

## **HDMI Coaxial Cable Extender**

# COS-T100HD-B / COS-R100HD-B

The IDK COS-T100HD-B / COS-R100HD-B HDMI Coaxial Cable Extender is an extender for transmission of HDMI signals using a coaxial cable. The receiver supports Daisy Chain connection and bidirectional communication via RS-232C. The COS-100HD-B enables HDMI transmission using the existing coaxial cables. A digital audio input and an analog audio input are switch selectable.

Specific	ation			000 T400UD D (T	000 0400 ID 0 (0 )
Item				COS-T100HD-B (Transmitter)  1 input / HDMI (*1) / DVI 1.0	COS-R100HD-B (Receiver)
Input	Video	HDMI / DVI	Number / Signal	TMDS Single Link, HDCP1.4 TMDS clock: 25 MHz to 165 MHz Dot clock: 25 MHz to 165 MHz Built-in EDID emulation	1 input / Digital signals for extension
			Connector	1 female HDMI Type A (*2)	1 BNC 75 Ω
		Others		Color depth: 24 bit (*5)	
		Formats		480i / 480p / 576i / 576p / 720p / 1080i / 1080p VGA to QWXGA * WUXGA / QWXGA only support Reduced Blanking	
	Audio	Digital	Number / Signal	1 input Multi-channel LPCM up to 8 channels - Sampling frequency: 32kHz to 192kHz - Sample Size: 16bit to 24bit - Reference level:-20 dBFS, - Max. input level: 0 dBFS	1 input / Digital signals for extension
			Connector	1 female HDMI Type A (*2)	1 BNC 75 Ω
		Analog	Number / Signal	1 input / stereo LR unbalanced signals - Input impedance: 24 kΩ - Reference level: -10 dBu - Max input level: +10 dBu	-
			Connector	1 RCA pin jack	-
Output		HDMI / DVI	Number / Signal	1 output / Digital signals for extension	1 output / HDMI (*1) / DVI 1.0 TMDS Single Link, HDCP1.4 TMDS clock: 25 MHz to 165 MHz Dot clock: 25 MHz to 165 MHz
			Connector	1 BNC 75 Ω	1 female HDMI Type A (*3)
	Video	Daisy	Number / Signal	-	1 input / Digital signals for extension
		Chain	Connector	-	1 BNC 75 Ω
		Others		Color depth: 24 bit (*5)	
		Formats		480i / 480p / 576i / 576p / 720p / 1080i / 1080p VGA to QWXGA * WUXGA / QWXGA only support Reduced Blanking	
	Audio	Digital	Number / Signal	1 output / Digital signals for extension	1 output Multi-channel LPCM up to 8 channels - Sampling frequency: 48kHz - Sample Size: 24bit - Reference level:-20 dBFS - Max. input level: 0 dBFS
			Connector	1 BNC 75 Ω	1 female HDMI Type A
		Analog	Number / Signal	-	1 output / stereo LR unbalanced signals (*6) - Input impedance: 75 kΩ - Reference level: -10 dBu - Max input level: +10 dBu
			Connector	-	1 RCA pin jack
Plug & Play			<u> </u>	DDC2B (Built-in EDID: It can select maximum reso	olution)
Coaxial cables				75 Ω coaxial cable for high frequency signal	
Signal transmission distance				L-7CHD: Up to 689 ft. (210 m) L-7CFB: Up to 492 ft. (150 m) L-5CFB: Up to 361 ft. (110 m) L-5C2V: Up to 197 ft. (60 m) L-3CFB: Up to 262 ft. (80 m) L-3C2V: Up to 131 ft. (40 m) *Please be careful to use it with an adequate cable length *This distance may shorten due to jitter performance of the input video signals *Number of daisy chaining may be limited or cable extension distance may shorten if jitter performance at daisy chaining had degraded	
Functions				Anti-Snow (*7), Connection Reset (*8), Built-in test pattern / tone output, I/O signal status check	
Control	Serial co	Serial control port Number / Signal Connector		1 port / Full duplex Max. 115.2kbps 1 male 9-pin D-Sub	
Others	AC adapter			Input: $100 - 240 \text{ VAC} \pm 10\%$ , $50 \text{ Hz} / 60 \text{ Hz} \pm 3 \text{ Hz}$ Output: DC 5V 3A (AC adapter is supplied)	
	Power consumption			About 6 Watts	About 6 Watts
	Dimensions			4.2 × 1.1 × 5.9" (106 (W) × 28 (H) × 150 (D) mm)	,
	Weight			(EIA quarter rack wide) (Excluding connectors and the like)  1.1 lbs. (0.5 kg)	
				1.1 lbs. (0.5 kg) Operating: 32°F to 104°F (0°C to +40°C)	
	Temperature			Storage: -4°F to +176°F (-20°C to +80°C)	
	Humidity	Humidity		Operating / Storage: 20% to 90% (Non Condensing)	

