

CORIOview™ Multi-window Processor
Classic mode
CORIOgrapher™ V2.9 and above

User Guide V1.20

Firmware version M409 and above

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Oct 2019

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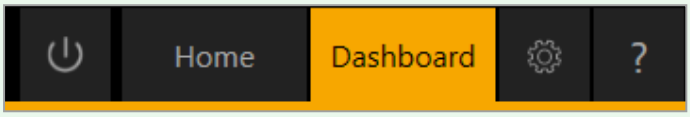
Welcome

Welcome to tvONE Help, the place to get help with your:

- CORIOview™
- CORIOgrapher™
- CORIOdiscover
- Classic mode

Get more help

You can read more online. To open the online help, select ? in CORIOgrapher, or visit help.tvone.com/products/mwp-series/corioview/classic.



Meet CORIOview

Thanks for buying this CORIOview multi-window processor. CORIOview works with CORIOgrapher software to support your needs with an easy-to-use interface and front panel buttons.

CORIOview now runs in two modes. This Quick Start Guide covers setting up your CORIOview in either mode.

About modes:

- Classic mode

  Classic mode gives you more control over features like audio, transitions, borders, and rotating your output. You can more fully customize your layout, choose your output resolution, and even rotate your displays into portrait mode. Use classic mode for more sophisticated activities, such as broadcast management and medical applications.

  If you've had a CORIOview for a while running a firmware version below 409, you're already using classic mode.

- Dynamic mode

  Dynamic mode automates more of the features of your CORIOview. It has a simplified interface, automatic layouts, and is easier to use, even if you're not very experienced. As a result, dynamic mode is better for activities like running meetings and lectures, and security monitoring.

- Dual mode multi-processor
- Manage meetings with ease
- Stay sharp in security settings
- Keep on top in your control room
- 4K Processor with pixel-perfect scaling
- Crystal-clear images with 4K output
- Window labeling
- Color borders with adjustable thickness
- 16 ready to use preset layouts
- Intuitive front panel
- Layout activation, and video and audio routing from front panel
- Unique Info button
- Wide range of inputs, including DVI, SDI, HDBaseT, 4K, and streaming media
- Up-down-cross conversion
- Custom resolutions
- Embedded and S/PDIF audio outputs
- Audio embedding and de-embedding
- Supports portrait and landscape displays

- Clone your output to a second display
- Supports secure communication
- Multiple control methods using CORIOgrapher, API, or Crestron/AMX controllers
- RESTful API
- Ultra-compact, ½ RU size with up to eight inputs

Meet CORIOgrapher

CORIOgrapher V2.9 is packed with features to help you create and manage your visual space.

- Intuitive software interface
- Assign sources to windows
- Design window border colors and sizes
- Configure labels, borders, and colors
- Custom resolution editor on inputs and outputs
- Control and configure audio
- Manage streaming media

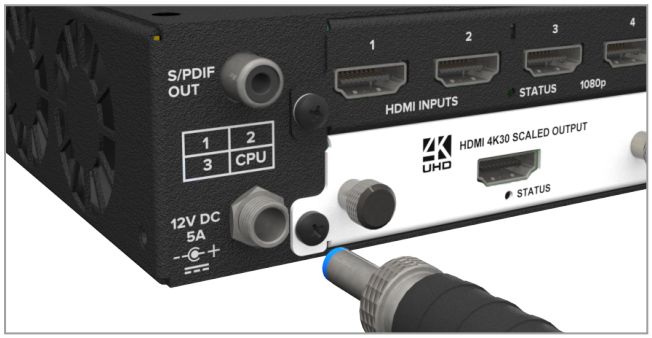
Quick start

This Quick Start Guide gives you an overview of the steps involved in setting up your CORIOview™ hardware and CORIOgrapher™ software.

1. Install your hardware.
   a. Connect your display or displays to your output module.
      Connect the LAN port of the CPU module to your network.

