

Matrox™ Release Notes

Matrox™ Maevex™ 5100 Series • Maevex™ 6100 Series
Software version 2.00.00

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www.matrox.com/graphics

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Graphics for Professionals

Overview

This document describes the current release of the Matrox Maevex 6100 Series and Maevex 5100 Series hardware, and PowerStream Plus software. Matrox provides these notes to describe bug fixes and improvements to Maevex hardware and PowerStream Plus software.

What's new in this release

This release supports the new *Matrox Maevex 6100 Series* encoder and *Matrox PowerStream Plus* software:

- Matrox Maevex 6100 Series PCIe® ×8 quad HDMI capture and H.264 encode card
- Quad HDMI® inputs with digital L-PCM stereo audio and resolution support up to 4 × 4K30
- Two 4k60 4:2:0 capture and encoding
- 8- and 10-bit, numerous color space (4:0:0 to 4:4:4), and standard H.264 encoding profile support (up to High 4:4:4); up to Level 5.2 support
- Scaling and compositing (including Picture-In-Picture, Mosaic, etc.)
- Multi-stream/multi-recording support (including simultaneous streaming and recording)
- High stream density support (up to 4 × 4k30, 2 x 4k60, 8 × 1080p60, 16 × 1080p30, and numerous SD streams or a combination)
- AAC-LC and AAC-HEv1/v2 audio encoding
- Unparalleled quality at low bit rates
- Multi-protocol support: RTSP, RTP, MPEG2-TS
- Enhanced Matrox PowerStream Plus User interface and controls
- Multi-user/multi-password support
- Unified PowerStream Plus software and corresponding firmware package (supports Maevex 6100 and 5100 Series products)
- Compatible with Matrox Secure Cable Solution HDMI cable retention mechanism (sold separately)

First-time installation of PowerStream Plus

If you're installing Matrox PowerStream Plus software for the first time, PowerStream Plus automatically detects the Maevex devices and adds them to your environment. You'll need to manually add any devices that remain undetected.

For more information, see the Matrox PowerStream Plus user guide. Matrox makes the latest PowerStream Plus software and firmware available on the Matrox web site (www.matrox.com/maevexsw).

Upgrading from an older version of Matrox PowerStream or PowerStream Plus software

If you're currently using Matrox PowerStream or PowerStream Plus software and corresponding firmware package, and you want to upgrade to a recent version of PowerStream Plus software and corresponding firmware package, do the following:

- 1** Install the latest firmware package for your Matrox Maevex 6100 Series and 5100 Series devices. (Make sure the firmware package version you're installing corresponds to the PowerStream Plus software you're planning to install.)
- 2** Install the latest version of Matrox PowerStream Plus software.
- 3** Remove the older (previously installed) version of Matrox PowerStream or PowerStream Plus software.

PowerStream Plus automatically detects the Maevex devices and adds them to your environment. You'll need to manually add any devices that remain undetected.

For more information, see the Matrox PowerStream Plus user guide. Matrox makes the latest PowerStream Plus software and firmware package available on the Matrox web site (www.matrox.com/maevexsw).

Notes and limitations

Maevex 6100 Series

- Using interlaced video as input isn't supported.
- RTMP isn't currently supported.
- HDCP (High-Bandwidth Digital Content Protection) isn't supported.
- Windows Server 2012 and Server 2008 R2 – Windows Server operating systems disable the SSDP Discovery service by default. For your devices to be automatically detected on your subnet, this service needs to be enabled. For more information on enabling this service, see Windows documentation.

- Multicast streaming requires networking hardware that supports and is properly configured for IPv4 multicasting. Otherwise, only unicast streaming will be supported.
- Switching between dynamic and static IP addresses isn't supported while encoding or decoding. Before you change the IP address, make sure you stop encoding or decoding.
- If you're using PowerStream Plus software to set a static IP address, make sure the IP address you want to set isn't already allocated to another device on the network.

