DATA SHEET

KVXLCH-100, KVXLCHF-100

KVX SERIES 4K HDMI KVM EXTENDERS

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INTRODUCTION

The KVX Series are the Black Box® low-cost 4K HDMI KVM extenders. In a point-to-point configuration, they enable you to locally use an HDMI monitor, USB keyboard/mouse/other devices, speaker and microphone to operate a remote computer, server, or other IT device. Operation is plug-and-play.

Two versions are available:

- KVX Series 4K HDMI KVM CATx Extender (KVXLCH-100)
- KVX Series 4K HDMI KVM Fiber Extender (KVXLCHF-100)

FEATURES

- OFFERS HDMI INPUT/OUTPUT VIDEO QUALITY UP TO 4K @ 30 HZ
- VIDEO/USB/RS-232/AUDIO BASIC EXTENSION DISTANCE IS 330 FEET (100 METERS) OVER CAT5E/6/7
- VIDEO/USB/RS-232/AUDIO BASIC EXTENSION DISTANCE IS UP TO 18.6 MILES (30 KM) USING A SINGLE-MODE SFP TRANSCEIVER MODULE OR MULTIMODE SFP FOR SHORTER DISTANCES
- THE HDMI KVM CONSOLE EXTENDER LETS YOU CONTROL A SERVER, OR COMPUTER OVER SINGLE-MODE OR MULTIMODE FIBER OPTIC CABLE AT DISTANCES OF UP TO 30 KM (DEPENDING ON THE SFP USED, FIBER TYPE, AND FIBER BANDWIDTH*)
- SUPPORTS TRANSPARENT USB EXTENSION VIA TWO USB 2.0 PORTS PLUS TWO USB 1.1 PORTS FOR USB HUBS OR USB HIDS SUCH AS TOUCHSCREENS, PRINTERS, BARCODE READERS, KEYBOARDS AND MICE
- SUPPLIES BIDIRECTIONAL ANALOG LINE-IN/LINE-OUT EXTENSION
 AND SERIAL RS-232 EXTENSION
- SUPPORTS 4K HDMI LOCAL VIDEO OUTPUT

*NOTE: Reference the supported SFP chart on page 4.

FEATURES COMPARISON CHART				
	KVXLCH-100	KVXLCHF-100		
AUDIO	YES	YES		
RS-232	YES	YES		
LOCAL OUT CONNECTOR	YES	YES		
MEDIA	TWISTED-PAIR	FIBEROPTIC		
MAXIMUM DISTANCE	328 FEET (100 M)	UP TO 18.6 MILES (30 KM), DEPENDING ON SFP USED		
IR EXTENSION	NO	NO		
LEVEL	ENTRY-LEVEL	ENTRY-LEVEL		

COMPARISON CHART



SPECIFICATIONS

KVX SERIES HDMI KVM CATX EXTENDERS (KVXLCH-100)



WHAT'S INCLUDED WITH THE KVXLCH-100

- (1) HDMI KVM CATX EXTENDER TRANSMITTER
- (1) HDMI KVM CATX EXTENDER RECEIVER
- (2) POWER SUPPLIES (INCLUDES US, EU, UK AND AU PLUG TYPES)
- (1) HDMI CABLE (6-FT./1.8-M)
- (1) 3.5MM AUDIO CABLE (6-FT./1.8-M)
- (1) USB-B TO USB-A CABLE (6-FT./1.8-M)

SPECIFICATION	CATX TRANSMITTER	CATX RECEIVER
CONNECTORS	Host connection: Video Input: (1) HDMI female Serial Control Port: (1) DB9 female Link Port: (1) RJ-45 female USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (1) HDMI female	Console connection: Video Output: (1) HDMI female Serial Control Port: (1) DB9 male Link Port: (1) RJ-45 female USB: (4) USB Type A female Audio: (1) Mic In, (1) Speaker Out
DISTANCE	CATx cable: Up to 328 ft. (100 m)	CATx cable: Up to 328 ft. (100 m)
INDICATORS	(1) Power LED (red), (1) Link LED (green)	(1) Power LED (red), (1) Link LED (green)
MAXIMUM RESOLUTION	4K @ 30 Hz, 3840 x 2160 @ 30 Hz	4K @ 30 Hz, 3840 x 2160 @ 30 Hz
DDC SUPPORTED	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
HOUSING MATERIAL	Metal chassis	Metal chassis
OPERATING SYSTEM	OS independent	OS independent
ENVIRONMENTAL	Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing	Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing
POWER	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
DIMENSIONS	0.83" H x 3.27" W x 7.09" D (2.1 x 8.3 x 18 cm)	0.83" H x 3.27" W x 7.09" D (2.1 x 8.3 x 18 cm)
WEIGHT	0.82 lb. (0.372 kg)	0.83 lb. (0.378 kg)

