Matrox Mura DVW

Installation and User Guide

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

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CHAPTER 1

Introduction

This chapter includes the following topics:

- *About Matrox Mura DVW*
- *Supported web browsers*
- *About the Matrox Mura DVW user documentation*

About Matrox Mura DVW

Matrox Mura DVW is a high-performance IP-based 4K distributed video wall appliance that enables you to combine multiple units in various arrangements to easily create a fully synchronized video surface of any size and rectangular arrangement.

Go to our *website* for the latest updates, documentation, and utilities.

Supported web browsers

Matrox Mura DVW currently supports Microsoft Edge and Google Chrome (on Windows and macOS).

Other web browsers may work but have not been fully validated by Matrox Video.

About the Matrox Mura DVW user documentation

The Matrox Mura DVW user documentation consists of the following:

- **Matrox Mura DVW Device Setup sheet:** This is a printed quick start sheet included with your Mura DVW device. It describes the hardware connections and basic setup required to get you started. This document is also available on our website.
- **Matrox Mura DVW Installation and User Guide:** This is the main documentation for the Mura DVW and is accessible from the Mura DVW user interface at any time.

  Please note that the version of the user guide included with the software is only current at the time of the official release. The most up-to-date version of the user guide can always be found on our *website*.

CHAPTER 2

Getting started with Matrox Mura DVW

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*
- *About the Matrox Mura DVW user interface*

Initial setup overview

The following list is an overview of the tasks you'll need to perform to get started with Matrox Mura DVW. When needed, links to other topics are provided or more information.

To get started with Matrox Mura DVW:

Step 1. **Connect all Matrox Mura DVW devices to a power source:** Matrox Mura DVW can be powered by the included 19 v d.c. power supply or by a 12 v d.c. power supply (sold separately).

More info: see *Device connections and button functions*.

Step 2. **Connect all Matrox Mura DVW devices to your network**.

More info: see *Device connections and button functions*.

Step 3. **Access the Web interface for the primary device:** When Mura DVW is connected to your network, it will boot in DHCP. This allows you to connect to the Mura DVW application with your web browser (Google Chrome is recommended). Connect to the device that will be used as the primary.

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

Step 4. **Log in and create a device account:** When you first log in to the Mura DVW application, you will be prompted to create the device password.

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

Step 5. **Add other Matrox Mura DVW devices:** When you connect to the primary device, other Mura DVW devices on the same network will be automatically discovered. Add the ones that will be included in the wall. To log in to these secondary devices, use the same username and password that was used for the primary device.

More info: see *Adding devices*.

Step 6. **Update the Matrox Mura DVW firmware for all devices in the wall at once:** There may be a more recent firmware version available for your Mura DVW from the Matrox Video *website*. It is recommended to always use the latest version.

More info: see *Updating your device firmware*.

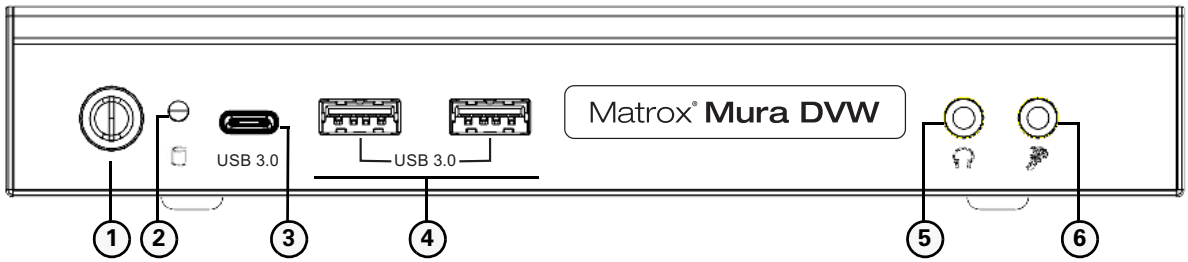
Result of this task: You are now ready to design your video wall.

Device connections and button functions

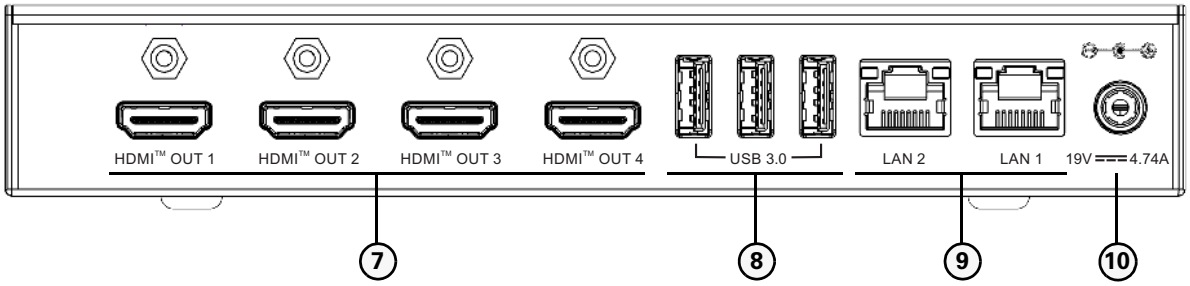
The information in this section is also provided on the printed sheet available in the box with your Mura DVW device.

NOTE Device images have been intentionally simplified for illustration purposes.

Matrox Mura DVW (Front)



Matrox Mura DVW (Rear)



Button/Connector/LED	Description
(1) - Power button	Power the device on or off. The button is green when the device is powered.
(2) - Status LED	Blinks red for storage reading or writing.
(3) - USB Type-C	USB power and support for external connection (e.g. keyboard, mouse, etc). Can be used for the factory reset process if needed. Additional support to be added in a future release.
(4) - USB 3.0	USB power and support for external connection (e.g. keyboard, mouse, etc). Can be used for the factory reset process if needed. Additional support to be added in a future release.

Button/Connector/LED	Description
(5) - Audio out	Standard 3.5 mm stereo output. Additional support to be added in a future release.
(6) - Microphone	Microphone-level audio input. Additional support to be added in a future release.
(7) - HDMI outputs 1, 2, 3, and 4	Connect monitors for display wall configuration. Connect at least one monitor to the first HDMI output when powering on the Mura DVW.
(8) - USB 3.0	USB power and support for external connection (e.g. keyboard, mouse, etc). Can be used for the factory reset process if needed. Additional support to be added in a future release.
(9) - LAN1 and LAN2	**LAN 1** -- Up to 2.5 GbE. Connect to your network for media and control. **LAN 2** -- To be supported in a future release.
(10) - Power	Connect to 12v d.c. or 19v d.c.power (19v d.c. power supply is included).
(11) - Reset (not shown in image)	Use a paperclip or similar object to reboot the device.

