



**AUDIOropa**  
**Infrared Assistive  
Listening Solutions.**



# Introducing AUDIOropa assistive listening solutions.



## About AUDIOropa.

AUDIOropa is a brand of the Humantechnik Group, world leaders in hearing augmentation solutions.

The AUDIOropa portfolio includes professional-grade systems for stationary and mobile use. The portfolio includes:

- Inductive loop systems
- Radio transmission systems
- Infrared transmission systems

## Introduction to Assistive Listening.

**Assistive Listening or Hearing Augmentation** refers to the various devices and technologies that assist individuals with hearing impairments to improve their ability to hear and communicate effectively.

The aim of hearing augmentation is to enhance the auditory experience for those with hearing loss, thereby improving their overall quality of life and facilitating their participation in social, educational, and professional settings.

In recent times, significant changes to the **Building Code of Australia (BCA)** have been instrumental in making public areas more accessible for the hearing impaired.

Complementary to these changes are standards under the **Disability Discrimination Act**, mandating the installation of hearing augmentation systems in public buildings where people gather.

# Infrared Transmission Systems.

Infrared audio transmission ensures interference-free and safe communication directly to personal hearing devices by using infrared light to send signals from a transmitter to a receiver.

Ideal for confidential areas like courtrooms, conference rooms, and multiplex cinemas with neighbouring transmission systems.

It is also valuable in schools, universities, and large auditoriums with partial signal coverage or high radio-frequency emissions in city centres.

## HOW THEY WORK

- A transmitter converts sound into infrared light pulses
- The light pulses travel to a receiver worn by the user
- The receiver converts the light pulses back into sound
- The sound is fed into a headset or neck loop

## ADVANTAGES

- Infrared systems can provide high-quality sound
- They can be used in large spaces
- They can be used without a specific line of sight between the transmitter and receiver

## LIMITATIONS

- Infrared light cannot pass through walls
- Objects like furniture and pillars can interfere with or block reception



# Kits Available.

## PRO IR-101 KIT

Infrared Assisive  
Listening Kit for  
Small Spaces



## PRO IR-102 KIT

Infrared Assisive  
Listening Kit for  
Small to Medium Spaces



## PRO IR-202 KIT

Infrared Assisive  
Listening Kit for  
Medium to Large Spaces



## PRO IR-400 KIT

Infrared Assisive  
Listening Kit for  
Large Spaces





# PRO IR-101 KIT for small spaces.

## Kit Contents

- 1 x PRO IR-202 IR-Transmitter (HT A-4082-0)
- 1 x PR-22 Belt Pack IR Receiver (HT A-4037-0)
- 1 x Single Charger for PR-22 (HT A-4971-0)
- 1 x Headphones (HT A-4908-0)

This is a suitable alternative for rooms and spaces not subject to minimum requirements under Standard AS 1428.5:2021.



# PRO IR-102 KIT for small to medium spaces.

## Kit Contents

- 1 x PRO IR-202 IR-Transmitter (HT A-4082-0)
- 2 x PR-22 Belt Pack IR Receiver (HT A-4037-0)
- 2 x Single Charger for PR-22 (HT A-4971-0)
- 1 x Mono Neck Loop (HT A-4928-0)
- 1 x Headphones (HT A-4908-0)

Compliant for rooms and spaces holding up to **50 people** under Standard AS 1428.5:2021.





# PRO IR-202 KIT for medium to large spaces.

## Kit Contents

- 1 x PRO IR-202 IR-Transmitter (HT A-4082-0)
- 3 x PR-22 Belt Pack IR Receiver (HT A-4037-0)
- 3 x Single Charger for PR-22 (HT A-4971-0)
- 2 x Mono Neck Loop (HT A-4928-0)
- 3 x Headphones (HT A-4908-0)

Compliant for rooms and spaces holding up to **75 people** under Standard AS 1428.5:2021.





# PRO IR-400 KIT for large spaces.

## Kit Contents

1 x PRO IR-400 IR-Transmitter (HT A-4026-0)

5 x RCI-102 2-Channel IR Under Chin-Receiver (HT A-4043-0)

1 x 5-Bay Charger for Under Chin-Receiver (HT A-4976-0)

Compliant for rooms and spaces holding up to **125 people** under Standard AS 1428.5:2021.