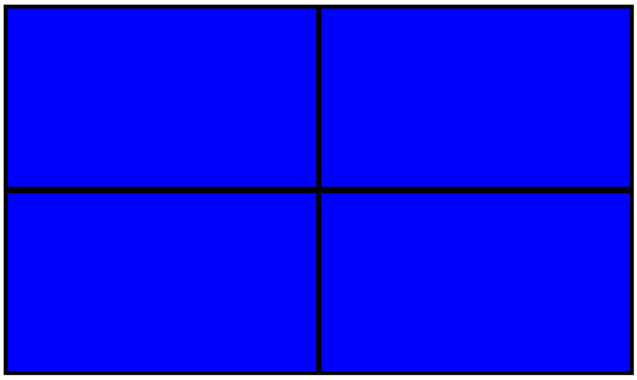
      Video tearing
      Using a mixture of frame rates and/or resolutions can cause video tearing. For best results, make sure your display and sources use the same frame rate.

   b. **OPTIONAL:** Connect a digital audio device to the S/PDIF audio output.
   c. Power on your CORIOview.



Read more about installing hardware on page 22.

2. Check your display looks correct for each source.
   Press PRESET, and then select the highest number button that is lit. For example, if buttons 1-4 are dimly lit, press button 4.
   Make sure your sources are playing, check that each picture looks correct.





✖ Not the source you were expecting
✖ Blue screen
✖ Display keeps dropping signal
✖ No image

Possible causes:

- Source connected incorrectly
- Input ports named incorrectly
- Source not playing
- Source resolution not supported
- Display does not support HDCP
- Source does not support the required number of HDCP keys
- Poor quality or damaged cables

✔ Sources and display connected correctly

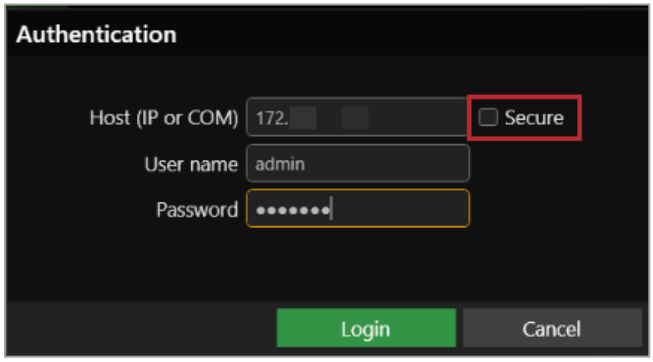
3. **Optional:** test the audio from each source.
   a. Press AUDIO, then press button 1 and check you can hear your source.
   b. If you can hear your source, repeat this step for buttons 2-8.
   c. If you can't hear your source, check it's not muted, at the source device or in CORIOgrapher.

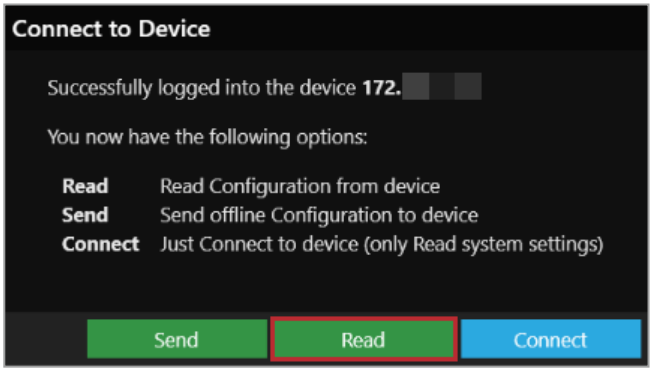
> Read more about controlling audio with CORIOgrapher in tvONE Help. In CORIOgrapher, select ? and search, or ask a question.

4. Install CORIOdiscover and CORIOgrapher.
   Download the latest version of CORIOdiscover and CORIOgrapher from tvone.com/softwares.
5. Open CORIOgrapher and select your CORIOview.



Enter your username and password to log in, and select Read to load your configuration.

