

# DATA SHEET

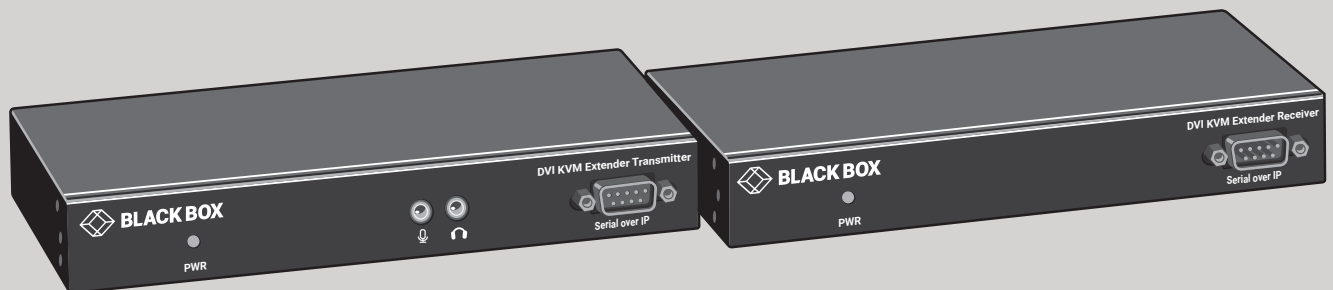
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KVXLC-100-R2, KVXLCF-100-R2, KVXLC-200-R2, KVXLCF-200-R2

# KVX SERIES DVI KVM EXTENDERS

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24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT [BLACKBOX.COM](http://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 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-R2)
- KVX Series Single-Head DVI KVM Fiber Extender (KVXLCF-100-R2)
- KVX Series Dual-Head DVI KVM CATx Extender (KVXLC-200-R2)
- KVX Series Dual-Head DVI KVM Fiber Extender (KVXLCF-200-R2)

### FEATURES

- OFFERS DVI-D INPUT/OUTPUT VIDEO QUALITY UP TO 1920 X 1200 (OR 1080) @ 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-R2	KVXLCF-100-R2	KVXLC-200-R2	KVXLCF-200-R2
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



# SPECIFICATIONS

## KVX SERIES SINGLE-HEAD DVI KVM CATX EXTENDERS (KVXLC-100-R2)

FRONT VIEW



CATx Transmitter

BACK VIEW



CATx Transmitter

FRONT VIEW



CATx Receiver

BACK VIEW



CATx Receiver

### WHAT'S INCLUDED WITH THE KVXLC-100-R2

- (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)

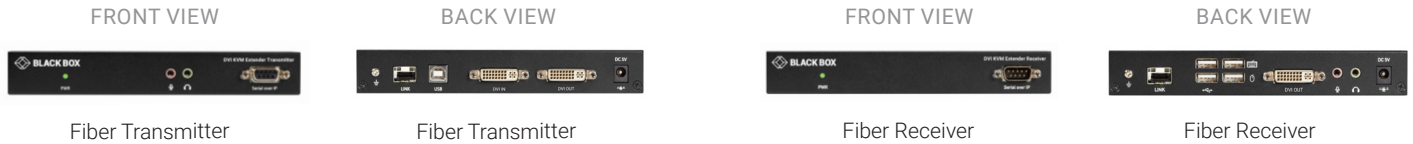
### SPECIFICATIONS FOR KVX SERIES SINGLE-HEAD DVI KVM CATX EXTENDER (KVXLC-100-R2)

SPECIFICATION	CATX TRANSMITTER	CATX RECEIVER
<b>CONNECTORS</b>	Host connection: Video Input: (1) DVI-D 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-D female; Serial Port: (1) DB9 female	Console connection: Video Output: (1) DVI-D 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
<b>DISTANCE</b>	CATx cable: Up to 328 ft. (100 m)	CATx cable: Up to 328 ft. (100 m)
<b>INDICATORS</b>	(1) Power LED	(1) Power LED
<b>MAXIMUM RESOLUTION</b>	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 Hz
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	0.79 lb. (0.36 kg)	0.84 lb. (0.38 kg)