SPECIFICATIONS

KVX SERIES HDMI KVM FIBER EXTENDERS (KVXLCHF-100)



WHAT'S INCLUDED WITH THE KVXLCHF-100

- (1) HDMI KVM FIBER EXTENDER TRANSMITTER
- (1) HDMI KVM FIBER EXTENDER RECEIVER
- (2) POWER SUPPLIES (INCLUDES US, EU, UK AND AU PLUG TYPES)
- (1) HDMI CABLE (6-FT./1.8-M)
- (1) 3.5MM AUDIO CABLE (6-FT./1.8-M)
- (1) USB-B TO USB-A CABLE (6-FT./1.8-M)

NOTE: SFP not included, must be ordered separately. See the chart below.

SPECIFICATIONS FOR KVX SERIES HDMI KVM FIBER EXTENDER (KVXLCHF-100)			
SPECIFICATION	FIBER TRANSMITTER	FIBER RECEIVER	
CONNECTORS	Host connection: Video Input: (1) HDMI female Serial Control Port: (1) DB9 female Link Port: (1) SFP cage USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (1) HDMI female	Console connection: Video Output: (1) HDMI female Serial Control Port: (1) DB9 male Link Port: (1) SFP cage USB: (4) USB Type A female Audio: (1) Mic In, (1) Speaker Out	
DISTANCE	Fiberoptic cable: Up to 18.6 miles (30 km), depending on SFP used	Fiberoptic cable: Up to 18.6 miles (30 km), depending on SFP used	
INDICATORS	(1) Power LED	(1) Power LED	
MAXIMUM RESOLUTION	4K @ 30 Hz, 3840 x 2160 @ 30 Hz	4K @ 30 Hz, 3840 x 2160 @ 30 Hz	
DDC SUPPORTED	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B	
HOUSING MATERIAL	Metal chassis	Metal chassis	
OPERATING SYSTEM	OS independent	OS independent	
ENVIRONMENTAL	Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing	Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing	
POWER	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply	
DIMENSIONS	0.83" H x 3.27" W x 7.09" D (2.1 x 8.3 x 18 cm)	0.83" H x 3.27" W x 7.09" D (2.1 x 8.3 x 18 cm)	
WEIGHT	0.82 lb. (0.372 kg)	0.83 lb. (0.378 kg)	

NOTE: SFP not included, must be ordered separately. See the chart below.

COMPATIBLE SFP MODULES				
PART NUMBER	DESCRIPTION	DISTANCE		
1-GBPS CONNECTIONS				
LFP441	SFP 1.25-Gb, 850-nm Multimode Fiber, LC	550 m		
LFP442	SFP 1.25-Gb, 1310-nm Single-mode Fiber, LC	20 km		
LFP412	SFP with Extended Diagnostics - 1250-Mbps Multimode Fiber, 1310-nm	2 km		
LFP413	SFP with Extended Diagnostics - 1250-Mbps Single-Mode Fiber, 1310-nm	10 km		
LFP414	SFP with Extended Diagnostics - 1250-Mbps, Singlemode Fiber, 1310-nm	30 km		
LFP416	SFP 1250-Mbps, Extended Diagnostics, 10/100/1000BASE-T, SGMII Interface, RJ-45	100 m		

NOTE: Other SFPs may work but have not been validated by Black Box, we recommend you use the suggested SFPs to avoid technical incompatibilities.





ORDERING INFORMATION

ITEM	CODE
KVX HDMI KVM CATx Extenders	
Transmitter and Receiver Kit	KVXLCH-100
KVX HDMI KVM Fiber Extenders	
Transmitter and Receiver Kit	KVXLCHF-100
Accessories	
Rackmount Kit	KVXLC-RMK
Spare Power Supply	KVXLC-PS
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.

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