

HCS-5300MC/20 Digital Infrared Wireless Conference Main Unit



Features

- Original dirATC-digital infrared Audio Transmitting and Control technologies
 - Digital infrared audio processing and transmitting technologies ensure perfect sound quality
 - Digital infrared transmission technology guarantees conference privacy. Users are released from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications
 - Operating the IR conference system does not require a radio frequency license all over the world
 - Compatible with HCS-5100 series digital infrared language distribution system, when cooperating with digital infrared language distribution system, enabling a larger audience to join in the conference
 - Microphone sensitivity and EQ can be adjusted individually
 - TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
 - Excellent immunity to RF interference from mobile phones and comparable devices
- Digital infrared transmission technology guarantees conference privacy. Users are released from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications
 - Operating the IR conference system does not require a radio frequency license all over the world
 - Controls up to 1000 contribution units
 - Microphone sensitivity and EQ can be adjusted individually
 - 4 audio effect modes are prestored:
NORMAL/PRESS/THEATER/PARLIAMENT
 - Built-in adjustable audio compression feature
 - Compatible with HCS-5100 series digital infrared language distribution system, when cooperating with digital infrared language distribution system, enabling a larger audience to join in the conference
 - Implemented features in stand-alone mode:
 - ◆ Set the number (1/2/3/4) of delegates permitted to speak at the same time
 - ◆ "OPEN" mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing "Mic. On/Off" button
 - ◆ "OVERRIDE" mode, if Mic. active limit has been reached, when pressing "Mic. On/Off" button, next microphone can be turned on and the first active microphone will be turned off
 - Automatic video tracking, when cooperating with camera and video switcher unit
 - Advanced TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
 - Connection to central control system through RS-232 interface for centralized control

The digital infrared wireless conference main unit includes feature for controlling delegate microphones, without an operator.

In combination with a PC, the main unit brings greater sophistication to conference control. Users can access an extensive range of software modules, each with a specific function in controlling and monitoring a conference, greatly expanding the capacity to manage a conference.

Functions

- Compliant to IEC 60914
- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Digital infrared audio processing and transmitting technologies ensure perfect sound quality

Controls and Indicators

- Graphic LCD with back-lighting displays status and menu of the system configuration, supporting multi language menu
- Four buttons for configuration
- Power switch
- Standby switch with indicator
- Operation mode indicators
- LINE IN 1 electric level adjust knob
- Conference unit floor audio channel master volume adjust knob

Interconnections

- Multiple audio in/out interfaces:
 - ◆ One balanced XLR-M for MIC. mixed audio output
 - ◆ One balanced XLR-M for floor audio line out
 - ◆ Balanced LINE IN 1 interface (Ø 6.4 mm) for connection to external audio device
 - ◆ Ø 3.5 mm jack for stereo monitor earphone
- 2 × USB interfaces at front panel to upgrade system and to save system parameters
- Ethernet interface
- Video switcher interface
- Emergency signal interface: for connection to public emergency system. Pauses the conference automatically if the system is switched on and sends alarm signals to conference units

- 6 digital infrared transceiver interfaces, each interface can connect 4 transceivers if operating distributor HCS-5352, thus each main unit can connect up to 24 transceivers
- Power supply socket
- HF signal output interface (BNC socket) for connection to HCS-5100T Digital Infrared Radiator
- RS-232 interface for connection to central control system

Technical Specifications

Electrical

Frequency response.....20 Hz to 20 kHz (-3dB)
 SNR.....≥80 dBA
 Dynamic range.....≥80 dB
 THD at 1 kHz.....≤0.05%
 Isolation.....≥80 dB
 Power supply
 America, Japan.....AC 110 V ~ 120 V, 60 Hz
 Asia, Europe.....AC 220 V ~ 240 V, 50 Hz
 Power consumption.....Max. 160 W

Audio inputs

LINE IN 1.....+10 dBu, BAL.
 LINE IN 2.....+10 dBu, UNBAL.