Discovering your device on the network

To use the Matrox Mura DVW software, you must connect at least one HDMI monitor before powering on the device. During startup, the device will receive a dynamically assigned IP address from your DHCP network, which will be displayed on the monitor via the On-Screen Display (OSD).

If you need to connect remotely or discover the IP address without relying on the OSD, use one of the following methods from a computer on the same network subnet:

- **Using the Mura DVW serial number:** Open your web browser (Google Chrome is recommended) and navigate to *https://<DVW serial number>/*.

  Replace *<DVW serial number>* with the serial number located on the sticker on the Mura DVW device. This will allow you to access the device and view its IP address.
- **Using the primary Mura DVW device:** The first Mura DVW device gives you access to the others. Log in to this initial device to discover and manage all other Mura DVW devices on the same subnet.
- **Using the Matrox Unified Utility:** Download the Matrox Unified Utility from our *website*. This tool can locate the IP addresses of all Mura DVW devices on the subnet and assist with firmware updates. The utility includes step-by-step instructions for discovering and updating devices.

Logging in to the user interface

After your have discovered your Matrox Mura DVW device on the network and know its IP address, you can log in to the web-based Mura DVW application for configuration.

Step 1. Discover the Mura DVW devices on your network (see *Discovering your device on the network*).

Step 2. Connect to your Mura DVW.

- Open your web browser and go to the IP address of your Mura DVW (e.g. https://123.123.123.123). You must use “https” to connect to the application, or
- Open your web browser and navigate to https://<DVW serial number>/. Replace <DVW serial number> with the serial number located on the sticker on your Mura DVW device.

Step 3. Enter the **Username** and **Password**, then click **Sign in**.

More info: Unless you created your own username through the Matrox Unified Utility, the username for your device will be *admin* by default. This is the device administrator account. The username cannot be changed.

Result of this task: You are logged in to the Mura DVW.

When done, remember: It is recommended to update your device firmware if you are not using the latest version. Check our *website* to see if there is a newer version available.

Updating your device firmware

It is recommended to use the latest device firmware, especially if you are logging in to Mura DVW for the first time. It is also important that all your Mura DVW devices are operating on the same firmware. Before you begin configuring your video wall, update any devices that are not using the latest version.

Check our *website* to see if there is a newer version available.

NOTE You can also use the Matrox Unified Utility to update all your Mura DVW devices at once. For more information, refer to the Matrox Unified Utility documentation.

To update the firmware:

Step 1. Download the update package from our *website*.

Step 2. From the Mura DVW application main menu ( ), select **Firmware update**.

Step 3. Click **Choose file**.

Step 4. Select the update package (*dvw-[firmware_version].pkg*) file and click **Open**.

Step 5. Click **Next**.

Step 6. Click **Select All** or select the device(s) to be updated.

More info: You should select all devices when updating firmware to ensure that all devices use the same firmware version.

Step 7. Click **Update**.

Result of this task: The **Update firmware** window will show how many devices are being updated along with a progress bar. Once the update is complete, the devices will reboot and the **Update firmware** window will show which device updates were successful (in green) and which failed (in red).

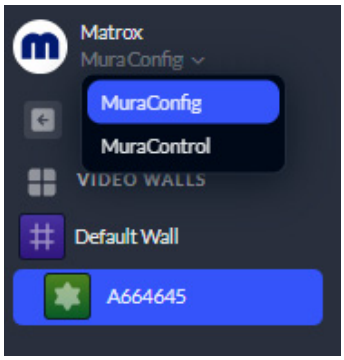
When done, remember: Secondary devices are updated before the primary device. Therefore the primary device will be the last to reboot. If an update fails, restart the firmware update process and select only the device(s) that failed to update.

About the Matrox Mura DVW user interface

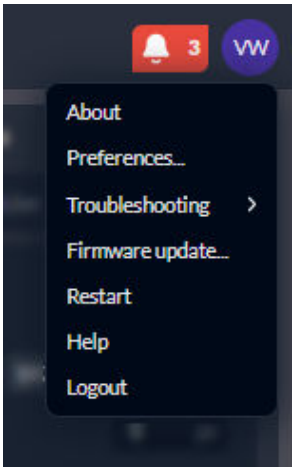
The Matrox Mura DVW user interface consists of two environments:

- **MuraConfig:** The first time you log in to your Matrox Mura DVW, it will open the MuraConfig environment. This is where you manage devices and configure your video wall setup. For more information about this environment, refer to *Using MuraConfig to design a video wall*.
- **MuraControl:** If you have started designing your video wall, the Mura DVW application will open the MuraControl environment when you log in. This is where you manage the layouts of your video wall as well as the sources used in the layout. For more information about this environment, refer to *Using MuraControl to manage layouts and sources*.

To switch between these two environments. click the drop-down list in the upper-left of the application window and make a selection.



You can find information about the status of your Mura DVW and set your application preferences by clicking the icons at the top-right of the application (see *About the main menu* and *About notifications*).



About the main menu

From the main menu ( ), you can access Mura DVW's general functions.

Function	Description
About	See the current version of the application. From here you can also view the Matrox Video license agreement.
Preferences	Set user preferences (see *Setting user interface preferences*).
Troubleshooting	Hover over **Troubleshooting**, then select **Download logs**. This will download all system/software-related logs from all devices used in the video wall, including logs related to updates.
Firmware update	Update the device firmware (see *Updating your device firmware*).
Restart	Restart all the devices that are used in the video wall.
Help	Access this user guide from the application.
Logout	Log out of the application.

Setting user interface preferences

Click the menu button ( ) and select **Preferences** to modify the general application settings.

Once you've changed a preference, click **Save**.

NOTE Preferences are applied to the application only in the browser you're using and only until the browser history is cleared. If you switch to a different browser or clear your browser history, you may need to readjust the settings.

App settings

You can choose to display a warning when deleting devices, and choose whether to display small or large device tiles by default.

About notifications

Click the notifications icon ( ) to open the Notifications panel. This panel logs all events that occur. Events that were logged since the last time the panel was opened are in bold with **NEW** added to the event icons.

Notifications will appear for errors ( ) and warnings ( ), to provide information ( ), or to confirm a successful action ( ).

Click the **Mark all as read** button to change the read status of all notifications in the panel.

