Matrox® Video Release Notes

Matrox® ConvertIP

Version 2.00.00.205

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https://video.matrox.com



Overview

This document describes Matrox ConvertIP firmware version 2.00.00.205 and Matrox ConvertIP Manager software version 1.4.0.1343.

Matrox Video has provided these notes to describe new features, fixes, and improvements to the ConvertIP product.

What's new in this release?

This release introduces the following new features:

- Support for ST 2110 and IPMX: All ConvertIP models offer ST 2110 and IPMX support in TX and RX mode.
- **Genlock support:** ConvertIP DSS and ConvertIP DRS units in RX mode can convert the PTP clock to a broadcast blackburst output signal.
- HDCP support: Allows encoding and decoding of HDCP-protected content over HDMI.
- Additional ConvertIP Manager functionality: You can now use Matrox ConvertIP Manager to create an initial user on several ConvertIP devices at once.
- Improved Colibri performance: On ConvertIP transmitter devices, the latency for the Colibri codec has been reduced.
- **Expanded NMOS API support:** NMOS API support includes previous versions of the IS-04 and IS-05 protocols.
- General user interface improvements:
 - ConvertIP serial numbers are now visible in webpage tabs.
 - Enable/disable NTP and PTP services.
 - Programmable audio packet time.
 - Telemetry statistics for network packet behavior.
 - Network packet capture as .pcap file for analysis.
 - Improved mode change behavior (RX to TX and vice-versa).
 - Switch between ST2110 and IPMX modes on all ConvertIP models.
 - Improved Diagnostics page.

This release also addresses specific customer concerns and enhances overall product stability for all ConvertIP models.

For an overview of the Matrox ConvertIP product line, please refer to our website.

Important: Before you begin using your ConvertIP, we **highly recommend** that you update device firmware to use a common firmware across all units on the installation. The procedure is described in "Updating your ConvertIP firmware" on page 5.

Notes and limitations

- ConvertIP supports Google Chrome only. Other browsers are expected to work but have not been officially validated by Matrox Video.
- The following SFPs have been validated by Matrox Video for use with ConvertIP:
 - Mellanox MFM1T02A-SR 10G
 - o CISCO SFP-10G-SR
 - o CISCO SFP-25G-SR-S 25G
- The following SFPs are expected to work with ConvertIP but have not been fully tested and validated by Matrox Video:
 - AVAGO 10G
 - o FINISAR 10G
 - o Intel 10G
 - FS (Fiber Store) 10G & 25G
- Dual rate 10G/25G SFPs are not supported.
- ConvertIP only supports one user at a time. A logged-in user will be automatically logged out when another user logs in.
- The ConvertIP Command Center refreshes the device settings every 30 seconds. If you apply stream changes in Matrox ConductIP or Matrox ConvertIP Manager and they are not displayed, refresh the Command Center by clicking **Refresh**, or refresh your web browser (F5).
- After applying your settings in Command Center, wait a few seconds before turning on **Master enable**.
- JPEG XS is only supported at 1G/2.5G RJ45 on the ConvertIP SRST.
- The HDBaseT RJ45 connector LED lights do not currently conform to HDBaseT specification. This will be enabled in an upcoming release.

- The following features are not supported in this release, but will be supported in a future release:
 - Analog audio in/out on both RX and TX devices.
 - o IPV6.
 - o BT.2020 to RGB and BT-2020 to BT 709 conversion. If conversion is selected, BT.2020 will be treated as BT.709 content.

Known issues

- In certain network configurations, some devices in Matrox ConvertIP Manager may disappear and reappear in the list of scanned devices. If this occurs, you can resolve the issue by assigning static IP addresses to your ConvertIP devices.
- When using Matrox ConvertIP Manager to activate the JPEG XS codec on a ConvertIP, an unexpected error may sometimes occur. If this happens, you may need to manually reboot the ConvertIP device.
- If both the control connection and media connection are on the same network switch, disable mDNS and LLMNR on the media network to avoid unexpected errors.
- If something changes while a device is actively streaming to another device and the video settings are set to **Follow input** (e.g., refresh rate, resolution, etc), it may result in a corrupted video output. To avoid this issue, make sure ConvertIP always maintains the same resolution and frame rate. If this does occur, you can resolve the issue by reconnecting the RX and TX in the ConvertIP settings, then toggle **Master enable** off and on.
- If your computer has more than one network card, and you cannot detect ConvertIP devices in Matrox ConvertIP Manager, go to the **Network selection** settings, and select the card you want to use from the ones displayed. Do not use the "All network cards" option.
- On the ConvertIP DRH and DSH models, the passthrough feature is disabled by default until you have a source connected, or until you enable it manually (Master enable) in the ConvertIP settings.
- If you disable NMOS from the ConvertIP user interface, you will be unable to use Matrox ConvertIP Manager to update your devices. Additionally, with NMOS disabled, SDP files will not be accessible in the ConvertIP Dashboard area.

