



Avocent® HMX High Performance KVM Extender System, Next Generation, and the Avocent® HMX Advanced Manager Release Notes

VERSION 4.9, DECEMBER 1, 2019

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.

Pre-requisites

A mixed system where the Advanced Manager software is at version 4.4 and the HMX extender system transmitters and receivers are at version 4.5 is not supported. If the Avocent® HMX Advanced Manager software is upgraded to version 4.5, then the connected transmitters and receivers (endpoints) must also be upgraded to version 4.5 in order to maintain compatibility. While the HMX Advanced Manager can be upgraded straight to version 4.5, the transmitters and receivers must be upgraded to version 4.4 first and then upgraded to version 4.5.

NOTE: It is also not possible to downgrade the extenders to version 4.1, 4.2 or 4.3. If your HMX Advanced Manager software is at version 4.1, 4.2 or 4.3, then it must be upgraded to the same version as the endpoints.

If your HMX Advanced Manager software server is being used in a backup configuration, then you must upgrade all of the HMX Advanced Manager software servers before upgrading the transmitters and receivers. See the Avocent® HMX Advanced Manager Installer/User Guide for additional information.

Systems Running Versions Earlier than 4.4

As soon as you upgrade the Avocent® HMX Advanced Manager software to version 4.5, you will be prompted to upgrade the transmitters and receivers since the minimum hardware version has been set for version 4.5.

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

1. In the user interface (OBWI) of the 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 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 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 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 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 Advanced Manager	V4.9.44052
Avocent® HMX Endpoints (Transmitters and Receivers)	V4.9.43973

3 Features, Enhancements and Resolved Issues (By Version)

This section highlights features and/or enhancements available since the last version/update of the Avocent® HMX extender system and/or the Avocent® HMX Advanced Manager software.

Avocent® HMX Extender Endpoint Updates (This Release, Version 4.9)

- Fixed corruption on On-Screen Display (OSD) if switching between low and high resolutions
- Fixed channel OSD label not displayed in 2K resolution
- Fixed issues with the HMX 6210 transmitter (remote VNC sessions, video can now be stacked vertically)
- Fixed issue occurring when the OSD was unable to be invoked after disconnecting from a dual link video channel
- Fixed web page certificate issue. Web page certificates were due to expire if using standalone endpoints set to use HTTPS instead of HTTP. The existing certificate was originally set to expire on October 4, 2020.
- Fixed issue where the channel reminder banner was not displayed over dual-link video
- Increased hotplug detect period to five seconds
- Added Elgato Streak Deck support
- Fixed issue where uTrust card reader stops working

The following additional updates were made between release 4.8 and 4.9.

This issues in the following list are now resolved:

- Unable to add backup Manager
- HMX8000 extender system with factory certificates has interfaces mismatched in the Advanced Manager database that prevent it from being added
- The HMX Advanced Manager does not allow the second video head of an HMX80000 transmitter to be set to dual-link EDID (DDC)

The following additional enhancements were made:

- Updated the HMX8000 extender system (HMX 4K) to reflect proper product names/part numbers
- Enabled debug setting in the Manager
- Prevented duplicate IP addresses in the device table
- Added device name and descriptions to syslog messages that refer to a device ID

Avocent® HMX Extender Endpoint Updates (Version 4.8)

This release covers version 4.8.42747 for the Avocent® HMX 5100, 5200 and 6200 transmitters and receivers, as well as the HMX 6210 transmitter. This release also covers version 4.8.43178 of the Avocent® HMX Advanced Manager software.

The following features have been added:

- Added local transmitter feed-through feature
NOTE: This feature requires Avocent® HMX Advanced Manager software version 4.8 or higher.
- Added support for Chyron Hego Intellicommander X-lyric keyboard
- Added fixed EDID for 3440x1440@50hz to support Ultrawide monitors
- Added support for Belfuse 1GbE SFP RJ45 modules
- Added support for Unicomp keyboard
- Added support for Fingerman fingerprint USB Reader (slow read -10 seconds)

Avocent® HMX Extender Endpoint Updates (Version 4.7)

NOTE: With this update, the HMX 5150T transmitter was at version 4.6.1.