CHAPTER 3

Using MuraConfig to design a video wall

This chapter includes the following topics:

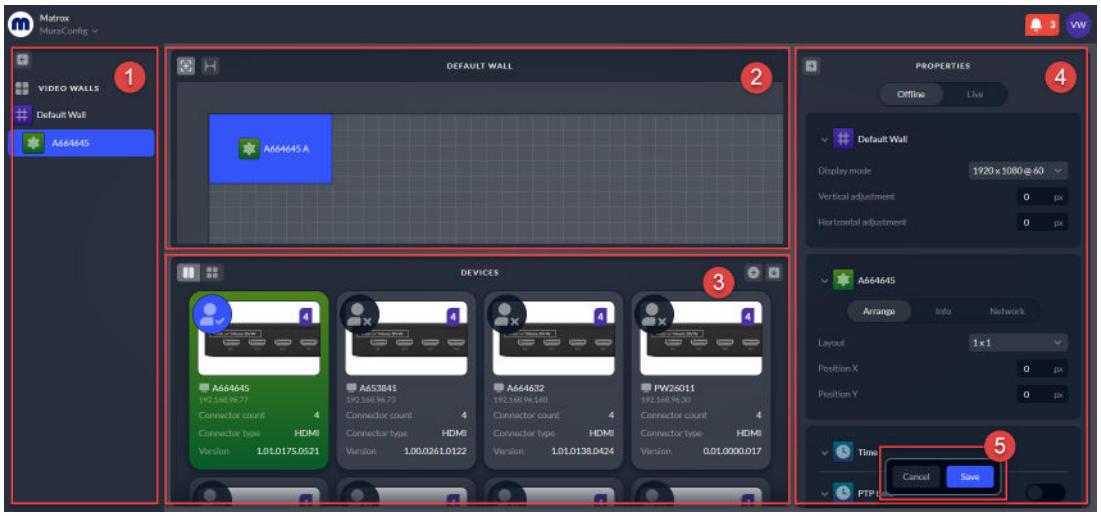
- *About MuraConfig*
- *Adding and deleting devices*
- *Managing device credentials*
- *Configuring properties*
- *Adjusting bezels*

About MuraConfig

MuraConfig is where you design and configure your wall setup. When you log in to the Mura DVW application for the first time, a **Default Wall** is created for you, with the device you used to connect to the application included as the **Primary device**.

NOTE You cannot change or delete the primary device.

You can click the arrow buttons (↑ ↓ ← →) to collapse or expand sections of the interface or the chevrons (⌄ ›) to collapse or expand sections of the **Properties** panel.



Numbered area	Description
(1) - Devices list	Devices you add to the video wall will appear here and on the wall canvas. The Default Wall is identified by a hash icon (#). The Primary device appears with a green star icon (★). Secondary devices appear with a purple monitor icon (▭). The selected device will have a blue background.
(2) - Wall canvas	The wall canvas represents the physical layout of your video wall. As you modify the wall configuration, the changes will be reflected on the canvas. Click (⊹) to toggle the gridlines off and on. With your mouse pointer on the canvas, use the mouse scroll wheel to zoom in and out. Click (|↔|) to recenter the canvas.
(3) - Device bin	These are all the Mura DVW devices that were discovered on the same network subnet as the primary device, and that can be added to the wall design (see *Adding devices*). Each device represents up to four monitors.

Numbered area	Description
(4) - Properties panel	The **Properties** panel is where you configure the video wall and the devices used in its design (see *Configuring properties*). The configuration is done in **Offline** mode and additional adjustments can be made in **Live** mode.
(5) - Save/Cancel buttons	The **Save** button appears each time you make a change to the Mura DVW configuration or settings. Changes will only be applied to the video wall when you save. The application will flash green when a save is successful or red if there is an error.

Managing device credentials

When you access a Mura DVW device for the first time, you will be prompted to sign up and create a device password. The user icon in the upper-left corner of each tile in the device bin indicates the device's account status:

Icon	Description
	There is no account for this device. You must create one before you can sign in to the device.
	You are signed in to the device.
	You are not signed in to the device. If the log in attempt fails, this icon turns red. Refer to the notifications for further details.

You must be signed in to a device to add it to the video wall. When you sign in to the Primary device, you will be automatically signed in to all other devices that use the same password.

Creating a device password

You can create a password for a single device or create one password for multiple devices.

IMPORTANT We recommend using the same password for all devices that will be used in a video wall. We also recommend using a different password for each video wall on the same network.

To create a password for a device:

Step 1. Select devices in the device bin by clicking the user icon in the upper-left corner of each device tile:

- To select a single device, click one user icon.
- To select multiple consecutive devices, hold the **Shift** key, then click the user icon on the first and last device.
- To select multiple non-consecutive devices, hold the **Ctrl** key, then click the user icon on each device.

Step 2. In the **Properties** panel, enter a password for the device(s).

Step 3. Click **Create**.

Result of this task: The password is created and you are signed in to the device(s).

Signing in to a device

You can sign in to a single device or to multiple devices simultaneously if they use the same password.

To sign in to a device:

Step 1. Select devices in the device bin by clicking the user icon in the upper-left corner of each device tile:

- To select a single device, click one user icon.
- To select multiple consecutive devices, hold the **Shift** key, then click the user icon on the first and last device.
- To select multiple non-consecutive devices, hold the **Ctrl** key, then click the user icon on each device.

More info: All selected devices must use the same password.

Step 2. In the **Properties** panel, enter the device password.

Step 3. Click **Sign in**.

Result of this task: You are signed in to the device(s).

Changing a device password

You can change the password for a single device or simultaneously for multiple devices that use the same password.

IMPORTANT We recommend using the same password for all devices that will be used in a video wall. We also recommend using a different password for each video wall on the same network.

To change a device password:

Step 1. Select devices in the device bin by clicking the user icon in the upper-left corner of each device tile:

- To select a single device, click one user icon.
- To select multiple consecutive devices, hold the **Shift** key, then click the user icon on the first and last device.
- To select multiple non-consecutive devices, hold the **Ctrl** key, then click the user icon on each device.

More info: All selected devices must have the same current password.

Step 2. In the **Properties** panel, enter the current device password and a new password.

Step 3. Click **Submit**.

Result of this task: The password has been changed for the selected device(s).

Adding and deleting devices

The device bin lists Mura DVW devices that were discovered on the same subnet as the primary device. These can be added to the video wall design as secondary devices. Each device represents up to four monitors.

You can switch between the small tile view ( ) and the large tile ( ) view using the buttons in the upper-left of the device bin. Each tile displays the device name and its IP address. Large tiles also display the device connector count, connector type, and firmware version.

NOTE If a device appears in red, the device was found on the network but there was a problem getting its information. If this happens, an error message will appear in the Notifications.

Adding devices

To add a device to the wall:

Step 1. You must first be signed in to a device to add it to the wall (see *Signing in to a device*).

Step 2. Scroll through the device bin to find the device to add or open the search function ( ) to find a device using its IP address. The tile for a device found with the search will blink in the device bin.

More info: When performing a search, you must enter the full, properly formatted IP address (e.g. 123.123.123.123) and click **Search**.

Step 3. Add a device one of three ways:

- Double-click the device tile.
- Drag-and-drop the device tile onto the wall canvas.
- Right-click the device tile and click **Add**.

More info: We strongly recommend a rectangular wall design.

Step 4. Click **Save**.

