



contacta 



# Large Area Infrared Systems

Improve quality of life for people with hearing loss using Contacta IR,  
providing clear sound, confidentiality and accessibility



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## Infrared assistive listening systems provide clear, wireless hearing in large areas

Assistive technology systems provide independence, accessibility and well-being to users who require them.

Contacta IR assistive listening systems are ideal for when a sound source needs to be transmitted to multiple receivers, when ambient noise needs to be reduced, or when confidentiality is required within a confined space.

An audio source is converted to infrared light and projected to users via an **infrared transmitter**. **Infrared receivers** then convert the light back into audio, providing them with a simple and crystal clear listening experience.



## Medium Area Infrared Transmitter with Modulator

### IR-TX2

The Medium Area Infrared Transmitter with Modulator combines an infrared modulator and transmitter, providing a wide angle of emission with a sleek and compact design (available in both black and white). With a coverage area of 180m<sup>2</sup>, it is ideal for use in medium-sized environments.

All audio signals are modulated to infrared signals 2.3MHz or 2.8MHz.

The unit's range can also be increased and the angle enlarged by combining two Medium Area Infrared Transmitters. The range of the combined units is up to 370m<sup>2</sup> at one-channel transmission, ideal for large areas.

A wall and ceiling mounting kit is supplied.

### Applications:

For use in any situation where infrared systems can provide multiple listeners with clear sound:

- Conference and Meeting Rooms
- Cinemas and Theatres
- Courts
- Lecture Halls, Schools and Universities
- Places of Worship

### Colour Options

- The fascia is removable and available in both black and white

### What's Included:

- Medium Area Infrared Transmitter w/ Modulator
- Wall/Ceiling Mounting Kit

### Accessories

- Portable Infrared Receiver (see page 8)
- Portable Infrared Underchin Receiver (see page 9)

See next page for Physical Data, Technical Data and Product Codes.

**Technical Data:**

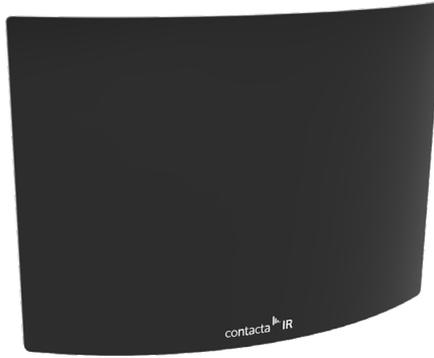
Power Supply Input	100-240V AC / 50-60Hz
Power Supply Output	24V DC / 0.8A (2.5mm barrel plug - centre contact »positive«)
Connection Cable	2 x barrel plug, 2.5mm
Carrier Frequencies	2.3 MHz (A-channel) and 2.8 MHz (B-channel)
Transmission Power	0.7W
Coverage Area	Single transmitter: 1-channel operation 180m <sup>2</sup>
	Combined mode (2 transmitters): 370m <sup>2</sup>
Line-Input	Cinch (RCA) for left and right and/or A and B-channel
Microphone Input	3.5 mm jack plug - sensitivity adjustable via control dial
Inputs/Outputs for Combined Mode	Primary Transmitter: Power-out 24V, audio-out "sync out"
	Secondary Transmitter: Power-in 24V, audio-in "sync-in"
LED Display	Input-level indicator LEDs, 1 per channel
Ambient Conditions	0 – +50°C ambient temperature (non-condensing, non-corrosive environment)
Mounting Options	Wall or ceiling mounting kit included

**Physical Data:**

Dimensions	Height – 64mm (2.51") Width – 254mm (10") Depth – 79mm (3.11")
Weight	300g (0.66lbs)
Finish	White
	Black

**Product Code:**

Medium Area IR Transmitter with Modulator	IR-TX2
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## Large Area Infrared Transmitter with Modulator

### IR-TX4

Our two-channel Large Area Infrared Transmitter with Modulator combines an infrared modulator and transmitter, generating a wide exit angle for the infrared signal while providing a sleek and compact design that eliminates the need for rack space. It is ideal for use in large environments.

