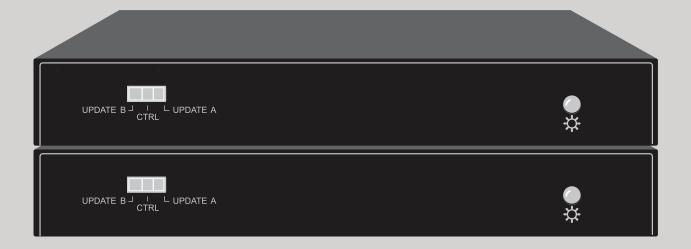
DATA SHEET

VX-HDB-KIT, VX-HDB-TX, VX-HDB-RX, VX-HDB2-KIT, VX-HDB2-TX, VX-HDB-RX

HDBT HDMI VIDEO EXTENDERS

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM





HDBT HDMI VIDEO EXTENDERS DATA SHEET

INTRODUCTION

The 4K HDBaseT HDMI Video Extender Kit, 70 m, PoH, IR, RS-232 consists of a transmitter and a receiver. It extends an 1080p/4K HDMI signal over CAT5e/CAT6a cable up to 229 feet (70 meters). It also supports CEC, bidirectional RS-232 and IR control, and bidirectional PoH.

The HDMI 2.0 4K 60Hz 4:4:4 HDR HDBaseT Video Extender, PoC IR, RS-232 consists of a transmitter and a receiver. It extends an 1080p/4K HDMI signal over CAT5e/CAT6a cable up to 229 feet (70 meters) or 131 feet (40 meters) using PoC. It also enables IR and RS-232 passthrough to control a source or display device remotely. The extender uses visually lossless video compression technology (VLC) to ensure the HD lossless transmission of HDR and 4K @ 60 Hz/4:4:4 over CAT5e/CAT6a cable.

FEATURES: VX-HDB-KIT

- SUPPORTS FULL HD: DELIVERS A HIGH-RESOLUTION IMAGE (1080P @ 60 HZ @ 48 B/PIXELS/3D/4K X 2K
- MAXIMUM TRANSMISSION DISTANCE IS UP TO 131 FEET (40
 METERS) FOR 4K X 2K AND UP TO 229 FEET (70 METERS) FOR 1080P
 OVER A SINGLE CAT5E/CAT6A CABLE
- HIGH-BANDWIDTH: 10.2 GBPS
- HDTV COMPATIBLE
- HDMI 1.4 AND HDCP 2.2 COMPLIANT
- SUPPORTS BIDIRECTIONAL POH
- USES HDBASET TECHNOLOGY
- LED INDICATORS SHOW WORK STATUS

FEATURES: VX-HDB2-KIT

- SUPPORTS 4K/UHD/60 HZ/4:4:4
- SUPPORTS HDMI 2.0 AND HDCP 2.2 AND IS BACKWARDS-COMPATIBLE TO THE PREVIOUS VERSIONS
- MAXIMUM TRANSMISSION DISTANCE IS UP TO 131 FEET (40 METERS) FOR 4K X 2K AND UP TO 229 FEET (70 METERS) FOR 1080P
- USES CEC, IR, AND RS-232 PASSTHROUGH FOR LONG-DISTANCE CONTROL
- INCLUDES BI-DIRECTIONAL POC FOR SIMPLIED WIRING
- SUPPORTS HDR
- INCLUDES A DIP SWITCH FOR CONTROL, UPDATE A, AND UPDATE B