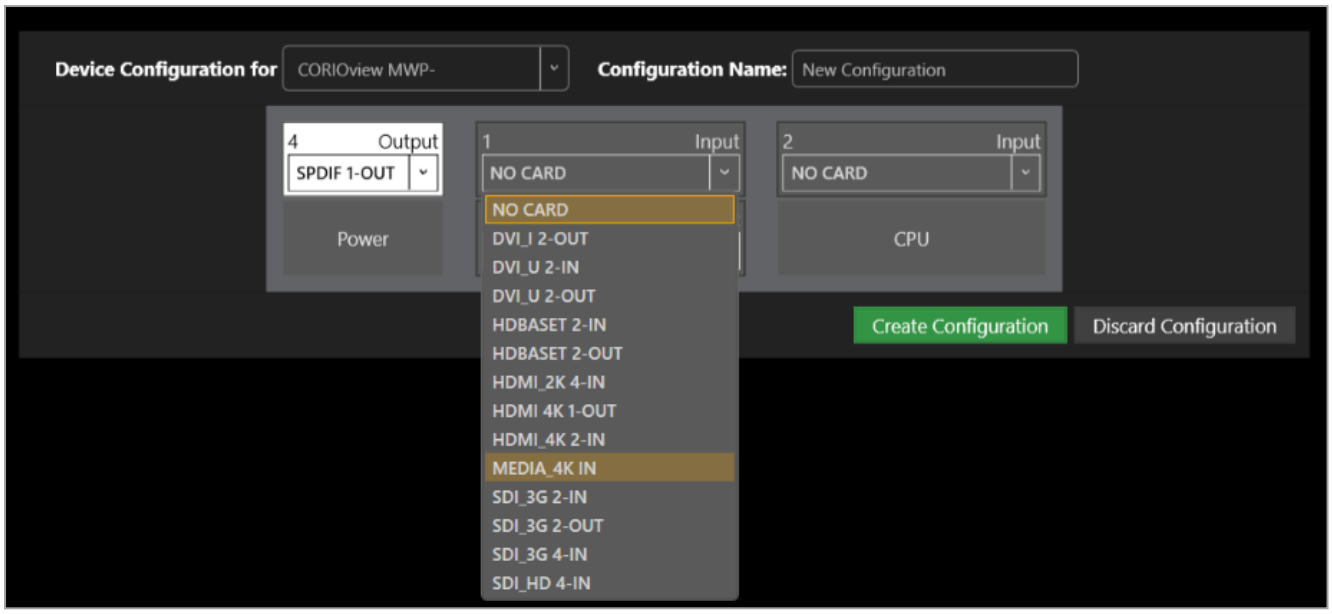




- The first time you log in, make sure the Secure option is cleared.
- The default username is admin, and the default password is adminpw.

Read about what to do if you can't find your CORIOview in the list on page 1.

If you aren't connected to a CORIOview, you can create an offline configuration for your device.



The media player of the Streaming media and 4K playback input module is not available when you work in an offline configuration.

Read more about your first steps with CORIOgrapher on page 1.

6. Choose your operating mode.

   You can use your CORIOview in two modes. Classic mode gives you more control. Dynamic mode has a simplified interface, and some functions are automated. Classic mode is better for more sophisticated activities like broadcast management and medical applications, dynamic mode is better for running meetings and lectures, and for security monitoring.

   You can change the operating mode later.

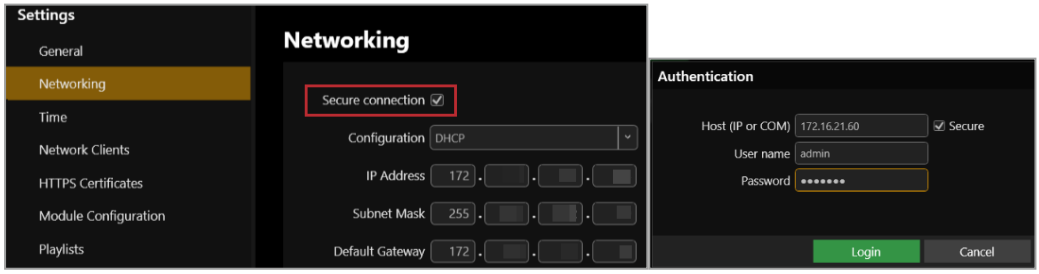
   Read about changing your operating mode on page 38.