Transmissions are at a bandwidth of 2.3MHz and 2.8MHz. In 1-channel mode, the transmitter supplies areas of up to 900m<sup>2</sup>. Additional transmitters allow the receiving range to be increased.

A wall and ceiling mounting kit is included.

#### Applications:

For use in any situation where infrared systems can provide multiple listeners with clear sound:

- Conference and Meeting Rooms
- Cinemas and Theatres
- Courts
- Lecture Halls, Schools and Universities
- Places of Worship

#### What's Included:

- Large Area Infrared Transmitter w/ Modulator
- Wall/Ceiling Mounting Kit

#### Accessories

- Portable Infrared Receiver (see page 8)
- Portable Infrared Underchin Receiver (see page 9)

See next page for Physical Data, Technical Data and Product Codes.

## Technical Data:

Power Supply	Primary: 210 - 240V~ 50-60Hz Secondary: 28V DC
DC Input	Low-voltage connector, 28V DC, centre contact »negative«
Power Consumption	700mA
Carrier Frequencies	2.3 MHz (A-channel) and 2.8 MHz (B-channel)
Coverage Area	900m <sup>2</sup> (closed room)
Audio Inputs	Cinch (RCA) for left and right and/or A and B-channel
Microphone Input	6.3mm stereo-jack plug
Input Impedance	Audio-In: 18k $\Omega$
	Mic-In: 1.3k $\Omega$
Trigger Voltage of Audio-In	110mV
Input Level Display Mic-In	1.5mV
Inputs/Outputs for Combined Mode	Sync-in/Sync-Out Cinch (RCA) for left & right and/or A and B-channel
Display	Input level-LEDs, one per channel.
Ambient Conditions	0 – +40 °C ambient temperature (non-condensing, non-corrosive environment)
Mounting Types	Wall or ceiling mounting kit included

## Physical Data:

Dimensions	Height – 327mm (12.8") Width – 412mm (16.2") Depth – 75mm (2.95")
Weight	1.1kg (2.42lbs)
Finish	Black

## Product Code:

Large Area IR Transmitter with Modulator	IR-TX4
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## Portable Infrared Receiver

### IR-RX2

Our Portable Infrared Receiver is a four channel receiver, compatible with our infrared transmitters using frequencies 2.3MHz and 2.8MHz. It features automatic gain control and high sensitivity for incoming infrared signals.

The receiver uses rechargeable batteries, and is a versatile and sturdy unit which requires either headphones or an assistive hearing neck loop.

Volume is amplified, adjustable up to 120dB to assist users with hearing loss.

#### What's Included:

- Portable Infrared Receiver
- Lanyard with Clip
- Belt Clip
- 2x Rechargeable Batteries

#### Accessories

- 5 Bay Infrared Receiver Charger (see page 10)
- Inductive Neck Loop (see page 10)
- Headphones (see page 11)
- Underchin Headphones (see page 11)

#### Technical Data:

Receiver Frequencies	2.3MHz / 2.8MHz / 3.3MHz / 3.8MHz
Modulation	FM broadband
Battery Type	2x AAA rechargeable batteries; type NiMH, 1.2V 750 mAh
Frequency Response	60Hz to 12kHz $\pm$ 3 dB
Signal-to-Noise Ratio	54dB not weighted
Usage Period	20 hours
Maximum Output	6mW
Settings	Volume Adjustment
	4 channel selection - rotary control

#### Physical Data:

Dimensions	Height – 112mm (4.40") Width – 70mm (2.75") Depth – 22mm (0.86")
Weight	200g (0.44lbs)
Finish	Black

#### Product Code:

Portable IR Receiver	IR-RX2
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## Portable Infrared Underchin Receiver

### IR-RXU

Our Portable Infrared Underchin Receiver is a two channel under-the-chin receiver, compatible with our transmitters using frequencies 2.3MHz and 2.8MHz.

The receiver is easy-to-use, comfortable and can switch between mono and stereo. Its earpieces swivel, meaning they keep their position in the ear even when a user turns his/her head. It utilises rechargeable batteries.

