Matrox Maevex MGX Series

Installation and User Guide

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(Go to our *website* for the latest version)

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See the product's hardware warranty: *https://video.matrox.com/en/support/warranty/*

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CHAPTER 1

Introduction

This chapter includes the following topics:

- *About the Matrox Maevex MGX series*
- *Supported web browsers*
- *About the Matrox Maevex MGX user documentation*
- *Matrox safety information*

About the Matrox Maevex MGX series

The Matrox Maevex MGX Series of single-channel and dual-channel encoders and decoders are designed to deliver high-quality 4K60 AV-over-IP streaming with exceptionally low latency and flexible deployment options. Built for enterprise and mission-critical environments, Maevex MGX supports both open-standard IPMX and Matrox IQ Mode, enabling organizations to optimize for interoperability or maximum performance depending on their workflow needs.

With advanced codec support, multi-protocol streaming, and integrated USB functionality for interactive workflows, Maevex MGX goes beyond traditional video distribution, enabling real-time collaboration, remote access, and scalable network deployments, all while dramatically reducing bandwidth requirements.

For more information about the Matrox Maevex MGX Series, including a list of benefits and features, see our *website*.

Supported web browsers

You configure and control the Matrox Maevex MGX through a web-based user interface.

Currently, only Google Chrome (Windows and macOS) is officially supported. Other browsers may work, but have not been tested or validated by Matrox Video.

About the Matrox Maevex MGX user documentation

The Matrox Maevex MGX documentation includes the following resources:

- Matrox Maevex MGX Device Setup Sheets

  Each Maevex MGX device ships with a printed quick start sheet. It covers hardware connections and the basic setup steps to get you started. PDF versions are also available on the Matrox Video *website*.

- Matrox Maevex MGX Series Installation and User Guide

  This is the main user guide for configuring and operating the Maevex MGX. You can download it from the Matrox Video *website*, along with the latest drivers. Always refer to the *website* for the most recent version of the guide.

Matrox safety information

To ensure safe and reliable operation of your Matrox product, to avoid personal injury, and to prevent damage to your computer or Matrox hardware, read the following guidelines.

Installation and operation

- Read and retain all instructions. Only use your Matrox product according to the instructions, operating ranges, and guidelines provided in the Matrox user guide and other related Matrox documentation. Failure to follow these instructions could result in damage to your product or injury to the user or installer.
- Don't expose your Matrox product to rain, water, condensation, or moisture.
- **Caution: Hot Surface, Do Not Touch**
  Your Matrox product can become hot while operating. Ensure that your computer cover is secured in place before turning it on.
  Always turn off your computer, unplug it, and then wait for it to cool before removing the cover of your computer to touch any of its internal parts or to install your Matrox card. Allow hot surfaces to cool before touching your Matrox unit.
- **Attention: Surface chaude, ne pas toucher**
  Votre produit Matrox peut devenir chaud durant son fonctionnement. Assurez-vous de bien fermer le couvercle de votre ordinateur avant de l'allumer.
  Éteignez votre ordinateur, débranchez-le et attendez qu'il refroidisse avant d'ouvrir son couvercle pour accéder à ses parties internes ou pour installer votre carte Matrox. Laissez les surfaces chaudes refroidir avant de toucher votre appareil Matrox.
- Static electricity can severely damage electronic parts. Before touching any electronic parts, drain static electricity from your body (for example, by touching the metal frame of your computer).
- When handling a card, carefully hold it by its edges and avoid touching its circuitry.
- Don't stack devices or place devices so close together that they're subject to recirculated or preheated air.
- Don't operate your system or Matrox product near a heat source or restrict airflow to your system, and make sure the ambient temperature doesn't exceed the maximum recommended temperatures. Don't block ventilation holes on your unit or system.

If a power supply (internal or external) was included with your product

- Don't place the external power supply directly on top of the device.
- Only use power supplies originally supplied with the product or use a replacement that's approved by Matrox. Don't use the power supply if it appears to be defective or has a damaged chassis.

- Any AC-powered product must be connected to a grounded outlet installed by a licensed electrician. Don't defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug doesn't fit into your outlet, consult a licensed electrician to replace the obsolete outlet.
- Make sure that nothing rests on the power cables and that the cables aren't located where they can be stepped on, pinched, or tripped over.
- Don't use damaged power cables.
- Unplug your system or device during lightning storms or if unused for long periods of time.

If your product includes laser-based technology

- The device contains a Class 1 laser product for use only under the recommended operating conditions and guidelines. For more information, see your Matrox user guide.
- Invisible laser radiation may be emitted from disconnected fibers or connectors. Don't stare into beams or view directly with optical instruments.
- Only use optical transceivers originally supplied with the product or use a replacement that's approved by Matrox.
- For more information on laser support and compliance, see your Matrox user guide.

If your product includes a battery

- The battery is non replaceable.
- To dispose of your product, see *https://video.matrox.com/en/environment/product-waste-management*.

Repair

- Don't attempt to open or repair a power supply unit (if one was supplied).
- Don't attempt to open or repair your Matrox product.
- If there's a fault with your Matrox product, review your Matrox warranty for more information.

CHAPTER 2

Getting started with Matrox Maevex MGX

This chapter includes the following topics:

- *Initial setup overview*
- *Device connections and button functions*
- *Discovering your device on the network*
- *Logging in to the user interface*
- *Updating your device firmware*
- *Configuring SSL certificates*

Initial setup overview

Use the following steps to set up your Matrox Maevex MGX. Where applicable, links are provided to other sections for more detail.

Step 1. **Connect to network, power, and media** -- All Maevex MGX physical connections are covered in *Device connections and button functions*, as well as on the printed setup sheets included with the devices.

Step 2. **Access the web interface** -- On first boot, the Maevex MGX uses DHCP mode by default. Because the IP address is assigned automatically, you must first identify the device IP address after connecting the device to the network. You can then open the Maevex MGX interface using a supported web browser (Google Chrome is recommended). Several methods are available to locate the device IP address, including the *Matrox Central Manager* application.

More info: see *Discovering your device on the network*.

Step 3. **Log in to Maevex MGX** -- When you first access the Maevex MGX web interface, you are prompted to create the device's initial administrator account. This includes setting a username and password.

More info: see *Logging in to the user interface*.

Step 4. **Update the firmware** -- We recommend updating your device to ensure you have the most recent features and fixes. Check the Matrox Video *website* for the latest firmware version.

More info: see *Updating your device firmware*.

Step 5. **Install SSL certificates** -- To avoid browser security warnings, install a valid SSL certificate.

More info: See *Configuring SSL certificates*.

Step 6. **Create user accounts** -- As the administrator, you are responsible for creating user accounts for others who will operate the Maevex MGX.

More info: See *Creating user accounts*.

Result of this task: Your device is now ready for use.

Device connections and button functions

The information in this section is also available on the printed device setup sheets included with your Maevex MGX device:

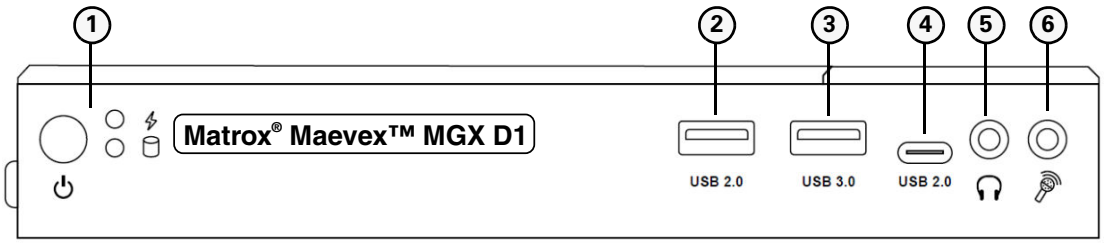
- *Matrox Maevex MGX D1*
- *Matrox Maevex MGX D2*
- *Matrox Maevex MGX E1*
- *Matrox Maevex MGX E2*

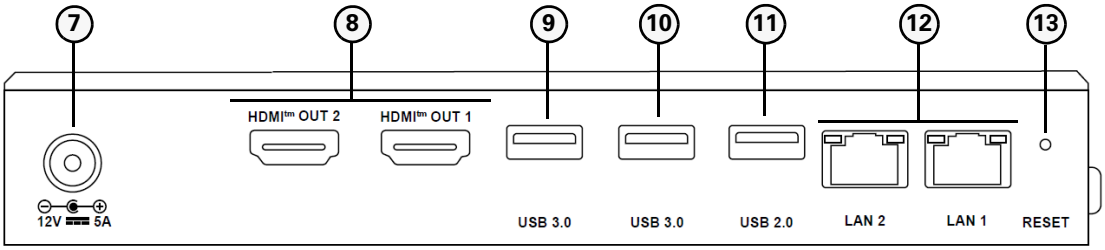
The setup sheets describe the device's hardware connections and button functions.

You can also download the latest versions of the setup sheets from the Matrox Video *website*, along with the most recent firmware.

Matrox Maevex MGX D1

NOTE Device images have been simplified for illustration purposes.





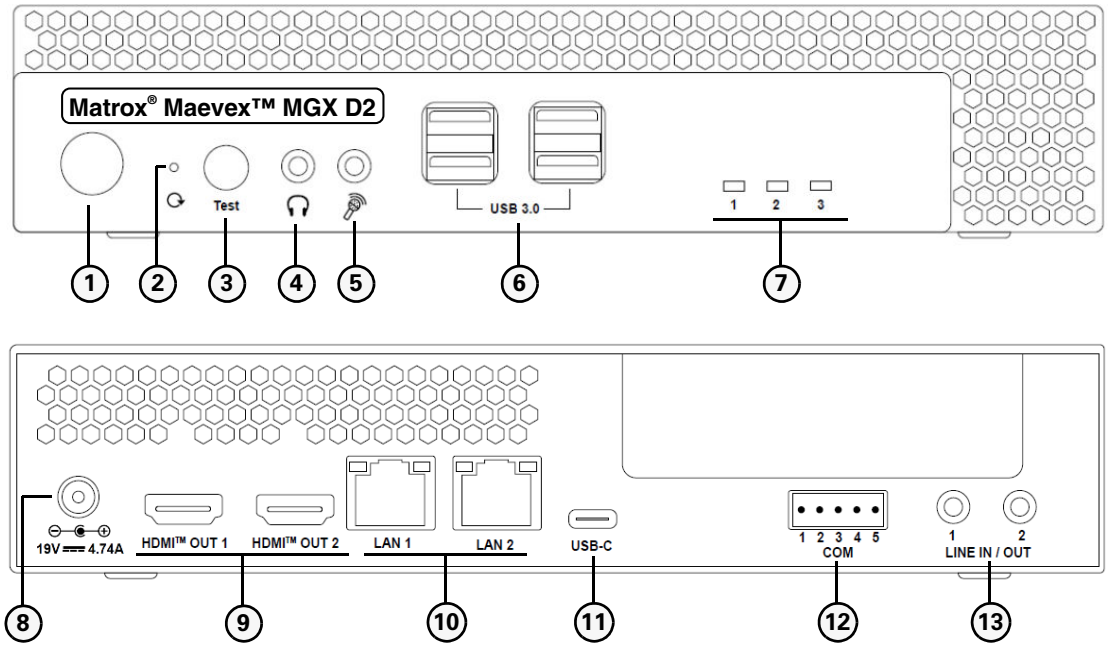
Label	Description
(1) - Power button and Status LEDs	Powers the device on or off. The button is illuminated when the device is on. Status LEDs blink when the device is reading from or writing to storage.
(2) - USB 2.0	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(3) - USB 3.0	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.

Label	Description
(4) - USB Type-C	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(5) - Audio out[1]	Standard 3.5 mm stereo output.
(6) - Microphone[1]	Microphone-level analog audio input.
(7) - Power	Connect the 12 V d.c. power supply (60 W power supply is included).
(8) - HDMI OUT 1 and HDMI OUT 2	Connect monitors to HDMI outputs 1 and 2 to view the decoded video stream(s).
(9) - USB 3.0	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(10) - USB 3.0	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(11) - USB 2.0	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(12) - LAN 1 and LAN 2	Both LAN connectors support up to 1 GbE. Each connector can be used for control (e.g. user interface access) or media. When both connectors are connected, LAN 1 is used for control and LAN 2 is used for media.
(13) - Reset	Use a paperclip or similar tool to reboot the device.

1. Additional functionality may be available in future releases.

Matrox Maevex MGX D2

NOTE Device images have been simplified for illustration purposes.