Updating your ConvertIP firmware

There are two ways to update your ConvertIP device.

- Update a single ConvertIP device from its configuration page.
- Use the Matrox ConvertIP Manager application to update one or more ConvertIP devices.

This section describes both methods and describes the types of firmware available.

Updating an individual ConvertIP from the configuration page

To update your ConvertIP:

- 1 Download the "Matrox_ConvertIP_Manager_v.2.00.00.205.exe" zip file from the Matrox Video website.
- 2 Unzip the file. You can unzip the file to the suggested folder (C:/Matrox) or choose a different folder. There will be a "Firmware" folder that contains the firmware files you'll need to perform the update.
- 3 Log in to your ConvertIP.

You can either go to the IP address of your ConvertIP (e.g., https://192.168.123.456), or go to https://mtxcip-ConvertIP_serial, where "ConvertIP_serial" is the serial number found on your device label. If your computer is set up to use mDNS, this will take you to the ConvertIP login page.

Note: If you do not have access to mDNS and you don't know the IP address of your ConvertIP, see "Updating one or more ConvertIP devices using ConvertIP Manager" on page 6.

- 4 After logging in, go to the **Device > Maintenance** page.
 - Click **Update firmware**, then browse to the "Firmware" folder and select the firmware that corresponds to the ConvertIP model you have, and the codec type you wish to use. Note that it is not recommended to load firmware supporting the JPEG XS codec if you have not acquired a JPEG XS license.
- **5** Update the firmware. Do not disconnect the ConvertIP until the update is complete. Your ConvertIP will reboot to apply the update.

Your ConvertIP device has been updated.

Updating one or more ConvertIP devices using ConvertIP Manager

To update your ConvertIP:

- 1 Download the "Matrox_ConvertIP_Manager_v.2.00.00.205.exe" zip file from the Matrox Video website.
- 2 Unzip the file. You can unzip the file to the suggested folder (C:/Matrox) or choose a different folder.
- 3 Run the file "Matrox_ConvertIP_Manager.exe". This will launch Matrox ConvertIP Manager to the **Devices** page. ConvertIP will automatically scan your network for connected ConvertIP devices. Click **Rescan** if needed.
 - From the **Devices** page, you will see a () next to the devices that are eligible for an update. For more information on updating devices, see the Matrox ConvertIP Manager embedded help.
- 4 Select the ConvertIP device(s) you want to update, then click **Update firmware**. The unit will be updated but kept in its current mode of operation.
 - **Note:** If you wish to change the mode or codec type, you can use the Matrox ConvertIP Manager to make the change. For more information, see the Matrox ConvertIP Manager embedded help.
- **5** ConvertIP Manager will update the devices. Do not disconnect the ConvertIP until the update is complete.
- 6 It is recommended that you create user accounts for the ConvertIP devices. For more information on creating user accounts for your devices, see the Matrox ConvertIP Manager embedded help. If you're using the Matrox ConvertIP Manager on a ConvertIP with existing credentials, you will be prompted to enter those ConvertIP credentials before the update can proceed.

Your ConvertIP device(s) have been updated.

Available firmware in download package

- Matrox ConvertIP_DRH_HDMI_Dual_RJ45_JPEGXSCodec-2.00.00.205.cip

 For use with Matrox ConvertIP DRH when the JPEG XS codec is required.

 To use this codec, you must purchase the JPEG XS codec license separately.

