

HCS-5100R Digital Infrared Receivers



Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- Independent intellectual property chipset for digital infrared processor, and DQPSK digital modulation/demodulation technology
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Channel selection via up/down button, at most 4,8,16 or 32 channels available
- LCD display with channel number, language name, battery and signal status indication
- Number of available channels is always the same as the number of channels in use by the system, eliminating the need to scroll through unused channels
- Adjustable volume
- Unique 270° super wide reception angle, ensuring perfect sound quality even when casually placed
- Audio signal automatically muted when signal is too low, ensuring that the user receives only high quality audio
- Ergonomically compact and elegant design
- Lightweight and handy receiver in conjunction with single earphone (EP-820AS/EP-820BS) or headphone (HCS-5100PA) for easy and comfortable use
- Can be hung over the neck via a nice strap or fit into the shirt pocket
- Freedom of movement within the range of IR power radiator
- No limit to the receiver number within the IR power radiation range
- Works without errors, even in bright sunlight
- Built-in high precision rechargeable circuitry to prolong the battery life
- Can be used with disposable batteries (2×AA alkaline batteries, not included) or environmentally-friendly Ni-MH rechargeable battery pack (not included)
- No power consumption when headphone is disconnected
- Measurement mode for easy checking of radiator coverage
- Can be equipped with alarm system to prevent loss
- Can work with HCS-5300 digital infrared wireless conference system and achieve up to 1+3 channels infrared wireless simultaneous interpretation

HCS-5100R is a series of IR receivers, which can receive up to 32 language channels. Both rechargeable NI-HM battery and disposable battery can be used. The receiver is equipped with channel selector, volume control, power switch, Ø 3.5 mm stereo earphone jack, and charging circuit on the PCB. A LCD displays channel number with language name, received signal intensity, battery capacity and volume.

Controls and Indicators

- LCD can display channel number, language name, battery capacity, signal intensity and volume
- Power switch
- Channel selector buttons
- Volume control buttons

Interconnections

- Ø 3.5 mm stereo earphone jack
- Charging contacts

Technical Specifications

System Specifications

Modulation.....DQPSK, according to IEC 61603-7
Modulation frequency
Carriers 0 to 5.....2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7.....up to 8 MHz
Frequency response.....20 Hz to 10 kHz (-3dB) at standard quality;
20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 KHz.....<0.05%
Crosstalk attenuation at 1 kHz.....>80 dB
Dynamic range.....>80 dB
Weighted SNR.....>80 dBA
Input range.....-12 dBV ~ +12 dBV (adjustable)

Electrical

IR irradiance level.....4 mW/m² per carrier
Angle of sensitivity.....270°
Headphone output level at 2.4 V...450 mVrms (speech at maximum volume, 32 Ohm headphone)
Headphone output freq. range.....20 Hz to 20 kHz
Headphone output impedance.....32 Ohm to 2 kOhm
Max. SNR.....>80 dBA
Supply voltage.....1.8 to 3.6 V, nominal 2.4 V
Power consumption
Normal (at 2.4 V).....38 mA (32 Ohm headphone)
Headphone jack unplugged.....0 mA
Battery life
2×AA alkaline cells.....70 hours
Rechargeable battery pack.....52 hours

Mechanical

Dimensions h x w x d (mm)..... 155 × 46 × 24
Weight
Excl. batteries.....80 g
Incl. batteries.....135 g
Color.....Gray

Ordering Information

HCS-5100R/04.....4 CHs Digital Infrared Receiver
(LCD, language display,
optional rechargeable battery
pack or 2xAA alkaline cells)
HCS-5100R/08.....8 CHs Digital Infrared Receiver
(LCD, language display,
optional rechargeable battery
pack or 2xAA alkaline cells)
HCS-5100R/16.....16 CHs Digital Infrared Receiver
(LCD, language display,
optional rechargeable battery
pack or 2xAA alkaline cells)
HCS-5100R/32.....32 CHs Digital Infrared Receiver
(LCD, language display,
optional rechargeable battery
pack or 2xAA alkaline cells)