# SPECIFICATIONS

## KVX SERIES SINGLE-HEAD DVI KVM FIBER EXTENDERS (KVXLCF-100-R2)



### WHAT'S INCLUDED WITH THE KVXLCF-100-R2

- (1) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES 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-R2)		
SPECIFICATION	FIBER TRANSMITTER	FIBER RECEIVER
<b>CONNECTORS</b>	Host connection: Video Input: (1) DVI-D female Link Port: (1) SFP cage USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (1) DVI-D female; Serial Port: (1) DB9 female NOTE: SFP not included	Console connection: Video Output: (1) DVI-D 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
<b>DISTANCE</b>	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
<b>INDICATORS</b>	(1) Power LED	(1) Power LED
<b>MAXIMUM RESOLUTION</b>	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 Hz
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	0.77 lb. (0.35 kg)	0.81 lb. (0.37 kg)

COMPATIBLE SFP MODULES		
PART NUMBER	DESCRIPTION	DISTANCE
<b>1-GBPS CONNECTIONS</b>		
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-R2)

FRONT VIEW



CATx Transmitter

BACK VIEW



CATx Transmitter

FRONT VIEW



CATx Receiver

BACK VIEW



CATx Receiver

### WHAT'S INCLUDED WITH THE KVXLC-200-R2

- (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-R2)

SPECIFICATION	CATX TRANSMITTER	CATX RECEIVER
<b>CONNECTORS</b>	Host connection: Video Input: (2) DVI-D 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-D female; Serial Port: (1) DB9 female	Console connection: Video Output: (2) DVI-D 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
<b>DISTANCE</b>	CATx cable: Up to 328 ft. (100 m)	CATx cable: Up to 328 ft. (100 m)
<b>INDICATORS</b>	(1) Power LED	(1) Power LED
<b>MAXIMUM RESOLUTION</b>	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 Hz
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	1.12 lb. (0.51 kg)	1.12 lb. (0.51 kg)

# SPECIFICATIONS

## KVX SERIES DUAL-HEAD DVI KVM FIBER EXTENDERS (KVXLCF-200-R2)



### WHAT'S INCLUDED WITH THE KVXLCF-200-R2

- (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-R2)		
SPECIFICATION	FIBER TRANSMITTER	FIBER RECEIVER
<b>CONNECTORS</b>	Host connection: Video Input: (2) DVI-D female Link Port: (2) SFP cages USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (2) DVI-D female; Serial Port: (1) DB9 female NOTE: SFP not included	Console connection: Video Output: (2) DVI-D 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
<b>DISTANCE</b>	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
<b>INDICATORS</b>	(1) Power LED	(1) Power LED
<b>MAXIMUM RESOLUTION</b>	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 Hz
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	1.12 lb. (0.51 kg)	1.12 lb. (0.51 kg)

COMPATIBLE SFP MODULES		
PART NUMBER	DESCRIPTION	DISTANCE
<b>1-Gbps CONNECTIONS</b>		
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	<b>KVXLC-100-R2</b>
Dual-Head Transmitter and Receiver Kit	<b>KVXLC-200-R2</b>
KVX DVI KVM Fiber Extenders	
Single-Head Transmitter and Receiver Kit	<b>KVXLCF-100-R2</b>
Dual-Head Transmitter and Receiver Kit	<b>KVXLCF-200-R2</b>
Accessories	
Rackmount Kit	<b>KVXLC-RMK</b>
Desktop Mounting Bracket Kit	<b>KVXLC-DMK</b>
DIN Rail Mounting Bracket	<b>KVXLC-DRM</b>
Spare Power Supply	<b>KVXLC-PS</b>
NOTE: Extender kits contain (1) Transmitter and (1) Receiver	

NOTES

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