 For more information, contact your Matrox Video sales representative.
- Matrox ConvertIP_DRH_HDMI_Dual_RJ45_PROAVCodec-2.00.00.205.cip
 For use with Matrox ConvertIP DRH when the Colibri codec is required.

■ Matrox ConvertIP_DSH_HDMI_SFP_10G_JPEGXSCodec-2.00.00.205.cip

For use with Matrox ConvertIP DSH when the JPEG XS codec is required. To use this codec, you must purchase the JPEG XS codec license separately to enable the codec. For more information, contact your Matrox Video sales representative.

Note: This firmware supports 10G SFPs only. 25G SFPs are not supported. This firmware is suitable for uncompressed HD and compressed HD/4K workflows.

- Matrox ConvertIP_DSH_HDMI_SFP_10G_PROAVCodec-2.00.00.205.cip
 For use with Matrox ConvertIP DSH when the Colibri codec is required.
 Note: This firmware supports 10G SFPs only. 25G SFPs are not supported. This firmware is suitable for uncompressed HD and compressed HD/4K
- Matrox ConvertIP_DSH_HDMI_SFP_25G_NoCodec-2.00.00.205.cip
 For use with Matrox ConvertIP DSH when the uncompressed codec is required.

workflows.

Note: This firmware supports both 10G and 25G SFPs. Compressed workflows are not supported. This firmware is suitable for uncompressed HD and 4K workflows. This firmware is a direct update to the default firmware installed on all ConvertIP DSH units.

- Matrox ConvertIP_SRH_HDMI_Single_RJ45_JPEGXSCodec-2.00.00.205.cip
 - For use with Matrox ConvertIP SRH when the JPEG XS codec is required. To use this codec, you must purchase the JPEG XS codec license separately to enable the codec. For more information, contact your Matrox Video sales representative.
- Matrox ConvertIP_SRH_HDMI_Single_RJ45_PROAVCodec-2.00.00.205.cip
 For use with Matrox ConvertIP SRH when the Colibri codec is required.
- Matrox ConvertIP_DSS_SDI_SFP_10G_JPEGXSCodec-2.00.00.205.cip

 For use with Matrox ConvertIP DSS when the JPEG XS codec is required. To use this codec, you must purchase the JPEG XS codec license separately to enable the codec. For more information, contact your Matrox Video sales representative.
- Matrox ConvertIP_DSS_SDI_SFP_10G_PROAVCodec-2.00.00.205.cip
 For use with Matrox ConvertIP DSS when the Colibri codec is required.

- Matrox ConvertIP_DSS_SDI_SFP_25G_NoCodec-2.00.00.205.cip
 For use with Matrox ConvertIP DSS when the uncompressed codec is required.
- Matrox ConvertIP_DRS_SDI_RJ45_JPEGXSCodec-2.00.00.205.cip

 For use with Matrox ConvertIP DRS when the JPEG XS codec is required. To use this codec, you must purchase the JPEG XS codec license separately to enable the codec. For more information, contact your Matrox Video sales representative.
- Matrox ConvertIP_DRS_SDI_RJ45_PROAVCodec-2.00.00.205.cip
 For use with Matrox ConvertIP DRS when the Colibri codec is required.
- ConvertIP_SRST_HDBASET_RJ45_JPEGXSCodec-2.00.00.205.cip

 For use with Matrox ConvertIP SRST when the JPEG XS codec is required.

 To use this codec, you must purchase the JPEG XS codec license separately to enable the codec. For more information, contact your Matrox Video sales representative.

Note: This firmware only supports 1/2.5G networks and is not supported on 10G networks.

- ConvertIP_SRST_HDBASET_RJ45_PROAVCodec-2.00.00.205.cip
 For use with Matrox ConvertIP SRST RJ45 when the Colibri codec is required.
- ConvertIP_SRST_HDBASET_SFP_10G_PROAVCodec-2.00.00.205.cip

 For use with Matrox ConvertIP SRST SFP when the Colibri codec is required (JPEG XS is not supported on SRST at 10G).
- ConvertIP_SRST_HDBASET_SFP_25G_NoCodec-2.00.00.205.cip
 For use with Matrox ConvertIP SRST when the uncompressed codec is required.

Contact us

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If you have any questions or comments about our products or solutions, contact us at https://video.matrox.com/en/contact.

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