# HCS-5100R/16F Digital Infrared Receiver



#### **Features**

- Compliant with ISO 22259
- 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 1~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Channel selection via up/down button, at most 16 channels available
- Back-lighting 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 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
- 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 battery life
- Can be used with disposable batteries (2xAA alkaline batteries, not included) or environmentally-friendly Li-ion rechargeable battery pack (not included)
- No power consumption when headphone is disconnected
- Measurement mode for easy checking of radiator coverage
- Can work with HCS-5300/80 new generation digital infrared wireless conference system and achieve up to 1+7 channels infrared wireless simultaneous interpretation

HCS-5100R/16F is a infrared receiver with 16 language channels. Both rechargeable Li-ion 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 displays 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
Modulation frequency	1 to 8 MHz
Carriers 0 to 5:2 to 6 MHz, according to IEC 61603-7	
Frequency response 20 Hz to 10 kHz (-3 dB)	) at standard quality;
20 Hz to 20 kHz (-3 di	B) at perfect quality
THD at 1 kHz	≤0.05%
Isolation	
Dynamic range	≥90 dB
Weighted SNR	

#### **Electrical**

IR irradiance level	4 mW/m² per carrier
Angle of sensitivity	270°
Headphone output level at 3.0 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	≥85 dBA
Supply voltage	2.5 V to 4.2 V, nominal 3.0 V
Power consumption	
Normal (at 3.0 V)	38 mA (32 Ohm headphone)
Headphone jack unplugged	0 mA
Battery life	
2xAA alkaline cells	55 hours
Rechargeable battery pack	42 hours



## **Mechanical**

Dimensions h x w x d (mm)	155 × 46 × 24
Weight	
Excl. batteries	70 g
Incl. HCS-5100BAT-Li	115 g
Color	Black (PANTONE 419 C)

## **Ordering Information**

HCS-5100R/16F 16 CHs Digital Infrared Receiver (LCD, language display, optional rechargeable battery pack or 2xAA alkaline cells, excl. battery, black)