



[Manuals.plus](#) /

› [Black Box](#) /

› Black Box EMD5004-R Emerald DeskVue KVM Receiver User Manual

Black Box EMD5004-R

Black Box EMD5004-R Emerald DeskVue KVM Receiver User Manual

Model: EMD5004-R | Brand: Black Box

1. INTRODUCTION

The Black Box EMD5004-R Emerald DeskVue KVM Receiver is a high-performance device designed to extend and switch KVM (Keyboard, Video, Mouse) signals over a network. This receiver supports 4K video resolutions up to 3840 x 2160, providing crystal-clear visuals for demanding applications. It features multiple connectivity options including network (RJ-45), USB, and HDMI, making it suitable for various professional environments. This manual provides essential information for the proper setup, operation, and maintenance of your EMD5004-R KVM Receiver.

2. SAFETY INFORMATION

- **Power Supply:** Use only the specified power adapters (12 V DC or 19 V DC) provided or approved by Black Box. Using incorrect power supplies can damage the device and void the warranty.
- **Ventilation:** Ensure adequate ventilation around the unit. Do not block ventilation openings. Overheating can lead to malfunction.
- **Environment:** Operate the device in a clean, dry environment. Avoid exposure to moisture, extreme temperatures, or direct sunlight.
- **Servicing:** Do not attempt to open or service the unit yourself. Refer all servicing to qualified personnel.
- **Cables:** Ensure all cables are securely connected and not pinched or damaged.

3. PACKAGE CONTENTS

Verify that your package contains the following items:

- Black Box EMD5004-R Emerald DeskVue KVM Receiver Unit
- Power Adapter (12V DC or 19V DC, depending on region/model)
- Quick Start Guide (if applicable)

- Mounting Kit (if applicable)

If any items are missing or damaged, please contact Black Box support immediately.

4. PRODUCT OVERVIEW

The EMD5004-R receiver features various ports and indicators for connectivity and status monitoring.

4.1 Front Panel

Typically, the front panel includes status LEDs and possibly some USB ports for convenient access.

- **Power LED:** Indicates power status.
- **Link/Activity LEDs:** Indicate network connection and data activity.
- **USB Ports:** For connecting keyboard, mouse, and other USB peripherals.

4.2 Rear Panel

The rear panel houses the primary connection ports.

- **HDMI Ports (3x):** Connect to your display monitors.
- **Network Ports (RJ-45, 2x):** Connect to your network switch or directly to the KVM transmitter.
- **USB Ports (5x total, including front):** For connecting various USB devices.
- **Power Input (12V DC / 19V DC):** Connect the provided power adapter.

5. SETUP

Follow these steps to set up your EMD5004-R KVM Receiver:

1. **Power Off Devices:** Ensure all devices (monitors, computers, KVM transmitter) are powered off before making connections.
2. **Connect Monitors:** Connect your HDMI display monitors to the HDMI output ports on the rear panel of the EMD5004-R receiver using high-quality HDMI cables.
3. **Connect USB Peripherals:** Connect your keyboard, mouse, and any other USB peripherals to the available USB ports on the receiver.
4. **Connect Network Cables:** Connect one or both RJ-45 network ports on the receiver to your network switch or directly to the corresponding KVM transmitter unit using standard Ethernet cables. Ensure the network infrastructure supports the required bandwidth for 4K video.
5. **Connect Power:** Connect the provided power adapter to the DC power input port on the receiver, then plug the adapter into a suitable power outlet.
6. **Power On:** Power on your monitors, then the EMD5004-R receiver, and finally the KVM transmitter and connected computers.

Note: For optimal performance, ensure all cables are of appropriate length and quality, especially for 4K video transmission.

6. OPERATING INSTRUCTIONS

Once the EMD5004-R receiver is set up and powered on, it will establish a connection with the KVM transmitter.

6.1 Powering On/Off

- **Power On:** Connect the power adapter. The unit will power on automatically.
- **Power Off:** Disconnect the power adapter from the unit.

6.2 KVM Switching

The EMD5004-R works in conjunction with a KVM transmitter. Switching between connected computers is typically managed through the KVM transmitter unit or via hotkey commands from the connected keyboard. Refer to the KVM transmitter's manual for specific switching procedures.

6.3 Video Resolution

The receiver supports a maximum video resolution of 3840 x 2160 (4K). Ensure your monitors and graphics cards are capable of supporting this resolution for optimal display quality.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Do not use liquid or aerosol cleaners.
- **Firmware Updates:** Periodically check the Black Box website for firmware updates for your EMD5004-R. Firmware updates can improve performance, add features, or resolve issues. Follow the instructions provided with the firmware update package carefully.
- **Cable Management:** Ensure cables are neatly organized and not under strain to prevent damage to ports or cables.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No video on display.	Loose HDMI cable. Incorrect input selected on monitor. No signal from transmitter. Power issue.	Check and re-secure HDMI cables. Select correct HDMI input on your monitor. Verify transmitter is powered on and connected. Ensure receiver is powered on and power LED is lit.
Keyboard/Mouse not responding.	Loose USB cable. USB port issue. Transmitter connection issue.	Check and re-secure USB cables. Try a different USB port on the receiver. Verify network connection between receiver and transmitter.
Network connection issues.	Loose RJ-45 cable. Network configuration. Faulty cable/port.	Check and re-secure RJ-45 cables. Verify network settings and ensure proper IP configuration (if applicable). Try a different network cable or port.

If troubleshooting steps do not resolve the issue, please contact Black Box technical support.

9. SPECIFICATIONS

Model Number	EMD5004-R
---------------------	-----------

Brand	Black Box
Maximum Video Resolution	3840 x 2160 (4K)
Network Ports	2 x RJ-45
USB Ports	5 x USB
HDMI Ports	3 x HDMI
Input Voltage	12 V DC, 19 V DC
TAA Compliant	Yes
GTIN/UPC	822088280897

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Black Box website or contact your local Black Box representative. Keep your purchase receipt as proof of purchase for warranty claims.

Black Box Website: www.blackbox.com