More info: A device can only be added to one Default Wall. If a device you added is part of another Default Wall on the same network, you will get an error.

Result of this task: The device has been added to the wall.

When done, remember: Once a device is added to the design, **ADDED** appears on the device tile in the device bin and you can click and drag the device on the wall canvas to position it.

Adding devices from outside your subnet

Devices that are not on the same network subnet as the Primary device will not appear in the device bin, but they can still be added to the video wall.

To add a device from outside your subnet:

Step 1. Click (⊕) in the upper-right of the device bin to open the search function.

Step 2. Enter the IP address of the device to add.

More info: When performing a search, you must enter the full, properly formatted IP address (e.g. 123.123.123.123).

Step 3. Click **Search**. When the device is found, it will be added to the device bin and blink.

Step 4. Add a host mapping to the *primary* device and save it (see *Network tab*).

Step 5. Once the host mapping is complete, add the device to the video wall and save the configuration (see *Adding devices*).

More info: When a device from outside the network subnet is added to the video wall, it MUST be mapped to the primary device to establish communication between the devices. The outside device cannot be saved to the video wall if the host mapping is not complete and saved.

Result of this task: The device has been added to the wall.

Deleting devices

To remove a device from the wall canvas:

Step 1. Scroll through the device bin to find the device to remove or open the search function (⊕) to find a device using its IP address. The tile for a device found with the search will blink in the device bin.

Step 2. Remove the device one of three ways:

- Double-click the device tile in the device bin.
- Right-click the device tile in the device bin and click **Delete**.
- Right-click the device in the devices list and click **Delete**.

More info: You cannot delete the primary device.

Step 3. If *Show warnings when deleting devices* is enabled (see *Setting user interface preferences*), a confirmation message will appear.

More info: If you select **Don't ask again** when confirming a device deletion, it will disable the *Show warnings when deleting devices* preference.

Step 4. Click **Save**.

Result of this task: The device has been deleted from the wall.

Configuring properties

By default, the wall setup is in **Offline** mode. You must configure properties while in this mode.

The **Properties** panel is divided into three sections: Wall, Device, and Time.

Wall properties

Settings in the **Default Wall** properties are applied to the entire video wall.

Select the **Display mode** from the drop-down list.

The **Vertical adjustment** and **Horizontal adjustment** are used to adjust the bezel of your monitors. For a detailed explanation of bezel adjustments, see *Adjusting bezels*.

Click **Save** after making changes to the Default Wall properties.

Device properties

Settings in the **Device** properties affect only the selected device.

There are three tabs for the device properties: Arrange, Info, and Network.

Arrange tab

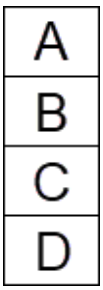
Each device in your video wall design can represent up to four monitors. The properties under the **Arrange** tab let you adjust the arrangement of the device outputs.

By default when a device is added to the wall design, it will have a 1x1 layout. You can choose a different **Layout** from the drop-down list.

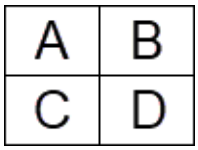
NOTE Only options that are available for the selected device will appear in the list. That is, a device with only two outputs will not show layouts for three or four outputs.

On the wall canvas, each monitor will be identified with the name of the device it's connected to and a letter representing the order of its connection to the device. A device's outputs will always be arranged from left to right and from top to bottom, as follows:

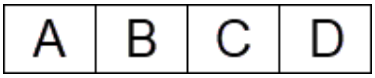
1x4 layout



2x2 layout



4x1 layout



IMPORTANT Individual outputs cannot be assigned a position, therefore monitors must be connected to the Mura DVW device in the correct order from left to right (A to D).

You can click and drag a device on the wall canvas to reposition it and all its connected outputs. You can also specify the position of a selected device using the **Position X** and **Position Y** fields as follows:

- Type a number in the field and press the **Enter** key.
- Press the up or down arrow key to increase or decrease the number by 1.
- Press the Shift key + the up or down arrow key to increase or decrease the number by increments of 10.

When changing the position, you can press and hold the arrow key, whether you're also pressing the Shift key or not. The position will be reflected when the arrow key is released.

A rectangular arrangement is recommended for best results. A device's individual monitors cannot be repositioned on the canvas.

Click **Save** after making changes to the device's **Arrange** tab.

Info tab

The **Info** tab displays read-only details about the selected device, including:

- Hostname.
- Connector type and count.
- Used, total and available memory, as well as the percent of memory usage.
- CPU and GPU usage.
- System time.
- Firmware version.

Network tab

You can change network settings in the **Network** tab. This tab is divided into three sections: General, IPv4, IPv6, and Host Mapping.

IMPORTANT The Network tab has its own Save ( ) and Cancel ( ) buttons that appear beside the device name at the top of the Device properties section when you modify the Network settings. When there are unsaved changes to the network settings, a save icon also appears beside the device name in the device list on the left. If you click the main **Save** button, it will not save changes you made in the Network tab.

General

In the **General** section, you will find the **Mac address** and **Hostname** of the device.

IPv4 and IPv6

In the IPv4 and IPV6 sections, you can change your IP settings, DNS servers and domain. Both DHCP and DNS are enabled by default.

To edit a field:

Step 1. Disable DHCP and/or DNS. You can then modify the corresponding fields.

More info: If both DHCP and DNS are enabled and you disable DHCP, DNS will be disabled automatically. You can then re-enable DNS and/or DHCP.

Step 2. Select a field and click the X that appears in it to clear the content.

Step 3. Enter the new content.

Step 4. Click **Network save** ( ).

Step 5. Re-enable DHCP and/or DNS.

Result of this task: The field has been edited.

When done, remember: Whether you are connected by IP address or Hostname, if you change any of the Primary device's IP settings and save the network properties, you will be redirected to the new IP address. A warning will prompt you to save any changes to the Default Wall before the page reloads.

Host mapping

When you add a device from outside your network subnet to your video wall, you must map it to the primary device for the two to communicate with each other.

To add a host mapping:

Step 1. Select the primary device one of three ways:
- Click the device tile in the device bin.
- Click the device name in the device list.
- Click the device on the wall canvas.

Step 2. In the Host Mapping section of the Network settings, click Add (⊕).

Step 3. Enter the **Hostname** and **IP address** of the device from outside your subnet.

More info: You must enter these exactly as they appear in the Mura DVW application. If the field is outlined in red, it means the entry is invalid and you will not be able to save the network settings.

Step 4. Click **Network save** (💾).

Result of this task: The host has been mapped.

When done, remember: To remove the content of a host mapping field, select the field and click the X. To remove a host mapping, click (⊖).

Time properties

Time properties are specific to each Mura DVW device.

PTP time

You can enable or disable **PTP time** by clicking the toggle switch.

IMPORTANT PTP time is enabled by default. Disabling PTP time may affect the performance of the wall.