Audio outputs

LINE OUT 1.....+20 dBu, BAL.
 MIC. MIX (1~4) OUTPUT.....+20 dBu, BAL.

Interface data

Transceivers I/O terminal6P-DIN socket × 6
 External control terminal.....RS-232 D-sub (9P, male),
 USB interface,
 RJ-45 (ETHERNET)
 HF OUT (Radiator terminal).....BNC connector × 1
 Alarm terminal3.81 mm Phoenix connectors, 2-pole
 Video switcher terminal3.81 mm Phoenix connectors, 4-pole

Mechanical

Mounting.....Tabletop or mounted in a 19" rack
 Dimensions (h x w x d)
 For table use, with feet.....99 x 430 x 325 mm
 For 19" rack use, with brackets.....89 x 478 x 350 mm
 Weight.....8.3 kg
 Color.....White

Ordering Information

HCS-5300MC/20.....Digital IR Wireless Conference
 System Main Unit (discussion)

HCS-5302C Wireless Chairman Unit



Features

- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Vertical acceptance/emission angle selectable
- Hi-Fi loudspeaker
- Priority button
- Pluggable microphone
- System controls up to 1000 contribution units
- Vertical emission angle selectable via LCD menu
- Broadcast standard microphone and digital infrared audio processing and transmitting technologies ensure 20 Hz to 20 kHz perfect sound quality, extremely low distortion factor
- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Excellent immunity to RF interference from HF-driven lighting and mobile phones
- Microphone sensitivity and EQ can be adjusted individually
- Built-in rechargeable Lithium battery pack

The stylish and ergonomically designed chairman unit has all the necessary facilities to enable the user to chair a conference. Similar in appearance and function to HCS-5302D Delegate Unit, the HCS-5302C Chairman Unit includes an extra microphone priority button. When pressed, the priority button causes all currently active delegate microphones to be switched off temporarily or permanently, allowing the chairman to take control of the meeting. Separate rechargeable Lithium battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Functions

- Compliant to IEC 60914
- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- System controls up to 1000 contribution units
- Vertical emission angle selectable via LCD menu
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Broadcast standard microphone and digital infrared audio processing and transmitting technologies ensure 20 Hz ~ 20 kHz perfect sound quality, extremely low distortion factor
- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Excellent immunity to RF interference from HF-driven light and mobile phones
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Two Ø 3.5 mm stereo headphone jacks for headphones with separate volume control
- Microphone On/Off button
- Microphone sensitivity and EQ can be adjusted individually
- System when operated in stand-alone mode can implement the following facilities:
 - ◆ “ACTIVE MICS”, set the number of delegates permitted to speak at the same time (1/2/3/4)
 - ◆ “OPEN” mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing “Mic. On/Off” button
 - ◆ “OVERRIDE” mode, if Mic. active limit has been reached, when pressing “Mic. On/Off” button, next microphone can be turned on and the first active microphone will be turned off
- Automatic video tracking, when cooperating with camera and video switcher unit
- Can be activated at any time provided that the total number of active microphones (including the active microphone of the chairman) is within the maximum of 4 active microphones allowed by the system
- Priority button can switch off or mute the speaking units according to preset
- System supports up to 20 chairman units, while only 1 chairman unit has the control facilities listed above
- Built-in rechargeable Lithium battery operation duration: 14.4 hours when microphone is continuously on; 48 hours when microphone is off

Controls and Indicators

- Graphic 96×64 LCD with back-lighting for displaying battery capacity, signal icon and emission angle icon
- Uni-directional electret condenser microphone with two-color illuminated ring (blue/red)
- Charging indicator

- Fully charged indicator
- Power switch
- Two headphone volume control buttons
- Microphone On/Off button with indicator
- Priority button

Interconnections

- Socket for pluggable microphone
- 2 × Ø 3.5 mm stereo headphone jack
- Power adapter interface

