop, which generates a magnetic field. The magnetic field is then picked up by the Telecoil inside a hearing aid.

Hearing Loops are commonly installed in public areas which are generally noisy, making it difficult for hearing impaired users to hear clearly. They have been engineered to meet AS60118.4-2007 and include a compressor/limiter circuit with tailored frequency response ensuring excellent speech intelligibility. They will operate into loads of less than 2 ohms and are short circuit proof. Great for places of worship, community halls, museums public places, etc.

Delivers 3.5A RMS, 5A peak into a typical loop resistance of 0.2Ω to 1.7Ω (max 2Ω). Suitable for areas of approximately 180 - 200m² subject to metal loss. Note that coverage may vary from site to site depending on outside influences such as steel reinforcement, high current electrical wiring etc.

Inputs are provided for balanced mic and line, auxiliary and an EWIS input with VOX muting for interfacing into venue emergency evacuation systems.

Key Features

- ✓ **Australian made**
- ✓ **10 year manufacturer warranty with local product support**
- ✓ Designed to meet AS60118.4-2007
- ✓ 180 - 200m² coverage
- ✓ XLR line & mic inputs
- ✓ Aux input via stereo RCA
- ✓ EWIS signal connection (RCA)
- ✓ Short circuit proof
- ✓ Compressor for added speech intelligibility
- ✓ Adjustable VOX sensitivity
- ✓ Compatible with single loop designs
- ✓ 240V AC operation
- ✓ 19" Rack Mount (with optional A 4376 rack ears)

About Redback® Public Address Amplifiers

Redback® amplifiers are proudly designed, engineered and manufactured in Australia.

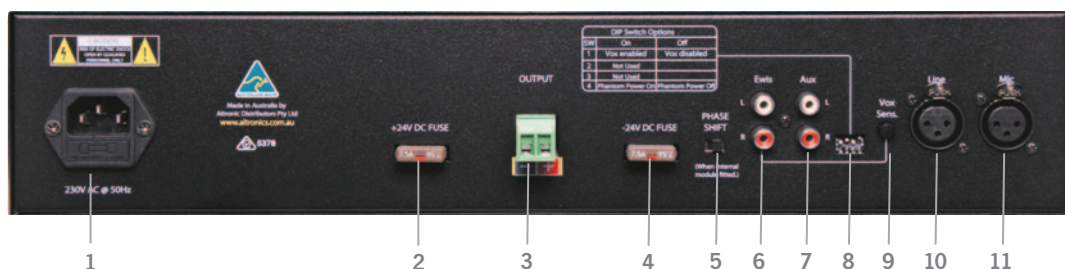
Each unit is covered by a comprehensive 10 year parts and labour warranty. Redback® offers rock solid reliability from over 40 years experience in the commercial sound industry. Redback® offer locally available servicing and parts, plus the ability to offer feedback direct to the manufacturer.

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Rear Panel



| | | | | | |
|---|-------------------------------|---|----------------------|----|----------------------------|
| 1 | 240V AC input | 5 | Phase shift switch | 9 | VOX sensitivity adjustment |
| 2 | 24V DC Fuse (7.5A resettable) | 6 | EWIS Dual RCA output | 10 | 3 pin XLR line input |
| 3 | Output terminals (to loop) | 7 | Aux Dual RCA output | 11 | 3 pin XLR mic input |
| 4 | 24V DC Fuse (7.5A resettable) | 8 | DIP switch settings | | |

Specifications

Electrical

| | |
|---------------------|--|
| Drive current: | 3.5A RMS, 5A Peak |
| Loop requirements: | 0.2Ω to 1.7Ω preferred range |
| Frequency response: | 100Hz to 5kHz @ -2dB, 80Hz to 6kHz @ -3dB target. |
| THD: | <0.25% @ 50% drive |
| Compressor: | 2:1 for dynamics control (fast attack) |
| Input: | 3 pin XLR, Stereo RCA |
| Output: | Loop connection via pluggable terminals |
| Power: | 240V AC |

Controls

| | |
|-----------|---------------------|
| Mic/Line: | Volume, Sensitivity |
|-----------|---------------------|

Mechanical

| | |
|-------------|----------------------|
| Dimensions: | 432W x 380D x 88H mm |
| Weight: | ≈6.4kg |

Architect Specifications

The amplifier shall be a current loop type suitable for hearing induction with a coverage area of 180-200m². The amplifier shall have a drive current of 3.5A RMS. The unit shall have 3 pin balanced XLR input for EWIS and Auxiliary connection. The unit shall have a frequency response of 100Hz to 5kHz @ -2dB.

The unit shall have front panel volume level controls with indicators for power, overtemperature, signal presence and 0, -3, -6, -9 and -15dB levels.

The unit shall operate from 240V AC and shall be fuse protected. The unit shall have automatic output limiting in event of overload or overdrive. The unit shall have automatic shutdown and restart in the event of overtemp condition.

The hearing induction loop output shall be provided via screw terminals.

The amplifier shall be housed in a high quality 2RU metal chassis suitable for rack mounting with optional A 4376 rack ears.

The amplifier shall be a REDBACK model A 4210.

Connections

| | Mic | Line |
|---------|---------------------------------|---|
| Inputs | 3 pin XLR female (balanced) | 3 pin XLR female (balanced) 2 x RCA Stereo |
| Outputs | Hearing Loop Transmitter | |
| | Pluggable screw terminals | |