There are two settings options for PTP time: Basic and Advanced.

Both options include the **Status** panel that shows the **Port state** (leader or follower) of the selected device, as well as the IP address of the leader for the PTP network (**Best leader IP**). Click (↻) to refresh the Status panel.

NOTE The Status panel is only visible when PTP is enabled.

Basic

When using **Basic** PTP time, all of the settings are set to the default values. You can only set the **Follow mode** for the device (Default, Leader, Follower, or Leader Follower).

IMPORTANT When you select Basic and save, any values that were entered in the Advanced settings will reset to the default, except the Follow mode.

From the Basic settings option, you can also choose to enable or disable PTP time across all devices that are added to the wall using the **Sync** function. For more, see *PTP time sync*.

Advanced

From the **Advanced** settings option, you can set the **Follow mode** for the device as well as the **Domain**, **Delay request interval**, **Announce interval**, and **Sync interval**. Enter a value for each and click **Save**, or leave fields empty to use the *Default value* that the Network API chooses.

NOTE When fields with invalid values are outlined in red, you will not be able to save your settings. To remove content from a field, select it and click the X that appears.

From here, you can also choose to **Sync** the PTP time settings across all devices that are added to the wall. For more, see *PTP time sync*.

PTP time sync

The **Sync settings across all devices** function allows you to set the same PTP settings for all your devices without having to set them on each device. You can sync from any device.

When you click **Sync**, you can choose to enable/disable PTP for all devices. You can also select which PTP settings to sync and change their values. Once done, click the **Sync** button at the bottom of the pop-up, then click **Save**. All devices will be synchronized to the selected device.

IMPORTANT PTP time is enabled by default on all devices. Once the devices are synchronized, if you disable PTP time for a single device and save the setting, it may affect the synchronization.

Adjusting bezels

Once you have added your devices to the wall, configured your settings, and saved, switch to **Live** mode to make final adjustments to the monitor bezels.

NOTE All configurations done Offline must be saved before switching to Live mode.

Once in **Live** mode, a pattern of lines appears on the monitors connected to the Mura DVW devices that were added to the Default Wall. Use the lines to help you align the outputs.

Bezel adjustments only apply to the edges of an output that are adjacent to another output of a device. There is no bezel adjustment for the outside edges of the video wall or between devices. As you adjust the bezels, you will see the pattern move on the monitors.

Vertical adjustment moves the output vertically, affecting the upper and lower (horizontal) bezels. When the vertical adjustment is 0, there is no horizontal space between the outputs.

Horizontal adjustment moves the output horizontally and affects the left and right (vertical) bezels. When the horizontal adjustment is 0, there is no vertical space between the outputs.

To change the Vertical and Horizontal adjustments:

- Type a number in the field and press the **Enter** key.
- Press the up or down arrow key to increase or decrease the number by 1.
- Press the Shift key + the up or down arrow key to increase or decrease the number by increments of 10.

When changing the position, you can press and hold the arrow key, whether you're also pressing the Shift key or not. The position will be reflected when the arrow key is released.

Best practices when adjusting bezels

When adjusting bezels, remember:

- Only the Vertical adjustment and Horizontal adjustment settings of the Default Wall are available in Live mode.
- If you change the Vertical or Horizontal adjustment while in Offline mode, you will see the adjustments on the wall canvas only.
- It may take a few seconds for the alignment pattern to appear on the monitors.

Result of this task: A bezel can be no more than 25% of a monitor's width or height.

CHAPTER 4

Using MuraControl to manage layouts and sources

This chapter includes the following topics:

- *About MuraControl*
- *Managing layouts*
- *Managing sources*

About MuraControl

The MuraControl environment is where you manage your wall layouts and sources.

You can click the arrow buttons (↑ ↓ ← →) to collapse or expand sections of the interface or the chevrons (⌄ ›) to collapse or expand sections of the **Properties** panel.

The layout dashboard provides an overview of the layouts that were created for your video wall.

Image A. MuraControl layout dashboard

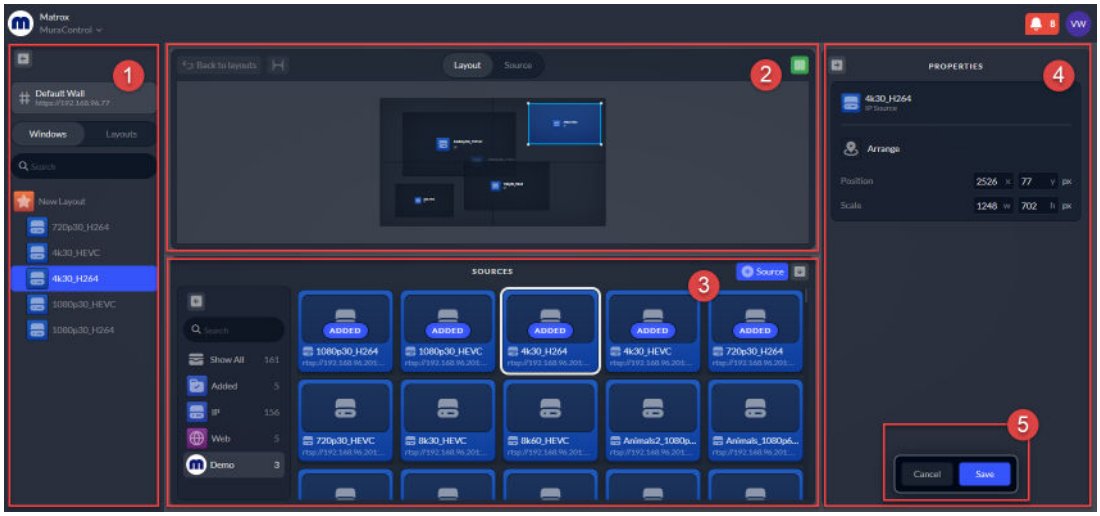


Numbered area	Description
(1) - Layouts filter	Choose whether to see all layouts that were created for this video wall or only those marked as favorites.
(2) - Product banner	Click **Learn More** to view more about the Mura DVW appliance on the Matrox Video website.
(3) - Layout bin	These are the layouts that were created for the wall, based on the selected filter. Click **Layout** in the upper-right of the bin to create a new layout. To search for a layout by name, click (🔍) and enter a search term in the field that appears. Click (★) to add the layout to the favorites. Click (▶) to activate the layout or (■) to deactivate it. When the layout is active, **ACTIVE** appears on the layout tile. To modify a layout, double-click the layout tile. Right-click a tile for more options. For more information, see *Managing layouts*.

From the dashboard, double-click a layout tile to open the layout builder. There are two views on the builder page:

- In the **Layout** view, you can add sources to a layout and decide how they will appear on the video wall (see *Managing layouts*).
- In the **Source** view, you can add text overlays to a selected source (see *Managing sources*).

