HDC-TH200

HDMI / Universal Analog HDBaseT Extender

The IDK HDC-TH200 is a transmitter for long-distance transmission of HDMI/DVI and Analog (video and audio) input signals over a twisted pair cable. Since HDMI/DVI signals are transmitted without compression or processing, the image quality can be kept. Input signals are automatically detected and switched according to the setting of the input auto switching function.

FRONT & REAR PANEL

FEATURES

■ **Video**
 ・ Up to QWXGA (RB)*1 or 1080p
 ・ HDCP supported
 ・ 3D Y/C separation for NTSC and PAL signals
 ・ Digital cable EQ
    INPUT: up to 33 ft. to 98.43 ft. / 10 m to 30 m
 ・ Up to 328.08 ft. approx. / 100 m signal extension over a Cat6 cable
 ・ Anti-snow

■ **Audio**
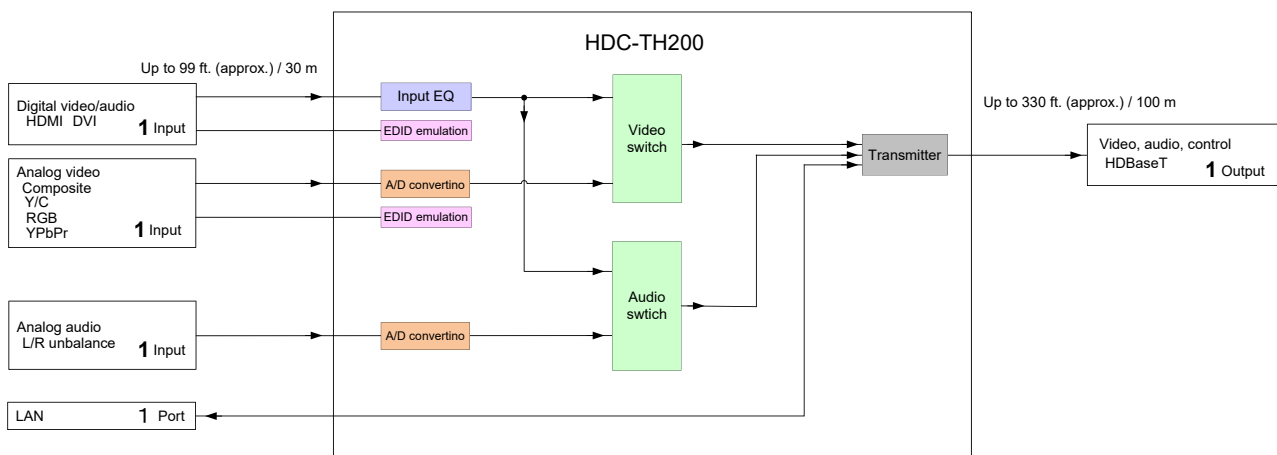 ・ Embedding analog audio into digital signals

■ **Control output**
 ・ LAN (Bi-directional communication)

■ **Others**
 ・ EDID emulation
 ・ Auto input detection and switching
 ・ CEC (Pass through)
 ・ Last memory
 ・ Connection Reset
 ・ Front panel security lock out
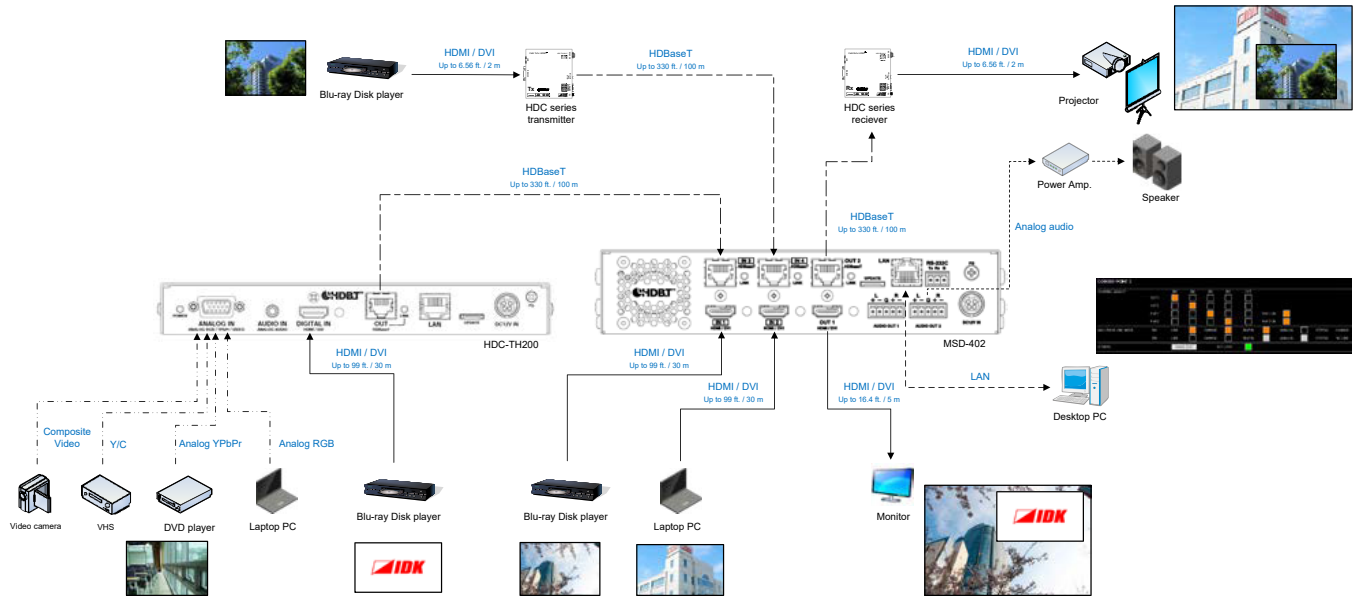 ・ Lock mechanism for AC adapter

