## DATA SHEET

KVXLC-100, KVXLCF-100, KVXLC-200, KVXLCF-200

# KVX SERIES DVI KVM EXTENDERS

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





#### KVX SERIES DVI KVM EXTENDERS DATA SHEET

#### INTRODUCTION

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

- Four versions are available:
- KVX Series Single-Head DVI KVM CATx Extender (KVXLC-100)
- KVX Series Single-Head DVI KVM Fiber Extender (KVXLCF-100)
- KVX Series Dual-Head DVI KVM CATx Extender (KVXLC-200)
- KVX Series Dual-Head DVI KVM Fiber Extender (KVXLCF-200)

#### **FEATURES**

- OFFERS DVI-I (DVI AND VGA) INPUT/OUTPUT VIDEO QUALITY UP TO 1920 X 1200 @ 60 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 DVI 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

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

## COMPARISON CHART

FEATURES COMPARISON CHART				
	KVXLC-100	KVXLCF-100	KVXLC-200	KVXLCF-200
AUDIO	YES	YES	YES	YES
RS-232	YES	YES	YES	YES
TX LOCAL OUT DVI CONNECTORS	(1) DVI	(1) DVI	(2) DVI	(2) DVI
TX INPUT DVI CONNECTORS	(1) DVI	(1) DVI	(2) DVI	(2) DVI
RX OUTPUT DVI CONNECTORS	(1) DVI	(1) DVI	(2) DVI	(2) DVI
MEDIA	TWISTED-PAIR	FIBEROPTIC	TWISTED-PAIR	FIBEROPTIC
MAXIMUM DISTANCE	328 FEET (100 M)	UP TO 18.6 MILES (30 KM), DEPENDING ON SFP USED	328 FEET (100 M)	UP TO 18.6 MILES (30 KM), DEPENDING ON SFP USED
IR EXTENSION	NO	NO	NO	NO
LEVEL	ENTRY-LEVEL	ENTRY-LEVEL	ENTRY-LEVEL	ENTRY-LEVEL



#### KVX SERIES SINGLE-HEAD DVI KVM CATX EXTENDERS (KVXLC-100)

FRONT VIEW	BACK VIEW	FRONT VIEW	BACK VIEW
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CATx Transmitter	CATx Transmitter	CATx Receiver	CATx Receiver

#### WHAT'S INCLUDED WITH THE KVXLC-100

- (1) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES US, EU, AND UK PLUG TYPES)
- (1) DVI-D CABLE 1.8M (6 FT.)
- (1) 3.5MM AUDIO CABLE 1.8M (6 FT.)
- (1) USB-B TO USB-A CABLE 1.8 M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK)

#### SPECIFICATIONS FOR KVX SERIES SINGLE-HEAD DVI KVM CATX EXTENDER (KVXLC-100) SPECIFICATION CATX TRANSMITTER CATX RECEIVER CONNECTORS Console connection: Host connection: Video Output: (1) DVI-I female Video Input: (1) DVI-I female Link Port: (1) RJ-45 female Serial Extension: (1) DB9 male Link Port: (1) RJ-45 female USB: (1) USB Type B female USB 2.0: (2) USB Type A female Audio: (1) Line in, (1) Line out; Local Video Output: (1) DVI-I female; USB HID ports: (2) USB Type A female Serial Port: (1) DB9 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 (1) Power LED MAXIMUM RESOLUTION 1920 x 1200 @ 60 Hz 1920 x 1200 @ 60 Hz DDC, DDC2, DDC2B DDC SUPPORTED DDC, DDC2, DDC2B Metal chassis Metal chassis HOUSING MATERIAL **OPERATING SYSTEM** OS independent OS independent ENVIRONMENTAL Operating Temperature: 32 to 122° F (0 to 50° C); Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing Operating Humidity: 0 to 80%, noncondensing POWER External 5-VDC, 2-A power supply External 5-VDC, 2-A power supply DIMENSIONS 1.06" H x 7.09" W x 3.27" D (2.7 x 18.0 x 8.3 cm) 1.06" H x 7.09" W x 3.27" D (2.7 x 18.0 x 8.3 cm) 0.84 lb. (0.38 kg) WEIGHT 0.79 lb. (0.36 kg)



#### KVX SERIES SINGLE-HEAD DVI KVM FIBER EXTENDERS (KVXLCF-100)



#### WHAT'S INCLUDED WITH THE KVXLCF-100

- (1) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDS US, EU, AND UK PLUG TYPES)
- (1) DVI-D CABLE, M/M 1.8M (6 FT.)
- (1) USB TYPE A TO B CABLE, M/M 1.8M (6 FT.)
- (1) 3.5MM DUAL AUDIO/MIC CABLE, M/M 1.8M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK)