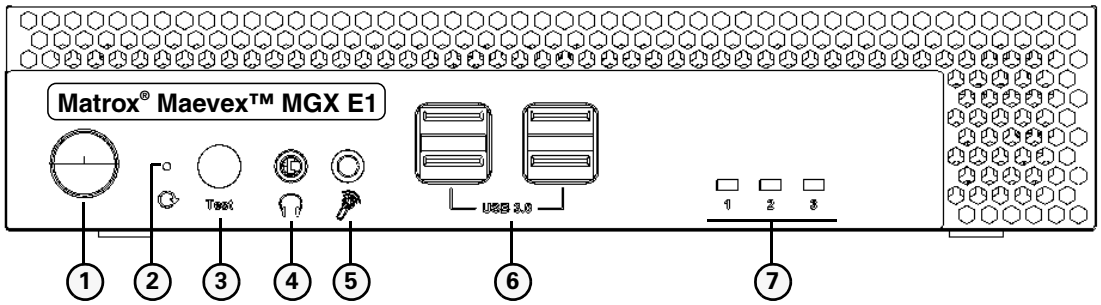


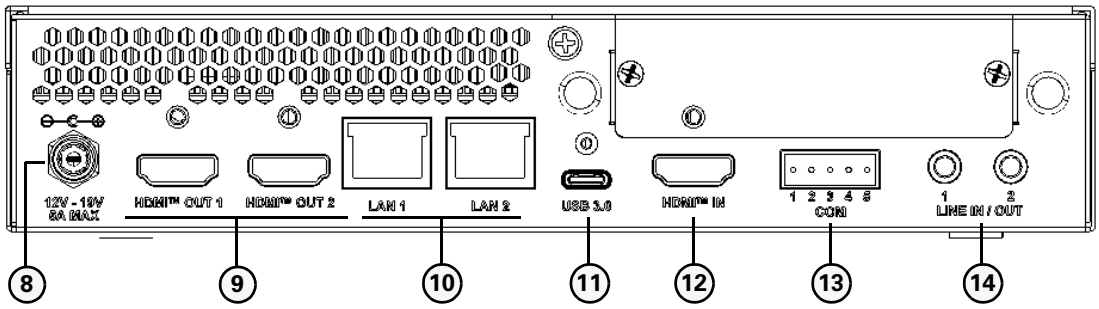
Label	Description
(1) - Power button	Powers the device on or off. The button is illuminated when the device is on.
(2) - Reset	To be supported in a future release. If you need to reboot the device, power it off and on again or use the WebUI.
(3) - Test	To be supported in a future release.
(4) - Audio out	To be supported in a future release.
(5) - Microphone	To be supported in a future release.
(6) - USB 3.0	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(7) - Status LEDs	Status LEDs flash when device is booting up. Additional functionality will be available in a future release.
(8) - Power	Connect to 19 12 V d.c. power (90W power supply is included).
(9) - HDMI OUT 1 and 2	Connect monitors to HDMI outputs 1 and 2 to view the decoded video stream(s).

Label	Description
(10) - LAN 1 and 2	Both LAN connectors support up to 2.5 GbE. Each connector can be used for control (e.g. user interface access) or media. When both connectors are connected, LAN 1 is used for control and LAN 2 is used for media.
(11) - USB Type-C	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(12) - COM port	To be supported in a future release.
(13) - LINE IN / OUT	To be supported in a future release.

Matrox Maevex MGX E1

NOTE Device images have been simplified for illustration purposes.



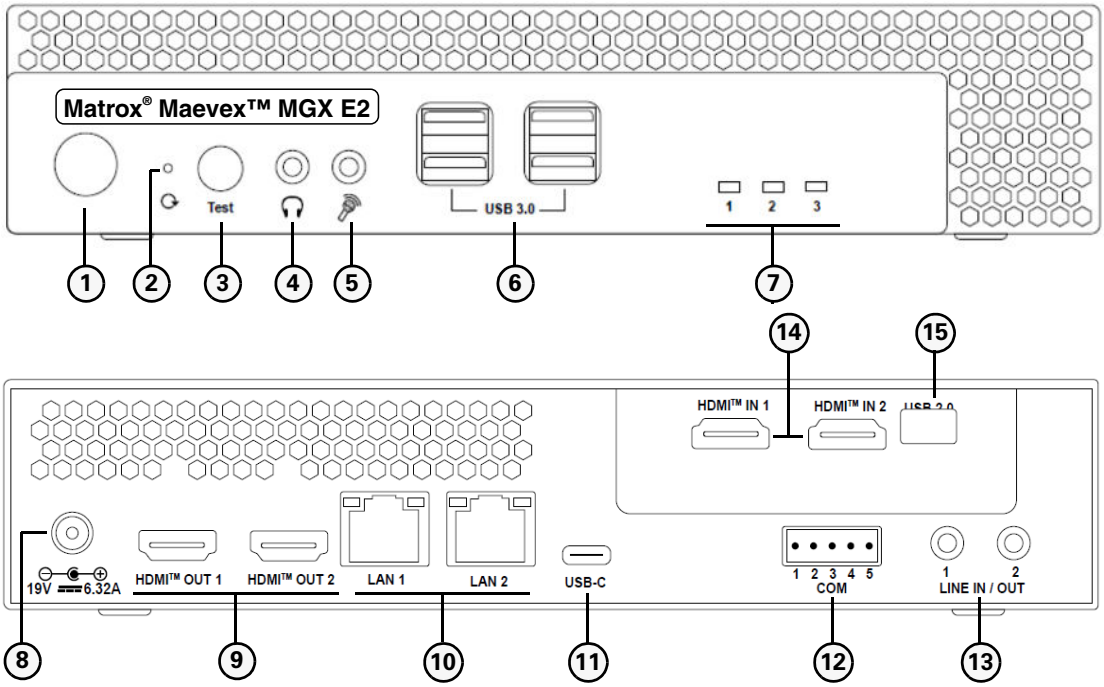


Label	Description
(1) - Power button	Powers the device on or off. The button is illuminated when the device is on.
(2) - Reset	To be supported in a future release. If you need to reboot the device, power it off and on again or use the WebUI.

Label	Description
(3) - Test	To be supported in a future release.
(4) - Audio out	To be supported in a future release.
(5) - Microphone	To be supported in a future release.
(6) - USB 3.0	Provides USB power and supports external devices, such as a keyboard, webcam, and mouse for KVM workflows.
(7) - Status LEDs	Status LEDs flash when device is booting up. Additional functionality will be available in a future release.
(8) - Power	Connect the 12 V d.c. power supply (60 W power supply is included).
(9) - HDMI OUT 1 and 2	Connect monitors to HDMI outputs 1 and 2 to view the video captured via the HDMI inputs.
(10) - LAN 1 and 2	Both LAN connectors support up to 2.5 GbE. Each connector can be used for control (e.g. user interface access) or media. When both connectors are connected, LAN 1 is used for control and LAN 2 is used for media.
(11) - USB Type-C	Provides USB power and connection to the source computer for KVM workfows (i.e. remote keyboard, webcam, and mouse functions).
(12) - HDMI IN	Connect your HDMI input source.
(13) - COM port	To be supported in a future release.
(14) - LINE IN / OUT	To be supported in a future release.

Matrox Maevex MGX E2

NOTE Device images have been simplified for illustration purposes.



Label	Description
(1) - Power button	Powers the device on or off. The button is illuminated when the device is on.
(2) - Reset	To be supported in a future release. If you need to reboot the device, power it off and on again or use the WebUI.
(3) - Test	To be supported in a future release.
(4) - Audio out	To be supported in a future release.
(5) - Microphone	To be supported in a future release.
(6) - USB 3.0	Provides USB power and supports external devices, such as a keyboard and mouse for factory reset of the device.
(7) - Status LEDs	Status LEDs flash when device is booting up. Additional functionality will be available in a future release.
(8) - Power	Connect to 19 V d.c. power (120W power supply is included).
(9) - HDMI OUT 1 and 2	Connect monitors to HDMI outputs 1 and 2 to view the video captured via the HDMI inputs.

Label	Description
(10) - LAN 1 and 2	Both LAN connectors support up to 2.5 GbE. Each connector can be used for control (e.g. user interface access) or media. When both connectors are connected, LAN 1 is used for control and LAN 2 is used for media.
(11) - USB Type-C	Provides USB power and connection to the source computer for KVM workfows (i.e. remote keyboard, webcam, and mouse functions).
(12) - COM port	To be supported in a future release.
(13) - LINE IN / OUT	To be supported in a future release.
(14) - HDMI IN 1 and 2	Connect your HDMI input source(s).
(15) - USB 2.0	Not supported. Do not use.

Discovering your device on the network

On startup, the Maevex MGX gets an IP address from your DHCP network. To find the IP address and log in, note the serial number (see device sticker), then use one of these methods from a computer on the same subnet:

- **Device serial number** -- Open your web browser (Google Chrome™ is recommended) and go to ***https://maevex-SerialNumber***. This takes you directly to the user interface to log in.
- **CMD Prompt** -- (needs Bonjour® SDK) Run ***ping maevex-SerialNumber.local*** to display the IP address.
- **PowerShell** -- (needs Bonjour® SDK) Run ***ping maevex-SerialNumber*** to display the IP address.

NOTE Note the following:

- Make sure your computer is on the same subnet as the Maevex MGX. If Bonjour is not installed, you may not be able to resolve the hostname directly.
- You can also use the *Matrox Central Manager* application to discover Maevex MGX devices. For more information, see the embedded help included with the application.

Logging in to the user interface

After you discover your Matrox Maevex MGX on the network and determine its IP address, you can log in to the web-based application to configure the device.

To log in to the user interface:

Step 1. Find the device on your network

More info: see *Discovering your device on the network*.

Step 2. **Connect to the Maevex MGX user interface** -- Open a supported web browser and do one of the following:

- Enter the IP address of the device (for example: https://123.123.123.123 or https://[2001:db8:1234:1::123]).
- Enter the hostname using the serial number (for example: *https://maevex-SerialNumber*). Replace *SerialNumber* with the serial number printed on the sticker on your device.

More info: You must use HTTPS to access the application.

Step 3. **Log in to the Maevex MGX application** -- Enter the **Username** and **Password**, then click **Sign in**.

Step 4. **Create the administrator account (first-time login only)** -- If this is your first time logging in, you will be prompted to create the administrator account. Enter a username and password to complete the setup.

Result of this task: You are now logged in to the Matrox Maevex MGX.

When done, remember: Visit the Matrox Video *website* to check for the latest firmware. It is recommended to keep your device updated.

Updating your device firmware

It is recommended to use the latest firmware version, especially if you are setting up Matrox Maevex MGX for the first time. Check the Matrox Video *website* to see if a newer version is available.

You can also use the *Matrox Central Manager* application to update multiple Maevex MGX devices at once. For more information, refer to the *Matrox Central Manager* documentation.

To update the firmware:

Step 1. **Download the update package** -- Go to the Matrox Video *website* and download the latest firmware for your device.

Step 2. Log in to your Matrox Maevex MGX

More info: see *Logging in to the user interface*.

Step 3. **Start the update process** -- From the **Dashboard**, click **Update**.

Step 4. **Upload the firmware package** -- Click **Upload firmware package**, then browse to the folder where you saved the update file. You can also drag and drop the file into the upload window.

Step 5. **Apply the update** -- Click **Update** to begin installation. A progress bar shows the update status.

Step 6. **Wait for reboot** -- When the update is complete, the device automatically reboots. Log in again to continue.

Result of this task: Your Matrox Maevex MGX is now running the updated firmware.

When done, remember: You can also use the *Matrox Central Manager* application to update Maevex MGX devices. For more information, see the embedded help included with the application.

Configuring SSL certificates

Matrox Maevex MGX uses HTTPS to secure access to its web interface. By default, Maevex MGX includes a self-signed SSL certificate.

When you first connect, your browser may display a warning such as:

```
"Your connection is not private"
NET::ERR_CERT_AUTHORITY_INVALID
```

This warning appears because the self-signed certificate is not trusted by your browser. The connection is encrypted, but the browser cannot verify the device's identity.

To remove this warning and establish a trusted connection, upload a valid SSL certificate and matching private key signed by a certificate authority (CA).

To upload an SSL certificate:

Step 1. **Log in to Matrox Maevex MGX** -- You can ignore the browser warning and proceed.

More info: see *Logging in to the user interface*.

Step 2. **Open the Certificates section** -- Go to the **Other** page and expand the **Certificates** section.

Step 3. **Upload your certificate and key** -- Click the plus icon **(+)** to add a new server certificate.

- Upload the certificate file (*.crt* or *.pem*)
- Upload the corresponding private key file (.key)

Step 4. **Save the new certificate** -- Click **Save** to apply the changes.

Result of this task: Maevex MGX uses the uploaded certificate for secure HTTPS access. If the certificate is signed by a trusted CA, browsers will no longer display security warnings.

When done, remember: If no certificate is uploaded, the system continues using the built-in self-signed certificate.

CHAPTER 3

Using Matrox Maevex MGX

This chapter includes the following topics:

- *User interface overview*
- *Using the Dashboard*
- *Configuring Processing settings*
- *Configuring Network settings*
- *Configuring Date and time settings*
- *Creating user accounts*
- *Configuring Other settings*

User interface overview

You control and configure the Matrox Maevex MGX using a web-based interface, accessible from most standard web browsers (see *Supported web browsers*).

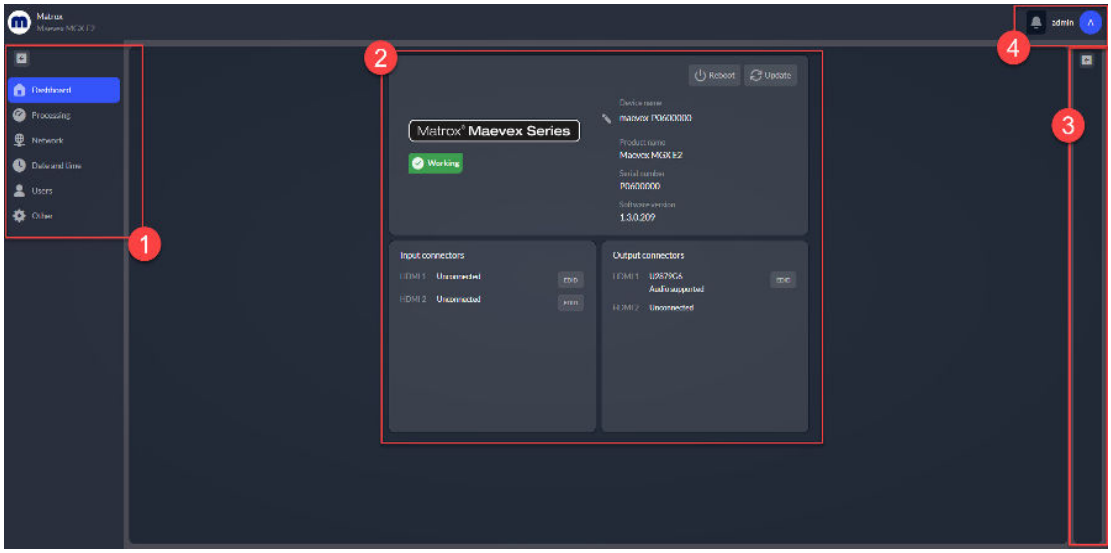
The interface has four key areas:

- **Navigation menu (left)**: Lets you move between sections such as Dashboard, Processing, Network, and Users.
- **Content area (center)**: Displays detailed settings and options for each selected section.
- **Status window (right)**: Shows important information about active processes and device status.
- **Notification area (top right)**: Displays alerts, warnings, and system messages.