Technical Specifications

Electrical

Headphone connection

Frequency response 20 Hz to 20 kHz (-3dB)
 Headphone load impedance ≥16 Ohm × 2
 Headphone output 10 mW

Microphone

Transducer Electret-condenser
 Polar pattern Uni-directional
 Sensitivity -46 dBV/Pa
 Frequency response 50 Hz to 20 kHz
 Directionality 0°/180° >20 dB (1 kHz)
 Equivalent noise 20 dBA (SPL)
 Max.SPL 125 dB (THD<3%)

Interface data

Connector 2 x Ø 3.5 mm stereo jack for headphone

Operation time of battery pack

When mic. is continuously on
 Not omnidirectional Approx. 14.4 hours
 Omnidirectional Approx. 10 hours
 When mic. is off Approx. 48 hours
 15% mic. on + 85% mic. off Approx. 36 hours

Mechanical

Mounting Tabletop
 Dimensions (h x w x d) (w/o Mic.) 68 x 180 x 132 mm
 Weight
 Excl. battery 0.46 kg
 Incl. battery 0.78 kg
 Color Silver/ Charcoal gray

Ordering Information

HCS-5302C_S Digital IR Wireless Chairman Unit (silver)
 HCS-5302C_G Digital IR Wireless Chairman Unit (charcoal gray)

HCS-5302D Wireless Discussion Unit



Features

- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Vertical acceptance/emission angle selectable
- Hi-Fi loudspeaker
- Pluggable microphone
- System controls up to 1000 contribution units
- Vertical emission angle selectable via LCD menu
- Broadcast standard microphone and digital infrared audio processing and transmitting technologies ensure 20 Hz to 20 kHz perfect sound quality, extremely low distortion factor
- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Excellent immunity to RF interference from HF-driven lighting and mobile phones
- Microphone sensitivity and EQ can be adjusted individually
- Built-in rechargeable Lithium battery pack

This wireless delegate unit meets the basic demands of most conferences. It provides facilities for speaking and listening and has excellent immunity to RF interference from mobile phones. The loudspeaker offers superior acoustics with minimal feedback, for enhanced intelligibility.

Separate rechargeable Lithium battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

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- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
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- System controls up to 1000 contribution units
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- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Excellent immunity to RF interference from HF-driven light and mobile phones
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Two Ø 3.5 mm stereo headphone jacks for headphones with separate volume control
- Microphone On/Off button
- Microphone sensitivity and EQ can be adjusted individually
- System when operated in stand-alone mode can implement the following facilities:
 - ◆ “ACTIVE MICS”, set the number of delegates permitted to speak at the same time (1/2/3/4)
 - ◆ “OPEN” mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing “Mic. On/Off” button
 - ◆ “OVERRIDE” mode, if Mic. active limit has been reached, when pressing “Mic. On/Off” button, next microphone can be turned on and the first active microphone will be turned off
- Automatic video tracking, when cooperating with camera and video switcher unit
- Built-in rechargeable Lithium battery operation duration: 14.4 hours when microphone is continuously on; 48 hours when microphone is off

Controls and Indicators

- Graphic 96×64 LCD with back-lighting for displaying battery capacity, signal icon and emission angle icon
- Uni-directional electret condenser microphone with two-color illuminated ring (blue/red)
- Charging indicator
- Fully charged indicator
- Power switch
- Two headphone volume control buttons
- Microphone On/Off button with indicator

Interconnections

- Socket for pluggable microphone
- 2 × Ø 3.5 mm stereo headphone jack
- Power adapter interface

Technical Specifications

Electrical

Headphone connection

Frequency response.....20 Hz to 20 kHz (-3dB)
 Headphone load impedance.....≥16 Ohm × 2
 Headphone output.....10 mW

Microphone

Transducer.....Electret-condenser
 Polar pattern.....Uni-directional
 Sensitivity.....-46 dBV/Pa
 Frequency response.....50 Hz to 20 kHz
 Directionality 0°/180°.....>20 dB (1 kHz)
 Equivalent noise.....20 dBA (SPL)
 Max.SPL.....125 dB (THD<3%)