Image B. MuraControl layout builder page (Layout view)



Numbered area	Description
(1) - Layout list/Source list	**Layout view:** Sources you add to the current layout will appear under the **Windows** tab and on the layout canvas. Each instance of a source that was added multiple times is listed as a separate window. Use the search function to find a source. Right-click a source for more options. Layouts that were created for the video wall appear under the **Layouts** tab with layouts flagged as favorites listed first. Use the search function to find a layout. Right-click a layout for more options. **Source view:** Text overlays you add to the source will appear here and on the source canvas.

Numbered area	Description
(2) - Layout/Source canvas	The canvas represents the selected layout or source. As you modify the layout components, the changes will be reflected on the canvas. With your mouse pointer on the canvas, use the mouse scroll wheel to zoom in or out. Click **Back to layouts** to return to the layout dashboard. Click (|↔|) to recenter the canvas. Click **Layout/Source** to change from one view to another. Click (▶) to activate the layout or (■) to deactivate it.
(3) - Source bin	These are all the IP (blue), Web (purple), and Demo (blue with Matrox Video icon) sources that are available to add to a wall layout (see *Adding sources to a layout*). You can search for or filter sources in the bin, or right-click on a source tile for more options.
(4) - Properties panel	The **Properties** panel is where you configure the layout and its sources. The panel displays the properties of the selected element (for example, a text overlay).
(5) - Save/Cancel buttons	The **Save** button appears each time you make a change to the Mura DVW configuration or settings. Changes will only be applied to the video wall when you save. The application will flash green when a save is successful or red if there is an error.

Managing layouts

Once your display wall is configured, you can create and manage your wall's layouts from the layout bin on the dashboard of the MuraControl environment.

- **Create:** To create a new layout, click **Layout** in the upper-right of the bin. For more, see *Creating a layout*.
- **Modify:** To modify a layout, double-click the layout tile. For more, see *Modifying a layout*.
- **Rename:** To rename a layout, right-click the layout tile and select **Rename**.
- **Delete:** To delete a layout, right-click the layout tile and select **Delete**. For more, see *Deleting a layout*.

Creating a layout

A layout is what will be shown on your video wall. You can create multiple layouts and activate each one when needed.

To create a layout:

Step 1. Click **Layout** in the upper-right of the layout bin on the dashboard. This will open the Layout view of the layout builder page.

Step 2. Under the **Layouts** tab, right-click the new layout and click **Rename**.

Step 3. Type a new name for the layout and press the **Enter** key.

Step 4. Add sources (see *Adding sources to a layout*).

Step 5. Modify the layout (see *Modifying a layout*).

Result of this task: The new layout has been created. It appears in the layout bin and is listed under the **Layouts** tab.

Adding sources to a layout

The source bin lists all IP, HTML, and Demo sources that have been added to your Mura DVW (see *Adding sources*). These can be added to a layout to create the look of your wall.

Each tile displays the source name and its RTSP URL. You can hover on the source tile to see the full RTSP URL.

To add sources to the layout:

Step 1. Find the sources to add one of three ways:

- Scroll through the source bin to find the source.
- Use the source bin search function to find a source by its name.
- Use the source bin filters to find a source by its type.

More info: When performing a search, you can enter any part of the source name. Mura DVW will search for sources within the applied filter. Therefore, it is best to select the **Show All** filter when searching for a source.

Step 2. Select the sources in the source bin:

- To select a single source, click one source tile.
- To select multiple consecutive sources, hold the **Shift** key, then click the first and last source.
- To select multiple non-consecutive sources, hold the **Ctrl** key, then click each source.

Step 3. Add the sources one of three ways:

- To add a single source, double-click the source tile.
- Drag-and-drop the selected source tiles onto the layout canvas.
- Right-click a selected source tile and click **Add source to layout**.

More info: Sources are automatically added to the layout. A source can be added to the layout multiple times.

Result of this task: The sources have been added to the wall layout and appear in the list under **Windows** on the left side of the Layout view.

When done, remember: Once a source is added to the layout, **ADDED** appears on the source tile in the source bin and you can click and drag the source on the layout canvas to position it.

Modifying a layout

Once sources have been added to the layout canvas, you can change their size, position, and placement.

Source size

To change the size of a source on the layout canvas:

Step 1. Resize the source one of three ways:

- Click and drag a corner or side of the source border on the layout canvas.
- Click the source on the layout canvas and change its size in the **Properties** panel.
- Click the source in the list under the **Windows** tab and change its size in the **Properties** panel.

More info: The width and height measurements in the **Properties** panel are independent of one another. To maintain the aspect ratio, drag the border of a source on the layout canvas instead. To break the aspect ratio, hold the **Shift** key while dragging a border.

Step 2. Click **Save**.

NOTE If you delete the source from the layout canvas and re-add it to the layout, it will be back to its default size.

Result of this task: The source has been resized.

Source position

When a source is added to a layout, it is aligned in the upper-left corner (the 0x, 0y position) and appears with an orange border.

To change the position of a source within the layout:

Step 1. Move the source one of three ways:

- Drag-and-drop the source to a new position on the layout canvas.
- Click the source on the layout canvas and change its position in the **Properties** panel.
- Click the source in the list under the **Windows** tab and change its position in the **Properties** panel.

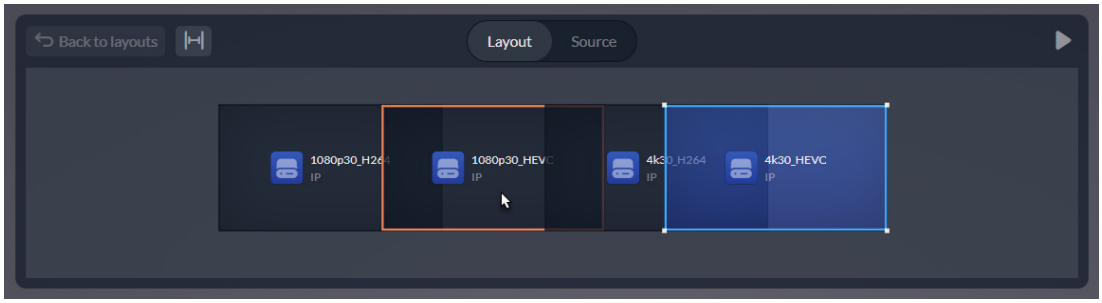
Step 2. Click **Save**.

Result of this task: The source has been repositioned in the layout.

Source placement (z-order)

The z-order determines how overlapping sources will appear on your layout. You can select and/or mouse over sources on the layout canvas to see how they overlap.

In this example, the sources are ordered bottom to top, going from left to right.



To change the placement of a source within the z-order:

Step 1. Open the z-order menu one of two ways:

- Right-click the source on the layout canvas and hover over **Z-order**.
- Right-click the source under the **Windows** tab of the Layout view and hover over **Z-order**.