The following issues have been corrected with/since this version:

- Maximum bandwidth limited to 750Mb/s – now 950Mb/s
- Protection added against malformed multicast packets (improved filter to stop multicast packets from being sent)
- Fixed crash caused by incorrect file setting for inbound multicast traffic
- Fixed memory leak when statistics are turned on (was causing crashes after five days)
- Fixed issue where devices occasionally go “offline”

Avocent® HMX Extender Endpoint Updates (since Version 4.6)

Endpoint changes with 4.6 included a Vertiv rebrand of all pieces, including the web pages (logos/colors) and naming. Also, the following issues have been corrected with/since version 4.6:

- USB Stall handling can result in unnecessary device rejection
- HPz840 loss of USB on transmitter restart
- Vertiv branding has not been carried through in the VNC configuration
- VNC firmware version is incorrect
- FIELD-PageUP/DN shift OSD which can lock up text entry
- Verify capacitive fingerprint reader (P6000) not reliable
- Transmitter System Configuration web page locks up trying to load thumbnails
- Dual-head mode can fail when the screen sizes are unequal
- Typing an extended ASCII character into the password input field closes the OSD
- Preferred networking mode cannot switch multicast video due to h/w limitations
- Channel OSD name could intermittently be rendered in screen center when switching channels with different resolutions
- Fixes for Disconnect/Reconnect your USB device when switching channels
- Fixed intermittent slow channel changes if Channel Labels enabled
- Fixed intermittent Channel OSD name not being displayed
- Fixed support for Lenovo Gemalto card reader
- Fixed typo on banner message
- Fixed specific teamed redundancy scenarios where video may not be received
- Fixed a rare issue where multicast packets could be corrupted
- Fixed an issue where the on-screen display (OSD) could logout on channel change

Avocent® HMX Advanced Manager Updates (since Version 4.5)

The Avocent® HMX Advanced Manager changes since version 4.5 include:

- The Avocent® MIB should have any references to Emerson replaced with Vertiv
- There is a Vertiv™ rebrand of all pieces, including the Admin site and the On-Screen Display (OSD)
- We now prevent a user from setting localhost as remote syslog server
- This release exposes the C-USB LAN Graphical User Interface (GUI) for Vertiv
- This release ensures that a DHCP server on a Vertiv™ 4.6 HMX Manager software server can serve addresses to Emerson devices

- Brand substring of firmware filenames changed from 'emerson' to 'vertiv'
- The firmware version number for the Vertiv firmware changed
- There is an update to the remote OSD background color on the branded software
- When configuring a backup from the primary, links to update licenses are now shown, but these relate to the primary
- This release allows the HMX extender system/Manager brand to be localizable
- This release makes it possible for the customer to add a new locale with a language pack
- This release adds support for the new HMX transmitter device [HMX5150T transmitter (DVID & DP)]
- Support for linking a USB6000 receiver with an HMX5000/6000 receiver and switching devices via the OSD.
- Addition of 3440x1440@60Hz to the EDID list
- Warning to users via the OSD that the Primary HMX Manager unit has failed
- Ability to have multiple DNS server IP addresses
- Manual editing of email addresses to overcome issues with Exchange 2010 servers not complying to RCF2821

The following issues with the Avocent® HMX Advanced Manager have been fixed since version 4.5:

- Transmitters' VIDEO_MB config is defaulted to 1000, rather than 950
- Not possible to create a channel with the same video source used for both heads
- Possible to bring down the network interface by providing an invalid netmask
- Replaced HMX Manager software server no longer sending email
- HMX Manager software server not sending mail to exchange server
- Remove accidental 'f' on settings page
- Premature browser redirect to primary on restoration results in *Server not available* error
- Device Daemon misreports devices as offline after failover
- On recovery from fail-over, changes made by the acting primary are not always rewritten back to the primary
- Code to purge old database backups doesn't work
- The button statuses in the get_channels API response are wrong
- The reboot_HMX Manager page has the wrong version number for the HMX Manager software
- Shortcuts page refers to "channel" when it should say "preset"
- Maximum height of OSD content should not exceed 548px
- Fix various presentation issues with OSD
- Description not truncating properly, and it causes bottom of the OSD to be clipped

4 Known Issues

UNIT	ISSUE
Avocent® HMX Advanced Manager software server	<ul style="list-style-type: none"> • A backup Manager cannot be added if HTTPS connection is set. To work around this issue, turn off HTTPS if adding a new backup Manager. • In some cases, the device name gets truncated in the syslog message. • “Identify” light box does not work when using “replace device”. • If a password contains special pronunciation characters, the OSD resets and prevents log in. • Cannot use Internet Explorer (IE) to set up start of day network settings. To work around this issue, use Chrome or Firefox as preferred browsers.
Avocent® HMX High Performance KVM transmitters and receivers	<ul style="list-style-type: none"> • The 2700 R Cloud CAC reader does not function. • Num Lock key does not work in the OSD. • Mouse pointer forced to top left of the OSD when using touchscreen devices. • Disconnect hotkeys not working (Left Ctrl + Left Alt + X)