

INFRACOM® Daylight-Receiver

BRÄHLER ICS is committed to continually improving its products and so reserves the right to make technical modifications without notice



Description

The portable INFRACOM® IRX receiver is part of the INFRACOM® system, which is used for the wireless transmission of sound via infrared light (IR).

For this purpose, the audio signal is converted into a frequency-modulated infrared light signal and emitted through IR-radiators. The INFRACOM® IRX receiver is equipped with a new designed lens that offers a wider receiving angle than ever before. The infrared light signal picked up by the lens is demodulated by the receiver and the delegate may listen to any selected language on a headphone.

The IRX receiver has been designed to receive up to 31 audio channels within the frequency range of 55...1335kHz. The use of a Phase-locked-loop (PLL) synthesizer guarantees a high sensitivity, good transmission quality and high operating reliability as well.

The new generation of INFRACOM-receivers allows the use even in direct sunlight, e.g. in the open air, or in places where normal infrared transmission would be impossible due to excessive lighting, e.g. press conferences, stage, etc.

The smart designed receiver's weight is about 150 g (incl. batteries). It can be worn by fastening it to the clothing, using the integrated clip in its rear plate or by using a lanyard.

Different light-weight headphone models are available as accessories. On request, the receiver-fascia can be customized by use of a removable adhesive foil.

The receiver is equipped with 4 push buttons: volume up and down and channel selection up and down. Operation is self-evident, requiring no instruction. The unit is activated simply by pressing one of its 4 control buttons. The LC-Display lights up as an indication that the unit is operating properly. A check about remaining battery capacity is shown by the LCD on start-up. The selected channel will be shown on the display. This will be memorized until the next use.

The receiver is powered by either 3 NiMh 600 mA/h rechargeable batteries size AAA or the same amount of AAA dry-cells. The operating time is approx. 150 hours with rechargeables and 250h with dry-cells. Switching to standby-mode is automatic if

more than 30 seconds elapse with no infrared signal received. Thus if the receiver is taken out of the meeting room or the IR-transmitter is switched off, the receiver is switched off into standby mode automatically. If the headphone is disconnected, the receiver will also switch off. These functions ensure that the receiver operates in an energy saving manner.

The IRX receiver is prepared to be equipped with an INFRACOM-guard® acoustic signal module to remind the user to return the receiver. By implementing the INFRACOM-guard® controller CIX1 and an unobtrusive transmission line, doorways, entrances and exits can be appropriately safeguarded; i.e. INFRACOM-guard® equipped receivers transmit a clearly audible acoustic signal if brought within the scope of such protected areas.

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Technical Data

Complies with int. standard IEC 914 and IEC61603-2 (standard operation)

Number of channels:

22 per IEC 61603-2
31 extended operation

Modulation: FM

Transmission frequency:

55kHz -975kHz in 40kHz steps per IEC
55kHz- 1335kHz in 40kHz steps extended operation

Operating mode:

Superhet receiver with PLL synthesizer

Intermediate frequency: 455kHz

Reception characteristic: 150°

Audio frequency range: 125 - 8.000Hz

Distortion factor: < 2.0%

Signal-to-noise ratio (S/N): > 55dB

Headphone jack:

3.5mm mono (DIN 455838)

Headphone impedance:

150 - 3.000 Ohm

Operating voltage: 3.6...4.5 volts

Power supply:

3 NiMh 600 mA/h rechargeable batteries (AAA) or 3 Dry-cell batteries 1,5V (AAA)

Operating time:

approx. 250 hours (Dry-cell)

Display:

2 digit LCD (liquid crystal display) for channel and volume

Test-functions:

Battery capacity and operating time by LCD

Temperature range:

operating: +10°C to +40°C
storage: -20°C to +50°C

Humidity: <80% non condensing

Dimensions: 150 x 50 x 25mm

Colour: grey

Weight (including batteries):

150g (approx.)

Accessories

K10/16 Delegate headphone

K45/6 Delegate headphone

MG06/8 Stethoscopic headphone

Rechargeable batteries

NiMh 600 mA/h Type AAA

Flight charging/storage tray

for 50 INFRACOM[®] receivers

CIX1 INFRACOM-guard[®] controller

N2 Guard loop cable

Options

Customized adhesive removable receiver fascia.

INFRACOM-guard[®] plug-on module - acoustic signal device to remind the user to return the receiver (only in conjunction with CIX1 INFRACOM-guard[®] controller and N2 guard-loop cable).

Tender Specification

The infrared receiver must comply with the IEC 914 and IEC 61603 standards.

It must be able to receive at least 31 audio channels at FM transmission and work after the superheterodyne principle.

The receiving channel must be selectable by push buttons and be displayed by a two digit LC-display.

The LCD should be backlighted during any user operation.

A battery test function must show the left capacity in percent.

The infrared signal must be picked up within an angle of 150°.

The audio- frequency range must cover the range from 125 to 8.000 hz .

The audio quality must not be affected if using the receiver in the open air or under extreme lighting conditions.

A battery discharge function must be integrated.

The receiver must be capable of being used with rechargeable or dry batteries alternatively (size AAA).

An automatic standby function must guarantee energy-saving operation. The possible operating time must be >250 hours.

The receiver should be prepared for extension with an acoustic signal device, to remind the user to return the receiver.

The receiver must have an unbreakable clip plus possibility for use of a lanyard.

Infrared daylight-receiver model BRÄHLER ICS[®], type IRX or equivalent.