   If you selected classic mode, continue on page 5.

   If you selected dynamic mode, continue on page 7.

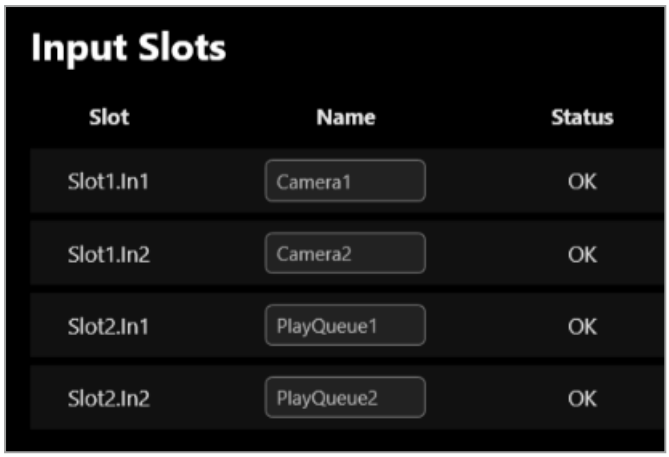
If you selected classic mode

1. **Optional:** enable secure mode.
   a. Select ⚙ > Networking.
   b. Select Secure connection.



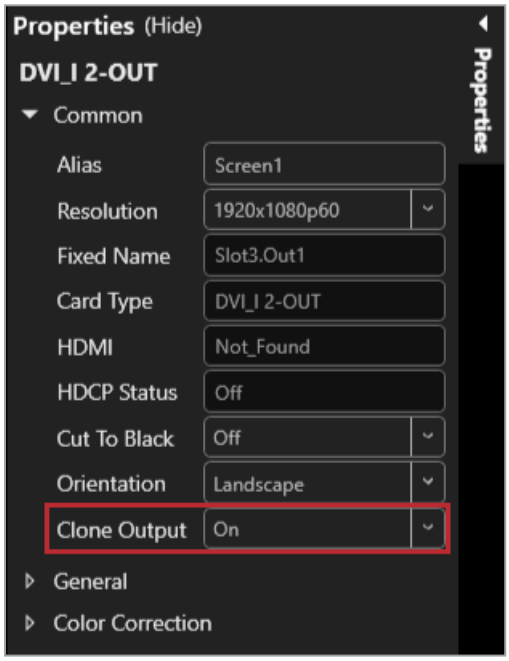
   c. Select Save > Save.
   CORIOview restarts.
   d. Select Secure and log in.

2. **Optional, but recommended:** name your input and output ports.



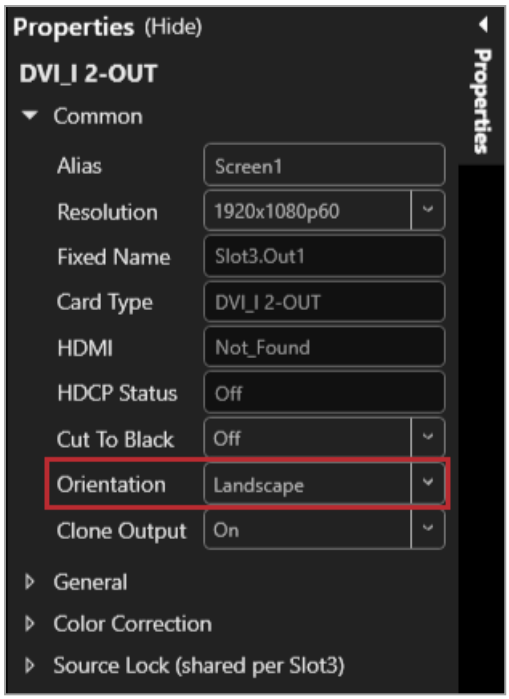
   - Select ⚙ > Slot Status. Give each port a name that describes the device connected to it. Read more about naming input and output ports on page 1.

