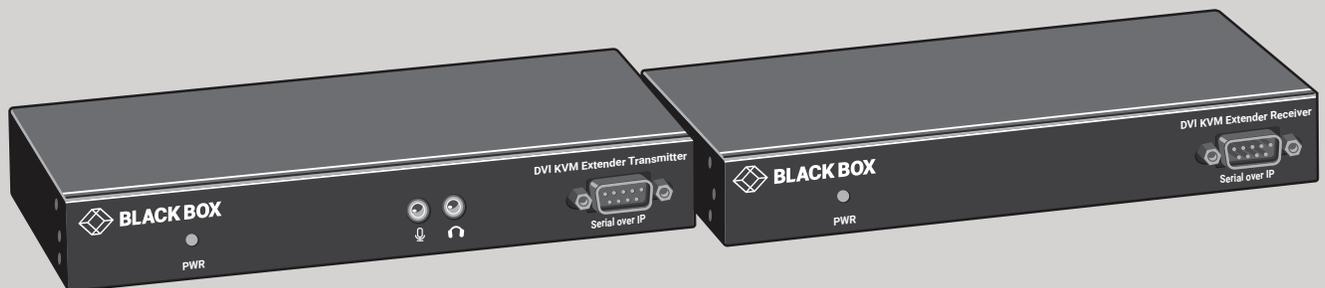KVXLC-100, KVXLCF-100, KVXLC-200, KVXLCF-200

KVX SERIES DVI KVM EXTENDERS

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

BLACK BOX

OVERVIEW

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

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SPECIFICATIONS

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

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

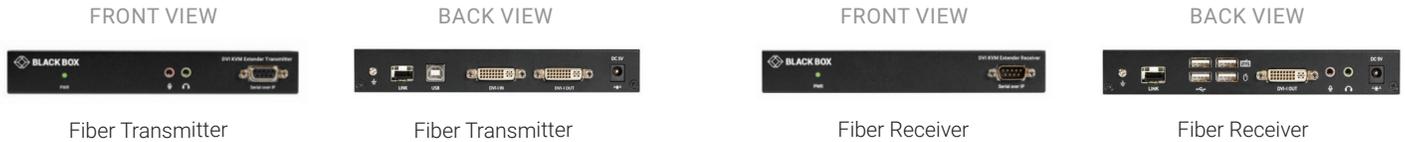## WHAT'S INCLUDED WITH THE KVXLC-100

- **(1) SINGLE-HEAD DVI KVM CATX EXTENDER TRANSMITTER**
- **(1) SINGLE-HEAD DVI KVM CATX EXTENDER RECEIVER**
- **(2) WALLMOUNT POWER SUPPLIES 5 V, 2 A W/ US, EU, AU, AND UK POWER CLIPS**
- **(1) DVI CABLE, M/M**
- **(1) USB TYPE A TO B CABLE, M/M**
- **(1) 3.5-MM DUAL AUDIO/MIC CABLE, M/M**

SPECIFICATIONS FOR KVX SERIES SINGLE-HEAD DVI KVM CATX EXTENDER (KVXLC-100)

SPECIFICATION	CATX TRANSMITTER	CATX RECEIVER

CONNECTORS	Host connection:
	  Video Input: (1) DVI-I female
	  Link Port: (1) RJ-45 female
	  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
		Console connection:
		  Video Output: (1) DVI-I female
		  Serial Extension: (1) DB9 male
		  Link Port: (1) 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	1.06" 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	0.79 lb. (0.36 kg)	0.84 lb. (0.38 kg)

SPECIFICATIONS

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

FRONT VIEW	BACK VIEW	FRONT VIEW	BACK VIEW
Fiber Transmitter	Fiber Transmitter	Fiber Receiver	Fiber Receiver

WHAT'S INCLUDED WITH THE KVXLCF-100

- **(1) SINGLE-HEAD DVI KVM FIBER EXTENDER TRANSMITTER**
- **(1) SINGLE-HEAD DVI KVM FIBER EXTENDER RECEIVER**
- **(2) WALLMOUNT POWER SUPPLIES 5 V, 2 A W/ US, EU, AU, AND UK POWER CLIPS**
- **(1) DVI CABLE, M/M**
- **(1) USB TYPE A TO B CABLE, M/M**
- **(1) 3.5-MM DUAL AUDIO/MIC CABLE, M/M**

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.

SPECIFICATIONS

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

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

WHAT'S INCLUDED WITH THE KVXLC-200

- **(1) DUAL-HEAD DVI KVM CATX EXTENDER TRANSMITTER**
- **(1) DUAL-HEAD DVI KVM CATX EXTENDER RECEIVER**
- **(2) WALLMOUNT POWER SUPPLIES 5 V, 2 A W/ US, EU, AU, AND UK POWER CLIPS**
- **(2) DVI CABLES, M/M**
- **(1) USB TYPE A TO B CABLE, M/M**
- **(1) 3.5-MM DUAL AUDIO/MIC CABLE, M/M**

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)

SPECIFICATIONS

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

FRONT VIEW	BACK VIEW	FRONT VIEW	BACK VIEW
Fiber Transmitter	Fiber Transmitter	Fiber Receiver	Fiber Receiver

WHAT'S INCLUDED WITH THE KVXLCF-200

- **(1) DUAL-HEAD DVI KVM FIBER EXTENDER TRANSMITTER**
- **(1) DUAL-HEAD DVI KVM FIBER EXTENDER RECEIVER**
- **(2) WALLMOUNT POWER SUPPLIES 5 V, 2 A W/ US, EU, AU, AND UK POWER CLIPS**
- **(2) DVI CABLES, M/M**
- **(1) USB TYPE A TO B CABLE, M/M**
- **(1) 3.5-MM DUAL AUDIO/MIC CABLE, M/M**

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
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 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	

NOTES

DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

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.