Because the interface runs in a browser, the Maevex MGX supports access from most operating systems and devices and allows the use of multiple browser tabs. This capability lets operators configure the encoders and decoders at the same time. For example, open decoder settings in one tab and encoder settings in another.

When you log in, the **Dashboard** appears by default. It shows an overview of your Maevex MGX device, including input and output connectors, EDID status, device info, and software version.

Matrox Maevex MGX Dashboard

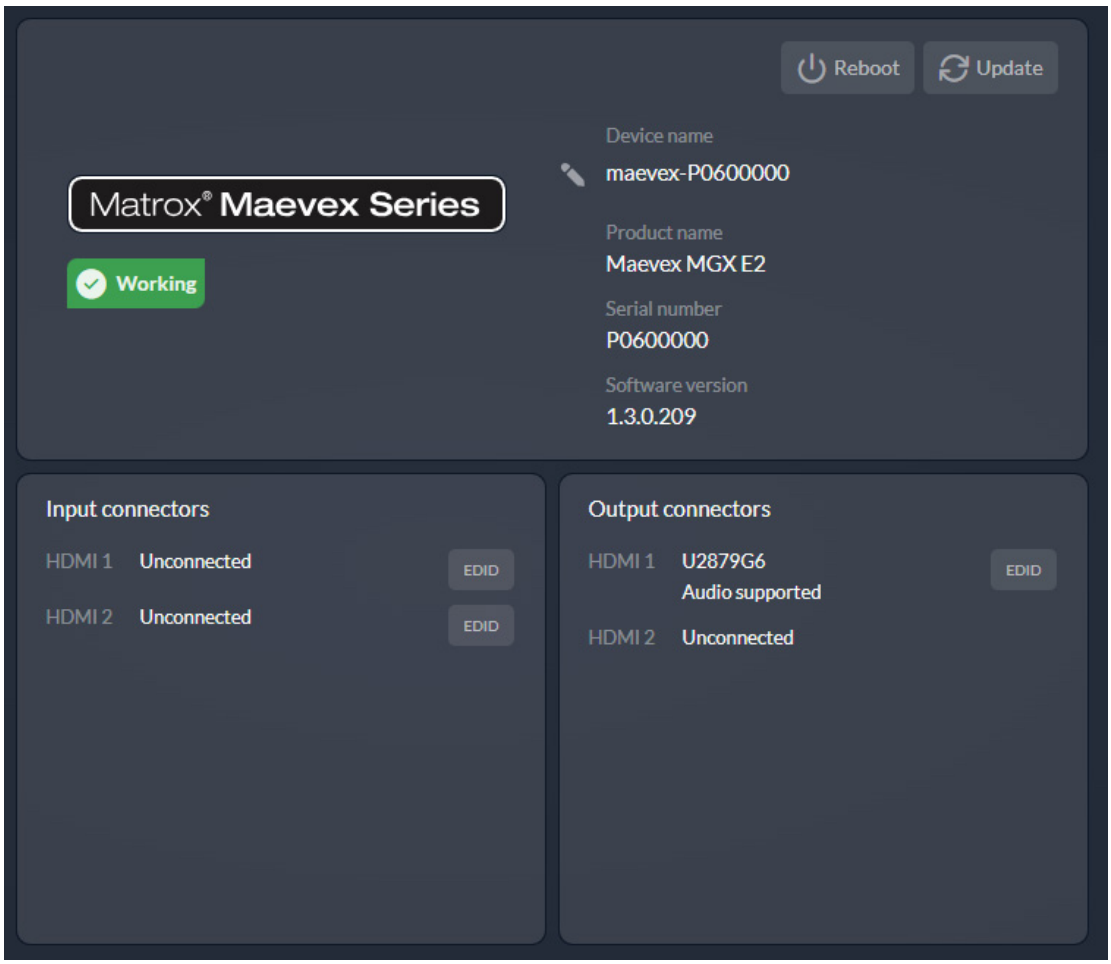


Callout number	Description
(1) - Navigation menu	Use the navigation menu to access different configuration sections, including **Dashboard**, **Processing**, **Network**, **Date and Time**, **Users**, and **Other**. Selecting a menu item updates the main work area.

Callout number	Description
(2) - Content area	Displays detailed content and interactive controls for the selected section. This is where you configure settings, view device status, and manage pipelines (input-to-output media workflows).
(3) - Status window	Displays quick-access system indicators.
(4) - Notification area	Shows system alerts, updates, and connection status indicators. This area may also include firmware update messages or warnings.

Using the Dashboard

The Dashboard provides a high-level overview of the device's current state and offers quick access to key actions.



From the Dashboard, you can:

- Reboot the device
- Check software version and hardware identifiers
- Change the device name
- Perform a firmware update
- Manage EDID settings for HDMI inputs and outputs
- Check the states of all the connections

Use this screen to confirm system status, access connected interfaces, and initiate basic tasks.

Configuring Processing settings

The **Processing** section is used to configure live routing, conversion, and distribution tasks on the Matrox Maevex MGX. From this interface, input sources are connected to processing paths and routed to output destinations. These processing paths are referred to as *pipelines*.

Each pipeline combines a video source, an optional audio source, and one or more output destinations into a single processing chain. Inputs can be dragged into the workspace, processing steps can be added, and outputs can be assigned to create workflows for different use cases.

The rest of this section provides an example workflow for **Matrox IQ mode with KVM functionality**. This example demonstrates how to create a complete processing pipeline and introduces the main workflow concepts used throughout the interface.

The Matrox IQ mode workflow is one of the most advanced processing configurations available on the Matrox Maevex MGX. After you understand how to create and configure this workflow, you can create other workflows, such as RTSP, MPEG-2 TS, SRT, and IPMX pipelines.

Although the settings vary between workflows, the pipeline creation process remains the same. If you can create an IQ mode pipeline, you can create any other pipeline; only the settings differ.

For more information on individual settings, see the *Matrox Maevex MGX Settings Reference*.

Creating a Matrox IQ Mode pipeline with KVM functionality

This task guides you through setting up a pipeline that receives an HDMI input, encodes it to Matrox IQ mode, and then decodes it for an ultra-low-latency workflow with Keyboard, Video, and Mouse (KVM) functionality.

The task first configures the encoder settings and then configures the decoder settings.

- *Configure the encoder settings*
- *Configure the decoder settings*

NOTE For best KVM performance, use the USB Type-C connectors on the MGX devices (see *Getting started with Matrox Maevex MGX*).

Configure the encoder settings

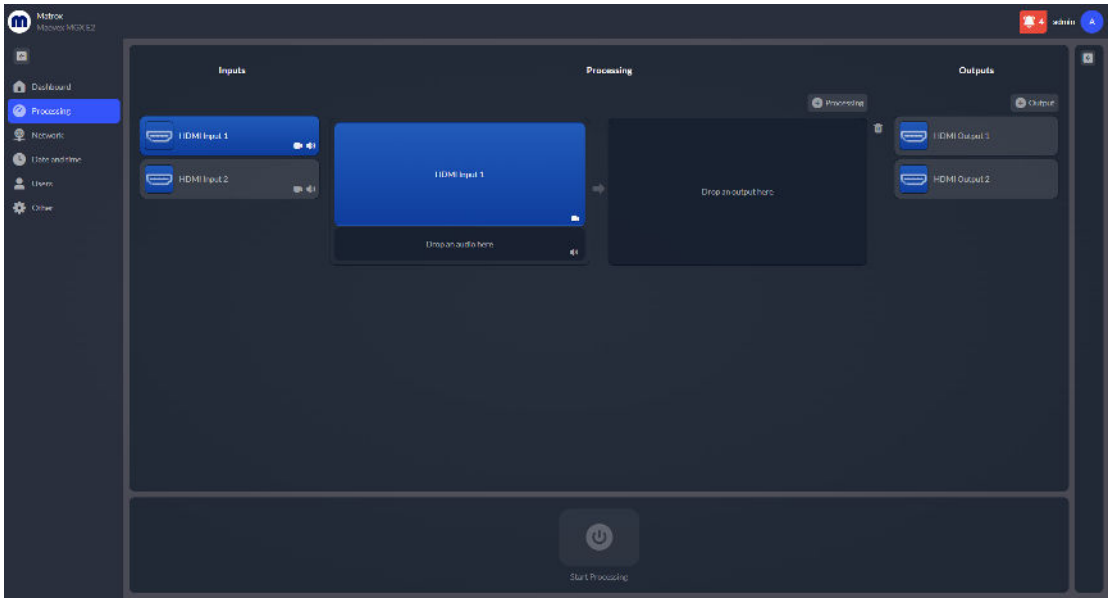
Step 1. Log in to the Matrox Maevex MGX encoder (see *Logging in to the user interface*).

Step 2. Go to the **Processing** section.

Step 3. Click on an HDMI Input to modify its settings (this example will continue with **HDMI Input 1**):

- Select the **No signal action** you want from the list.
- Enable **HDCP** if needed.
- Click **Save**.

Step 4. Drag **HDMI Input 1** to the **Processing** area.



More info: You can click **HDMI Input 1** in the **Processing** area to adjust the composition layout. However, composition processing increases latency and is not recommended for Matrox IQ mode.

Step 5. (Optional) To include audio, drag an input into the **Audio** area.

Step 6. Click on **+Output**, then select **Matrox IQ Mode** from the menu.

Matrox IQ Mode will now appear in the **Outputs** area.

Step 7. Drag an HDMI Output to the **Processing** area (this example will continue with **HDMI Output 1**).

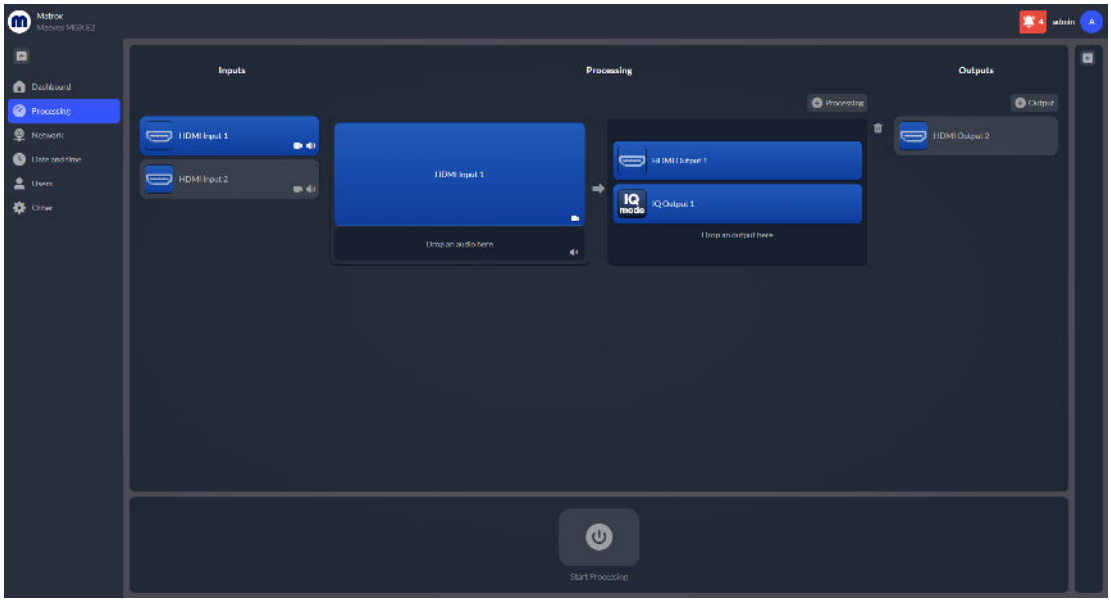
Step 8. Click on **HDMI Output 1** to modify its settings:

- (Optional) Edit the name of the output.
- **Resolution**: Select **Use stream resolution** (ultra low latency streams do not support scaling).
- **Scaling type**: Select **No scaling** (ultra low latency streams do not support scaling).
- Enable **HDCP** if needed.
- Enable **Servo display** (required for IQ Mode's ultra low latency stream).
- **Jitter buffer**: Adjust if needed to further optimize the latency. The default setting is usually adequate.
- Click **Save**.

Step 9. Click on **IQ Output 1** and configure the following:

- Enable **HDCP**.
- To include KVM functionality, you must **Enable KVM**. The **Base port** must match on both encoder and decoder.
- Modify the remaining settings in the **Properties** area according to your specific workflow (see *Matrox Maevex MGX Settings Reference*).
- Click **Save**.

Step 10. Drag **IQ Output 1** to the **Processing** area.

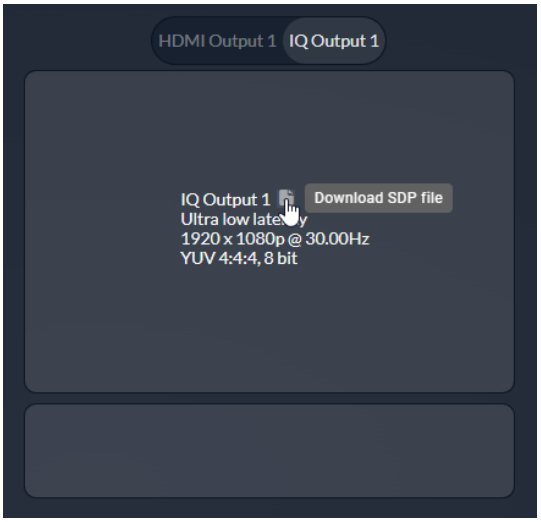


Step 11. Click **Start Processing**.

The user interface switches to a pipeline monitoring view (see *Viewing an Active Pipeline*).

Step 12. Click on **IQ Output 1** to see its status and download the SDP file to use when configuring your decoder settings.