3. **Optional:** If you want to use more than one display, enable output cloning.



   a. From Dashboard, select 🖵.
   b. From Properties< (Clone Output) select On.

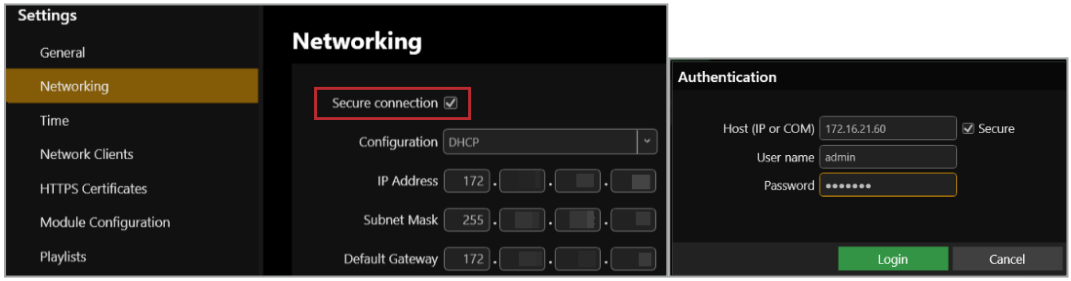
4. **Optional:** If you want your displays in portrait orientation, enable output rotation.



a. From Dashboard, select .
b. Select an option from Properties > Orientation.

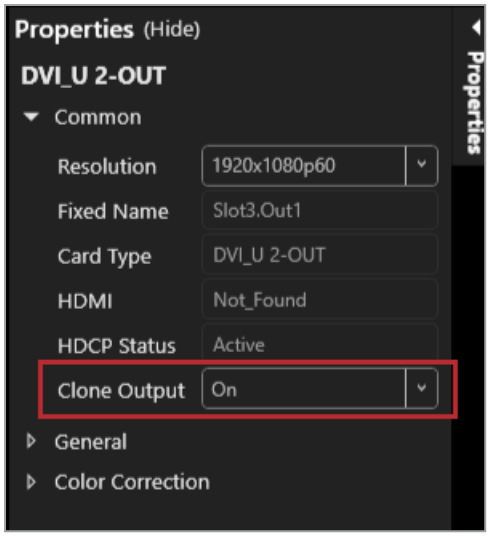
If you selected dynamic mode

1. **Optional:** enable secure mode.



a. Select > Networking.
b. Select Secure connection.
c. Select Save > Save.
CORIOview restarts.
d. Select Secure and log in.

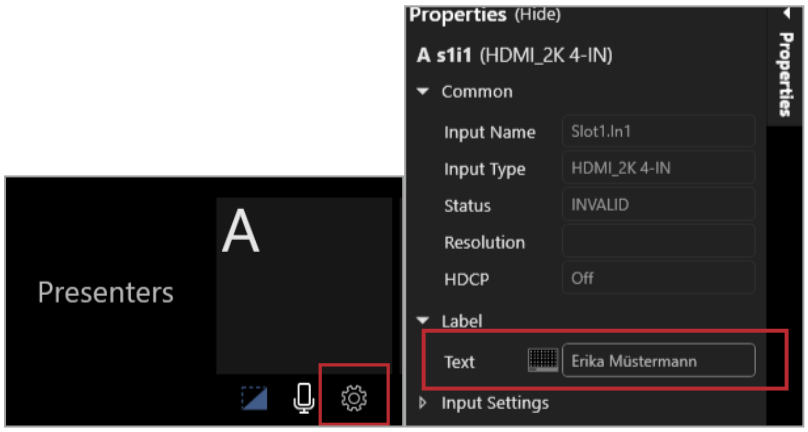
2. **Optional:** If you want to use more than one display, enable output cloning.



a. From Dashboard, select .
b. From Properties > (Clone Output) select On.