Interface data

Connector.....2 x Ø 3.5 mm stereo jack for headphone

Operation time of battery pack

When mic. is continuously on
 Not omnidirectional.....Approx. 14.4 hours
 Omnidirectional.....Approx. 10 hours
 When mic. is off.....Approx. 48 hours
 15% mic. on + 85% mic. off.....Approx. 36 hours

Mechanical

Mounting.....Tabletop
 Dimensions (h x w x d) (w/o Mic.).....68 x 180 x 132 mm
 Weight
 Excl. battery.....0.46 kg
 Incl. battery.....0.78 kg
 Color.....Silver/ Charcoal gray

Ordering Information

HCS-5302D_S.....Digital IR Wireless Delegate Unit (silver)
 HCS-5302D_G.....Digital IR Wireless Delegate Unit (charcoal gray)

Conference Units Function list

Type No.	Status	Discussion	Sign-in	Voting	Simultaneous interpretation
HCS-5300CE	chairman	√	√	√	1+3 CHs
HCS-5300DE	delegate	√	√	√	1+3 CHs
HCS-5301D	delegate	√			(1+3 CHs)×2
HCS-5302C	chairman	√			
HCS-5302D	delegate	√			

HCS-5300TD-W Digital Infrared Transceiver



Features

- Compliant to IEC 60914
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Transmitting in 2 ~ 8 MHz frequency band, eliminating the interference from HF-driven lights
- Tripod, wall or ceiling mounting, easy to install
- Inside the coverage area of infrared signals, also HCS-5100R/RA digital infrared receivers can be in operation simultaneously to receive (1+3 channels) simultaneous interpretation

HCS-5300TD-W digital infrared transceiver manages communication between main unit and conference units. It can be mounted onto the ceiling and wall for optional coverage or fixed onto a tripod at any appropriate spot.

Indicators

- Power indicating light

Interconnections

- Equipped with a 2.0 m specific cable with 6P-DIN male plug. For extension purposes, 6P-DIN extension cable can be used.

Technical Specifications

Electrical

Wavelength.....	870 nm
Modulation method.....	DQPSK
Carrier frequency.....	2 ~ 8 MHz
Voltage.....	33 V DC (supplied from HCS-5300M)
Current consumption.....	Max. 550 mA
Connector.....	6P-DIN
Cable.....	2.0 m specific cable with 6P-DIN male plug
Acceptance/emission angle	
Vertical.....	150° (75°+75°)
Horizontal.....	360°
Communication area.....	Approx 13 m in radius from the point underneath the unit (ceiling height: 2.5 ~ 4.5 m)

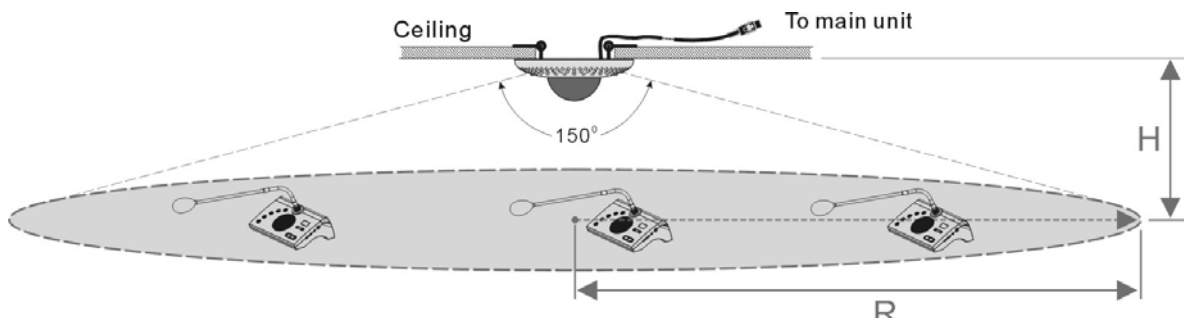
Mechanical

Mounting.....	Ceiling, wall or tripod mounting
Dimensions.....	Ø 181 mm, 63 mm (height)
Weight.....	0.5 kg
Color.....	Silver/ Charcoal gray

