

Infra~Hear



IR-RX Infra~Hear™ Infrared Assistive listening Receiver



USER Manual

Revision 2 - June 2009

Please Read Carefully Before Use



Introduction

The Infra-Hear range of infrared assistive listening products are designed to meet the demands of members of the public who need to receive programme information in accordance with the DDA (Disabled Discrimination Act) and as such is defined as an auxiliary aid.

The IR-RX can be used on its own with the inbuilt telecoil to transmit audio to hearing aid wearers equipped with the "T" position switch on their hearing aid (in compliance with IEC 118-1) or with suitable headphones plugged into the unit.

Suitability

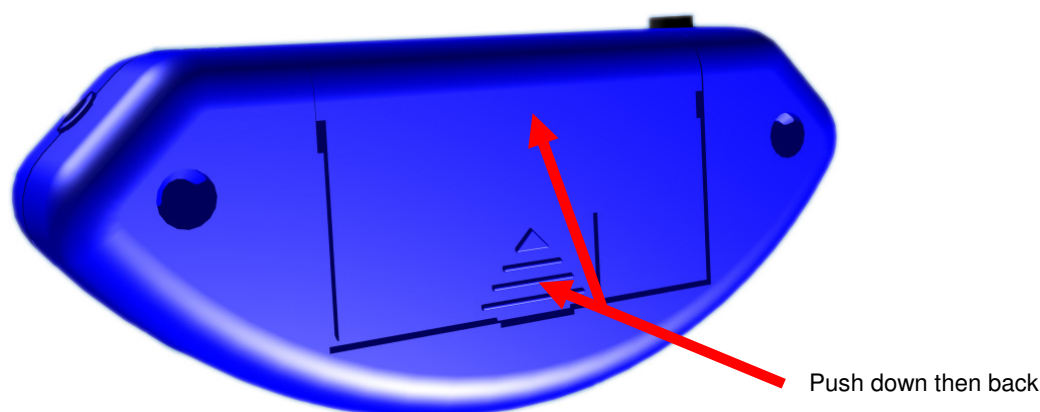
The IR-RX with headphones is suitable for use as a museum tour-guide system or to provide assistance for non hearing aid users, it is not sold as a medical aid, and the services of a professional Audiologist should be sought on these applications. When used as a neck loop for a prescribed hearing aid user the system can be used in all locations where information needs to be imparted.

System Design

A basic Infra-Hear system will comprise a radiator/modulator and a number of IR-RX receivers; operation is completely automatic at the transmitter end and if correctly installed and commissioned the user needs no interaction.

Operation

The Infra-Hear IR-RX requires two AAA type batteries for operation, to open the battery compartment press in and push as indicated in the drawing below:

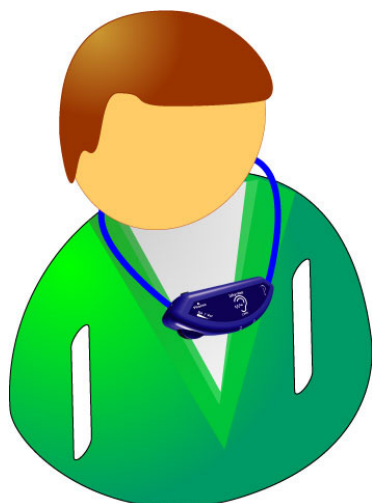


Once the compartment is open insert the batteries as shown:



Ensuring the flat section of the battery is placed on the spring terminals.

Wearing the unit



The IR~RX is designed to be worn around the neck using the neck loop cable as a support, with the logo face pointing outwards.

The receiver needs to be over any clothes as it needs to receive the infrared light from the transmitter.

The receiver is very sensitive and can receive clear audio from reflected infrared light, but for best operation the user should face the general direction of the transmitter(s)

Controls

The IR~RX has only one control, a combined volume and ON/OFF switch.

The switch has a positive click action and can be slowly adjusted until the correct listening volume is achieved. When using headphones near the microphone, feedback may occur in the form of a loud whistle, either move away from the microphone or reduce the volume control to stop this.

When using the device with the neck loop, ensure the hearing aid is switched to the "T" position before adjusting the volume level.

If the audio is distorted, either the level is too high, the batteries are low on charge, or the incorrect impedance headphones have been used, IR~RX is designed for 32 Ω headphones and will not work correctly with 600 Ω units.



Important Safety Information

When using the IR~RX with headphones there is a tendency to use a higher volume than for normal listening, this should be avoided as it may lead to long term hearing problems.

Technical Specification

Modulation wideband FM
 Nominal deviation ± 50 kHz
 Carrier frequency 2.3 MHz
 Audio output power 40mW
 Loop Field 400mAM-1
 Frequency response 30-18,000 Hz
 THD (1 kHz, nom. dev.) <1%
 Audio signal-to-noise ratio >60 dB(A) rms
 Headphone output 3.5mm mono jack
 Headphone impedance Minimum 16 Ω
 IR diodes 2@ 875nm

Reception angle 120°
 Receiving power minimum
 1mW
 Operating voltage 2.3-3.3 V DC
 Batteries 2 off AAA
 Current consumption approx. 30 mA
 Dimensions
 Height 39mm
 Width 110mm
 Depth 28mm
 loop 400mm Diameter
 Weight approx. 70g



The IR~RX Units are designed and manufactured in the UK by:

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