More info: You can also use an NMOS controller to establish the connection.



Result of this task: The encoder side of the IQ Mode pipeline is ready. Now you can use the SDP file to configure your decoder settings.

When done, remember: It is recommended to open your decoder settings in a seperate browser tab. You may need to go back and forth from encoder and decoder.

Configure the decoder settings

Step 1. Log in to the Matrox Maevex MGX decoder (see *Logging in to the user interface*).

Step 2. Go to the **Processing** section.

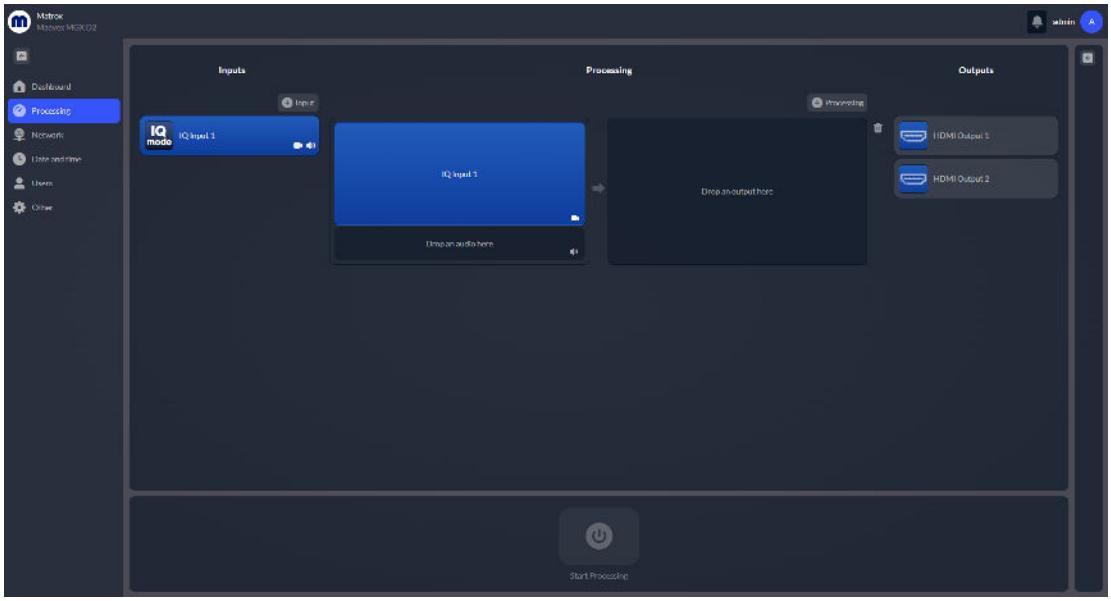
Step 3. Click on **+Input**, then select **Matrox IQ Mode** from the menu.

Matrox IQ Mode will now appear in the **Inputs** area.

Step 4. Click on **IQ Input 1** to modify its settings:

- (Optional) Edit the name of the input.
- **Network interface**: Select the network interface used by IQ Mode on the encoder side of the pipeline.
- Specify the **Base port**. This value must match the encoder's **Base port**.
- Select **Avoid stream reconnections** to prevent the system from automatically trying to reconnect if the connection is lost.
- Select the **No signal action** you want from the list.
- **SDP file**: Click **Choose file...** and upload the SDP file you exported from the encoder.
- To include KVM functionality, you must **Enable KVM**. The **Base port** must match on both encoder and decoder.
- Click **Save**.

Step 5. Drag **IQ Input 1** to the **Processing** area.



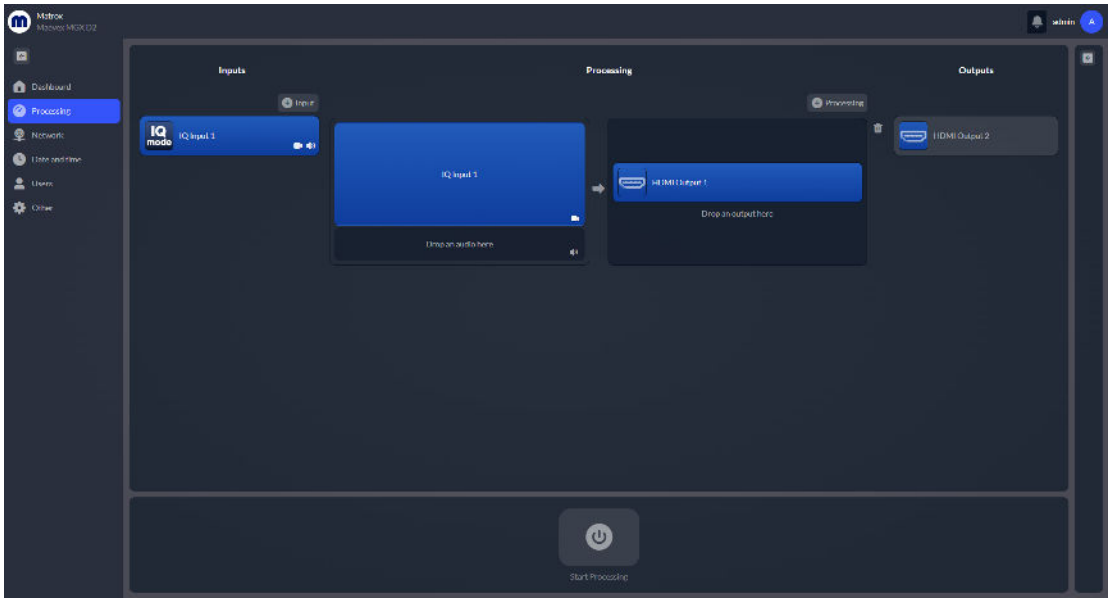
More info: You can click **IQ Input 1** in the **Processing** area to adjust the composition layout. However, composition processing increases latency and is not recommended for Matrox IQ mode.

Step 6. (Optional) To include audio, drag an input into the **Audio** area.

Step 7. Click on **HDMI Output 1** and configure the following:

- (Optional) Edit the name of the output.
- **Resolution**: Select **Use stream resolution** (ultra low latency streams do not support scaling).
- **Scaling type**: Select **No scaling** (ultra low latency streams do not support scaling).
- Enable **HDCP** if needed.
- Enable **Servo display** (required for IQ Mode's ultra low latency stream).
- **Jitter buffer**: Adjust if needed to further optimize the latency. The default setting is usually adequate.
- Click **Save**.

Step 8. Drag **HDMI Output 1** to the **Processing** area.

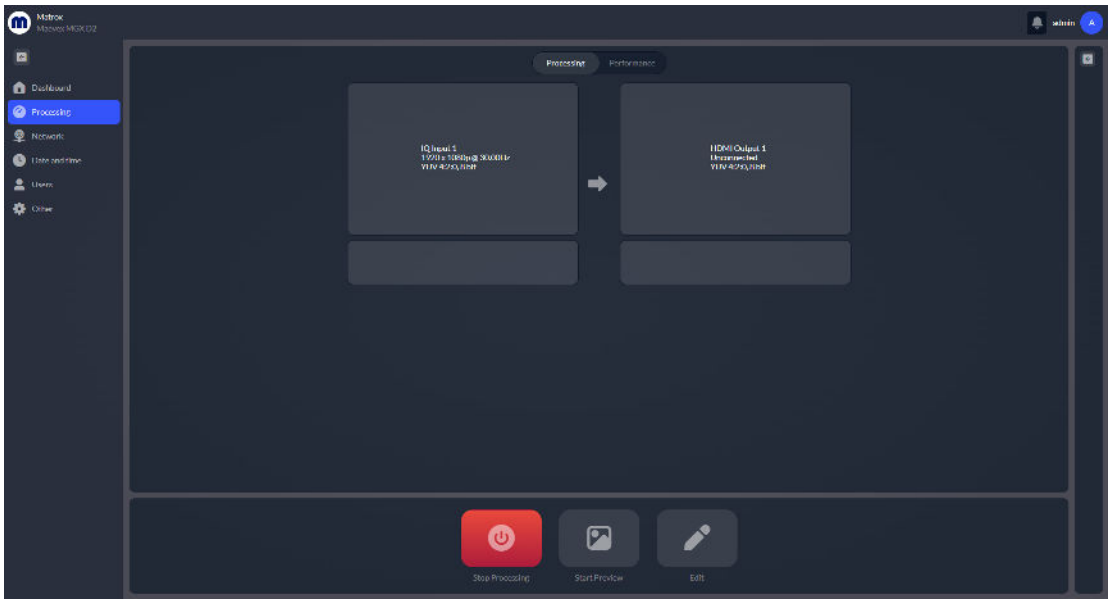


Step 9. Click **Start Processing** to start the pipeline.

The processing pipeline is now active, and the display will change to the pipeline viewer (see *Viewing an Active Pipeline*).

Viewing an Active Pipeline

Once a pipeline is started, the **Processing** view updates to show telemetry and real-time connection details between sources and outputs. Each block displays stream information such as resolution, frame rate, color format, and transmission mode.

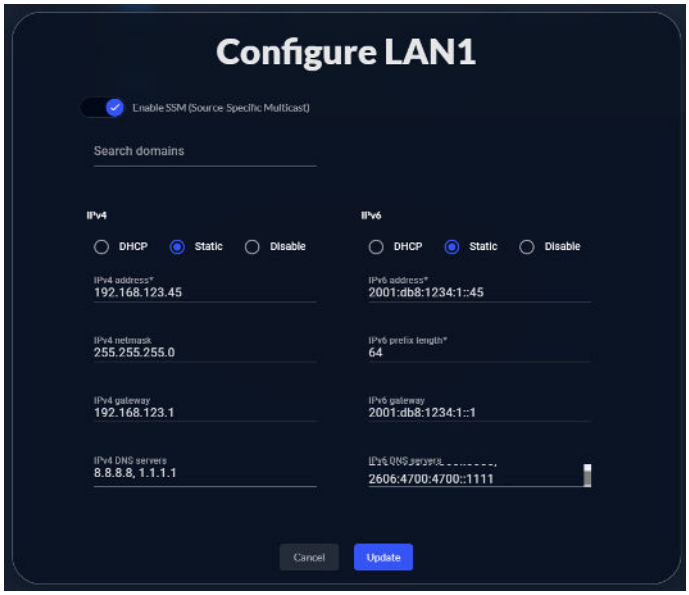


- **Input block**: Shows the connected input name, resolution, and video format.
- **Output block**: Displays the configured output type (e.g., **HDMI Output 1**), network details, and encoding parameters.
- **Control bar (bottom)**:
  - **Stop Processing**: Ends the current pipeline session.
  - **Start Preview**: Opens a preview of the active video stream, if available.
  - **Edit**: Returns to the editable pipeline layout for changes.

This view confirms that the system is actively routing and processing video. To stop or modify the stream, use the buttons in the control bar.

Configuring Network settings

Click on **LAN1** or **LAN2** to configure network interface settings for the Matrox Maevex MGX.



This window is used to configure IPv4 and IPv6 addressing, DNS settings, gateways, and multicast options. DHCP, static addressing, and interface disable modes are supported for both IPv4 and IPv6 configurations.

When static addressing is selected, enter the required IP address and network information before applying the configuration.

- The interface selected in a stream configuration (e.g., LAN1 automatic IPv4) must be correctly configured and physically connected.
- Click **LAN1** or **LAN2** to configure that port. The selected interface is highlighted in blue and shows the link speed, MAC address, and current IP addresses.
- For each interface, you can configure **IPv4** and **IPv6** separately:
  - **DHCP** automatically obtains an IP address from the network.
  - **Static** allows you to enter a fixed IP address, netmask, gateway, and DNS servers.
  - **Disable** turns off the protocol on the selected interface.
- When using **Static** mode, you must manually enter the network configuration. The following fields are available:
  - **IPv4 address**: The fixed IP address assigned to the device (e.g., 192.168.1.100).
  - **IPv4 netmask**: Defines the size of the local subnet (e.g., 255.255.255.0).
  - **IPv4 gateway** (optional): The IP address of the router used to access other networks.
  - **IPv4 DNS servers** (optional): One or more DNS server IPs used to resolve hostnames (e.g., 8.8.8.8). Separate multiple entries with commas.
  - **IPv6 address**: The device's IPv6 address in full notation (e.g., 2001:db8::1).
  - **IPv6 prefix length**: Indicates the size of the IPv6 subnet (e.g., 64).

  - **IPv6 gateway** (optional): The IPv6 address of the default gateway for external traffic.
  - **IPv6 DNS servers** (optional): One or more DNS servers for IPv6 name resolution. Separate entries with commas.
  - **Search domains** (optional): Domain suffixes used when resolving unqualified hostnames. For example, if *matrox.com* is listed, a lookup for *device1* becomes *device1.matrox.com*. You can list multiple domains, separated by commas.
- If a stream is not working, verify that the network interface has a valid IP address and an active link.

Configuring Date and time settings

Use this section to synchronize the device clock using NTP and optionally enable PTP on one of the available network interfaces.

- Click the main NTP/PTP status block to open the settings.
- View the current system date and time, and switch between local time and UTC if needed.
- Synchronize the system clock using a user-defined NTP server.
- View the current NTP synchronization status and the server in use.
- Enable PTP (Precision Time Protocol) on **LAN1** or **LAN2**.
- Specify the PTP domain number used for clock hierarchy in a multi-device environment.
- View the PTP lock status for each interface and the detected grandmaster, if applicable.

Creating user accounts

Administrators have full access to all configuration, system, and network settings on the Matrox Maevex MGX. They can manage all users, change security and network configurations, and control the device at every level. Click the **(...)** button to change the Admin password.

Users have limited access, focused on daily operational tasks. A user can configure and run processing pipelines, download logs, reboot the device if needed, and manage their own credentials. This role is designed for day-to-day use without the ability to alter critical system settings.

To create a user, click the **(+)** button in the **List of users** section. Enter the username, assign a role (User or Admin), and set a password.

