

## HDMI/Analog HDBaseT Transmitter

# HDC-TH200

The HDC-TH200 is an HDBaseT transmitter that features both HDMI/DVI and analog input signals. It also acts as a simple switcher, automatically sending and switching to an active input. The HDC-TH200 can also embed the analog video into the digital stream. Pair with any of IDK's HDBaseT receivers for video and audio extension to 328 ft. (100 m).

#### ■ Specification

Specification Item		Item	Description
Input	Video	HDMI/DVI	1 input HDMI Deep Color (*1)/DVI 1.0 TMDS single link, HDCP 1.4 (*2) TDMS clock: 25 MHz to 225 MHz Built-in cable EQ, EDID emulation, CEC (Pass-through) Connector: Female HDMI Type A (19-pin)
		Analog	1 input Composite video/Y/C/Analog RGB/Analog YPbPr (Auto-recognition) Composite video: 1.0 V[p-p]/75 Ω Y/C : 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 EDID emulation Connector: Female high-density D-sub (15-pin)
		Format	Analog: NTSC/PAL Analog/HDMI: VGA to QWXGA (Dot clock: 25 MHz to 165 MHz) For WUXGA/QWXGA, only Reduced Blanking is supported. 480i / 480p / 576i / 576p / 720p / 1080i / 1080p
	Audio	Digital	1 input Multi-channel LPCM up to 8 channels Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit Reference level: -20 dBFS, Max. input level: 0 dBFS Connector: Female HDMI Type A (19-pin)
		Analog	1 input Unbalanced Stereo LR Input impedance: 24 kΩ, Reference level: -10 dBu, Max. input level: +10 dBu Connector: Stereo mini jack (3.5 mm)
Output	Video	HDBaseT	1 output HDBaseT RS-232C, LAN, CEC (Pass-through) Connector: RJ-45 (*3) Cable: CAT.5E HDC, Cat5e UTP/STP, Cat6 UTP/STP (*4)
	Audio	Digital	1 output Multi-channel LPCM 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: RJ-45
Maximum		Digital input	98 ft. (30 m) (*5)
transmission distances		Digital output	328 ft. (100 m), 492 ft. (150 m) (Long reach mode is used) (*6)
Function		Analog video processing	3D Y/C separation
		Others	Input channel automatic switching, Last memory, Anti-snow (*7), Connection Reset (*8), Button security lockout
Control		LAN	1 port/RJ-45 10Base-T/100Base-TX (Auto Negotiation), Auto MDI/MDI-X
General		AC adapter	Input: 100 - 240 VAC ±10%, 50 Hz/60 Hz ±3 Hz Output: DC 12 V 3 A 36.0 W (A dedicated AC adapter is provided)
		Power consumption	About 11 W
		Dimensions	8.3 (W) × 1.1 (H) × 5.9 (D)" (210 (W) × 27.5 (H) × 150 (D) mm) (Half rack wide, thin type) (Excluding connectors and the like)
		Weight	2 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: 20% to 90% (Non Condensing)

- 30 bit/pixel (10 bit/component) and 36 bit/pixel (12 bit/component) Deep Color are supported while x.v.Color, 3D, ARC and HEC are not supported.
- HDCP-compliant DVI signals are not supported. To transmit these signals, use our extender which supports DVI signals or MSD-402.

  RJ-45 (HDBaseT output connector) is only for extending digital video and audio signals over a Cat5e/Cat6 cable. Do not use for LAN devices.

  T568A or T568B straight. The CAT.5E HDC cable is developed by IDK and recommended by HDBaseT alliance.
- The maximum cable distance varies depending on the connected devices and was measured under following conditions:
- 1080p@60: When IDK's 24 AWG cable was used and signals of 1080p@60 24 bit/pixel (8 bit/component) was input or output.

The maximum cable distance depends on the connected devices. The distance may not be extended with some device combinations, cabling method, or other manufacturer's cable. Video may be disturbed or may not be output even if signals are within the range mentioned above.

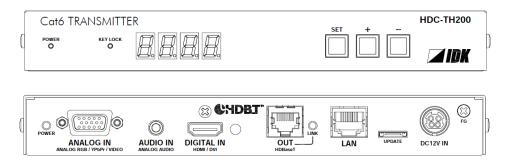
The maximum transmission distance was obtained when IDK's CAT.5E HDC cable was used. The distance may not be extended with some device combinations, cabling method,

- or other manufacturer's cable. Video may be disturbed or may not be output even if signals are within the range mentioned above. Operations may not be stable with some LCD devices; please check the operation beforehand or contact us.
  - The maximum transmission distance is the shorter distance of connected HDBaseT product or sink device's maximum transmission distance.

    Up to 492 ft. (150 m): 1080p (24 bit) in Long reach mode. For Long reach mode, use IDK's HDBaseT Products that supports 328 ft. (100 m) or longer.
- 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.
- 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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## ■ Front & Rear Panels

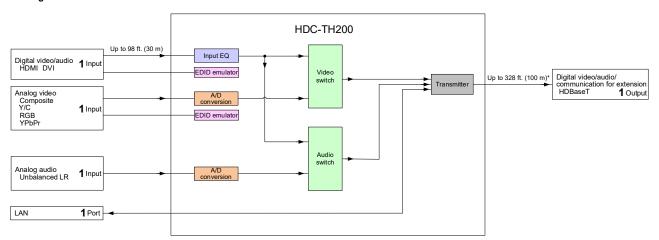


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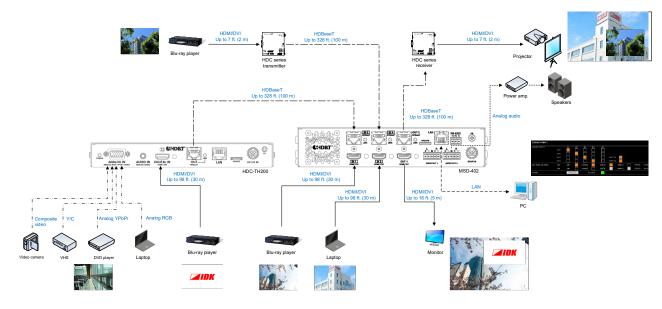
## HDC-TH200

## ■ Diagram



<sup>\*</sup>For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum if using with IDK's HDBaseT products supporting 328 ft. (100 m) transmission.

## ■ Application Example



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## [Features]

#### ■ Video

- Up to 1080p/QWXGA (Reduced Blanking)
- HDCP 1.4
- 3D Y/C separation for NTSC and PAL signals
- · Automatic input signal equalization Input: Up to 98 ft. (30 m)

  • Up to 328 ft. (100 m) over Cat6 cable
- Anti-snow
- Up to 492 ft. (150 m) in Long reach mode (1080p 60 Hz 24 bit or less)\*1

Embedding

## ■ Communication

LAN

# ■ Control input

RS-232C (HDBaseT)

## ■ Others

- EDID emulation
- · Input channel automatic switching
- CEC (Pass-through)
- · Last memory
- Connection Reset
- · Button security lockout
- AC adapter with locking mechanism

<sup>\*1</sup> If exceeding 328 ft. (100 m) in Long reach mode, CAT.5E HDC, Cat5e STP, and Cat6 STP cables are recommended.

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