

Vertiv™ Avocent® HMX 8000

High Performance KVM Extender System

Release Notes

VERSION 4.02, APRIL 1, 2021

Release Notes Section Outline

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1. Upgrade Instructions

NOTE: For additional product information, please refer to the Avocent® HMX High Performance KVM Extender System Next Generation Installer/User Guide and the Avocent® HMX Advanced Manager Installer/User Guide.

Transmitters and receivers are flash upgradable at any time to ensure that your system is running the most current version available. If your system is running the most current firmware version and is managed by the Avocent® HMX Advanced Manager software, then that same version must be used across all units in your system. Firmware versions can be mixed in configurations not using the Advanced Manager software, but it is always recommended to use the most current version. The Advanced Manager software On-Board Web Interface (OBWI) provides a central location for you to perform a firmware upgrade on any linked unit.

To upgrade the firmware on the Avocent® HMX Advanced Manager server:

1. In the user interface (OBWI) of the Avocent® HMX Advanced Manager server, or the primary server, select *Dashboard- Settings- Managers* and ensure that the Require Authentication radio button is set to No. If it is not set to No, change it and click *Save*.
2. Select *Dashboard- Backups* and ensure the backup option to Download to your computer is selected. Click *Backup Now*.
3. Using the Avocent® HMX Advanced Manager software server, verify that all transmitters and receivers are connected and online.
4. Navigate to *Dashboard- Updates* and browse to the location of the software update file.
5. Select the file and click *Open*.
6. Click *Upload*. Do not restart or turn the Avocent® HMX Advanced Manager software server off until the upgrade is complete.
7. After the upgrade is complete, click *Restart Now*.

NOTE: While the update is applied, the primary server temporarily loses communication. During this time, the backup server acts as the primary server. You are redirected to the backup server's web interface and automatically logged in. When the primary server becomes available, you are redirected back to that web interface.

8. If you have an Avocent® HMX Advanced Manager backup server, repeat the steps above to upgrade the backup server. Then, proceed to the next step.
9. The upgrade should now be complete. To verify, select *Dashboard- Settings- Managers* on the primary Avocent® HMX Advanced Manager software server and confirm both servers are upgraded and synchronized.

To upgrade the firmware on the transmitters and receivers:

1. In the user interface (OBWI) of the Avocent® HMX Advanced Manager server, select *Dashboard- Updates*.

2. In the Upload new TX/RX Firmware section, click *Browse*.
3. Select the firmware file and click *Open*.
4. Click *Upload*.
5. For each transmitter and receiver to be upgraded, select the corresponding checkbox.
-or-
Select the Upgrade All checkbox.
6. Click *Upgrade Selected Transmitters*.
-or-
Click *Upgrade Selected Receivers*.

2. Package Version Information

APPLIANCE/PRODUCT	IMAGE/CODE VERSION
Avocent® HMX 8000 Transmitters and Receivers	V4.2

3. Features and Enhancements

This version of the Avocent® HMX 8000 high performance KVM extender system adds the following features and enhancements:

NOTE: This release requires Avocent® HMX Advanced Manager software version 4.12 or higher.