Ordering Information

HCS-5300TD-W.....Digital Infrared Transceiver (ceiling, wall or tripod-mounted, excl. tripod when ordered, wide-angle, silver)

HCS-5300TD-WG.....Digital Infrared Transceiver (ceiling, wall or tripod-mounted, excl. tripod when ordered, wide-angle, charcoal gray)



Footprint of HCS-5300TD-W digital infrared transceiver (If H=2.5 ~ 3.0 m, then R= 13 m; if H=3.5 ~ 4.5 m, then R= 11 m)

HCS-5300TD-N Digital Infrared Transceiver



Features

- Compliant to IEC 60914
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Transmitting in 2 ~ 8 MHz frequency band, eliminating the interference from HF-driven lights
- Tripod, wall or ceiling mounting, easy to install
- Inside the coverage area of infrared signals, also HCS-5100R/RA digital infrared receivers can be in operation simultaneously to receive (1+3 channels) simultaneous interpretation

HCS-5300TD-N digital infrared transceiver manages communication between main unit and conference units. It can be mounted onto the ceiling and wall for optional coverage or fixed onto a tripod at any appropriate spot.

Indicators

- Power indicating light

Interconnections

- Equipped with a 2.0 m specific cable with 6P-DIN male plug. For extension purposes, 6P-DIN extension cable can be used.

Technical Specifications

Electrical

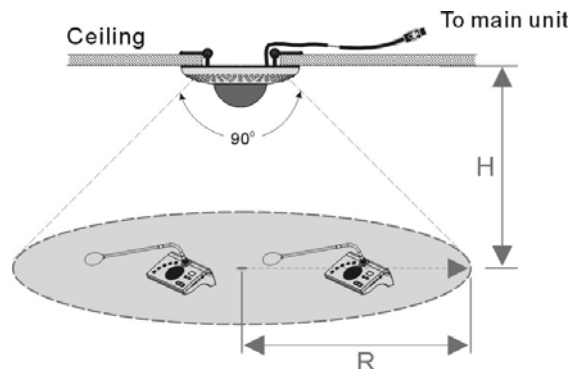
Wavelength.....	870 nm
Modulation method.....	DQPSK
Carrier frequency.....	2 ~ 8 MHz
Voltage.....	33 V DC (supplied from HCS-5300M)
Current consumption.....	Max. 550 mA
Connector.....	6P-DIN
Cable.....	2.0 m specific cable with 6P-DIN male plug
Acceptance/emission angle	
Vertical.....	90° (45°+45°)
Horizontal.....	360°
Communication area.....	Approx 9 m in radius from the point underneath the unit (ceiling height: 5 ~ 7 m)

Mechanical

Mounting.....	Ceiling, wall or tripod mounting
Dimensions.....	Ø 181 mm, 63 mm (height)
Weight.....	0.5 kg
Color.....	Silver/ Charcoal gray

Ordering Information

HCS-5300TD-N.....	Digital Infrared Transceiver (ceiling, wall or tripod-mounted, excl. tripod when ordered, silver)
HCS-5300TD-NG.....	Digital Infrared Transceiver (ceiling, wall or tripod-mounted, excl. tripod when ordered, charcoal gray)



Footprint of HCS-5300TD-N digital infrared transceiver (If H=5 ~ 7 m, then R= 9 m)

HCS-5300BAT
Lithium Rechargeable Battery Pack



Features

- Lithium rechargeable battery pack
- Used for supplying power to HCS-5300 series digital infrared wireless conference unit

Technical Specifications

Electrical

Nominal voltage..... 11.1 V DC
 Nominal capacity..... 4400 mAh

Mechanical

Dimensions (h x w x d)..... 28 × 140 × 58 mm
 Weight..... 0.32 kg
 Color..... Black