DIAGRAM

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Item				Description
Input	Video	HDMI / DVI	Number / Signal	1 input / HDMI Deep Color (*1), DVI1.0 - HDCP 1.4 (Pass through) (*2) - CEC (Pass through) - TMDS clock: 25 MHz to 225 MHz - Dot clock: 25 MHz to 165 MHz
			Connector	1 female HDMI Type A
			Others	Built-in cable EQ, EDID emulation
		Universal analog	Number / Signal	1 input / Composite video, S-Video, Analog RGB/Analog YPbPr (auto-recognition) - Composite video (VBS Signal): 1.0 V[p-p]/75 Ω - Y/C Signal: 1.0 V [p-p] (Y) /0.286 V [p-p] (C) /75 Ω - Analog RGB: 0.7 V [p-p] / 75 Ω HS/VS TTL level, - Analog YPbPr: 1.0 V [p-p] (Y) /0.7 V [p-p] (Pb/Pr) /75 Ω
			Connector	1 female 15-pin HD
			Others	EDID emulation
		Formats		NTSC / PAL 480i / 480p / 576i / 576p / 720p / 1080i / 1080p VGA to QWXGA * WUXGA / QWXGA: only Reduced Blanking is supported.
	Audio	Digital	Number / Signal	1 input / Multi-channel linear PCM up to 8 channels - Sampling frequency: 32 kHz to 192 kHz - Sample bit: 16 bit to 24 bit - Reference level:-20 dBFS - Max. input level: 0 dBFS
			Connector	1 female HDMI Type A
		Analog	Number / Signal	1 input / Stereo L/R unbalanced signal - Input impedance: 24 kΩ - Reference level: -10 dBu - Max. input level: +10 dBu
			Connector	1 Stereo mini pin jack 3.5 mm
Output	Video		Number / Signal	1 output / HDBaseT Cable: Cat5e/Cat6 (STP/UTP straight cable), CAT.5E HDC cable (*4)
			Connector	1 RJ-45 (*3)
	Audio		Number / Signal	1 output / Multi-channel linear PCM up to 8 channels - Sampling frequency: 32 kHz to 192 kHz - Sample size: 16 bit to 24 bit - Reference level: -20 dBFS - Max. output level: 0 dBFS
			Connector	1 RJ-45
Max. extension distance	Input	HDMI/DVI		From 32.8 ft. / 10 m up to 99 ft. / 30 m (approx.) (*5)
	Output	HDBaseT		Max. 330 ft. / 100 m (approx.) (*6)

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Function	Analog video processing		3D Y/C separation
	Others		Auto input detection and switching Last memory Anti-Snow (*7) Connection Reset (*8) Front panel security lockout
Control port	LAN	Number / Signal	1 port / 10Base-T (Auto Negotiation), 100Base-TX (Auto Negotiation), Auto MDI/MDI-X
		Connector	1 RJ-45
Others	AC adapter		Input: 100 - 240 VAC ± 10%, 50 Hz / 60 Hz ± 3 Hz Output: 12 VDC 3 A 36 Watts (AC adapter is supplied)
	Power consumption		About 11 Watts
	Dimensions		8.27 x 1.08 x 5.91"/ 210 (W) x 27.5 (H) x 150 (D) mm (EIA rack 1/2U widths and low height, not including projections)
	Weight		1.98 lbs. / 0.9 kg
	Temperature		Operating: 32°F to 104°F / 0°C to +40°C Storage: -4°F to +176°F / -20°C to +80°C
	Humidity		Operating/ Storage humidity: 20% to 90% (Non Condensing)

*1 30 bit/pixel (10 bit/component) and 36 bit / pixel (12 bit / component) Deep Color is supported while xvYCC, 3D, ARC and HEC are not supported.
*2 HDCP-compliant DVI signals are not supported. To transmit these signals, use our extender which supports DVI signals or MSD-402.
*3 RJ-45 (HDBaseT output connector) is only for Cat5e/Cat6 twisted pair cable. Please do not use it for LAN devices or the like.
*4 T568A or T568B straight connection. HDC.CAT5E cable is HDBaseT recommended cable which IDK developed.
*5 The extension distance depends on connected I/O devices. The distance above is the maximum transmission distance when a cable made by IDK (AWG24) is used and signals, 1080p@60 24 bit / pixel (8 bit / component), are input or output. If the connected device is not matched to the unit or if other makers' cables are used, video signals can be unstable or video signals cannot be output, even though the transmission distance is within the distance above.
*6 If connected to a device whose status is significantly bad, video signal can be unstable or cannot be output. Check the operation beforehand or contact us.
*7 The anti-snow feature automatically fixes snow noise that is a specific symptom of HDCP-compliant signals and mainly occurs at start-up. This feature does not work when snow noise has already occurred during startup or when it occurs due to a bad condition of the transmission line.
*8 For digital systems, some problems, such as an HDCP authentication error, can often be recovered by physically disconnecting and reconnecting the digital cables. However, the Connection Reset feature will fix these problems automatically without the need to physically plug and unplug the cables. It creates the same condition as if the cable were physically disconnected and reconnected. This feature only works for the HDC's output. If other devices are connected between the HDC's output and sink device, this feature may be invalid.

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