3. **Optional:** customize your window labels.

   You can choose the label text that appears on each window on your display.



a. From Dashboard, select underneath a presenter.

   For example, to add a custom label for presenter A, select underneath presenter A.

b. From Properties, customize your label. Labels can be up to 20 characters long. For special characters, select .

Troubleshooting problems setting up

Read troubleshooting advice on page 1.

Next steps

Congratulations, your CORIOview is set up!

If your CORIOview contains one or more Streaming media and 4K playback input modules, you need to set those up too.

Read about setting up Streaming media and 4K playback input modules on page 1.

Get to know your products

Learn about the features and functions of your hardware.

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About your CORIOview™

CORIOview is a multi-window processor that works with tvONE™ modules for a customizable experience. You can use your CORIOview in two different ways; as a presentation system with dynamic mode, and as a multiviewer with classic mode.

You can buy a preconfigured CORIOview, or a made-to-order CORIOview.

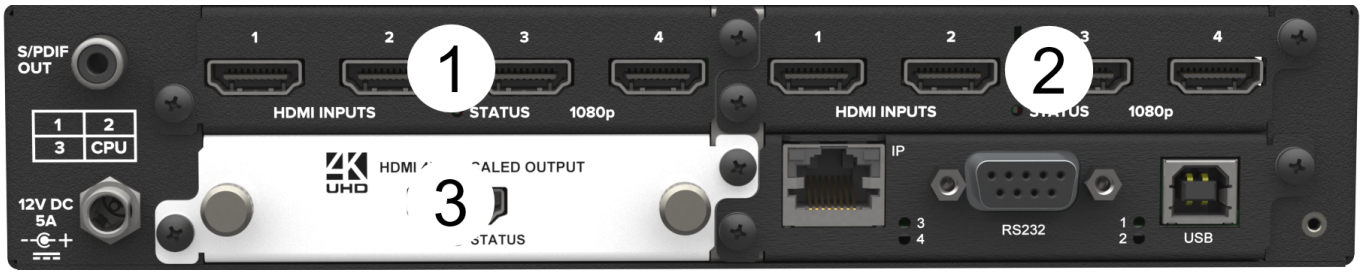
See a list of modules you can choose from to create a made-to-order CORIOview on page 12.

Modes

CORIOview has two operating modes.

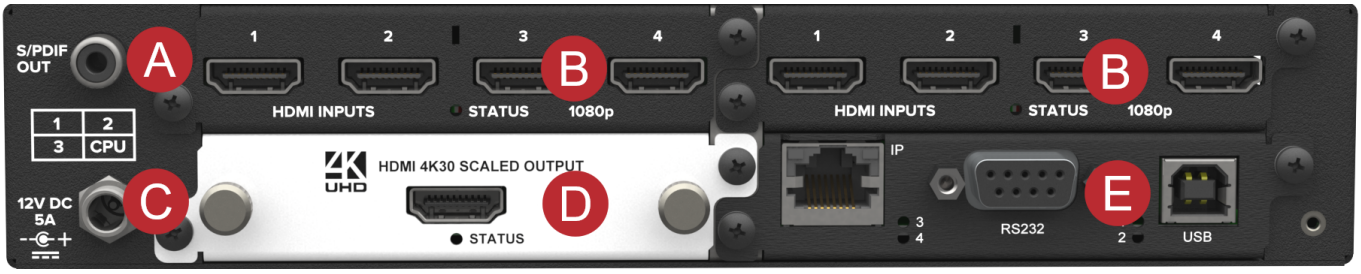
- In dynamic mode, use your CORIOview to present and share screens in a meeting or huddle room. You can connect up to eight presenters at once. Dynamic mode is also great for security monitoring.
- In classic mode, use your CORIOview to show up to eight video sources on a single display.

Slots



Your CORIOview has three slots that can contain input or output modules. You can have up to two input modules and one output module.