Administrator	User
• Modify EDID • Create, modify, and start processing sessions • Change the device name • Update device firmware • Erase device and processing data • Reboot the device • Configure network settings • Configure date and time settings (NTP and PTP) • Add, delete, and change passwords for all users • Delete device logs • Download updates and device logs • Add and delete certificates • Download and disable certificates • Modify NMOS settings	• Create, modify, and start processing sessions • Change their own password • Download updates[1] and device logs • Reboot the device • Download certificates

1. Users can download update files but only administrators can perform actual firmware updates.

Configuring Other settings

This section includes advanced device controls and service integrations. While most fields are covered in the *Matrox Maevex MGX Settings Reference*, this page allows you to:

- Download or delete device logs.
- Erase all device data.
- Manage certificates for secure connections (see *Configuring SSL certificates*).
- View and configure NMOS registry settings.
- Specify the HDCP port (encoder only).

Settings are mostly view-only unless you click the edit icon. Only administrators can make changes.

CHAPTER 4

Matrox Maevex MGX Settings Reference

This chapter includes the following topics:

- *Dashboard*
- *Processing*
- *Network*
- *Date and time*
- *Users*
- *Other*

Dashboard

This section describes the configurable settings on the Maevex MGX **Dashboard** page.

Field	Description
Device name	The Maevex MGX device label. You can use this label instead of the IP address to connect from a web browser (via DNS). **NOTE** You can change this name. However, changing the name disables DNS, and your browser will not be able to resolve the address.
Reboot	Reboots the Maevex MGX device. This action does not delete configuration data or user credentials.
Update	Performs a firmware update (see *Updating your device firmware*).
EDID	
Download	Exports the current EDID from the selected HDMI input connector to a file. Use this to back up or inspect the EDID configuration.
Upload	Replaces the current EDID with a previously saved file. This lets you manually override the default EDID so that connected sources detect the Maevex MGX device as if it were the device described in the uploaded EDID. For example, if you upload a monitor's EDID, the source will assume it is connected to that monitor, even though it is physically connected to the Maevex MGX.
Reset	Restores the EDID to its factory default settings. Use this to undo changes or resolve compatibility issues with connected devices.

Processing

This section describes the configurable settings on the Maevex MGX **Processing** page.

Input settings

Field	Description
HDMI	
Name	The label for the HDMI input. This field is read-only and used for identification in the interface.
No signal action	Defines the system behavior when the HDMI input signal is lost or unavailable. • **Do nothing**: Maintains the last displayed frame; no visual change occurs. • **Show blank screen**: Replaces the input with a black screen. • **Show 'No signal' message**: Displays an on-screen message indicating that the signal is missing.
Enable HDCP	Enables High-bandwidth Digital Content Protection (HDCP) for protected content streams.
RTSP	
Stream name	The label for the new RTSP input. This name is used to identify the input in the interface.
Network interface	Selects the Ethernet interface that receives the RTSP stream from the sender.
Network scheme	Selects the network transport type. This setting must match the configuration of the sending device. • **Unicast**: Stream is sent directly from one sender to one receiver. • **Multicast**: Stream is sent from one sender to a multicast group. • **TCP interleave**: Stream is transmitted over a single TCP connection using RTSP interleaved mode, which embeds RTP packets within the RTSP control channel.
Stream URI	Specifies the full RTSP Uniform Resource Identifier (URI) for the stream source. Must include the correct protocol prefix (e.g., rtsp://).

Field	Description
Base port	Specifies the base port number for receiving media streams.
Avoid stream reconnection	Prevents the system from automatically trying to reconnect if the RTSP stream connection is lost.
No signal action	Defines the system behavior when the stream signal is lost or unavailable. • **Do nothing**: Maintains the last displayed frame; no visual change occurs. • **Show blank screen**: Replaces the input with a black screen. • **Show 'No signal' message**: Displays an on-screen message indicating that the signal is missing.
Use authentication	Enables authentication for the RTSP connection.
User	The username required to access the RTSP stream if authentication is enabled.
Password	The password required to access the RTSP stream if authentication is enabled.
MPEG-2 TS	
Stream name	The label for the new input stream. This name is used to identify the input in the interface.
Network interface	Selects the Ethernet interface that receives the MPEG-2 TS stream from the sender.
Network scheme	Selects the network transport type. This setting must match the configuration of the sending device. For example, if you are sending a unicast stream, you *must* select **Unicast** here for the stream to connect. • **Unicast**: Stream is sent directly from one sender to one receiver. • **Multicast**: Stream is sent from one sender to a multicast group. **NOTE** This selection determines how the **Sender address** field below is used.
Sender address / Multicast address	The name of this field changes based on the selected **Network scheme**: • **Unicast**: Enter the IP address of the device sending the MPEG-2 TS stream. • **Multicast**: Enter the multicast group address for the stream.

Field	Description
Sender port	The port number used by the sender to transmit the MPEG-2 TS stream. This field is required.
Avoid stream reconnection	Prevents the system from automatically trying to reconnect if the stream connection is lost.
No signal action	Defines the system behavior when the stream signal is lost or unavailable. • **Do nothing**: Maintains the last displayed frame; no visual change occurs. • **Show blank screen**: Replaces the input with a black screen. • **Show 'No signal' message**: Displays an on-screen message indicating that the signal is missing.
SRT	
Source stream name	The label for the SRT input. Used to identify the input in the interface.
SRT connection mode	Selects the connection mode for the SRT stream. • **Caller**: Initiates a connection to the remote SRT listener. • **Listener**: Waits for an incoming SRT connection. • **Rendezvous**: Both sides simultaneously establish the connection.
Network interface	Selects the Ethernet interface that receives the SRT stream.
Sender address	The IP address of the device sending the SRT stream.
Sender port	The UDP port number used by the sender for the SRT connection.
Receiver port mode	Specifies how the receiver port is assigned. Select **Automatic** to let the MGX assign the port automatically. Select **Custom** to manually specify the receiver port.
Receiver port	Specifies the receiver port to use when **Receiver port mode** is set to **Custom**.
Latency	Sets the buffering time (in milliseconds) to compensate for network jitter.

Field	Description
Encryption	Selects the encryption method for the SRT stream. • **Unencrypted**: No encryption is applied. • **AES-128**: Uses AES encryption with a 128-bit key. • **AES-192**: Uses AES encryption with a 192-bit key. • **AES-256**: Uses AES encryption with a 256-bit key. **NOTE** If you encrypt your stream, you will be asked to choose a passphrase (between 10 and 79 alphanumeric characters).
Avoid stream reconnection	Prevents the system from automatically trying to reconnect if the SRT stream connection is lost.
No signal action	Defines the system behavior when the stream signal is lost or unavailable. • **Do nothing**: Maintains the last displayed frame; no visual change occurs. • **Show blank screen**: Replaces the input with a black screen. • **Show 'No signal' message**: Displays an on-screen message indicating that the signal is missing.
IPMX[1]	
Stream name	The label for the IPMX input. Used to identify the input in the interface.
Network interface	Selects the Ethernet interface that receives the video portion of the IPMX stream.
SDP mode	Selects the method for obtaining the SDP (Session Description Protocol) file. • **URL**: Loads the SDP from a specified URL. • **File**: Loads the SDP from an uploaded local file.
SDP file URL / SDP file	Specifies the URL used to retrieve the video SDP file when **SDP mode** is set to **URL**. When **SDP mode** is set to **File**, click **Choose file...** to upload an SDP file from the computer.
Matrox IQ Mode	
Name	The label for the IQ Mode input. Used to identify the input in the interface.
Network interface	Selects the Ethernet interface that receives the IQ Mode stream from the sender.
Base port	Specifies the base port number for receiving media streams.
Avoid stream reconnection	Prevents the system from automatically trying to reconnect if the IQ Mode stream connection is lost.

Field	Description
No signal action	Defines the system behavior when the stream signal is lost or unavailable. • **Do nothing**: Maintains the last displayed frame; no visual change occurs. • **Show blank screen**: Replaces the input with a black screen. • **Show 'No signal' message**: Displays an on-screen message indicating that the signal is missing.
SDP file	Specifies the SDP file used for IQ mode connections between the Maevex MGX encoder and decoder. Click **Choose file...** to upload the SDP file.
Enable KVM	Enables KVM communication between the encoder and decoder. Enable this setting on both devices to use KVM functionality.
Base port	Specifies the base port used for KVM communication. The encoder and decoder must use the same port value.

1. **Video Network** and **Audio Network** include identical setting options. Each section is configured separately, but the descriptions apply to both.

Output settings

Field	Description
HDMI	
Name	The label for the HDMI output. Used to identify the output in the interface.
Resolution	Selects the output resolution. • **Use stream resolution**: Matches the resolution of the active input stream when possible. • **Use preferred resolution**: Automatically uses the resolution preferred by the connected display. • Select a specific resolution and frame rate from the list.
Scaling type	Selects how the output image is scaled. • **Keep aspect ratio**: Maintains the original aspect ratio, adding black bars if needed. • **No scale**: Outputs the image without any scaling. • **Fullscreen**: Stretches the image to fill the entire screen, which may alter the original aspect ratio.

Field	Description
Enable HDCP	Enables High-bandwidth Digital Content Protection (HDCP) for protected content streams.
Enable servo display	Enables servo display on the local HDMI output to reduce display latency. Servo display is required for Matrox IQ mode ultra-low-latency workflows. For servo display to function correctly, the HDMI output resolution and refresh rate must match the input resolution and refresh rate.
Jitter buffer	Sets the buffer size (in milliseconds) to compensate for network jitter when receiving streams. A larger buffer improves stability on unstable networks but increases latency.
RTSP	
Stream name	The label for the RTSP output stream. Used to identify the stream in the interface.
Stream key	Optional identifier for the RTSP session.
Network interface	Selects the Ethernet interface used for transmitting the RTSP stream.
RTSP port	Specifies the TCP port used for RTSP control messages. Default is typically 554, but it can be customized.
Network scheme	Selects the transport method for media delivery. • **No restriction**: The system selects the most appropriate method. • **Unicast and TCP interleave**: Streams are sent via unicast; RTP and RTSP messages are interleaved over a single TCP connection. • **Multicast only**: Streams are sent using multicast transport.
Base port	Specifies the starting UDP port for RTP media streams when using unicast or multicast.
Multicast address	Specifies the multicast IP address if the network scheme is set to **Multicast only** or **No restriction**.
Time to live	Sets how many network hops multicast packets are allowed before being discarded.
Type of service	Sets a network priority value for the stream traffic.

Field	Description
Resolution	Selects the output resolution. • **Use stream resolution**: Matches the resolution of the active video source when possible. • **3840×2160p**: Sets the output resolution to Ultra HD 2160p. • **1920×1080p**: Sets the output resolution to Full HD 1080p. • **Custom**: Allows manual entry of **Width** and **Height** in pixels. Minimum is 640 × 480, maximum is the maximum resolution supported by Maevex MGX (see *Matrox Maevex MGX Hardware Specifications*).
Pixel format	Selects the color format and bit depth for the output video. • **Use stream pixel format**: Matches the pixel format of the active video source. • Manual selection allows choosing from several YUV chroma subsampling formats (such as 4:2:0 or 4:4:4) with 8-bit or 10-bit depth.
Scaling type	Selects how the video is scaled to fit the output resolution. • **Keep aspect ratio**: Maintains the original aspect ratio, adding black bars if necessary. • **No scale**: Outputs the video without scaling. • **Fullscreen**: Stretches the video to fill the output frame, which may distort the aspect ratio.
Encoder mode	Selects the encoding mode. • **High quality H.265**: Encodes video using the H.265 (HEVC) codec with a focus on maintaining higher visual quality. • **High quality H.264**: Encodes video using the H.264 (AVC) codec with a focus on maintaining higher visual quality.
Target bit rate	Sets the average target bit rate for the encoded video in kilobits per second (Kb/s).
HRD mode	Selects the Hypothetical Reference Decoder (HRD) buffering model mode. • **VBR**: Variable Bitrate mode. • **CBR**: Constant Bitrate mode.
CPB size	Sets the size of the Coded Picture Buffer (CPB) in kilobits (Kb).
Minimum QP	Specifies the minimum Quantization Parameter (QP) value. Lower values improve quality but increase bitrate.

Field	Description
Maximum QP	Specifies the maximum Quantization Parameter (QP) value. Higher values lower quality but reduce bitrate.
GOP length	Sets the number of frames between I-frames (Group of Pictures length). Affects video compression efficiency and latency.
SubGOP length	Sets the interval between P-frames or B-frames within a GOP.
Profile	Selects the encoding profile. The available options depend on the selected codec. • **Automatic**: The system selects an appropriate profile based on resolution, frame rate, and other settings. For **High quality H.264**: • **H264 Baseline**: Simplified profile with lower compression efficiency, typically used for compatibility with older devices. • **H264 Main**: Provides better compression efficiency than Baseline; suitable for most applications. • **H264 High**: Offers the highest compression efficiency and best image quality among the available profiles. For **High quality H.265**: • **Main**: Standard HEVC profile for 8-bit video. • **Main, 10-bit**: Adds support for 10-bit color depth for improved image quality. • **Main 4:4:4**: Enables 4:4:4 chroma subsampling for full color detail. • **Main 4:4:4, 10-bit**: Combines 4:4:4 chroma subsampling with 10-bit color for maximum quality.
Level	Selects the encoding level for the codec. Defines limits for resolution, frame rate, and bitrate. • **Automatic**: The system selects an appropriate level. • Manual selection is available if specific compatibility is needed.
Tier (H.265 only)	Selects the encoding tier for H.265 (HEVC). • **Automatic**: The system selects the appropriate tier. • Manual selection allows choosing between **Main** or **High** tiers.
Force CAVLC (H.264 only)	Forces use of Context-Adaptive Variable Length Coding (CAVLC) instead of CABAC for H.264 entropy coding. Useful for compatibility with certain decoders.