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

SPECIFICATIONS FOR KVX SERIES SINGLE-HEAD DVI KVM FIBER EXTENDER (KVXLCF-100)		
SPECIFICATION	FIBER TRANSMITTER	FIBER RECEIVER
CONNECTORS	Host connection: Video Input: (1) DVI-I female Link Port: (1) SFP cage USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (1) DVI-I female; Serial Port: (1) DB9 female NOTE: SFP not included	Console connection: Video Output: (1) DVI-I female Serial Extension: (1) DB9 male Link Port: (1) SFP cage USB 2.0: (2) USB Type A female USB HID ports: (2) USB Type A female Audio: (1) Mic In, (1) Speaker Out NOTE: SFP not included
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	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 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	1.06" H x 7.09" W x 3.27" D (2.7 x 18.0 x 8.3 cm)	1.06" H x 7.09" W x 3.27" D (2.7 x 18.0 x 8.3 cm)
WEIGHT	0.77 lb. (0.35 kg)	0.81 lb. (0.37 kg)

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.





#### KVX SERIES DUAL-HEAD DVI KVM CATX EXTENDERS (KVXLC-200)



### WHAT'S INCLUDED WITH THE KVXLC-200

- (1) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES US, EU, AND UK PLUG TYPES)
- (2) DVI-D CABLES 1.8M (6 FT.)
- (1) USB TYPE A TO B CABLE, M/M 1.8M (6 FT.)
- (1) 3.5MM DUAL AUDIO/MIC CABLE, M/M 1.8M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK)

SPECIFICATIONS FOR KVX SERIES DUAL-HEAD DVI KVM CATX EXTENDER (KVXLC-200)		
SPECIFICATION	CATX TRANSMITTER	CATX RECEIVER
CONNECTORS	Host connection: Video Input: (2) DVI-I female Link Port: (2) RJ-45 female USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (2) DVI-I female; Serial Port: (1) DB9 female	Console connection: Video Output: (2) DVI-I female Serial Extension: (1) DB9 male Link Port: (2) RJ-45 female USB 2.0: (2) USB Type A female USB HID ports: (2) 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	(1) Power LED
MAXIMUM RESOLUTION	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 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	1.71" H x 7.09" W x 3.27" D (4.4 x 18.0 x 8.3 cm)	1.71" H x 7.12" W x 3.28" D (4.4 x 18.1 x 8.3 cm)
WEIGHT	1.12 lb. (0.51 kg)	1.12 lb. (0.51 kg)

#### KVX SERIES DUAL-HEAD DVI KVM FIBER EXTENDERS (KVXLCF-200)



#### WHAT'S INCLUDED WITH THE KVXLCF-200

- (1) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES US, EU, AND UK PLUG TYPES)
- (2) DVI-D CABLES, M/M 1.8M (6 FT.)
- (1) USB TYPE A TO B CABLE, M/M 1.8M (6 FT.)
- (1) 3.5MM DUAL AUDIO/MIC CABLE, M/M 1.8M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK) NOTE: SFP not included, must be ordered separately. See chart below.

SPECIFICATIONS FOR KVX SERIES DUAL-HEAD DVI KVM FIBER EXTENDER (KVXLCF-200)		
SPECIFICATION	FIBER TRANSMITTER	FIBER RECEIVER
CONNECTORS	Host connection: Video Input: (2) DVI-I female Link Port: (2) SFP cages USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (2) DVI-I female; Serial Port: (1) DB9 female NOTE: SFP not included	Console connection: Video Output: (2) DVI-I female Serial Extension: (1) DB9 male Link Port: (2) SFP cages USB 2.0: (2) USB Type A female USB HID ports: (2) USB Type A female Audio: (1) Mic In, (1) Speaker Out NOTE: SFP not included
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	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 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	1.71" H x 7.09" W x 3.27" D (4.4 x 18.0 x 8.3 cm)	1.71" H x 7.12" W x 3.28" D (4.4 x 18.1 x 8.3 cm)
WEIGHT	1.12 lb. (0.51 kg)	1.12 lb. (0.51 kg)

COMPATIBLE SFP MODULES		
PART NUMBER	DESCRIPTION	DISTANCE
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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**

ІТЕМ	CODE
KVX DVI KVM CATx Extenders	
Single-Head Transmitter and Receiver Kit	KVXLC-100
Dual-Head Transmitter and Receiver Kit	KVXLC-200
KVX DVI KVM Fiber Extenders	
Single-Head Transmitter and Receiver Kit	KVXLCF-100
Dual-Head Transmitter and Receiver Kit	KVXLCF-200
Accessories	
Rackmount Kit	KVXLC-RMK
Desktop Mounting Bracket Kit	KVXLC-DMK
DIN Rail Mounting Bracket	KVXLC-DRM
Spare Power Supply	KVXLC-PS
NOTE: Extender kits contain (1) Transmitter and (1) Receiver	

OTES

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