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Firmware Revision Information

Product Code(s): EMD2000PE, EMD2002PE, EMD2000SE, EMD2002SE & EMD200DV-T, EMD4000, EMD200DP-T, EMD2000SE-DP-T, EMD2002SE-DP-T, EMD2000PE-DP-T & EMD2002PE-DP-T

Product Name(s): 6.3.10_r11011

Date Modified 19 December 2022

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:

6.3.10_r11011 – software for the Emerald appliance (supported on all Emerald devices)

This release is compatible with the following produce software versions:
- Boxilla Manager   **4.6.0.6960**
- RemoteApp   **2.7.0.126**

Key Features added (since last release 6.3.3):

1. Interoperability: 4K transmitter support an optimized connection, which enables both HD and 4K receiver to make an optimized connection with a 4K transmitter.
    - Optimized connection from a HD receiver to a 4K transmitter is fully interoperable along with Audio and USBr.
    - OSD support for updating the 4K transmitter setting from a HD receiver and vice-versa.

2. Transmitter side scaling: This feature enables the 4K transmitter to scale down the ingress resolution greater than 1920x1200.

3. Dual mode streaming: This feature enable the 4K transmitter to start both optimized and lossless video stream in parallel. User can join a 4K receiver in lossless mode while a HD/4K receiver is already connected in optimized mode and vice-versa.

4. Connection sharing aspect: With the introduction of dual stream mode, both HD and 4K transmitters is limited to sharing a maximum of eight connection. A HD transmitter can share a maximum of eight optimized connections from a HD or 4K receiver. On a 4K transmitter following combinations are applicable.
   - Maximum of eight lossless connections from a 4K receiver.
   - Maximum of eight optimized connections from 4K or HD receiver.
   - Maximum of eight mixed lossless and optimized connections (Dual stream mode).

5. Support for New DP Transmitter
   - EMD2000SE-DP-T
   - EMD2002SE-DP-T
   - EMD2000PE-DP-T
   - EMD2002PE-DP-T

6. Connection label: Connection label overlay resized from 480x40 pixels to 800x72 pixels.

For further information on these features, please download the Emerald Manuals on the www.blackbox.com

Defects Resolved (since last release 6.3.3):

1. General improvements in reliability and stability
2. 674 – Support added for eGalaxTouch EXC3188-3002-07.00.00 touchscreen.
3. 648 – Support for extended capabilities of Logitech G PRO M-R0070 mouse and Logitech G915 LIGHTSPEED keyboard over USBr.
4. 606 – REST API support to provide statistics of an active VM connection on a 4K receiver.
5. 289 – There is no longer a perceivable pause time in Video and Audio of some active connections while joining or leaving a shared session.
6. 4246 – Fixed video freeze issue when setting EDID as HP_v220BB.

Notes on this Release: - Known issues:

- VM Connections PE/SE:- The performance of this connection type has improved with this release. It should be noted however when running full screen full motion video, you may encounter some video freezes. The issue results in the connection terminating and automatically restarting. The system will automatically reset and resolve the issue. Running standard windows desktop applications you will not see this issue. If running full motion video for extended time periods on VM's, it is advisable not to upgrade to this release
- Downgrading from this release (6.3.10_r11011), with the HID set to 'Absolute Basic' will result in the HID option being displayed as 'Default' (but functioning as 'Absolute basic') – To correct, the required hid option needs to be selected and Applied.
- When using bonded connections, if the user repeatedly makes and breaks connections via the OSD in quick succession, then one of the bonded pair may fail to launch or disconnect.
  In such cases, the user has two options
    1. If a private bonded connection, manually close the connection.
    2. If a share bonded connection, relaunching the bonded connection will resolve the issue.
- 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.

Firmware Installation

Supported upgrade paths

The following versions can be upgraded to this release
- 6.1.4_r8910
- 6.2.0_r9381
- 6.3.3_r10203

Managed System Upgrade

See the Boxilla Manager Manual for details of upgrade procedure.

Boxilla Manager Version 4.6.x or higher is required to manage devices on this firmware version.
Boxilla should be upgraded to 4.6.x 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.

<u>Documentation</u>

Manuals can be found at the links below.

For support in US, Australia, New Zealand and Canada – please go to: http://www.blackbox.com/

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

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Previous Release Information

6.3.3 Release

Software Versions - v6.3.3_r10203

Key Features include:
- Connection Labels Added
  Note: Not available on EMD2002SE-R devices
- 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

6.2 Release

Software Versions - v6.2.0_9381

Key Features include:

- Supports EMD200DP-T
- LACP on dual-network port devices
- Improved Switch time
- Improved Diagnostics
- Support new hardware version of EMD2000SE Receivers (no functional change on device – support for new component).

Defects Resolved:

- General improvements in reliability and stability
- LS-504 –resolutions for OSD being reset during upgrade fixed. Factory default for OSD resolution for all devices set to 1280x1024
- LS-493 – When using 16:10 resolutions can get "RDP resolution not compatible" error message on login.

6.1.3 Release

Software versions - v6.1.3_8786

Key Features include:

- Support new hardware version of EMD2000SE Receivers (no functional change on device–support for new component).

Resolutions to defects:

- BUG-3386–"Black-screen" after reboot of Windows10 machine with multiple video heads on GPU.