CORIOview rear panel



A	S/PDIF audio output	Connect to audio device with RCA
B	Input module (black)	Connect to sources
C	Power supply input	Connect to the power supply that came with your CORIOview
D	Output module (white)	Connect to displays **Note:** if you have more than one output port and connect two displays, they both show the same output.
E	CPU module	Connect to your network with Ethernet Optional: connect to serial controller with RS-232 Optional: connect directly to a PC with Ethernet or RS-232

CORIOview mounting accessories

You can mount your CORIOview to a surface, rack, or ONErack system with our mounting accessories, sold separately. Ask your distributor about:

- RM-CV-1RU-SINGLE: ONErack mounting module for CORIOview
- RM-CV-1RU-DUAL: rack mounting kit for one or two CORIOview units
- RM-CV-1RU-HANDLES: handles for your rack mount unit
- RM-503-SRF: surface mounting kit for CORIOview

Using the buttons of the front panel

In classic mode, you can use the buttons of the front panel to load presets, choose which window to hear, change the source playing in a window, lock the buttons, enter and exit standby mode, and display information about how sources are assigned to windows.

Preset mode

In preset mode, buttons A to H and 1 to 8 select presets.

PRESET is lit.



Buttons lit dimly	Buttons have presets assigned to them.
Button lit more brightly	The preset assigned to button 2 is active.
Unlit buttons	Buttons do not have presets assigned.

Video mode

In video mode, buttons A to H select windows, and buttons 1 to 8 select sources.

VIDEO is lit.



Buttons lit dimly	Sources and windows are available but not active.
Buttons lit more brightly	Source 1 is playing in window A.
Unlit buttons	Buttons do not have windows or sources assigned.

Audio mode

In audio mode, buttons 1 to 8 and A to H select sources to listen to. Both sets of buttons select the same sources, for example, you can select source 1 with button 1 or button A.

AUDIO is lit.



Buttons lit dimly	Audio is available but not active.
Buttons lit more brightly	You hear source 1 from your display and from any device connected to the S/PDIF output.
Unlit buttons	Buttons do not have windows or sources assigned.

Locking the buttons of the front panel

- To lock or unlock the buttons of the front panel, press and hold buttons 1 and 2.
  When the front panel is locked, buttons 1 and 2 are lit dimly.

Entering and exiting standby mode

In standby mode, your CORIOview reduces power and does not display content.

- To enter and exit standby mode, press and hold ⏻.
  When your CORIOview is in standby mode, the ⏻ button is lit red and other buttons are not lit.

Viewing sources assigned to windows

You can see which sources are assigned to which windows on your display.

- To show or hide sources assigned to windows, press ◈.



Selecting a source for a window

To select a source for a window:

1. Press VIDEO.
2. To select a window, press a button from A to H.

3. To select a source to play in that window, press a button from 1 to 8.

Selecting a preset

Window layouts are saved as presets. To select a preset:

1. Press PRESET.
2. Press a button from 1 to 8 or A to H.

Selecting audio

You hear audio from your display and from any device connected to the S/PDIF output. To select a source to hear:

1. Press AUDIO.
2. Press a button from 1 to 8.

About modules

CORIOview™ supports the following modules. You can have one output module, and up to two input modules. Each module supports specific connections, but our range of adapters means you can connect almost any type of source or display to your CORIOview.

Output modules with more than one port support up to two displays, both showing the same cloned output.