Volume is amplified, adjustable up to 120dB to assist users with hearing loss.

Spare rubber earbuds are available if required.

### What's Included

- Portable Infrared Earphone Receiver
- Rechargeable Battery
- Transparent Cover

### Accessories

- 5 Bay Infrared Receiver Charger (see page 10)
- Rubber Earbuds (available on request)
- Replacement Batteries (available on request)

### Physical Data:

Dimensions	Height – 225mm (8.85") Width – 95mm (3.74") Depth – 19mm (0.74")
Weight	57g (0.12lbs)
Finish	Black

### Technical Data:

Receiver Frequencies	2.3MHz / 2.8MHz
Battery Type	A100 rechargeable battery; type NiMH, 2.4V 180mAh
Modulation	FM, mono or stereo
Bandwidth	15-20000Hz
Distortion	<1%
Signal-to-Noise Ratio	Typ. 60 dB
Maximum Sound Pressure	120dBA

### Product Code:

Portable Infrared Underchin Receiver	IR-RXU
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## 5 Bay Infrared Receiver Charger

### IR-RX2-DC5 / IR-RXU-DC5

Our 5 Bay Infrared Receiver Chargers are available for both the Portable Infrared Receiver (IR-RX2, see page 8) and Portable Infrared Underchin Receiver (RF-RXU, see page 9).

This unit can hold up to 5 receivers in a standing position. Two chargers can be daisy-chained together to charge 10 receivers using a single power supply.



#### What's Included:

- 5 Bay Infrared Receiver Charger
- Power Supply

#### Physical Data:

Dimensions	Height – 38mm (1.49") Width – 160mm (6.29") Depth – 305mm (12.0")
Weight	540g (1.19lbs)
Finish	Black

#### Technical Data:

Power Supply	12V DC 1000mA
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#### Product Code:

5 Bay Portable IR Receiver Charger	IR-RX2-DC5
Portable IR Underchin Receiver Charger	IR-RXU-DC5

## Inductive Neck Loop

### IR-NL1

Our Inductive Neck Loop is a compact listening device which connects to our Portable Infrared Receiver (IR-RX2, see page 8) and enables users to listen using a hearing instrument switched to the "T" position (i.e. using the Telecoil in a hearing aid).

It connects to receivers using a 3.5mm mono jack.



#### Physical Data:

Dimensions	Height – 420mm (16.5") Width – 35.5mm (1.4") Depth – 10mm (0.39") Lead Length – 1m (39.3")
Weight	49g (0.10lbs)
Finish	Black

#### Technical Data:

Impedance	16Ω
Channel	@1KHz / Isolated
Connection	3.5mm mono jack
Maximum Power Input	0.5 watts per channel

#### Product Codes:

Infrared Neck Loop	IR-NL1
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# Headphones

## IR-HP1

Our black stereo headphones use a 2 metre lead and uses a standard 3.5mm audio jack.



### Physical Data:

Dimensions	Height – 175mm (6.80") Width – 150mm (5.90") Depth – 15mm (0.59") Lead Length – 2 metres (78.7")
Weight	48g (0.10lbs)
Finish	Black

### Technical Data:

Impedance	32Ω
Frequency Response	20-20000Hz
Sensitivity	104dB
Connection	3.5mm audio plug

### Product Codes:

Headphones	IR-HP1
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# Underchin Headphones

## IR-HP2

Our under-the-chin headphones connects to the Portable Infrared Receiver (IR-RX2, see page 8) using a standard 3.5mm audio jack. It uses earpieces which fit comfortably into the ear.

Additional rubber ear-buds are available if required.



### Physical Data:

Dimensions	Height – 220mm (8.66") Width – 135mm (5.31") Depth – 20mm (0.78") Lead Length – 780mm (")
Weight	22g (0.04lbs)
Finish	Black

### Technical Data:

Impedance	32Ω
Connection	3.5mm audio jack

### Product Codes:

Underchin Headphones	IR-HP2
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