# PRO IR-202 KIT IR Transmitter.



## PRO IR-202 IR-Transmitter (HT A-4082-0)

The **PRO IR-202** two-channel infrared emitter combines infrared modulator and emitter technology into a single mountable enclosure - which reduces operating costs, eliminates the need for rack space and eases set-up.

It is ideal for high-quality audio programs such as music, theatre and audio description.

The PRO IR-202 will accept any line level, balanced or unbalanced audio inputs.

The 2.3/2.8 MHz operating frequencies minimise interference caused by high-efficiency lighting equipment.

A ceiling and wall mounting set is included in the package.

# PR-22 Belt Pack IR Receiver.



## PR-22 Belt Pack IR Receiver (HT A-4037-0)

The PR-22+ features Automatic Gain Control and very high sensitivity for incoming infrared signals.

The high maximum output volume makes it an ideal receiver for people with impaired hearing.

The 3.5 mm audio jack allows the connection of a wide range of different audio components, such as:

- Underchin headphones
- Light-weight headphones
- Earphones
- Neckloops
- Direct audio links for e.g. CI-systems

# PRI IR-400 IR Transmitter.



## PRO IR-400 IR-Transmitter (HT A-4026-0)

The two-channel infrared emitter PRO IR-400 combines the modulator and emitter in one single unit. This design saves costs and can be mounted in limited spaces.

The infrared light exists in a wide angle, which spreads efficiently throughout the supplied areas in the club-shape typical for this transmission method.

The steady transmission of the PRO IR-400 is realised at a working frequency of 2.3 and 2.8 MHz without the interference of ambient light.

In 1-channel mode, the emitter supplies areas of up to 900 sqm. Adding further PRO IR-400 emitters into the setup allows the receiving range to be expanded easily.

The package includes an attachment set for wall and ceiling.

# RCI-102 2-Channel IR Under Chin Receiver.



Accessory:  
5 bay charger



## RCI-102 2-Channel IR Under Chin-Receiver (HT A-4043-0)

The RCI-102, is an ergonomically designed under-the-chin receiver that weighs just 52 grams and is equipped with swivelling earpieces, which means that the earpieces retain their position in the ear even when the user turns his/her head.

The soft flexible material of the ear buds nestles gently into the auditory canal to effectively subdue ambient noise.

Selectable stereo or mono reception, e.g. for multi-language transmissions.

The RCI-102 is equipped with a switch to select the frequency channels. Both channels can be used simultaneously for stereo transmissions.

If the event organizer uses the 2.3 MHz and the 2.8 MHz channels separately, in order to transmit in two different languages at the same time, the listener can select the channel in his/her preferred language and receive the information in mono mode.



# Accessories.



## **Mono Neck Loop (HT A-4928-0)**

The signals from your hearing amplifier are transmitted comfortably and discretely straight to your hearing aid by means of inductive transmission via the neckloop (set the hearing aid to T or MT).



## **Headphones (HT A-4908-0)**

This simple stereo headset is ideal for various applications. Its good sound, low weight and soft padding are ideal for a comfortable fit and prolonged wear.

Frequency response: 20 Hz – 20 kHz

Cable length: 1.25 m

Connection: 3.5 mm stereo jack

Weight: 67 g

# Technical Expertise & Sales Support.

We're passionate about enabling and assisting you to bring your AV projects to life.

From design to deployment and ongoing performance - our solutions architects, pre-sales audio engineers, customer support team, field service engineers and service technicians are committed to your success.



## Specification and Design

Our solutions architects can assist with your system design and our audio engineers can provide EASE modelling assistance.

## Service and Repair

We understand the urgency and importance of reliable after sales service and repair. Which is why we've invested in a national service centre, self-service portal, and an even larger team of service experts.

## Deployment

Whether it's installation advice or on-site instruction, deployment of your AV solution can be supported.

## Education and Training

We empower you to confidently recommend and supply reliable solutions to address their needs.

## Field Support

Our in-field support team deliver reconfiguration, re-programming and service support to your customers' doorstep.

## Quoting and Ordering

With competitive pricing and a strong stock position, you can depend on us to deliver to your project requirements.

# Also Available.



## Dante AVIO Adapters.

Connect assistive listening devices seamlessly into any Dante-enabled system

## Demonstration & Evaluation Kits.

Assess the AUDIOropa IR systems suitability and performance prior to ordering.

## Training.

Our team can upskill you in system design, product knowledge and deployment.



# beyond connected

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