Field	Description
Encoder mode	Displays the audio codec used for encoding. This field is fixed and cannot be changed. • **AAC-LC**: Low Complexity AAC, offering good quality at lower bitrates.
Target bit rate	Sets the target bitrate for the encoded audio in kilobits per second (Kb/s).
Audio format	Selects the audio stream container format. • **Raw**: Outputs audio data without additional transport encapsulation. • **ADTS**: Audio Data Transport Stream, commonly used for AAC audio transport.
Use authentication	Enables authentication for the stream connection. When selected, you must enter a username and password.
User	Specifies the username required to authenticate the connection. Available only when **Use authentication** is enabled.
Password	Specifies the password required to authenticate the connection. This field is available only when **Use authentication** is enabled. The password must include at least one ASCII character.
MPEG-2 TS	
Stream name	The label for the MPEG-2 TS output stream. Used to identify the stream in the interface.
Network interface	Selects the Ethernet interface used for transmitting the MPEG-2 TS stream.
Network scheme	Selects the network transport type for the output stream. • **Multicast**: Sends the stream to multiple receivers using a multicast IP address. • **Unicast**: Sends the stream directly to a single receiver.
Receiver / Multicast address	Specifies the multicast address used when **Network scheme** is set to **Multicast**. When **Network scheme** is set to **Unicast**, this setting specifies the receiver address.
Base port	Specifies the starting port number used for the MPEG-2 TS stream.
Time to live	Sets the Time to Live (TTL) value for multicast packets. Defines how many network hops the packets are allowed before being discarded.
Type of service	Sets a network priority value for the stream traffic.

Field	Description
Resolution	Selects the output resolution. • **Use stream resolution**: Matches the resolution of the active video source when possible. • **3840×2160p**: Sets the output to Ultra HD 2160p. • **1920×1080p**: Sets the output to Full HD 1080p. • **Custom**: Allows manual entry of Width and Height in pixels.
Width	Specifies the horizontal resolution of the output in pixels. Available only when **Custom** resolution is selected.
Height	Specifies the vertical resolution of the output in pixels. Available only when **Custom** resolution is selected.
Pixel format	Selects the color format and bit depth for the output video. • **Use stream pixel format**: Matches the pixel format of the active video source. • Manual selection allows choosing from several YUV chroma subsampling formats (such as 4:2:0 or 4:4:4) with 8-bit or 10-bit depth.
Scaling type	Selects how the video is scaled to fit the output resolution. • **Keep aspect ratio**: Maintains the original aspect ratio, adding black bars if necessary. • **No scale**: Outputs the video without scaling. • **Fullscreen**: Stretches the video to fill the output frame, which may distort the aspect ratio.
Encoder mode	Selects the encoding mode. • **High quality H.265**: Encodes video using the H.265 (HEVC) codec with a focus on maintaining higher visual quality. • **High quality H.264**: Encodes video using the H.264 (AVC) codec with a focus on maintaining higher visual quality.
Target bitrate	Specifies the average target bitrate for the encoded video in kilobits per second (Kb/s).
HRD mode	Selects the Hypothetical Reference Decoder (HRD) buffering model mode. • **VBR**: Variable Bitrate mode. • **CBR**: Constant Bitrate mode.
GOP length	Sets the number of frames between I-frames (Group of Pictures length). Affects video compression efficiency and latency.
SubGOP length	Sets the interval between P-frames or B-frames within a GOP.

Field	Description
Profile	Selects the encoding profile. The available options depend on the selected codec. • **Automatic**: The system selects an appropriate profile based on resolution, frame rate, and other settings. For **High quality H.264**: • **H264 Baseline**: Simplified profile with lower compression efficiency, typically used for compatibility with older devices. • **H264 Main**: Provides better compression efficiency than Baseline; suitable for most applications. • **H264 High**: Offers the highest compression efficiency and best image quality among the available profiles. For **High quality H.265**: • **Main**: Standard HEVC profile for 8-bit video. • **Main, 10-bit**: Adds support for 10-bit color depth for improved image quality. • **Main 4:4:4**: Enables 4:4:4 chroma subsampling for full color detail. • **Main 4:4:4, 10-bit**: Combines 4:4:4 chroma subsampling with 10-bit color for maximum quality.
Level	Selects the encoding level for the codec. The level defines maximum resolution, frame rate, and bitrate limits. • **Automatic**: The system selects an appropriate level based on the output configuration. • Manual selection is available if a specific level is required for compatibility.
Tier (H.265 only)	Selects the encoding tier for H.265 (HEVC) video. • **Automatic**: The system selects the appropriate tier based on bitrate and output settings. • Manual selection allows choosing between **Main** or **High** tiers, depending on the network or playback requirements.
CPB size	Sets the size of the Coded Picture Buffer (CPB) in kilobits (Kb).
Minimum QP	Specifies the minimum Quantization Parameter (QP) value. Lower values improve quality but increase bitrate.
Maximum QP	Specifies the maximum Quantization Parameter (QP) value. Higher values lower quality but reduce bitrate.
Force CAVLC (H.264 only)	Forces use of Context-Adaptive Variable Length Coding (CAVLC) instead of CABAC for entropy coding. Useful for compatibility with certain decoders.

Field	Description
Encoder mode	Displays the audio codec used for encoding. This field is fixed and cannot be changed. • **AAC-LC**: Low Complexity AAC, offering good quality at lower bitrates.
Target bitrate	Sets the target bitrate for the encoded audio in kilobits per second (Kb/s).
Audio format	Displays the audio stream container format. This field is fixed and cannot be changed. • **ADTS**: Audio Data Transport Stream, commonly used for AAC audio transport.
SRT	
Source stream name	The label for the SRT output stream. Used to identify the stream in the interface.
SRT connection mode	Selects the connection mode for the SRT stream. • **Caller**: Initiates the connection to the receiver. • **Listener**: Waits for incoming SRT connection requests. • **Rendezvous**: Both sides simultaneously initiate the connection.
Network interface	Selects the Ethernet interface used for transmitting the SRT stream.
Sender port	Specifies the port used for sending SRT packets.
Latency	Sets the buffer size (in milliseconds) to compensate for network jitter and packet loss. Higher values improve reliability but add delay.
Time to live (TTL)	Sets how many network hops multicast packets are allowed before being discarded.
Type of service (ToS)	Sets a network priority value for the SRT stream traffic.
Encryption	Selects the encryption mode for SRT traffic. • **Unencrypted**: No encryption applied. • **AES-128**: Encrypts stream data with a 128-bit key. • **AES-192**: Encrypts stream data with a 192-bit key. • **AES-256**: Encrypts stream data with a 256-bit key. **NOTE** If you encrypt your stream, you will be asked to choose a passphrase (between 10 and 79 alphanumeric characters).

Field	Description
Resolution	Selects the output resolution. • **Use stream resolution**: Matches the resolution of the active video source when possible. • **3840×2160p**: Sets the output resolution to Ultra HD 2160p. • **1920×1080p**: Sets the output resolution to Full HD 1080p. • **Custom**: Allows manual entry of Width and Height in pixels.
Width	Specifies the horizontal resolution in pixels. Available only when **Custom** resolution is selected.
Height	Specifies the vertical resolution in pixels. Available only when **Custom** resolution is selected.
Pixel format	Selects the color format and bit depth for the output video. • **Use stream pixel format**: Matches the pixel format of the active video source. • Manual selection allows choosing from several YUV chroma subsampling formats (such as 4:2:0 or 4:4:4) with 8-bit or 10-bit depth.
Scaling type	Selects how the video is scaled to fit the output resolution. • **Keep aspect ratio**: Maintains the original aspect ratio, adding black bars if necessary. • **No scale**: Outputs the video without scaling. • **Fullscreen**: Stretches the video to fill the output frame, which may distort the aspect ratio.
Encoder mode	Selects the encoding mode. • **High quality H.265**: Encodes video using the H.265 (HEVC) codec with a focus on maintaining higher visual quality. • **High quality H.264**: Encodes video using the H.264 (AVC) codec with a focus on maintaining higher visual quality.
Target bit rate	Sets the average target bit rate for video encoding in kilobits per second (Kb/s).
HRD mode	Selects the Hypothetical Reference Decoder buffering model. • **VBR**: Variable Bit Rate. • **CBR**: Constant Bit Rate.
CPB size	Sets the size of the Coded Picture Buffer (CPB) in kilobits (Kb).

Field	Description
Minimum QP	Specifies the minimum Quantization Parameter (QP) value. Lower values improve quality but increase bitrate.
Maximum QP	Specifies the maximum Quantization Parameter (QP) value. Higher values lower quality but reduce bitrate.
GOP length	Sets the number of frames between I-frames (Group of Pictures length). Affects video compression efficiency and latency.
SubGOP length	Sets the interval between P-frames or B-frames within a GOP.
Profile	Selects the encoding profile. The available options depend on the selected codec. • **Automatic**: The system selects an appropriate profile based on resolution, frame rate, and other settings. For H.264: • **H264 Baseline**: Simplified profile with lower compression efficiency, typically used for compatibility with older devices. • **H264 Main**: Provides better compression efficiency than Baseline; suitable for most applications. • **H264 High**: Offers the highest compression efficiency and best image quality among the available profiles. For H.265 (HEVC): • **Main**: Standard HEVC profile for 8-bit video. • **Main, 10-bit**: Adds support for 10-bit color depth for improved image quality. • **Main 4:4:4**: Enables 4:4:4 chroma subsampling for full color detail. • **Main 4:4:4, 10-bit**: Combines 4:4:4 chroma subsampling with 10-bit color for maximum quality.
Level	Selects the encoding level for the codec. The level defines maximum resolution, frame rate, and bitrate limits. • **Automatic**: The system selects an appropriate level based on the output configuration. • Manual selection is available if a specific level is required for compatibility.
Tier (H.265 only)	Selects the encoding tier for H.265 (HEVC). • **Automatic**: The system selects the appropriate tier. • **Main**: Standard tier. • **High**: Higher-tier encoding for demanding use cases.
Force CAVLC (H.264 only)	Forces use of Context-Adaptive Variable Length Coding (CAVLC) instead of CABAC for H.264 entropy coding. Useful for compatibility with certain decoders.

Field	Description
Audio encoder mode	Displays the audio codec used for encoding. This field is fixed and cannot be changed. • **AAC-LC**: Low Complexity AAC, offering good quality at lower bitrates.
Audio target bit rate	Sets the target bitrate for the encoded audio in kilobits per second (Kb/s).
Audio format	Selects the audio stream container format. • **Raw**: Outputs audio data without additional transport encapsulation. • **ADTS**: Audio Data Transport Stream, commonly used for AAC audio transport.
IPMX[1]	
Stream name	The label for the IPMX output stream. Used to identify the stream in the interface.
Resolution	Selects the output resolution. • **Use stream resolution**: Matches the resolution of the active video source when possible. • **3840×2160p**: Sets the output resolution to Ultra HD 2160p. • **1920×1080p**: Sets the output resolution to Full HD 1080p. • **Custom**: Allows manual entry of Width and Height in pixels.
Width	Specifies the horizontal resolution in pixels. Available only when **Custom** resolution is selected.
Height	Specifies the vertical resolution in pixels. Available only when **Custom** resolution is selected.
Pixel format	Selects the color format and bit depth for the output video. • **Use stream pixel format**: Matches the pixel format of the active video source. • Manual selection allows choosing from several YUV chroma subsampling formats (such as 4:2:0 or 4:4:4) with 8-bit or 10-bit depth.
Scaling type	Selects how the video is scaled to fit the output resolution. • **Keep aspect ratio**: Maintains the original aspect ratio, adding black bars if necessary. • **No scale**: Outputs the video without scaling. • **Fullscreen**: Stretches the video to fill the output frame, which may distort the aspect ratio.

Field	Description
Encoder mode	Displays the video encoder used for compression. • **High quality H.265:** Encodes video using the H.265 (HEVC) codec with a focus on maintaining higher visual quality. • **High quality H.264:** Encodes video using the H.264 (AVC) codec with a focus on maintaining higher visual quality.
Target bitrate	Sets the average target bitrate for the encoder in kilobits per second (Kb/s).
HRD mode	Selects the Hypothetical Reference Decoder (HRD) buffering model mode. • **VBR**: Variable Bitrate mode. • **CBR**: Constant Bitrate mode.
CPB size	Sets the size of the Coded Picture Buffer (CPB) in kilobits (Kb).
Minimum QP	Specifies the minimum Quantization Parameter (QP) value. Lower values improve quality but increase bitrate.
Maximum QP	Specifies the maximum Quantization Parameter (QP) value. Higher values lower quality but reduce bitrate.
GOP length	Sets the number of frames between I-frames (Group of Pictures length). Affects video compression efficiency and latency.
Profile	Selects the encoding profile. The available options depend on the selected codec. • **Automatic**: The system selects an appropriate profile based on resolution, frame rate, and other settings. • **Main**: Standard HEVC profile for 8-bit video. • **Main, 10-bit**: Adds support for 10-bit color depth for improved image quality. • **Main 4:4:4**: Enables 4:4:4 chroma subsampling for full color detail. • **Main 4:4:4, 10-bit**: Combines 4:4:4 chroma subsampling with 10-bit color for maximum quality.
Level	Selects the encoding level for the codec. Defines limits for resolution, frame rate, and bitrate. • **Automatic**: The system selects an appropriate level. • Manual selection is available if specific compatibility is needed.

