# **CrystalView HDT**



## **Features and Benefits**

- Supports HDMI, VGA, or DVI video input
- HDMI Output resolutions to 1080p
- Converts VGA and analog audio to HDMI
- Extension over standard CATx cable
- Receivers powered via CATx cable (PoE)
- USB keyboard/mouse and HID touchscreen support
- Dolby TrueHD and DTS-HD audio pass-through
- 1U chassis can house up to 6 HDMI or VGA transmitter cards
- Any combination of HDMI and VGA cards possible, each with local HDMI output
- Monitor hot plug detection and DDC support
- Infrared remote controller support (30 to 56 kHz)
- AC and DC redundant power supplies
- Headphone output at receivers for monitoring
- HDMI input is HDCP 1.3 compliant
- Laptop computers can be connected at remote receivers for keyboard and mouse control
- Connected computers can be started via Wake-on-LAN network messages
- Rack mountable options

- Transmits 1080p HDMI video up to 328' (100m)
- Accepts VGA input up to 1920 x 1200
- Remote receivers powered via CATx (PoE)
- Extends USB keyboard, mouse, and touchscreens
- Supports Infrared remote controllers
- HDCP 1.3 Compliant

## **Product Overview**

The CrystalView is a modular extender system that can transport uncompressed high-definition audio and video, USB keyboard and mouse, and infrared remote controller signals over a single standard CATx cable at distances of 328 feet (100 meters).

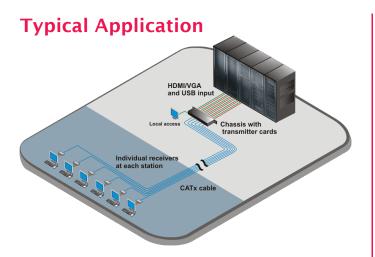
The product employs HDBaseT and Power over Ethernet (PoE) technology to supply power to the remote receivers through the CATx link. This eliminates the need for power adapters at receiver locations.

The transmitter chassis can house up to six HDMI or VGA transmitter cards, each supplying power and high definition signals to a remote receiver. VGA cards convert incoming analog video and audio signals to HDMI. DVI inputs are plugged in to the HDMI cards using a DVI to HDMI adapter. All transmitter cards have local HDMI outputs.

Video sources can be controlled by USB keyboard and mouse, HID USB touchscreens, connected laptop's keyboard/mouse, or Infrared Remote Controllers.

Copy-protected video streaming is provided by DDC support, hot plug detection of monitors, and HDCP compliance.





**Models** The CrystalView HDT is available in a single chassis model, which can host a combination of up to six HDMI or VGA Transmitter cards.

**Cables** HDMI cables and USB A-B cables are used to connect HDMI equipment to the CrystalView HDT HDMI card inputs. HD-15 combination VGA and audio cables, and USB A-B cables are used to connect analog video and audio equipment to the CrystalView HDT VGA card inputs.

**Installation** Installing CrystalView HDT extender consists of connecting up to six HDMI or VGA sources to the video inputs, along with their associated USB inputs. Attach HDMI displays, USB keyboards, and USB mice to the receiver device connectors. Apply power to the monitors and the transmitter chassis, and then apply power to the computers.

**Operation** USB keyboard hot keys can be used to adjust volume on the receiver headphone outputs. Hotkeys can also be used to adjust the HDMI video display from VGA sources.

