

Firmware Revision Information

Product Code(s):

ZeroU Appliances: EMD200DV-T, EMD200DP-T

SE Appliances: EMD2000SE-T/R, EMD2002SE-T/R, EMD2000SE-DP-T, EMD2002SE-DP-T,
EMD2000SE-T-R2, EMD2000SE-DP-R

PE Appliances: EMD2000PE-T/R, EMD2002PE-T/R, EMD2000PE-DP-T, EMD2002PE-DP-T,
EMD2000PE-T-R2, EMD2002PE-T-R2

4K Appliances: EMD4000 T/R

Product Name(s): 6.8.0_r11889

Date Modified: 19th April 2024

This document outlines:

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

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 HD and UHD resolution over an IP network.

Firmware Versions:

6.8.0_r11889 – software for all Emerald appliances

This release is compatible with the following product software versions:

- Boxilla Manager 4.9.0
- Boxilla Manager 4.8.0
- Boxilla Manager 4.7.1
- Remote App 2.8.3

Key Features added (since last release 6.7.0):

1. Exclusive Mode Connection type (permanent owner of Keyboard, Mouse and USBr among Shared Connections until it exits).
2. Customer configurable Idle-Splash-Screen.

Defects Resolved (since last release 6.7.1):

1. BUG-6432: Elgato Stream Deck locks up sometimes when buttons pressed repeatedly;
2. KVMAPP-843 – Default Mouse acceleration for Absolute mouse updated

Known issues:

- Legacy VMs that do not support RFX settings are not supported on SE/PE Receiver units.
- EMD-SE/PE/ZeroU Transmitters cannot be upgraded by an EMD4000-R when unmanaged and vice-versa.
- Downgrading a Transmitter from FW V6.7.1 release to FW V6.2.0 release will result in the HID setting getting deleted. This setting will need to be re-applied for the system to function correctly.
- NAT support is available only from appliance firmware version 6.3.10_r11011 and above. For utilizing NAT support, Customer will also have to upgrade Boxilla to software version 4.6.1 and above.
- When initiating a new connection request via the northbound API from a different user, a 4K receiver might exhibit a black screen.
 - **Workaround**
 - Re-launch a connection from Boxilla or via northbound API
 - Terminate a connection via northbound API, before launching a new connection
 - Set the OSD to Auto, then the new connection launch request via the northbound API will terminate existing Boxilla connection and then launch the new connection

Firmware Installation

Supported upgrade paths

The following versions can be upgraded to this release

- 6.3.3_r10203
- 6.3.10_r11011
- 6.5.0_r11096
- 6.6.1_r11301
- 6.7.0_r11637
- 6.7.1_r11749

Managed System Upgrade

See the Boxilla Manager Manual for details of upgrade procedure.

Boxilla Manager Version 4.8.0 or higher is required to manage appliances on this firmware version. Boxilla should be upgraded to 4.8.0 before appliances upgrade is attempted.

Unmanaged System upgrade

Note: 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/fit 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/fit files located in the root of your memory stick will be displayed. Select the latest upgrade 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.

Documentation

For downloading the manuals or getting Black Box support – please go to: <https://www.blackbox.com/>

Previous Release Information

6.7.1 Release

Software Versions - v6.7.1_r11749

Key Features include:

- None – a bug fix release

Defects Resolved:

1. 798: Supporting usage of LFP411/412 with Emerald appliances
2. 685/767: Connection terminates during network port scanning
3. General improvements in reliability and stability

6.7.0 Release

Software Versions - v6.7.0_r11637

Key Features include:

- Connection label color configuration
- Supporting USB redirection of encrypted (FIPS 197 & FIPS 140-2) thumb drives
- Adding support for following Emerald receiver
 - EMD2000SE-DP-R

Defects Resolved:

- 391: Supporting USB redirection of Matias Apple keyboard for MAC OS target
- 419: Supporting USB redirection of USB headset (Plantronics BlackWire 3220) for MAC OS target
- 702, 738: Enhanced alert messages for end user clarity
- 722: Configuring OSD resolution at the startup to match the display resolution supported by monitor
- 764: Addressing receiver lockup issue during 2K RDP VM connection
- 768: Supporting USB redirection (White listed) of Chyron keyboard
- 774, 782, 784: Fixed Unresponsive OR corrupted OSD issues during usage of special (Windows) Key
- 799: Boxilla API logout commands cause black screen or stale frame
- General improvements in reliability and stability

6.6.1 Release

Software Versions - v6.6.1_r11301

Key Features include:

- Enhanced OSD
 - Instant connection launch through OSD or Hotkey
 - Instant connection switching to previous connection using Hotkey
 - Instant OSD launch on connection termination
- Supporting Inactivity Timer (connection & OSD timeout) configuration of individual Emerald receiver in managed mode
- Supporting Japanese & Belgian Keyboards on OSD
- Reduction of video latency in 4K lossless system
- Supporting touchscreen usage as absolute mouse in shared mode
- Adding support for following transmitters

- EMD2000PE-T-R2
- EMD2002PE-T-R2
- EMD2000SE-T-R2

Defects Resolved:

- 705: Support added for Garmin touchscreen to be used as absolute mouse in shared mode
- 688: Supporting Belgian keyboard on OSD
- 650: Supporting Japanese keyboard on OSD
- 687: Fixed OSD issue observed during appliance firmware upgrade from 6.2.0 to 6.3.3 when connected to monitor Dell P2722H
- SanDisk thumb drive enumeration reliability on transmitters EMD2000SE-DP-T, EMD2002SE-DP-T, EMD2000PE-DP-T, EMD2002PE-DP-T
- General improvements in reliability and stability

6.5.0 Release

Software Versions - v6.5.0_r11096

Key Features include:

- Adding support for following transmitters
 - EMD2000SE-DP-T
 - EMD2002SE-DP-T
 - EMD2000PE-DP-T
 - EMD2002PE-DP-T

Defects Resolved:

- General improvements in reliability and stability
- LS-651 Fixed OSD freeze on Acer monitor model KG241Q

6.3.10 Release

Software Versions - v6.3.10_r11011

Key Features include:

- Interoperability
- Transmitter side scaling
- Dual mode streaming
- Connection sharing aspect
- Audio/Video blink reduction
- Connection label overlay resize

Defects Resolved:

- 674 – Support added for eGalaxyTouch EXC3188-3002-07.00.00 touchscreen.
- 648 – Support for extended capabilities of Logitech G PRO M-R0070 mouse and Logitech G915 LIGHTSPEED
 - Keyboard over USB.
- 606 – REST API support to provide statistics of an active VM connection on a 4K receiver.
- 289 – There is no longer a perceivable pause time in Video and Audio of an active connection while joining or leaving a shared session.
- 4246 – Fixed video freeze issue when setting EDID as HP_v220BB.

6.3.3 Release

Software Versions - v6.3.3_r10203

Key Features include:

- Connection Labels Added
Note: Not available on EMD2002SE-R appliance
- Enhanced Compression on 4K Connections
- New HID Option – Absolute mouse with no audio – setting is ‘Absolute Basic’

Defects Resolved:

- General improvements in reliability and stability
- 3781 – HID settings not maintained on downgrade

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