

## 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
- 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 single earphone (EP-820AS/EP-828) or headphone (HCS-5100PA /HCS-5100PB) 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 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-MH 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, 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%
Isolation.....	>80 dB
Dynamic range.....	>80 dB
Weighted SNR.....	>80 dBA
Input range.....	-12 dBV ~ +12 dBV
(adjustable)	

#### Electrical

IR irradiance level.....	4 mW/m <sup>2</sup> 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 V 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.....	42 hours

**Mechanical**

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

**Ordering Information**

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

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

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

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

HCS-5100R\_W/04.....4 CHs Digital Infrared Receiver  
 (LCD, language display,  
 optional rechargeable battery  
 pack or 2xAA alkaline cells,  
 white)

HCS-5100R\_W/08.....8 CHs Digital Infrared Receiver  
 (LCD, language display,  
 optional rechargeable battery  
 pack or 2xAA alkaline cells,  
 white)

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

HCS-5100R\_W/32.....32 CHs Digital Infrared Receiver  
 (LCD, language display,  
 optional rechargeable battery  
 pack or 2xAA alkaline cells,  
 white)

## HCS-5100RA 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
- 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 single earphone (EP-820AS/EP-828) or headphone (HCS-5100PA/HCS-5100PB) 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
- Used with disposable batteries (2×AA alkaline batteries, 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-5100RA is a series of IR receivers, which can receive up to 32 language channels, only for disposable battery. The receiver is equipped with channel selector, volume control, power switch, Ø 3.5 mm stereo earphone jack. 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

### 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%
Isolation.....	>80 dB
Dynamic range.....	>80 dB
Weighted SNR.....	>80 dBA
Input range.....	-12 dBV ~ +12 dBV (adjustable)

#### Electrical

IR irradiance level.....	4 mW/m <sup>2</sup> 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 V 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.....	70 hours

#### Mechanical

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

Color .....Black/White

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**Ordering Information**

HCS-5100RA/04.....	4 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, black)
HCS-5100RA/08.....	8 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, black)
HCS-5100RA/16.....	16 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, black)
HCS-5100RA/32.....	32 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, black)
HCS-5100RA_W/04.....	4 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, white)
HCS-5100RA_W/08.....	8 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, white)
HCS-5100RA_W/16.....	16 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, white)
HCS-5100RA_W/32.....	32 CHs Digital Infrared Receiver (LCD, language display, 2xAA alkaline cells, white)