COMPARISON CHART

SPECIFICATION COMPARISON CHART							
	VX-HDB-TX	VX-HDB-RX	VX-HDB2-TX	VX-HDB2-RX			
RESOLUTION	640 X 480 @ 60 HZ, 4K X 2K @ 30 HZ	640 X 480 @ 60 HZ, 4K X 2K @ 30 HZ	UP TO 4K X 2K @ 60 HZ 4: 4:4	UP TO 4K X 2K @ 60 HZ 4: 4:4			
INPUT	(1) HDMI, (1) IR, (1) RS-232	(1) HDBASET, (1) IR, (1) RS-232	(1) HDMI, (1) IR, (1) RS-232	(1) HDBASET, (1) IR, (1) RS-232			
OUTPUT	(1) HDBASET, (1) IR, (1) RS-232	(1) HDMI, (1) IR, (1) RS-232	(1) HDBASET, (1) IR, (1) RS-232	(1) HDMI, (1) IR, (1) RS-232			
HDMI STANDARD	HDMI 1.4 AMD HDCP 2.2	HDMI 1.4 AMD HDCP 2.2	HDMI 2.0 AMD HDCP 2.2	HDMI 2.0 AMD HDCP 2.2			
BANDWIDTH	10.2 GBPS		18 GBPS				
POWER SUPPLY	INPUT: 100 TO 240 VAC, 50/60 HZ, EXTERNAL POWER SUPPLY; OUTPUT: 24 VDC, 1.25 A		INPUT: 100 TO 240 VAC, 50/60 HZ, EXTERNAL POWER SUPPLY; OUTPUT: 12 VDC, 2 A				
TRANSMISSION MODE AND DISTANCE	HDBASET: 1080P < OR = 229 FT. (70 M); 4K X 2K < = 131 FT. (40 M)						
AUDIO	DIGITAL AUDIO, TRANSMIT THROUGH HDMI AUDIO DIGITAL AUDIO, TRANSMIT THROUGH HDMI 2.0 AUD		THROUGH HDMI 2.0 AUDIO				



SPECIFICATIONS

HDBT HDMI VIDEO EXTENDERS (VX-HDB-KIT)

FRONT VIEW

BACK VIEW

RX

RX

VX-HDB-TX

VX-HDB-TX

VX-HDB-RX

VX-HDB-RX

VX-HDB-RX

VX-HDB-RX

WHAT'S INCLUDED WITH THE TRANSMITTER

- (1) TRANSMITTER
- (2) MOUNTING EARS WITH (4) SCREWS
- (4) PLASTIC CUSHIONS
- (1) RS-232 CABLE
- (1) 24-VDC, 1.25-A POWER SUPPLY

WHAT'S INCLUDED WITH THE RECEIVER

- (1) RECEIVER
- (2) MOUNTING EARS WITH (4) SCREWS
- (4) PLASTIC CUSHIONS
- (1) RS-232 CABLE

4K HDBASET HDMI VIDEO	
TRANSMITTER	
INPUT	(1) HDMI, (1) IR, (1) RS-232
INPUT CONNECTOR	(1) HDMI female, (1) 3.5-mm mini jack, (1) 3p captive screw connector
AUDIO	Digital audio, transmit through HDMI audio
OUTPUT	(1) HDBaseT, (1) IR, (1) RS-232
OUTPUT CONNECTOR	(1) RJ-45, (1) 3.5-mm mini jack, (1) 3p captive screw connector
RECEIVER	
INPUT	(1) HDBaseT, (1) IR, (1) RS-232
INPUT CONNECTOR	(1) 3.5-mm mini jack, (1) RJ-45, (1) 3p captive screw connector
AUDIO	Digital audio, transmit through HDMI audio
OUTPUT	(1) HDMI, (1) IR, (1) RS-232
OUTPUT CONNECTOR	(1) HDMI female, (1) 3.5-mm mini jack, (1) 3p captive screw connector
GENERAL	
TRANSMISSION MODE	HDBaseT
TRANSMISSION DISTANCE	1080p < or = 229 ft. (70 m);
	4K x 2K < = 131 ft. (40 m)
RESOLUTION	640 x 480 @ 60 Hz, 4K x 2K @ 30 Hz
BANDWIDTH	10.2 Gbps
HDMI STANDARD	HDMI 1.4 and HDCP 2.2
IMPEDANCE	75 ohms
POWER SUPPLY	Input: 100 to 240 VAC, 50/60 Hz, external power supply; Output: 24 VDC, 1.25 A
POWER CONSUMPTION	14 W (max.)
OPERATING TEMPERATURE	32 to 122° F (0 to 50° C)
HUMIDITY	10 to 90% relative humidity
DIMENSIONS	0.6" H x 4.5" W x 4.3" D (1.6 x 11.5 x 10.9 cm)
WEIGHT	Transmitter: 0.425 lb. (0.193 kg): Receiver: 0.432 lb. (.0.196 kg)

NOTE: ALL NOMINAL LEVELS ARE AT $\pm 10\%$.