Ordering Information

HCS-5300BAT..... Lithium Rechargeable Battery Pack

HCS-5300HT-BAT
Lithium Rechargeable Battery Pack



Features

- Lithium rechargeable battery pack
- Used for supplying power to HCS-5300HT Portable Digital IR transmitter

Technical Specifications

Electrical

Nominal voltage..... 7.4 V DC
 Nominal capacity..... 2200 mAh

Mechanical

Dimensions (h x w x d)..... 20 × 70 × 38 mm
 Weight..... 0.1 kg
 Color..... Blue

Ordering Information

HCS-5300HT-BAT..... Lithium Rechargeable Battery Pack

HCS-ADP15V Power Adapter



Features

- Used for supplying power to HCS-5300 series digital infrared wireless conference unit

Technical Specifications

Electrical

Mains voltage.....AC 100 ~ 240 V, 50/60 Hz
 Output.....DC 15 V, 2.2 A
 Connector.....UL, CE or VDE type, according to the territory of selling

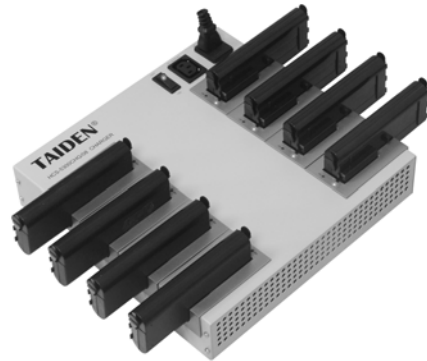
Mechanical

Cable length.....3 m
 Dimensions (h x w x d).....28 × 95 × 45 mm
 Weight.....0.3 kg
 Color.....Black

Ordering Information

HCS-ADP15V.....Power Adapter (DC 15 V, 2.2 A)

HCS-5300CHG/08 Charging Unit



Features

- Used for charging HCS-5300BAT Lithium batteries
- Charges 8 pcs of HCS-5300BAT batteries per charging
- Uses universal power supply with automatic voltage matching

Controls and Indicators

- Power switch
- Charging indicator (red)
- Fully charged indicator (green)

Interconnections

- Power output interface
- Power input interface
- Charging lattices

Technical Specifications

Electrical

Mains voltage
 America, Japan.....AC 110 V to 120 V, 60 Hz
 Asia, Europe.....AC 220 V to 240 V, 50 Hz
 Power consumption.....Max. 380 W
 Charging time.....Approx 6 hours
 Charging capacity.....8 HCS-5300BAT batteries

Mechanical

Dimensions (h x w x d).....74 × 288 × 300 mm
 Weight.....4.5 kg
 Color.....White

Ordering Information

HCS-5300CHG/08.....Charging Unit (8 pcs/case)

**CBL5300
Dedicated Transceiver Cable**



Features

- Dedicated cable for HCS-5300T series Digital Infrared Transceiver
- 1 × 6P-DIN plug
- 1 × 6P-DIN socket
- Ø 6 mm
- Color: black

Ordering Information

CBL5300-05.....	5 m Dedicated Transceiver Cable
CBL5300-10.....	10 m Dedicated Transceiver Cable
CBL5300-20.....	20 m Dedicated Transceiver Cable
CBL5300-50.....	50 m Dedicated Transceiver Cable

**CBL5304
Dedicated Receiver Cable**



Features

- Dedicated cable for HCS-5300R series Digital Infrared Receiver
- 1 × 6P-DIN plug
- 1 × 6P-DIN socket
- Ø 4 mm
- Color: black

Ordering Information

CBL5304-05.....	5 m Dedicated Receiver Cable
CBL5304-10.....	10 m Dedicated Receiver Cable
CBL5304-20.....	20 m Dedicated Receiver Cable
CBL5304-50.....	50 m Dedicated Receiver Cable