Field	Description
Tier	Selects the encoding tier for H.265 (HEVC). • **Automatic**: The system selects the appropriate tier. • Manual selection allows choosing between **Main** or **High** tiers.
Encoder mode	Displays the audio codec used for encoding. This field is fixed and cannot be changed. • **PCM**: Pulse-Code Modulation (uncompressed audio).
Network interface	Selects the Ethernet interface used for transmitting the IPMX video stream.
Destination address (multicast)	Specifies the multicast IP address used for the video stream.
Destination UDP port	Specifies the UDP port used to send the video stream to the network.
Network interface	Selects the Ethernet interface used for transmitting the IPMX audio stream.
Destination address (multicast)	Specifies the multicast IP address used for the audio stream.
Destination UDP port	Specifies the UDP port used to send the audio stream to the network.
RTP Payload type	Specifies the RTP payload type used for the audio stream.
Matrox IQ Mode	
Name	The label for the IQ Mode output stream. Used to identify the stream in the interface.
Stream key	Optional identifier for the IQ Mode session.
Network interface	Selects the Ethernet interface used for transmitting the IQ Mode stream.
RTSP port	Specifies the TCP port used for RTSP control messages. Default is typically 554, but it can be customized.
Network scheme	Selects the transport method for media delivery. • **No restriction**: The system selects the most appropriate method. • **Unicast and TCP interleave**: Streams are sent via unicast; RTP and RTSP messages are interleaved over a single TCP connection. • **Multicast only**: Streams are sent using multicast transport.

Field	Description
Base port	Specifies the starting UDP port for media streams when using unicast or multicast.
Multicast address	Specifies the multicast IP address if the network scheme is set to **Multicast only** or **No restriction**.
Time to live	Sets how many network hops multicast packets are allowed before being discarded.
Type of service	Sets a network priority value for the stream traffic.
Network channel port	Specifies the network port used for the stream channel.
Enable HDCP	Enables High-bandwidth Digital Content Protection (HDCP) for protected content streams.
Resolution	Selects the output resolution. • **Use stream resolution**: Matches the resolution of the active video source when possible (required for **Matrox IQ Mode**). • **3840×2160p**: Sets the output resolution to Ultra HD 2160p. • **1920×1080p**: Sets the output resolution to Full HD 1080p. • **2560×1440p**: Sets the output resolution to Quad HD (QHD) 1440p. • **2560×1600p**: Sets the output resolution to Wide Quad Extended Graphics Array (WQXGA) 1600p.
Pixel format	Selects the color format and bit depth for the output video. • **Use stream pixel format**: Matches the pixel format of the active video source. • Manual selection allows choosing from several YUV chroma subsampling formats (such as 4:2:0 or 4:4:4) with 8-bit or 10-bit depth.
Scaling type	Selects how the video is scaled to fit the output resolution. • **Keep aspect ratio**: Maintains the original aspect ratio, adding black bars if necessary. • **No scale**: Outputs the video without scaling. • **Fullscreen**: Stretches the video to fill the output frame, which may distort the aspect ratio.
Encoder mode	Specifies the video encoding mode used for the stream. IQ mode uses a fixed encoder mode and does not allow changes to this setting.
Target bitrate	Sets the average target bitrate for the encoded video in kilobits per second (Kb/s).

Field	Description
GOP length	Sets the number of frames between I-frames (Group of Pictures length). Affects video compression efficiency and latency.
Maximum continuous intra refresh length	Specifies the maximum number of consecutive frames that use intra refresh encoding.
Profile	Selects the encoding profile. The available options depend on the selected codec. • **Automatic**: The system selects an appropriate profile based on resolution, frame rate, and other settings. • **Main**: Standard HEVC profile for 8-bit video. • **Main, 10-bit**: Adds support for 10-bit color depth for improved image quality. • **Main 4:4:4**: Enables 4:4:4 chroma subsampling for full color detail. • **Main 4:4:4, 10-bit**: Combines 4:4:4 chroma subsampling with 10-bit color for maximum quality.
Level	Selects the encoding level for the codec. Defines limits for resolution, frame rate, and bitrate. • **Automatic**: The system selects an appropriate level. • Manual selection is available if specific compatibility is needed.
Tier	Selects the encoding tier for H.265 (HEVC). • **Automatic**: The system selects the appropriate tier. • Manual selection allows choosing between **Main** or **High** tiers.
Encoder mode	Displays the audio codec used for encoding. This field is fixed and cannot be changed. • **PCM**: Pulse-Code Modulation (uncompressed audio).
Enable KVM	Enables KVM communication between the encoder and decoder. Enable this setting on both devices to use KVM functionality.
Base port	Specifies the base port used for KVM communication. The encoder and decoder must use the same port value.

1. **Video Network** and **Audio Network** include identical setting options. Each section is configured separately, but the descriptions apply to both.

Network

This section describes the configurable settings on the Maevex MGX **Network** page.

Field	Description
IPv4 address	Specifies the static IPv4 address assigned to the selected network interface. Must be a valid IPv4 format (e.g., 192.168.1.100).
IPv4 netmask	Defines the subnet mask for the IPv4 address (e.g., 255.255.255.0).
IPv4 gateway	(Optional) Specifies the default gateway used for outbound IPv4 traffic.
IPv4 DNS servers	(Optional) Specifies one or more DNS server IPs for hostname resolution. Separate multiple addresses with commas.
IPv6 address	Specifies the static IPv6 address assigned to the selected network interface. Must be a valid IPv6 format (e.g., 2001:0db8::1).
IPv6 prefix length	Defines the network prefix length in bits (must be between 1 and 128).
IPv6 gateway	(Optional) Specifies the default gateway used for outbound IPv6 traffic.
IPv6 DNS servers	(Optional) Specifies one or more DNS server addresses for IPv6. Separate multiple addresses with commas.
Search domains	(Optional) Specifies one or more domain suffixes to use when resolving unqualified hostnames.

Date and time

This section describes the configurable settings on the Maevex MGX **Date and time** page.

Field	Description
NTP server	Specifies the hostname or IP address of the Network Time Protocol (NTP) server used to synchronize the device's system clock.
PTP control	Selects the network interface used for Precision Time Protocol (PTP) synchronization. • **LAN1** or **LAN2**: Enables PTP on the selected interface. • **Disabled**: Disables PTP operation.
PTP domain number	Sets the domain number for the PTP instance. The domain number allows multiple PTP domains to coexist on the same network. Valid values are typically between 0 and 127.

Users

For information on how to create and manage Maevex MGX users, see *Creating user accounts*.

Other

This section describes the configurable settings on the Maevex MGX **Other** page.

Field	Description
Logs	
Download device logs	Downloads the device's current log files.
Delete device logs	Deletes all stored device logs.
Erase data	
Erase data	Clears all stored data, including processing sessions.
License	
License	Displays the currently installed license.
Certificates	
Add / Delete certificates	Allows importing or removing trusted certificates used for secure communication (see *Configuring SSL certificates*).
NMOS registry	
Network interface	Specifies the network interface used for NMOS registry communication.
Control	Selects how the device discovers or configures its NMOS registry connection. • **Disable**: Disables NMOS registry interaction entirely. • **DNS**: Uses unicast DNS-SD to discover the registry. • **mDNS**: Uses multicast DNS (mDNS) for discovery on the local network. • **Automatic**: Attempts discovery using all available methods (recommended default). • **Manual**: Enables manual entry of the registry address, port, and domain.

Field	Description
Domain	Optional NMOS domain value to associate with registry entries.
Network interface	Displays the network interface used for NMOS registry communication.
Status	Displays the current NMOS registry connection and configuration status.
Registry control	Displays the current NMOS registry control mode.
Registry address	Displays the address of the NMOS registry currently in use.
Registry port	Displays the port used for NMOS registry communication.
Registry version	Displays the NMOS registry API version currently in use.
HDCP settings	
Port	Specifies the port used for HDCP.

CHAPTER 5

Matrox Maevex MGX Hardware Specifications

This chapter includes the following topics:

- *Matrox Maevex MGX Hardware Specifications*

Matrox Maevex MGX Hardware Specifications

	Maevex MGX E1	Maevex MGX E2	Maevex MGX D1	Maevex MGX D2
Part number	MVX-MGXE1Y	MVX-MGXE2Y	MVX-MGXD1Y	MVX-MGXD2Y
Form factor	Standalone appliance Rack-mountable: 1U, half rack, horizontal			
Connectivity				
Input - HDMI	1 x HDMI Type A with retention screw hole	2 x HDMI Type A with retention screw hole	N/A	N/A
Input - Audio	HDMI digital LPCM two-channel stereo audio		N/A	N/A
Input - Microphone **Input - Line In**	Inactive	1 x 3.5 mm port[1]	N/A	1 x 3.5 mm port[1]
Output - HDMI	2 x HDMI Type A with retention screw	2 x HDMI Type A with retention screw	1 x HDMI Type A with retention screw	2 x HDMI Type A with retention screw
Output - Headphone **Output - Line out**	Inactive	1 x 3.5 mm port[1]	1 x 3.5 mm port[1]	1 x 3.5 mm port[1]
Network	**LAN 1:** 1000BASE-T/ 2500BASE-T RJ45 **LAN 2:** 1000BASE-T/ 2500BASE-T RJ45 Separate MAC addresses	**LAN 1:** 1000BASE-T/ 2500BASE-T RJ45 **LAN 2:** 1000BASE-T/ 2500BASE-T RJ45 Separate MAC addresses	**LAN 1:** 1000BASE-T RJ45 **LAN 2:** 1000BASE-T RJ45 Separate MAC addresses	**LAN 1:** 1000BASE-T/ 2500BASE-T RJ45 **LAN 2:** 1000BASE-T/ 2500BASE-T RJ45 Separate MAC addresses

	Maevex MGX E1	Maevex MGX E2	Maevex MGX D1	Maevex MGX D2
USB ports	4 x USB Type-A ports, front Keyboard, mouse, webcams, and USB 2.0 mass storage devices[1] 1 x USB Type-C port, back	4 x USB Type-A ports, front Keyboard, mouse, webcams, and USB 2.0 mass storage devices[1] 1 x USB Type-C port, back	3 x USB Type-A ports, front 2 x USB Type-A ports, back 1 x USB Type-C port, front Keyboard, mouse, webcams, and USB 2.0 mass storage devices[1]	4 x USB Type-A ports, front 1 x USB Type-C port, back Keyboard, mouse, webcams, and USB 2.0 mass storage devices[1]
COM port	5-Pin COM port[1]	5-Pin COM port[1]	N/A	5-Pin COM port[1]
Performance				
Baseband Video Input Resolutions	All common resolutions and refresh rates up to 3840 x 2160 at 60 Hz, progressive	All common resolutions and refresh rates up to 4096 x 2160 at 60 Hz, progressive and interlaced[1]	N/A	N/A
Baseband Video Output Resolutions	Passthrough: All common resolutions and refresh rates up to 3040 x 2160 at 60 Hz, progressive only	Passthrough: All common resolutions and refresh rates up to 4096 x 2160 at 60 Hz, progressive only		
Encode	**H.264, 4:2:0 only:** Up to 1 x 4Kp60 **H.265, 4:2:0 or 4:4:4:** Up to 1 x 4Kp60 Up to 4 x 1080p60	**H.264, 4:2:0 only:** Up to 2 x 4Kp60 Up to 8 x 1080p60 **H.265, 4:2:0 or 4:4:4:** Up to 2 x 4Kp60 Up to 8 x 1080p60	N/A	N/A

	Maevex MGX E1	Maevex MGX E2	Maevex MGX D1	Maevex MGX D2
Decode	N/A	N/A	**H.264, 4:2:0 only:** Up to 1 x 4Kp60 Up to 2 x 1080p60 **H.265, 4:2:0 or 4:4:4:** Up to 1 x 4Kp60 Up to 2 x 1080p60	**H.264, 4:2:0 only:** Up to 2 x 4Kp60 Up to 8 x 1080p60 **H.265, 4:2:0 or 4:4:4:** Up to 2 x 4Kp60 Up to 8 x 1080p60
Recording	To be supported in a future release.		N/A	N/A
Latency	Matrox IQ Mode, glass-to-glass: 32 ms, 2 frames IPMX, glass-to-glass: 120 ms	Matrox IQ Mode, glass-to-glass: 16 ms, 1 frame IPMX, glass-to-glass: 120 ms	Matrox IQ Mode, glass-to-glass: 16 ms, 1 frame[2] IPMX, glass-to-glass: 120 ms	Matrox IQ Mode, glass-to-glass: 16 ms, 1 frame[2] IPMX, glass-to-glass: 120 ms
Video and audio processing				
Video scaling	Yes			
Video compositing	No	Yes, fixed formats, including picture-in-picture (PiP) and picture-by-picture (PbP)	Yes, fixed formats, including picture-in-picture (PiP), picture-by-picture (PbP), and quad-rant, 720p	Yes, fixed formats, including picture-in-picture (PiP), picture-by-picture (PbP), and quad-rant, 720p
Preview mode	Yes			
HDCP support	1.4 and 2.3			
Audio encoding format	MPEG-4 AAC-LC, Raw, ADTS, and stereo			
Audio bitrates	Up to 1152 kbps			
Supported codecs				
Codecs and Color Space Support	H.264/MPEG-4 Part 10 (AVC): 4:2:0 8-bit, up to 100 Mbps H.265 (HEVC): 4:2:0 8/10-bit, 4:4:4 8/10-bit, up to 100 Mbps Uncompressed PCM audio for IPMX AAC-LC			

	Maevex MGX E1	Maevex MGX E2	Maevex MGX D1	Maevex MGX D2
Encoder/ Decoder Video Bitrate Range	50 kbps to 400 Mbps per stream			
Encoding level	Up to 6.0			
Encoding profile	H.264 Baseline H.264 Main H.264 High H.265 Main H.265 Main 10-bit H.265 Main 4:4:4	H.264 Baseline H.264 Main H.264 High H.265 Main H.265 Main 10-bit H.265 Main 4:4:4 H.265 Main 4:4:4 10-bit		
Encoding rate control	Adjustable GOP size Constant bitrate (CBR) Variable bitrate (VBR)		N/A	N/A
Network				
Network standard	Auto speed Half-duplex/full-duplex IGMPv2 and IGMPv3			
Routing scheme	Unicast Multicast Multi-unicast		Unicast Multicast	
IP addresing	IPv4 IPv6 DHCP, default, and static IP			
Command and control	mDNS and LLMNR HTTPS over TCP			
Discovery, registration, and control	NMOS discovery and control according to NMOS IS-04 and NMOS IS-05			
Streaming formats	IPMX Matrox IQ Mode RTP/RTSP SRT, caller, sender, and rendezvous MPEG-2 TS			