- Adds support for 10-bit color and HDR:
 - Supports video signals with color formats using 10-bits per color (bpc) as well as the standard 8-bpc. The following dynamic ranges are supported:
 - SDR8: Uses 8-bpc (24-bits in total, per pixel) as supported across the range of the Avocent® HMX high performance KVM extender system
 - SDR10: Uses 10-bpc (30-bits total) in order to define a wider color gamut
 - HDR10: Uses 10-bpc to define a wider color gamut and benefits from ST2084 dynamic range mastering and BT.2020 colorimetry support
- Adds support for full touch-screen control for touch-screens not needing proprietary drivers:
 - A floating, semi-transparent icon may be positioned anywhere on screen to launch the On-screen Display (OSD) in point-to-point, basic matrix or Avocent® HMX Advanced Manager control
 - An on-screen keyboard is available
 - Single touch-screen operation takes effect as soon as the USB link is made between the screen and the Avocent® HMX receiver
NOTE: If installing two touch-screens, ensure the receiver knows which screen to correctly attribute to each USB input.
- Adds support for basic matrix operation:
 - Although most Avocent® HMX high performance KVM extender systems are organized and managed by a central Avocent® HMX Advanced Manager server, you may now create small networks of HMX extenders in a matrix arrangement (for example, multiple transmitters and receivers that freely cross-connect)
NOTE: While this connection method works well for a small number of transmitters and receivers, it becomes more difficult to manage as additional units are attached. The maximum number of transmitter sources that may be made available to any receiver is 16.
- Adds support for local feed-through at the receiver:
 - Avocent® HMX 8000 high performance receivers may be configured to support a local link to a separate host computer via a dedicated transmitter (in addition to the main link to the network)
 - In this scenario, the locally linked computer remains completely isolated from the main network:
 - Ensure the IP port used for the local link is not allocated an IP address

- The local link connection to the transmitter must use the same type of port as the main network connection (both SFP or CAT x, for example)
- Adds a new option in the USB filtering tool that allows blocking of mass storage devices (“No USB mass storage” feature):
 - This option prevents the use of USB mass storage devices on the receiver unit
 - This option is particularly useful when smart card readers need to be used for security purposes, but the use of a USB drive needs to be prevented

4. Resolved Issues

- Added workaround for error in the EDID of an LG Ultrawide 38UC99 monitor (3840 x 1660) which did not display video unless active sync was enabled
- Resolved issue where rebooting the Avocent® HMX Advanced Manager caused temporary loss of a channel connection
- Resolved issue where, in point-to-point mode, enabling or disabling the receiver’s USB setting had no immediate effect on the current channel and required either a reboot or deleting/re-adding the USB connection on the preset
- Resolved issue where the Video Mirroring feature did not support DisplayPort audio

5. Known Issues

The following issues apply to the Avocent® HMX 8000 high performance KVM extender system.

AREA	ISSUE DESCRIPTION	WORKAROUND
Audio	DisplayPort audio may send channel data to the wrong speaker.	If this issue occurs (even without the presence of the Avocent® HMX 8000 extenders), rebooting your computer usually resolves the issue.
Video	<ul style="list-style-type: none"> • 3440 x 1440 @50 Hz is not supported. • Intermittent video “tearing” may occur at 1080p @ 144 Hz. 	<ul style="list-style-type: none"> • No workaround at this time. • Disconnect and reconnect the channel.
Upgrading	<ul style="list-style-type: none"> • When upgrading from v2.02 to v3.0 (via the OBWI) using a computer web browser to upload the image, the upgrade file upload from the browser to the Avocent® HMX 8000 extender incorrectly times out. A dialog box appears, indicating an error. • The RJ45 ports may be disabled if you upgrade to v3.0, downgrade to v2.02 (via the OBWI), then upgrade back to v3.0 via switch mode. 	<ul style="list-style-type: none"> • Option 1: Upgrade directly via a USB stick or the Avocent® HMX Advanced Manager software. • Option 2: Proceed with the upgrade via the OBWI anyway. Although the error dialog box appears, the upload actually succeeds and the upgrade proceeds (LEDs will flash green/blue). Ignore any <i>Upload timed out</i> messages, and when the LEDs stop flashing, clear the dialog box and select the option to manually reboot. The upgrade then takes effect. • Option 1: Upgrade directly via a USB stick or the Avocent® HMX Advanced Manager software. • Option 2: Proceed with the upgrade via the OBWI and perform a full “upgrade from file” to v3.00.0014.
Transmitter	On the transmitters, the OBWI is not updated for network port speed, and causes issues when switching from SFP to CATx.	Instead of using the <i>Refresh</i> button on the Network Settings page, reload the entire web page for the device URL.