Maevex 5100 Series

- This release requires firmware package version 2.00.00 for Maevex 6100 Series and firmware package version 1.05.03 for Maevex 5100 Series.
- **Windows Server 2012 and Server 2008 R2** – Windows Server operating systems disable the SSDP Discovery service by default. For your devices to be automatically detected on your subnet, this service needs to be enabled. For more information on enabling this service, see Windows documentation.
- Before daisy chaining your decoders, make sure each decoder is powered. This enables the decoder's internal network loop, allowing the DHCP server to allocate an IP address to the daisy-chained decoders.
- Audio distortion may occur if the analog audio input voltage level is too high. If this occurs, we recommend reducing the analog input signal voltage level from the host system (turn down the input volume).
- HDCP (High-Bandwidth Digital Content Protection) isn't supported. Depending on the source system, the local output of the Maevex 5150 encoder may result in a blank screen (black) while using the confidence preview output method, or in intended distorted display (blank screen or snowy display) while using the pass through output method.
- You can't stream and record at the same time (encoder).
- If failsafe is enabled (decoder), the feature overrides source-to-destination *no signal* DPMS remoting.
- USB and SD® Card connectivity aren't supported.
- Certain non-Matrox graphics cards may not properly support certain resolutions. For example, they don't output full-screen images in a 1920 × 1080 resolution (you can replicate this connecting your display directly to your graphics card). For information on the capabilities of your graphics card, contact your graphics hardware manufacturer.
- Your Maevex devices can only be detected on a DHCP network. To locate a Maevex device outside the DHCP subnet, first detect the Maevex device on the subnet, then set the Maevex device to a fixed IP address known to be available on the LAN outside the subnet. Remove the Maevex device from the subnet and place it in the intended location on the LAN.

- Multicast streaming requires networking hardware that supports and is properly configured for IPv4 multicasting. Otherwise, only unicast streaming will be supported.
- Switching between dynamic and static IP addresses isn't supported while encoding or decoding. Before you change the IP address, make sure you stop encoding or decoding.
- If you're using PowerStream Plus software to set a static IP address, make sure the IP address you want to set isn't already allocated to another device on the network.
- When switching between the **Use pass through** and **Use confidence preview** output methods on the encoder, the source system's HDMI® digital audio may be disabled. To re-enable the HDMI digital audio, disconnect and reconnect the HDMI input cable on the Maevex encoder.
- **Windows 10/8.1/7** – If your controller system doesn't have access to a DNS server or if response from its DNS server is slow, PowerStream Plus may take a long time to start up (several minutes). To avoid this delay, configure your controller system to use a fixed IP address (such as local host – 127.0.0.1) as its DNS server.
- To ensure compatibility with autonegotiating network switches and routers, your Maevex devices use autonegotiation for their network speed and duplex settings. We recommend you configure the networking hardware your Maevex product is connected to so that it also autonegotiates these settings. We also recommend you make sure the speed and duplex settings of your Maevex devices and networking hardware match. If image corruption occurs, make sure your networking hardware (and the ports connected to your Maevex devices) aren't overloaded and dropping data packets. If necessary, increase the bandwidth allocated to the ports connected to your Maevex devices, or try using different ports.
- Connecting a networked device other than a Maevex decoder (such as a computer, networked display, etc.) to the second network port of a Maevex decoder is currently unsupported.
- Connect a local monitor to a Maevex encoder's local output (**HDMI OUT**) *before* enabling the **Pass through** mode in PowerStream Plus. If you're using **Pass through** without a local monitor present, the source system may not output a valid signal, making capture impossible.
- If your source forces a signal of 1920 × 1200 @ 60 Hz, it will be automatically encoded and streamed as a 30 fps signal.
- Updating the firmware in parallel while your decoder devices are daisy chained isn't supported. Decoder devices that are daisy chained must be added to the Firmware Update Utility's list of devices to update and updated one device at a time.

PowerStream Plus API

- The current version of Maevex PowerStream Plus software and the Maevex firmware are *fully compatible* with the corresponding Maevex PowerStream Plus API (version 2.00.00). For more information on the Matrox PowerStream Plus API, or to obtain a version of the API, contact Matrox Technical Support (maevexsupport@matrox.com).

Contact us

The Matrox Web site has product literature, press releases, technical material, a sales office list, trade show information, and other relevant material. Visit us at www.matrox.com/graphics.

If you have any questions or comments about our products or solutions, contact us at
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