Step 2. Select an option. Only options available for the selected source will appear.

More info: You can also click and drag sources under the **Windows** tab to reorder them. Sources are listed according to the z-order, from top to bottom.

Option	Description
Move down	Move the source down one place.
Send to bottom	Move the source to the last place.
Move up	Move the source up one place.
Send to top	Move the source to the first place.

Step 3. Click **Save**.

Result of this task: The z-order of the sources has been changed.

Removing a source from a layout

To remove a source from a wall layout:

Step 1. Right-click the source on the layout canvas or in the list under the **Windows** tab of the Layout view.

Step 2. Click **Delete**.

More info: If the source was added multiple times, it may still appear on the layout canvas. Consult the source list under the **Windows** tab to see if it appears more than once.

Result of this task: The source has been removed from the wall layout.

Activating a layout

Once your layouts are built, you can activate each one as needed.

To show a layout on the video wall, activate it one of three ways:

- Click (▶) on the layout tile in the layout bin of the dashboard.
- Click (▶) on the canvas of the Layout or Source view of the layout builder.
- Right-click the layout in the list under the **Layouts** tab of the Layout view and click **Activate layout**.

Result of this task: The layout is active on your monitors.

When done, remember: When a layout is active, **ACTIVE** appears on the layout tile on the layout dashboard and (▶) appears beside the layout name under the **Layouts** tab.You can make changes to an active layout by modifying it and clicking **Save**.

Deactivating a layout

You can deactivate a layout that is being shown on the video wall one of three ways:

- Click (■) on the layout tile in the layout bin of the dashboard.
- Click (■) on the canvas of the Layout or Source view of the layout builder.
- Right-click the layout in the list under the **Layouts** tab of the Layout view and click **Deactivate layout**.

Result of this task: The layout has been deactivated.

When done, remember: When you deactivate a layout, monitors will go blank.

Deleting a layout

To delete a layout:

Step 1. Right-click the layout tile in the layout bin of the dashboard or the layout name in the list under the **Layouts** tab of the Layout view.

Step 2. Click **Delete**.

Step 3. Click **Ok** to confirm.

Result of this task: The layout has been deleted from Mura DVW.

When done, remember: When you delete an active layout, monitors will go blank.

Managing sources

You manage and configure sources from the layout builder page of the MuraControl environment.

About demo sources

Demo sources are pre-configured sample sources included with the Matrox Mura DVW appliance. These sources do not require any additional external equipment and are available for immediate use once your Mura DVW wall has been properly configured.

You can incorporate demo sources into layouts just like any other IP source, making them ideal for product evaluation, feature testing, and familiarization with the MuraControl application.

NOTE Demo sources can be removed if desired. However, once deleted, they can only be restored by performing a user configuration reset.

Adding, renaming, modifying, and deleting IP and Web sources

You can add, rename, modify, and delete sources in Mura DVW. These actions can be done from either view of the layout builder page.

Adding sources

To add an IP or HTML source to Mura DVW:

Step 1. Click **Source** at the top-right of the source bin.

Step 2. Select **IP Source** or **Web Source**.

Step 3. Enter the source details (see *Source properties*).

Step 4. Click **Create**.

More info: If the information entered for an IP source is invalid, the source cannot be created in Mura DVW.

Result of this task: The source has been added to the source bin.

When done, remember: Once a source is added to the bin, you can right-click its tile and select **Add source to layout** or you can click and drag the source to the canvas to add it to the layout.

Renaming sources

To rename a source:

Step 1. Right-click the source tile in the source bin.

More info: If the source has been added to the layout canvas, you can right-click it on the canvas or in the list under the **Windows** tab of the Layout view.

Step 2. Click **Rename**.

Step 3. Enter a new name for the source and press the **Enter** key.

Result of this task: The source has been renamed.

Modifying source settings

Select a tile in the source bin to view the source's settings in the **Properties** panel. The settings are the ones you entered when you added the source to Mura DVW.

NOTE If more than one source tile is selected, only the properties of the last source selected will appear in the **Properties** panel.

To modify a source's properties:

Step 1. Click the source tile.

Step 2. Modify the settings in the **Properties** panel (for details, see *Source properties*).

More info: For IP sources, the **Network Scheme** field appears only once the source is added to Mura DVW. Demo sources cannot be modified.

Step 3. Click **Save**.

Result of this task: The source properties have been modified.

Deleting sources

To delete a source from Mura DVW:

Step 1. Select the source in the source bin:

- To select a single source, click one source tile.
- To select multiple consecutive sources, hold the **Shift** key, then click the first and last source.
- To select multiple non-consecutive sources, hold the **Ctrl** key, then click each source.

Step 2. Right-click a selected source tile.

Step 3. Click **Delete source**.

Step 4. Click **Ok** to confirm.

Result of this task: The sources have been deleted from Mura DVW.

Adding, renaming, and deleting text overlays

You can add, rename, and delete text overlays in the Source view of the layout builder page.

Adding a text overlay

You can add multiple text overlays to any source, whether the source has been added to a layout or not, and regardless of whether the layout is active.

To add a text overlay to a source:

Step 1. Select the source one of three ways.
- Click the source tile in the source bin.
- Click the source on the layout canvas.
- Click the source under the **Windows** tab of the Layout view.

Step 2. Go to the **Source** view.

Step 3. Click **Text**.

Step 4. Modify the text overlay in the **Properties** panel (for details, see *Text overlay properties*).

Step 5. Click **Save**.

Result of this task: A text overlay has been added to the source and appears in the list on the left side of the Source view.

When done, remember: If the source has been added to an active layout, any modifications to the text overlay will appear on the source canvas, but will only be added to the layout once you click **Save**.

Renaming a text overlay

The text of the overlay is its name. Changing the text or the name will change both.

To rename a text overlay:

Step 1. Change the name one of three ways:
- Double-click the text overlay on the source canvas and change the text.
- Click the text overlay on the source canvas and change the text in the **Text** field of the **Properties** panel.
- Right-click the text overlay in the list on the left side of the Source view, then click **Rename** and change the text.

Step 2. Click **Save**.

Result of this task: The text overlay has been renamed and will appear on the wall as entered.

Deleting a text overlay

To delete a text overlay from a source:

Step 1. Right-click the text overlay name in the list on the left side of the Source view.

Step 2. Click **Delete**.

More info: The text overlay is automatically deleted.

Result of this task: The text overlay has been removed from the source.

APPENDIX A

Layout and source properties

This appendix includes the following topics:

- *Layout properties*
- *Source properties*
- *Text overlay properties*

Layout properties

These are the properties that can be adjusted for a source on the Layout view of the layout builder. Changes you make to the properties will be reflected on the layout canvas. They will only be applied to the layout when you click **Save**.