## **Specifications**

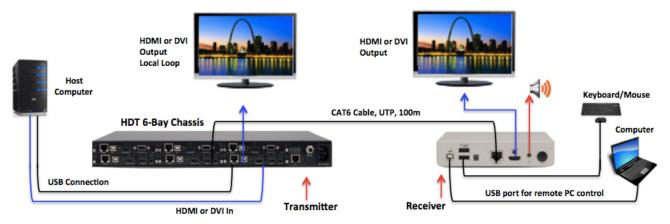
Dimensions	Transmitter (6-port):
(W x D x H)	17.28" x 9.63" x 1.75" (439 x 244 x 44 m)
	Transmitter/Receiver (single port):
	5.71" x 4.06" x 1.22" (145 x 103 x 31 mm)
Weight	Transmitter (6-port): 6.46 lb (2.93 kg)
	Transmitter/Rcvr (single port): 0.6 lb (0.27 kg)
Power	100-240 VAC 50-60Hz or 48VDC/3.3A
	Transmitter Chassis: external adapter or POE
	Transmitter (6-port): 160W POEW
	Transmitter (single port): 10W
	Receiver (single port): 10W
Resolution	VGA: 1920 x 1200@60Hz
	HDMI input: 1080p (50/60Hz)
	HDMI output: 1080p (50/60Hz)
	Video Bandwidth: single-link, 225Mhz
	Color depth: 8-bit, 10-bit
Audio	Audio pass-through: Surround sound (7.1ch),
	Dolby True HD and DTS-HD
ID Froquency	30 to 56Khz
IR Frequency	
Distance	HDMI: 330' (100m)
Distance	HDMI: 330' (100m)
Distance	HDMI: 330' (100m) Transmitter Cards:
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female
Distance	HDMI: 330' (100m) <b>Transmitter Cards:</b> HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio)
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female
Distance	HDMI: 330' (100m) <b>Transmitter Cards:</b> HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B
Distance	HDMI: 330' (100m) <b>Transmitter Cards:</b> HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack Receiver Unit:
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack Receiver Unit: HDMI video: HDMI female
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack Receiver Unit: HDMI video: HDMI female USB device: USB Type A (2)
Distance Connectors	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack Receiver Unit: HDMI video: HDMI female USB device: USB Type A (2) Laptop connector: USB Type B
Distance	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack Receiver Unit: HDMI video: HDMI female USB device: USB Type A (2) Laptop connector: USB Type B Operating temp: 32°F–104°F (0°C–40°C)
Distance Connectors	HDMI: 330' (100m) Transmitter Cards: HDMI card input video: HDMI female VGA card input video: HD15 (Video/Audio) HDMI local video out: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack or PoE Transmitter Unit: HDMI video: HDMI female USB host: USB Type B Link: RJ45 Power: barrel jack Receiver Unit: HDMI video: HDMI female USB device: USB Type A (2) Laptop connector: USB Type B

## **Part numbers**

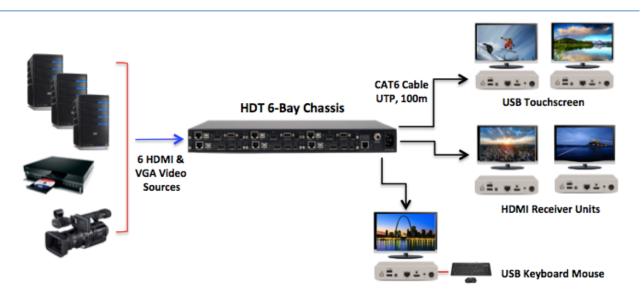
CRK-2HDTXU	CrystalView HDBaseT HDMI Extender Kit (Transmitter, Receiver, and PSU)
CRV-HDT-CH06-P	CrystalView HDT 6-bay chassis
CRV-DLHTXU-P/IRK	HDMI Transmitter Card
CRV-DLVTXU-P/IRK	VGA Transmitter Card
CRV-SRHTXU-P	HDMI Receiver Unit with POE
CRV-DLHTXU	HDMI Transmitter Unit
CRV-SRHTXU	HDMI Receiver Unit



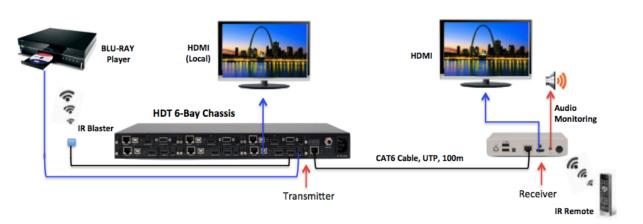
## **CrystalView HDT Application Diagrams**



CrystalView HDT set-up when connecting to a host computer



CrystalView HDT set-up when connecting to multiple video sources



CrystalView HDT set-up when connected to a BLU-Ray video player

#### WWW.ROSE.COM = sales@rose.com = (800) 333-9343



Rose Electronics • 10707 Stancliff Road • Houston, Texas 77099 Rose USA (281) 933-7673 • Rose Europe +49 (0) 2454 969442 Rose Asia +65 6324 2322 • Rose Australia +61 (0) 421 247083 datasheet-crystalview-hdt.pdf • 2017-11-17