# ILR3 & ILR3+ Induction Loop Receiver

#### Handbook contents:

- Safety
- Introduction
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#### **Box Contents:**

- 1 x ILR3 or ILR3+
- 1 x Lightweight stereo headphones
- 1 x Handbook (this document)
- 1 x A5 user guide (ILR3+ only)
- 2 x AA batteries





Listen to the difference

## Safety:



# This symbol is used to alert the user to important operating or maintenance instructions.



# The Lightning bolt triangle is used to alert the user to the risk of electric shock.

- 1. It is important to read these instructions, and to follow them.
- 2. Keep this instruction manual in an accessible place.
- 3. No user serviceable parts. Refer all servicing to qualified personnel.
- 4. No objects filled with liquids, such as vases, shall be placed on the apparatus.
  - WARNING: Do not expose to dripping or splashing.
- 5. Clean only with a dry cloth.

#### Introduction

The **ILR3** and **ILR3+** units are high quality induction loop receivers which allow the user to listen to an Audio Frequency Induction Loop (AFILS) system using a pair of standard stereo headphones.

#### The ILR3 can be used:

- To check an induction loop system is working. It is useful for venue managers, test engineers and event organisers.
- To check the extent of induction loop coverage.
- To record the output of a loop system.
- The ILR3 can be used by people who need some additional assistance but do not have a hearing aid.
- To check if a proposed installation has excessive (magnetic) background noise prior to installing the loop system.

#### The **ILR3+** has additional features to allow:

 Accurate indication of magnetic field strength with respect to IEC 60118-4 for periodic monitoring of system installations.

# Operation – ILR3 & ILR3+

Remove battery cover located on the rear of the unit, and insert  $2 \times AA$  batteries as shown by the polarity indication inside the unit.

The unit is switched ON / OFF by inserting / removing the headphone plug.

The green 'Power' LED will illuminate to indicate that the batteries are charged and have been inserted correctly.

The volume of the headphones can be adjusted using the rotary control knob.

The 'Low Cut Filter' switch allows the low frequency (bass) response of the unit to be changed. Whilst a full range response gives best quality reception, the cut mode

may help reduce the annoying "hum" experienced when there is magnetic interference from AC power circuits, and simulates a real hearing aid.

Remove the batteries from the unit when not using the unit for long periods.

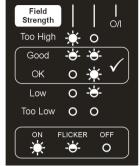
# Operation - ILR3+ only

The two extra LEDs (marked HI and LO) on the top of the unit provide a visual guide to the strength of the field created by the loop system.

The rear panel of the ILR3+ provides a key which shows that the LO (Amber) LED should normally be illuminated by a typical system, while the HI (Green) LED should just be illuminated and flicker, but not be on continuously.

A more detailed procedure is provided separately.

Important: Measurements taken using the ILR3+ are dependant on the frequency response mode setting, i.e. flat or Low cut, and should be set to Flat in most cases.



ILR3+ rear panel guide to measuring field strength

# Troubleshooting ILR3 & ILR3+:

'Power' LED does not illuminate

- Check that the headphones are plugged into the unit.
- Check that the batteries are fitted correctly as shown inside the unit.



Reversing the battery polarity may damage the unit and invalidate the warranty.

Try using new batteries.

No signal is heard in the headphones

- Check the volume control is adjusted correctly.
- Ensure that the loop system is available and switched ON in the venue.
- Hold the unit vertically.



Always hold the unit vertically when testing a loop system as this matches the coil orientation in a hearing aid.

Try using new batteries.

Signal is heard, but HI / LO LEDs do not illuminate (ILR3+ only)

- Ensure unit is used in correct orientation this is usually vertical.
- Try different locations and heights in the room / area.
- Check loop installation. Did the system ever reach these levels before?
- Try using new batteries.

### Specification – ILR3 & ILR3+:

Frequency Response:

Flat:  $85Hz - 6kHz \pm 0.5dB$ 

Low Cut Filter: 400Hz - 8kHz -3dB (similar to a hearing aid)

Output: 3.5mm stereo jack socket – enables power when used.

For use with stereo headphones (min  $25\Omega$  per side).

100mW into 16 $\Omega$ , <0.5% THD @ 1kHz

Environmental: IP30,  $-10^{\circ}$ C to  $+45^{\circ}$ C,  $20 - 90^{\circ}$  relative humidity

Dimensions: 62 x 26 x 112mm,

90g (excluding batteries and headphones)

Power: 2 x Alkaline AA / LR6 batteries

<0.1W 1.8V to 3.2V, >100 hours usage.

## Specification – ILR3+ only:

Magnetic field strength indication to PPM type II referenced to 400mA/m RMS:

'Good' ≥0dB Green LED 400mA/m RMS with sine

'Okay' ≥-6dB Amber LED 200mA/m RMS with sine

These levels are suggested by IEC 60118-4:2006 for such an indicating device.

# Warranty information

This product carries a five year parts and labour warranty from date of shipment from Ampetronic. To qualify for the five year warranty, the product must be registered at <a href="www.ampetronic.com">www.ampetronic.com</a> (products/warranty), without which the warranty will be valid for two years only. The warranty could be invalidated if the instructions in this handbook are not followed correctly, or if the unit is misused in any way.

The ILR3 and ILR3+ are designed and engineered in England.

# **Declaration Of Conformity**

The manufacturer: Ampetronic Ltd., Northern Road, Newark, NG24 2ET United Kingdom

Declares that the products: 'Induction Loop Receiver' Type Names ILR3 & ILR3+

Conforms to the following Directive(s) and Norm(s):

Directive 2004/108/EC EMC: EN 55103 (1&2):2009 Directive 2006/95/EC Safety: EN 60065:2002

January 2011 - J.R. Pieters – Managing Director, Ampetronic Ltd.

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