Matrox® Video Release Notes

Matrox® ConvertIP

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Overview

This document describes Matrox ConvertIP firmware version 2.06.02.013 and Matrox ConvertIP Manager software version 2.06.02.013.

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 improvements:

- JPEG XS now supports using 10G SFP on the ConvertIP SRST.

- Firmware versioning is now consistent across all product models.

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 all your installed devices to the latest firmware. For more information, see "Updating your ConvertIP firmware" on page 9.

Notes and limitations

- ConvertIP supports Google Chrome and Microsoft Edge 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
  - CISCO SFP-10G-SR
  - 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
  - FINISAR - 10G
  - 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**.

- The HDBaseT RJ45 connector LED lights do not currently conform to HDBaseT specification. This will be enabled in an upcoming release.

- When switching from a progressive format to an interlaced one in IPMX mode, it could take up to 1 minute for output to return. This does not apply when switching between ST 2110 sources in ST 2110 mode.

- It may take several seconds for an SDI monitor to lock to the DSS output signal when running in IPMX mode.

- BMC was tested up to 100 devices. If there are more than 100 devices on your network that require PTP, we recommend that you use a dedicated PTP master clock device.

- If ConvertIP DSS is set to IPMX mode, it could take up to 15 seconds for video to appear when switching sources. When switching from progressive to interlaced using IPMX it may take up to 2 minutes for output to return.

- To ensure proper functioning of ConvertIP SDM, RJ45 media and SFP media cannot both be connected at the same time.

- A RX will not be able to connect to a HDCP-protected TX unit when using manual connection method.

- The following features are not supported in this release, but will be supported in a future release:

  - IPV6.
  - BT.2020 to BT.709 and BT.709 to BT.2020 conversion.
  - SDP file to reflect the colorimetry flag found in SDI signal. Today UHD signals are identified as BT.2020 in SDP and HD signals are identified at BT.709.

- For DSH2, DSS2, and SDM2, if you are using a 10G **copper** SFP for a redundant media network (as per SMPTE 2022-7), you must use an industrial grade SFP.

- When editing the ConvertIP device name in the user interface, only basic ASCII printable characters (those between 33 and 127 in the ASCII table) are supported, up to a maximum of 16 characters.

- In Multiviewer Mode, receiver units can receive only progressive video signals, not interlaced signals.

- Multiviewer Mode supports a maximum input resolution of 1920x1080 pixels.

- Mixing color spaces is only supported when using Multiviewer Mode with uncompressed video.

- In Multiviewer Mode, it is possible to mix ST 2110 and IPMX sources.

- Link offset delay is available for video only in this release. Support for audio offset delay will be available in a future release.

- When switching ConvertIP DSH from its standard firmware to Gateway firmware or vice-versa, you must reenter all settings.

- The test pattern is not available on ConvertIP DSH when in Gateway mode.

- When the **On = Uncomp / Off = Comp** status light of a ConvertIP DSH is flashing, the unit is in Gateway mode. When in Gateway mode, if the **On = TX / Off = RX** status light is on, the device is in Encoder mode. When this light is off, the device is in Decoder mode.

Known issues

- Switching streams between unsynchronized Grand Master Clocks (GMC) devices may result in video signal loss. If this happens, re-initiate your stream by toggling the Master enable switch in ConvertIP Command Center or using your NMOS controller application (e.g., Matrox ConductIP). [HER-1139]

- The network bitrate displayed in ConvertIP Command Center may be up to 5% lower than the actual bitrate. [HER-1162]

- The ConvertIP Command Center may incorrectly indicate that certain SDI devices have more audio channels than there are outputs. Presently ConvertIP does not detect when a channel is silent. [HER-1378]

- Using Matrox ConvertIP Manager to update multiple devices may not automatically reboot some devices. If this happens, manually update the device through ConvertIP Command Center. [HER-1268]

- ConvertIP will not automatically reconnect on ST 2110 networks if input resolution or refresh rate changes. Restore the stream by toggling the Master enable switch in ConvertIP Command Center or using your NMOS controller application (e.g., Matrox ConductIP). Alternatively, manually set the resolution in Command Center to prevent recurrence. [HER-1174]

- Resolutions below 1280x720p @ 50/59.94/60Hz may not function as intended over HDMI connections. Full support is planned for a future release. [HER-910]

- 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 the monitor connected to the passthrough is HD, you must select **Passthrough** in **EDID management**. [HER-2240]

- 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.

