



## Firmware Revision Information

**Product Code(s):** EMD2000PE, EMD2002PE, EMD2000SE, EMD2002SE & EMD200DV-T

**Product Name(s):** *Emerald-PE/SE 6.0.4\_8050*

**Date Modified:** 20<sup>th</sup> October 2020

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### **This document outlines:**

1. Product Description
2. Firmware Installation
3. Notes on Release

For further information: [Click here for User Manual](#)

### **Product Description:**

Emerald is a high-performance KVM matrix switching solution that connects to both Physical and Virtual Machines. The zero-client IP-based KVM platform delivers pixel-perfect 2K/HD resolution over an IP network.

### **Firmware Versions**

EMDSE\_V6.0.4\_8050– software for the Emerald appliances.

### **Key Features include:**

1. Enables Interoperability for a EMD-4K Receiver to connect to any EMD HD transmitter (EMD2000SE-T, EMD2002SE-T, EMD2000PE-T, EMD2002PE-T, EMD200DV-T)
2. Zones – ability to create access rights based on a “zone” which a Receiver can be allocated to (same login – but different rights on different Receivers)
3. Video setting of Best Quality updated to be “pixel perfect” for EMD-PE family (with associated increased network bandwidth)
4. Power Users on unmanaged systems can access Transmitter settings & reboot Transmitters.
5. Added OSD Filter to Connections List (to filter connection list case-insensitive)
6. Improved NAT/firewall compatibility
7. Enhanced system diagnostics

### **Resolutions to defects:**

1. Resolved errors on API “force\_connection” failing when repeatedly accessed with very short intervals
2. Resolved issue with DKM interoperability introduced in 5.6 f/w
3. Resolved issue with Dell Touch-screen P2418HT.
4. Resolved issue with waking some sleeping servers.
5. Resolved issue with network failure on certain switches
6. Audio now working through NATs
7. OSD hotkey operation improved (time-outs)
8. LFP416 SFP now functions on EMD-PE
9. Resolved issue where rebooting the server which the Transmitter is connected to while in connection occasionally caused blank video, relaunching the connection to the Transmitter recovers from this problem

### **Notes on this Release: - Known issues**

1. NATs may exhibit decreased video performance (depends on their bandwidth performance)
2. Firewalls may exhibit decreased video performance and decreased audio quality

3. Receivers exiting a shared connection may cause of a pause <0.5 second in the audio and video of the shared connection
4. Occasional performance degradation on connections to some Windows VM using RDP (reduced frame-rate compared to 5.2.9).
5. Old VMs that do not support RFX settings are no longer supported
6. EMD-SE/PE/ZeroU transmitters cannot be configured by an EMD4000-R when unmanaged.

### **Firmware Installation**

#### **Boxilla Upgrade:**

For systems managed with Boxilla please refer to the Boxilla user manual which can be found on [www.Blackbox.com](http://www.Blackbox.com)

### **Unmanaged System upgrade**

#### **When upgrading, the Transmitter must be upgraded before the Receiver**

##### **To upgrade the Transmitter:**

1. Download the Transmitter image file to the root of a memory stick. Please ensure the memory stick is formatted to a FAT filesystem.
2. Reboot both the Receiver and the Transmitter. Preferably, have them connected point-to-point with a network cable.
3. On the Receiver, login and select the following menu options: Control > Transmitter.
4. Enter the IP address of the Transmitter and select Apply.
5. Select Upgrade.
6. Select the .clu image file .The Receiver will then initiate the Transmitter upgrade.
7. The Transmitter will reboot once the upgrade has completed.
8. A message will appear on the OSD stating the Transmitter Upgrade was successful.

##### **To upgrade the Receiver:**

1. Download the Receiver image file to the root of a memory stick. Please ensure the memory stick is formatted to a FAT file system.
2. Power up the Receiver and plug in the memory key.
3. Login and select the following menu options: Control > System > Upgrade
4. A list of .clu files located in the root of your memory stick will be displayed. Select the V6.0.4 .clu image file. Select OK.
5. The files will be copied to the unit and a message will appear. Select OK.
6. The upgrade will begin, and the Receiver will reboot once completed.
7. Once completed, log in and select the Information tab to review the software version.

### **Supported upgrade paths:**

The following versions can be upgraded to this release

- 5.2.9\_r6703, must upgrade to 5.6.0\_r7733 first then to 6.0.4
- 5.6.0\_r7733
- V6.0.2 (Beta Releases)

### **Required Boxilla version for upgrades under managed environment:**

BXA\_4.0.5.5781.bbx

### **Links below can also be used to access Manuals**

For support in US, Australia, New Zealand and Canada – Go to: <http://www.blackbox.com/>

For support in all other countries, please go to: <http://www.blackbox.eu/>