SPECIFICATIONS

HDBT HDMI 2.0 VIDEO EXTENDERS (VX-HDB2-KIT)



WHAT'S INCLUDED WITH THE TRANSMITTER

- (1) TRANSMITTER
- (4) MOUNTING EARS WITH (4) SCREWS
- (1) RS-232 CABLE
- (1) 12-VDC, 2-A POWER SUPPLY

WHAT'S INCLUDED WITH THE RECEIVER

- (1) RECEIVER
- (8) PLASTIC CUSHIONS
- (1) 3-PIN PHOENIX CONNECTOR

HDMI 2.0 4K 60 HZ 4:4:4 H	DR HDBASET VIDEO EXTENDER KIT, POC IR, RS-232 (VX-HDB2-KIT, VX-HDB2-TX, VX-HDB2-RX)
TRANSMITTER	
INPUT	HDMI IN
OUTPUT	HDBT OUT
CONTROL PORTS	IR IN, IR OUT, RS-232
RECEIVER	
INPUT	HDBT IN
ОИТРИТ	HDBT OUT
CONTROL PORTS	IR IN, IR OUT, RS-232
GENERAL	
TRANSMISSION MODE AND DISTANCE	HDBaseT: 1080p < or = 229 ft. (70 m); 4K x 2K < = 131 ft. (40 m)
RESOLUTION	Up to 4K x 2K @ 60 Hz 4: 4:4
BANDWIDTH	18 Gbps
HDMI STANDARD	HDMI 2.0 and HDCP 2.2
POWER SUPPLY	Input: 100 to 240 VAC, 50/60 Hz, external power supply; Output: 12 VDC, 2 A
POWER CONSUMPTION	14 W (max.)
OPERATING TEMPERATURE	32 to 104° F (0 to 40° C)
STORAGE TEMPERATURE	+14 to +122° F (-10 to +50° C)
HUMIDITY	0 to 90% relative humidity
DIMENSIONS	0.6" H x 4.5" W x 3.3" D (1.6 x 11.5 x 8.4 cm)
WEIGHT	Transmitter: 0.330 lb. (0.150 kg): Receiver: 0.337 lb. (.0.153 kg)

ORDERING INFORMATION

ITEM	CODE			
4K HDBaseT HDMI Video Extender Kit, 70 m, PoH, IR, RS-232				
Transmitter	VX-HDB-TX			
Receiver	VX-HDB-RX			
Kit (Includes one transmitter and one receiver)	VX-HDB-KIT			
HDMI 2.0 4K 60 Hz 4:4:4 HDR HDBaseT Video Extenders, PoC, IR, RS-232				
Transmitter	VX-HDB2-TX			
Receiver	VX-HDB2-RX			
Kit (Includes one transmitter and one receiver)	VX-HDB2-KIT			
NOTE: Kits contain (1) Transmitter and (1) Receiver				

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ABOUT BLACK BOX

Black Box is a world leading technology solutions provider specializing in complete high-performance KVM, professional A/V signal distribution and extension and switching solutions for mission-critical applications. Black Box is dedicated to delivering superior project engineering, technical support, and 24/7 customer service you can rely on for your most critical operations.

Every day, our customers trust us to design, integrate, and maintain reliable control room solutions for broadcasting, post-production, stadiums & arenas, medical, air traffic control, oil & gas, government & military, and utility industries. Leave the tech to us and our comprehensive technology solutions will deliver secure connections, fast-response times, real-time collaboration and more.

FILENAME: VX-HDB-KIT_VX-HDB2-KIT_DS_REV1.PDF
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