Black Box KVXHP-200

Black Box KVXHP-200 KVM Extender User Manual

Model: KVXHP-200

INTRODUCTION

The Black Box KVXHP-200 is a high-performance KVM extender designed for point-to-point extension of dual-monitor 4K DisplayPort, USB 2.0, and serial signals. It supports resolutions up to 4096x2160 at 60Hz with 8 bits per color and 4:4:4 chroma sampling. This extender utilizes a single cable for transmission, offering flexibility with both CATx and fiber optic interfaces to suit various installation requirements. It provides a true plug-and-play experience for extending KVM signals over long distances.

Figure 1: Black Box KVXHP-200 KVM Extender. This image shows the main unit, highlighting its compact design and connectivity options.

SETUP INSTRUCTIONS

Follow these steps to set up your KVXHP-200 KVM Extender:

1. **Power Off Devices:** Ensure all connected devices (computer, monitors, USB peripherals) are powered off before beginning the installation.

2. **Connect Source Unit:**
   - Connect the DisplayPort cables from your computer's graphics card to the DisplayPort input ports on the KVXHP-200 transmitter unit.
   - Connect a USB cable from your computer's USB port to the USB input port on the transmitter unit.
   - If using serial communication, connect the serial cable from your computer to the serial port on the transmitter unit.

3. **Connect Destination Unit:**
   - Connect your monitors to the DisplayPort output ports on the KVXHP-200 receiver unit.

- Connect your USB keyboard, mouse, and other peripherals to the USB ports on the receiver unit.
- If using serial communication, connect the serial cable from your peripheral to the serial port on the receiver unit.

4. **Connect Extender Units:** Connect the transmitter and receiver units using a single CATx cable (for copper extension) or a fiber optic cable (for fiber extension). Ensure the cable is securely connected to the appropriate port on both units.

5. **Apply Power:** Connect the provided power adapters to both the transmitter and receiver units and plug them into a power outlet.

6. **Power On Devices:** Power on your monitors, computer, and any connected USB or serial peripherals. The KVM extender should automatically establish a connection.

OPERATING INSTRUCTIONS

The KVXHP-200 KVM Extender operates as a transparent extension for your KVM signals. Once properly set up, no additional configuration is typically required for basic operation.

- **Automatic Detection:** The extender automatically detects and extends DisplayPort video, USB 2.0, and serial signals.
- **USB Hub Functionality:** The integrated USB 2.0 hub on the receiver unit allows connection of multiple USB peripherals, which will function as if directly connected to the source computer.
- **Dual Monitor Support:** The extender supports two DisplayPort monitors, enabling extended desktop or mirrored display configurations as set on your source computer.

MAINTENANCE

To ensure optimal performance and longevity of your KVXHP-200 KVM Extender, observe the following maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the units. Do not use liquid or aerosol cleaners, as they may damage the device.
- **Ventilation:** Ensure the units are placed in a well-ventilated area to prevent overheating. Do not block any ventilation openings.
- **Environmental Conditions:** Operate the device within its specified temperature and humidity ranges. Avoid exposing the units to extreme temperatures, direct sunlight, or excessive moisture.
- **Cable Management:** Keep cables organized and free from kinks or excessive bending, especially fiber optic cables, to prevent signal degradation or damage.

TROUBLESHOOTING

If you encounter issues with your KVXHP-200 KVM Extender, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No video on monitors	- Loose DisplayPort cables. - Incorrect DisplayPort input/output selection. - Extender link cable (CATx/fiber) not connected or damaged. - Power not supplied to units. - Source computer not outputting video.	- Check all DisplayPort cable connections. - Ensure DisplayPort cables are connected to the correct ports. - Verify the extender link cable is securely connected and undamaged. - Confirm both transmitter and receiver units are powered on. - Check computer's video output settings and ensure it's powered on.

Problem	Possible Cause	Solution
USB devices not responding	- Loose USB cables. - USB cable from computer to transmitter not connected. - USB device not compatible or requiring too much power.	- Check all USB cable connections. - Ensure the USB cable from the computer is connected to the transmitter. - Try connecting the USB device directly to the computer to verify functionality.
Intermittent signal loss	- Poor quality or damaged extender link cable. - Excessive cable length. - Electromagnetic interference (EMI).	- Replace the extender link cable with a high-quality, certified cable. - Ensure cable length is within specified limits for your cable type. - Relocate units or cables away from potential sources of EMI.

Specifications

Feature	Detail
Model Number	KVXHP-200
Product Dimensions	20 x 12.8 x 6.1 inches
Item Weight	11.15 pounds
Video Resolution	Up to 4096x2160 @ 60Hz (8 bits per color, 4:4:4 chroma sampling)
Video Interface	DisplayPort 1.2 (Dual Monitor Support)
USB Interface	USB 2.0 Hub (High-Speed Transparent)
Serial Interface	Yes
Extension Medium	CATx or Fiber Optic Cable
Manufacturer	Black Box Network
Date First Available	September 1, 2022

Warranty and Support

For detailed warranty information and technical support, please refer to the documentation included with your product or visit the official Black Box Network Services website. Warranty terms and conditions may vary by region and product. Keep your proof of purchase for warranty claims.

For direct support, you can typically find contact information on the manufacturer's website:

Black Box Network Services Official Website