# 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 /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 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-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 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%
Isolation	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
	-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 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
Supply voltage Power consumption Normal (at 2.4 V) Headphone jack unplugged Battery life 2×AA alkaline cells	1.8 to 3.6 V, nominal 2.4 V 38 mA (32 Ohm headphone) 0 mA 70 hours

## Mechanical

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

## **Ordering Information**

HCS-5100R/04	_4 CHs Di	gital Infrared F	Receiver
	(LCD,	language	display,
	optional	rechargeable	battery
	pack or 2	xAA alkaline c	ells)
HCS-5100R/08	8 CHs Di	gital Infrared F	Receiver
	(LCD,	language	display,
	optional	rechargeable	battery
	pack or 2	xAA alkaline c	ells)
HCS-5100R/16	16 CHs Di	gital Infrared F	Receiver
	(LCD,	language	display,
	optional	rechargeable	battery
	pack or 2	xAA alkaline c	ells)
HCS-5100R/32	32 CHs Di	gital Infrared F	Receiver
	(LCD,	language	display,
	optional	rechargeable	battery
	pack or 2	xAA alkaline c	ells)

# HCS-5100RA Digital Infrared Receiver



### **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/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 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

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

### Electrical

	4 mW/m <sup>2</sup> per carrier 270°
	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	70 hours

## Mechanical

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

## **Ordering Information**

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