Layout properties	
Source	
Selected source	The selected source's name and source type.
Arrange	
Position	This is the current position of the source on the layout canvas. You can change the position by typing new x- and y-axis coordinates.
Scale	This is the size of the source on the layout. You can change the size by typing new width and height values. **NOTE** The width and height measurements in the **Properties** panel are independent of one another. To maintain the aspect ratio, drag the border of a source on the layout canvas instead.

Source properties

These are the properties that can be adjusted for a source in the layout builder. Changes will be applied when you click **Save**.

IP source properties	
Source	
Selected source	The selected source's name and source type.
Basic stream settings	
Type	Streaming protocols or transport protocols used for delivering audio and video over IP networks.
IP/Hostname	IP address or hostname of the source.
Port	Port number used to receive the IP stream.
Stream	Path portion of the stream URL, after the host and port (for example, */media/mystream*).
Username	Optional login name for authenticated streams.
Password	Optional password for protected streams or sources.
General stream properties	
Network scheme	Transport method used to deliver the stream data.
Width	Displays the width of the source.
Height	Displays the height of the source.

Web source properties	
Source	
Selected source	The selected source's name and source type.
Details	
Path	Full URL of the web page to display on the video wall.
Width	Displays the width of the source.
Height	Displays the height of the source.

Text overlay properties

These are the properties that can be adjusted for a text overlay on a source. Changes you make to the text overlay properties will be reflected on the source canvas. They will only be applied to the source when you click **Save**.

Text overlay	
Text	
Text	The text of the overlay.
Arrange	
Position	Choose the position where the text will appear over the source.
Typography	
Text	This is the text that appears for the overlay.
Font	Select a font from the drop-down list.
Size	Enter a font size.
Auto scale	Check this box to automatically adjust the size of the text relative to the source when the source is resized on the Layout canvas.
Color	Click the color sample to change the text color. Enter the opacity percentage for the text.
Background	
Background fill	Activate this option to add a background color within the text overlay text box.
Color	Click the color sample to change the background color.
Full width	Set the background fill to the full width of the source.

APPENDIX B

Hardware specifications and factory reset

This appendix includes the following topics:

- *Matrox Mura DVW hardware specifications*
- *Restoring factory default settings*

Matrox Mura DVW hardware specifications

These are the hardware technical specifications for the Matrox Mura DVW.

Matrox Mura DVW	
Product	
Part number	DVW-Q4KY-NA (Canada/US power cord) DVW-Q4KY-EU (European Union power cord) DVW-Q4KY-NA (UK and Au/Nz power cord)
Cooling	Dual ball bearing fan
Connectors	4x HDMI outputs with locking mechanism, 2.5 and 1[1] GbE RJ45 ethernet
Maximum output resolutions	Max. 4096x2160 @ 60Hz
Form factor	Standalone appliance, 1U, ½ rack (horizontal)
Network interface	
Standard	Ethernet 10/100/1000/2.5G base-T, auto-detect, half/full-duplex
Connector	RJ45
IP version	IPv4/IPv6
Distributed method	Unicast, multicast and multiple unicast
IP addressing	DHCP (default) and Static IP
Streaming & Control Protocols	
Streaming protocols	RTSP, SRT
Command & control protocols	Telnet and HTTPS
Color Space	
Pixel formats	**RGB:** 8:8:8, 10:10:10[1] (24/32 bits per pixel) **YUV:** 4:4:4, 4:2:0 (8/10[1] bits per component), color space conversion support

Matrox Mura DVW	
Video & Audio Processing	
Video compositing	Multi-channel video composite/key/blend/crop/mirror/flip
Audio	Future software feature
Video Decoding	
Codec engine	H.264/MPEG-4 Part 10 (AVC), up to level 5.2, 4:2:0 8-bit H.265 (HEVC), up to level 6.2, 4:2:0 and 4:4:4 8-bit
H.264 and H.265 decode	For both H.264 and H.265, 4:2:0 8-bit, displayed across four 4K60 monitors: 1x 8K60, 6x 4K60, 12x 4K30, 18x 1080p60, 34x 1080p30, 34x 720p60, 72x 720p30
Rate control	Constant bitrate (CBR), variable bitrate (VBR), VBR with constraints, configurable GOP (group of pictures) structure
Environmental & Power Conditions	
Operating conditions	**Temperature:** 0 to 40[2] degrees Celsius **Humidity:** 10% to 90% non-condensing
Storage conditions	**Temperature:** -20 to 70 degrees Celsius **Humidity:** 20% to 80% non-condensing
Typical power consumption	45W (12-19V)
Power supply	19V, 90 Watt PSU with locking mechanism
General Specifications	
Dimensions	**Length:** 19 cm (7.48") **Width:** 14.8 cm (5.83") **Height:** 3 cm (1.18")
Rackmount	Vesamount bracket included, rackmount compatible
Regulatory compliance	Class A: FCC, CE, RCM, ICES-003, KC, UKCA
Environment compliance	RoHS, China RoHS, REACH, WEEE
Warranty[3]	2 years[4]

1. To be supported in a future release.

2. Units mounted side-by-side in a rack require proper ventilation and a maximum ambient temperature of 30 degrees Celsius for optimal performance.
3. The battery is non-replaceable and non-serviceable. Additionally, there are no user-serviceable parts within the device. Opening the chassis will void the warranty.
4. Extended warranty available.

Restoring factory default settings

To restore your Matrox Mura DVW to its factory default settings, or to purge the device of all configuration settings, you will need to connect to it using a keyboard and monitor and access the boot menu.

To access the boot menu:

Step 1. Power off the Matrox Mura DVW,

Step 2. Connect a keyboard to any of the USB ports.

Step 3. Connect a monitor to any of the HDMI ports.

Step 4. Power on the Matrox Mura DVW while simultaneously holding down the **Esc** button on your keyboard.

The Mura DVW will boot into the blue screen boot menu.

Step 5. You will see three options:

- **(1) Restore factory image** This will reset the Mura DVW to the factory default firmware/image. All files, settings, user credentials, and firmware updates will be lost. You will need to create a new admin password and update your firmware. Type **1** to proceed, then type **y** when prompted.
- **(2) Reboot** This will perform a simple reboot of the device. Type **2** to proceed.
- **(3) Reset configuration settings** This will reset all configuration settings to their default values. You will need to create a new admin password. Type **3** to proceed, then type **y** when prompted.

Result of this task: The Mura DVW will restart in the state you selected.

APPENDIX C

Legal and compliance

This appendix includes the following topics:

- *Disclaimers*
- *Compliance statements*

Disclaimers

(English) Disclaimer

THE INFORMATION IN THIS GUIDE IS SUBJECT TO CHANGE AT ANY TIME AND WITHOUT NOTICE.

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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.

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 elativamente 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.

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