	Maevex MGX E1	Maevex MGX E2	Maevex MGX D1	Maevex MGX D2
Physical				
Product dimensions	206 mm (L) x 185 mm (W) x 46 mm (H)	206 mm (L) x 185 mm (W) x 46 mm (H)	206 mm (L) x 185 mm (W) x 30 mm (H)	206 mm (L) x 185 mm (W) x 46 mm (H)
Unit weight	Device only: 1.22 kg	Device only: 1.265 kg	Device only: 1.08 kg	Device only: 1.22 kg
Regulatory	CE (EU) Class A, FCC (US) Class A, ICES-003 (Canada) Class A, KC (South Korea) Class A, RCM (Australia/New Zealand) Class A, UKCA (UK) Class A			
Operating conditions	0 to 40 °C (32 to 104 °F)			
Hardware and software				
Hardware included	Maevex MGX E1 Encoder Power supply: 110 to 240 V AC, 12 V DC, 60 W	Maevex MGX E2 Encoder Power supply: 110 to 240 V AC, 19 V DC, 120 W	Maevex MGX D1 Decoder Power supply: 110 to 240 V AC, 12 V DC, 60 W	Maevex MGX D2 Decoder Power supply: 110 to 240 V AC, 19 V DC, 90 W
Optional hardware	ConductIP NMOS-based routing solution, Part #: CDCTIP-MRA2Y			
Accessories (sold separately)	Rackmount kit, Part #: RMK-19TR-A Angled bracket kit, Part #: RMK-6BRKT-A Secure cable solution for HDMI, Part #: SK-SLND-4			
User interfaces	Matrox Central Manager: Included app to discover, update, and configure MGX devices Web UI: Main GUI for configuration and settings NMOS IS-04 and IS-05 API: Discovery and routing of IPMX signals			
Warranty	Standard warranty: 2 years Extended warranty: Contact a Matrox sales representative.	Standard warranty: 2 years Extended warranty: Contact a Matrox sales representative.	Standard warranty: 3 years, fanless Extended warranty: Contact a Matrox sales representative.	Standard warranty: 2 years Extended warranty: Contact a Matrox sales representative.

1. To be supported in a future release.
2. If used with an MGX E1 device, add 1 frame of latency, 2 frames total.

Appendix A

Restoring Matrox Maevex MGX to factory default settings

This appendix includes the following topics:

- *Restoring Matrox Maevex MGX to factory default settings*

Restoring Matrox Maevex MGX to factory default settings

To restore the Matrox Maevex MGX to its default settings, connect a monitor and keyboard to the device and access the boot menu.

Matrox Video recommends using **Reset Configuration Settings** to return a device to its default state. This option removes all user configuration while preserving the currently installed firmware version.

Use **Restore Factory Image** only under the guidance of Matrox Technical Support. This option restores the device to the factory image installed during production, removes all user configuration, and may revert the firmware to an earlier version. After restoring the factory image, a firmware update may be required to access the latest features and fixes.

For details about port locations and button functions, see *Device connections and button functions*.

To access the boot menu:

Step 1. Connect a monitor to the **HDMI Out 1** port on the Matrox Maevex MGX device.

Step 2. Connect a keyboard to any **USB** port.

Step 3. Use the power button to power on the device.

Step 4. While the device is booting, hold down the **Esc** key.

The boot menu appears with the following options:

```
[1] Restore Factory Image
[2] Reboot
[3] Reset Configuration Settings
```

Step 5. Select one of the following options:

- Press **3** to select **Reset Configuration Settings**. This option removes all user configuration and restores the device to its default settings while preserving the currently installed firmware version.
- Press **1** to select **Restore Factory Image**. This option removes all user configuration and restores the factory image installed during production. The firmware version may be reverted to an earlier release.

Step 6. If propmted, confirm the operation.

```
About to do a factory restore, this will wipe all content on
your device, continue? [y/n]
```

Step 7. Press `y` to confirm.

Result of this task: The device is restored to its default settings. If **Restore Factory Image** was selected, the firmware version may be reverted to an earlier release. Update the firmware if a newer version is required.

Appendix B

Customer support

This appendix includes the following topics:

- *Matrox Video website*
- *Technical support*
- *Register your Matrox Video product*

Customer support

In this section, you will find customer support information for your Matrox product.

Matrox Video website

Our website has product literature, press releases, technical material, a sales office list, trade show information, and other relevant material. Visit the Matrox Video website at *video.matrox.com*.

Technical support

Matrox Video values your business and offers professional support for your Matrox Video product.

If your product was purchased through a Matrox Video dealer, contact your dealer for product support. This is the quickest and most effective method of technical assistance. Your dealer is familiar with your complete system.

If your product was purchased through Matrox Video, contact your Matrox Video representative or visit our technical support Web site at *video.matrox.com/en/support*.

To serve you better, please provide a complete description of the problem, and include:

- Matrox product serial number, model number, revision number, and firmware number.
- Source specifications
- Specific web UI or OSD options and features used.

Register your Matrox Video product

Please register online (*video.matrox.com/en/apps/registration*) to be eligible for customer support, new product announcements, and information on special offers and upcoming events.

Appendix C

Legal information and compliance

This appendix includes the following topics:

- *Compliance statements*
- *Disclaimers*

Compliance statements

USA

FCC Compliance Statement

Remark for the Matrox hardware products supported by this guide This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING Changes or modifications to this unit not expressly approved by the party responsible for the compliance could void the user's authority to operate this equipment. The use of shielded cables for connection of the monitor to the card is required to meet FCC requirements.

CANADA

(English) Innovation, Science and Economic Development Canada

Remark for the Matrox hardware products supported by this guide These digital apparatus does not exceed the Class A limits for radio noise emission from digital devices set out in the Radio Interference Regulation of Innovation, Science and Economic Development Canada.

(Français) Innovation, Sciences et Développement économique Canada

Remarque sur les produits matériels Matrox couverts par ce guide Ce present appareil numérique n'émet aucun bruit radioélectrique dépassant les limites applicables aux appareils numériques de Classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par Innovation, Sciences et Développement économique Canada.

UNITED KINGDOM

United Kingdom user's information – Declaration of Conformity

Remark for the Matrox hardware products supported by this guide These devices comply with Directive UK SI 2016 No. 1091 relating to electromagnetic compatibility for a Class A digital device. They have been tested and found to comply with EN55032/CISPR32 and EN55035/CISPR35. In a domestic environment these products may cause radio interference in which case the user may be required to take adequate measures. To meet UK requirements, shielded cables must be used to connect the monitor and other peripherals to the card. These products have been tested in a typical class A compliant host system. It is assumed that these products will also achieve compliance in any class A compliant system.

JAPAN

VCCI Compliance Statement

Remark for the Matrox hardware products supported by this guide This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI－A

KOREA

A 급 기기 (업무용 방송통신기자재)

이 기기는 업무용 (A 급) 전자파적합기기로서 판 매자 또는 사용자는 이 점을 주의하시기 바라 며 , 가정 외의 지역에서 사용하는 것을 목적으 로 합니다 .

EUROPE

(English) European user's information – Declaration of Conformity

Remark for the Matrox hardware products supported by this guide These devices comply with EC Directive 2014/30/EU for a Class A digital device. They have been tested and found to comply with EN55032/CISPR32 and EN55035/CISPR35. In a domestic environment these products may cause radio interference in which case the user may be required to take adequate measures. To meet EC requirements, shielded cables must be used to connect the monitor and other peripherals to the card. These products have been tested in a typical class A compliant host system. It is assumed that these products will also achieve compliance in any class A compliant system.

(Français) Informations aux utilisateurs Européens – Déclaration de conformité

Remarque sur les produits matériels Matrox couverts par ce guide Ces unités sont conformes à la directive communautaire 2014/30/EU pour les unités numériques de classe A. Les tests effectués ont prouvé qu'elles sont conformes aux normes EN55032/CISPR32 et EN55035/CISPR35. Le fonctionnement de ces produits dans un environnement résidentiel peut causer des interférences radio, dans ce cas l'utilisateur peut être amené à prendre les mesures appropriées. Pour respecter les impératifs communautaires, les câbles de connexion entre le moniteur ou autres périphériques et la carte doivent être blindés. Ces produits ont été testés dans un système hôte typique compatible classe A. On suppose qu'ils présenteront la même compatibilité dans tout système compatible classe A.

(Deutsch) Information für europäische Anwender – Konformitätserklärung

Anmerkung für die Matrox Hardware-Produktunterstützung durch dieses Handbuch Diese Geräte entsprechen EC Direktive 2014/30/EU für ein digitales Gerät Klasse A. Sie wurden getestet und entsprechen demnach EN55032/CISPR32 und EN55035/CISPR35. In einer Wohnumgebung können diese Produkte Funkinterferenzen erzeugen, und der Benutzer kann genötigt sein, entsprechende Maßnahmen zu ergreifen. Um EG-Anforderungen zu entsprechen, müssen zum Anschließen des Monitors und anderer Peripheriegeräte an die Karte abgeschirmte Kabel verwendet werden. Diese Produkt wurden in einem typischen, der Klasse A entsprechenden, Host-System getestet. Es wird davon ausgegangen, daß diese Produkte auch in jedem Klasse A entsprechenden System entsprechend funktionieren.

(Italiano) Informazioni per gli utenti europei – Dichiarazione di conformità

Nota per i prodotti hardware Matrox supportati da questa guida Questi dispositivi sono conformi alla direttiva CEE 2014/30/EU relativamente ai dispositivi digitali di Classe A. Sono stati provati e sono risultati conformi alle norme EN55032/CISPR32 e EN55035/CISPR35. In un ambiente domestico, questi prodotti possono causare radiointerferenze, nel qual caso all'utente potrebbe venire richiesto di prendere le misure adeguate. Per soddisfare i requisiti CEE, il monitor e le altre periferiche vanno collegati alla scheda grafica con cavi schermati. Questi prodotti sono stati provati in un tipico sistema host conforme alla classe A. Inoltre, si dà per scontato che questi prodotti acquisiranno la conformità in qualsiasi sistema conforme alla classe A.

(Español) Información para usuarios europeos – Declaración de conformidad

Observación referente a los productos de hardware de Matrox apoyados por este manual Estos dispositivos cumplen con la directiva de la CE 2014/30/EU para dispositivos digitales de Clase A. Dichos dispositivos han sido sometidos a prueba y se ha comprobado que cumplen con las normas EN55032/CISPR32 y EN55035/CISPR35. En entornos residenciales, estos productos pueden causar interferencias en las comunicaciones por radio; en tal caso el usuario deberá adoptar las medidas adecuadas. Para satisfacer las disposiciones de la CE, deberán utilizarse cables apantallados para conectar el monitor y demás periféricos a la tarjeta. Estos productos han sido sometidos a prueba en un típico sistema anfitrión que responde a los requisitos de la clase A. Se supone que estos productos cumplirán también con las normas en cualquier sistema que responda a los requisitos de la clase A.

EUROPE

(English) European user's information – Directive on Waste Electrical and Electronic Equipment (WEEE)

Please refer to the Matrox Web site (https://video.matrox.com/en/environment/product-waste-management) for recycling information.

(Français) Informations aux utilisateurs Européens – Règlementation des déchets d'équipements électriques et électroniques (DEEE)

Se référer au site Web de Matrox (https://video.matrox.com/en/environment/product-waste-management) pour l'information concernant le recyclage.

(Deutsch) Information für europäische Anwender – Europäische Regelungen zu Elektro- und Elektronikaltgeräten (WEEE)

Bitte wenden Sie sich an der Matrox-Website (https://video.matrox.com/en/environment/product-waste-management) für Recycling-Informationen.

(Italiano) Informazioni per gli utenti europei – Direttiva sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE)

Si prega di riferirsi al sito Web Matrox (https://video.matrox.com/en/environment/product-waste-management) per le informazioni di riciclaggio.

FRANCE

Avertissement sur l'épilepsie

À lire avant toute utilisation d'un jeu vidéo par vous-même ou votre enfant Certaines personnes sont susceptibles de faire des crises d'épilepsie ou d'avoir des pertes de conscience à la vue de certains types de lumières clignotantes ou d'éléments fréquents dans notre environnement quotidien. Ces personnes s'exposent à des crises lorsqu'elles regardent certaines images télévisées ou qu'elles jouent à certains jeux vidéo. Ces phénomènes peuvent apparaître alors même que le sujet n'a pas d'antécédent médical ou n'a jamais été confronté à une crise d'épilepsie.

Si vous-même ou un membre de votre famille avez déjà présenté des symptômes liés à l'épilepsie (crise ou perte de conscience) en présence de stimulations lumineuses, veuillez consulter votre médecin avant toute utilisation.

Nous conseillons aux parents d'être attentifs à leurs enfants lorsqu'ils jouent avec des jeux vidéo. Si vous-même ou votre enfant présentez un des symptômes suivants: vertige, trouble de la vision, contraction des yeux ou des muscles, perte de conscience, trouble de l'orientation, mouvement involontaire ou convulsion, veuillez immédiatement cesser de jouer et consultez un médecin.

Précautions à prendre dans tous les cas pour l'utilisation d'un jeu vidéo Ne vous tenez pas trop près de l'écran. • Jouez à bonne distance de l'écran de TV et aussi loin que le permet le cordon de raccordement. • Utilisez de préférence les jeux de vidéo sur un écran de petite taille. • Évitez de jouer si vous êtes fatigué ou si vous manquez de sommeil. • Assurez-vous que vous jouez dans une pièce bien éclairée. • En cours d'utilisation, faites des pauses de dix à quinze minutes toutes les heures.

Disclaimers

(English) Disclaimer

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(Français) Responsabilité

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(Deutsch) Haftungsablehnungserklärung

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