<sup>●</sup> All specifications and drawings are subject to change without notice. ● Please do not use the supplied AC adapter and power supply cable for other products. ● The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries. ● The terms Anti-snow and Connection Reset are registered trademarks of IDK Corporation in Japan. ● All other company and product names mentioned in this document are either registered trademarks of their respective owners. In this document, the "®" or "™" marks may not be specified.

- CEC, x.v.Color, 3D, ARC and HEC are not supported Up to 98 ft. (30m) cables can be used. The transmission distance depends on the connected device.
- \*3 \*4 Use an HDMI cable shorter than 5 m.
  Video that does not meet VESA and CEA-861 may not be transmitted.
  - For coaxial transmission, data is not compressed and the size is not changed. However, signals with some resolutions are converted; the video data may not be restored completely.
- \*5 Deep Color is not supported.
- Analog audio output only supports 2 channels liner PCM \*6 \*7
- Analog audio output only supports 2 channels liner PCM
  Anti-snow function can fix snowy noise automatically that is a specific symptom of the signal having HDCP, mainly snow noise that arises during starting. Therefore, this function cannot work when snow noise has already occurred before starting or when snowy noise occurs because of bad status of transmission line.

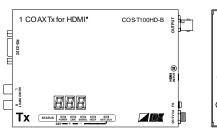
  Connection reset function can fix problems that can be repaired by taking off and putting in connectors. This function can work only in this product's output port, which sometimes will not take effect if another device is between output of this product and display device. \*8

#### ■Front & Rear Panels

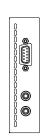
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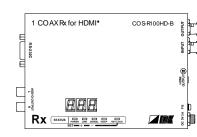
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#### COS-T100HD-B









COS-R100HD-B





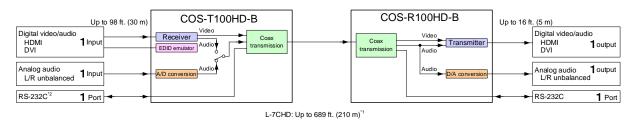


HDMI Coaxial Cable Extender

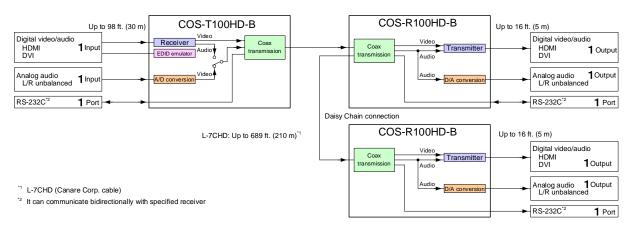
# COS-T100HD-B / COS-R100HD-B Diagram and Features

#### **■**Diagram

#### ■Use one receiver



## ■ Daisy Chain connection



## [Features]

#### ■ Video

- Up to QWXGA (RB)\*, 1080p
- HDCP1.4
- Extends up to 689 ft. (210 m) using a L-7CHD cable

L-7CHD: Up to 689 ft. (210 m)

L-7CFB: Up to 492 ft. (150 m)

L-5CFB: Up to 361 ft. (110 m)

L-5C2V: Up to 197 ft. (60 m) L-3CFB: Up to 262 ft. (80 m)

L-3C2V: Up to 131 ft. (40 m)

- HDMI input cable EQ

INPUT: up to 98 ft. (30 m)

- Daisy Chain Connection
- Anti-Snow

#### ■ Audio

- Embedded analog audio to HDMI signal
- De-embedded analog audio from HDMI signal

### ■ Control

- RS-232C bidirectional communication
- Batch transmission to all receivers when it has daisy chain connection
- Bidirectional communication between specified receiver when it has daisy chain connection

# ■ Others

- EDID emulation
- Connection reset
- Built-in test pattern / tone output
- Displaying I/O signal status (7-segement OSD)
- Transmit HDMI and serial signal using one coaxial cable
- AC adapter mechanical lock

<sup>\* (</sup>RB) = Reduced Blanking

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