- If you are using ConductIP, we highly recommend that you upgrade to the latest version before updating your ConvertIP. This will ease the transition. [HER-1965]

- After updating ConvertIP from 2.0x to 2.06.02.013:

    o Some items will appear offline in ConductIP. To remove these items, select **Delete all offline items** from the menu. [HER-1965]
    o All currently saved databases and presets in ConductIP will no longer be functional. You will need to re-save your databases and regenerate your presets. [HER-1965/HER-2295]

- On the ConvertIP DSH and SDM models, if you want to use fast switching and you have the color go from Full to Narrow or from YUV to RGB, you need to force your output to a set resolution and color. [HER-1954]

- In Multiviewer Mode, if no video is set on Video 1 then **Master Enable** will report off even though the other quadrants are streaming. [HER-2184]

- When using the Pro AV Colibri codec in Multiviewer mode and a stream is applied, codec artifacts will flash for a few seconds. [HER-2255]

- Mixing color spaces is not supported with JPEG XS when using Multiviewer Mode. [HER-2247]

- Multiviewer Mode on ConvertIP RX devices only supports 1920x1080 as an input resolution for each quadrant. If one quadrant uses an input with 4K resolution, it might be accepted. However, it will prevent the other quadrants from being able to populate with content. [HER-2337]

- When using the JPEG XS codec on ConvertIP DSH in Gateway – Decoder mode and the video stream input is switched from one resolution to another, codec artifacts will flash for a few seconds. [HER-2317]

- Once you've switched a ConvertIP DSH to Gateway mode, clear the browser cache and reload the Web page to ensure the ConvertIP Command Center displays correctly. [HER-2437]

- HDCP may not work as expected on ConvertIP SRST and SRH transmitters. [HER-2498]

- If a device is in Multiviewer mode and you're using the Quick connect mode for connection, you cannot add sources incrementally. Subsequent **Apply** actions fail with a "missing parameters" error. You must reset all senders and reconfigure the layout. [HER-2585]

- Previous versions of Matrox ConvertIP Manager are not compatible with the current *ConvertIP_SRST_HDBASET_SFP_10G_JPEGXSCodec* firmware. To install an earlier ConvertIP firmware version, first install the current version of a different firmware, then install the earlier ConvertIP firmware. [HER-2586]

- The **no output** option under **Lost signal settings** has been removed in this release, as it did not operate as intended. [HER-2571]

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.2.06.02.013.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 9.

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.2.06.02.013.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

- *ConvertIP_DRH_HDMI_Dual_RJ45_JPEGXSCodec-2.06.02.013.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.

- *ConvertIP_DRH_HDMI_Dual_RJ45_PROAVCodec-2.06.02.013.cip*

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

- ConvertIP_DSH_HDMI_SFP_10G_JPEGXSCodec-*2.06.02.013*.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.

- *ConvertIP_DSH_HDMI_SFP_10G_PROAVCodec-2.06.02.013.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 workflows.

- *ConvertIP_DSH_HDMI_SFP_25G_NoCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP DSH when the uncompressed codec is required.

  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.

- *ConvertIP_SRH_HDMI_Single_RJ45_JPEGXSCodec-2.06.02.013.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.

- *ConvertIP_SRH_HDMI_Single_RJ45_PROAVCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SRH when the Colibri codec is required.

- *ConvertIP_DSS_SDI_SFP_10G_JPEGXSCodec-2.06.02.013.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.

- *ConvertIP_DSS_SDI_SFP_10G_PROAVCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP DSS when the Colibri codec is required.

- *ConvertIP_DSS_SDI_SFP_25G_NoCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP DSS when the uncompressed codec is required.

- *ConvertIP_DRS_SDI_Dual_RJ45_JPEGXSCodec-2.06.02.013.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.

- *ConvertIP_DRS_SDI_Dual_RJ45_PROAVCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP DRS when the Colibri codec is required.

- *ConvertIP_SRST_HDBASET_RJ45_JPEGXSCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SRST RJ45 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-2.06.02.013.cip*

  For use with Matrox ConvertIP SRST RJ45 when the Colibri codec is required.

- *ConvertIP_SRST_HDBASET_SFP_10G_JPEGXSCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SRST SFP 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.

- *ConvertIP_SRST_HDBASET_SFP_10G_PROAVCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SRST SFP when the Colibri codec is required.

- *ConvertIP_SRST_HDBASET_SFP_25G_NoCodec-2.06.02.013.cip*

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

- *ConvertIP_SRS_SDI_Single_RJ45_JPEGXSCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SRS 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.

- *ConvertIP_SRS_SDI_Single_RJ45_PROAVCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SRS when the Colibri codec is required.

- *ConvertIP_SDM_HDMI_SFP_10G_25G_JPEGXSCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SDM 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.

- *ConvertIP_SDM_HDMI_SFP_10G_25G_PROAVCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP SDM when the Colibri codec is required.

- *ConvertIP_GW_SFP_10G_25G_JPEGXSCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP DSH when the JPEG XS codec is required and the device is used as an IP gateway. 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.

- *ConvertIP_GW_ SFP_10G_25G_PROAVCodec-2.06.02.013.cip*

  For use with Matrox ConvertIP DSH when the Colibri codec is required and the device is used as an IP gateway.

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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