Input modules

Module	Product number	Connections
4K 30 HDMI input module, two inputs	CV-HDMI-4K-2IN-FF	2 x HDMI up to 4096x2160 @30 HDMI compatible and HDCP compliant
HDMI input module, four inputs	CV-HDMI-4IN-FF	4 x HDMI up to 1920x1080 @60 HDMI compatible and HDCP compliant
Universal DVI input module	CV-DVIU-2IN-FF	2 x DVI-U (HDCP compliant, and HDMI compatible with an adapater)
HD/SD-SDI input module	CV-HDSDI-4IN-FF	4 x HD/SD-SDI using BNC For co-axial cables
HDBaseT input module	CV-HDBT-2IN-1ETH-FF	2 x HDBaseT For CATx cables Supports up to 2 x 4K @30Hz, or 1 x 4K @60 Hz
3G-SDI input module, two inputs	CV-3GSDI-2IN-FF	2 x 3G/HD/SD-SDI using BNC For co-axial cables
3G-SDI input module, four inputs	CV-3GSDI-4IN-FF	4 x 3G/HD/SD-SDI using BNC For co-axial cables
Streaming media and 4K playback input module Read more about the Streaming media and 4K playback input module on page 13.	CV-AVIP-IN-1USB-1ETH-FF CV-AVIP-IN-1USB-1ETH-128-FF	1 x USB 2.0/3.0 1 x Ethernet

Output modules

Module	Product number	Connections
3G-SDI scaled output module	CV-3GSDI-SC-2OUT-FF	2 x 3G/HD/SD-SDI using BNC, with scaling For co-axial cables
4K30 scaling output module	CV-HDMI-4K-SC-1OUT-FF	1 x HDMI up to 4K @30 Hz (UHD)
DVI-I scaled output module	CV-DVI-I-SC-2OUT-FF	2 x DVI-I (HDCP compliant)
HDBaseT™ scaled output module	CV-HDBT-SC-2OUT-1ETH-FF	2 x HDBaseT For CATx cables

Adapters

You can use our adapters to connect any of the following formats to the DVI modules. Unless stated, you can use all of these adapters with both DVI-I and DVI-U modules.

Adapter	Product number	Male connector	Female connector
HDMI adapter	CMD1941	DVI	HDMI
Analog PC adapter	ZDH2040	DVI	VGA
Analog RGBHV adapter	ZDB-2038	DVI	Analog RGBHV
YPbPr/YUV adapter	ZDR2042	DVI	YPbPr/YUV
YPbPr/YUV adapter cable	ZDB2044	DVI	YPbPr/YUV
YC (S-Video) adapter	ZDB2048	DVI-U only	2 x composite video
YC (S-Video) adapter	ZDS2046	DVI-U only	4-pin mini-DIN
Composite video adapter	ZDC2050	DVI	BNC

About your Streaming media and 4K playback input module

The Streaming media and 4K playback input module allows you to decode and play:

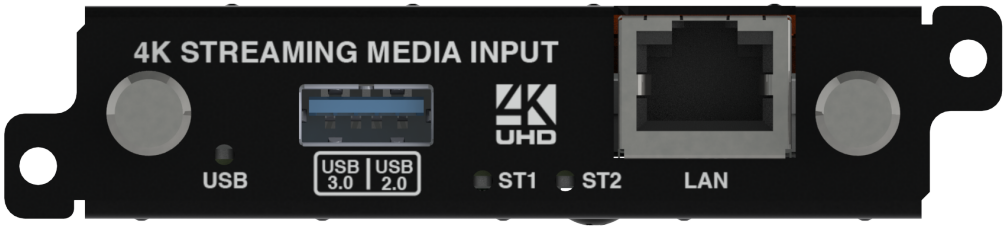
- Media and images from a USB drive
- Media and images from internal storage
- Video streams from IP sources.

  Sources include streaming server, and any device used with an IP encoder, for example, the Magenta™ Encoder-100.

Features

- Play two simultaneous channels of media, including IP streams
- Play video clips from USB drive up to 4K @30 Hz
- Play single IP streams up to 100 Mb/s
- Play dual IP streams up to 40 Mb/s
- Play still images up to 8K
- Play streams with low latency
- Play media from streaming server
- Create and save up to 20 playlists
- Primary channel supports up to 4K @30 Hz

- Secondary channel supports 1080p @60 Hz
- IP streams up to 4K @30 Hz
- Full resolution and frame rate scaling
- Start playing media when your CORIOview™ starts
- Supports USB 3.0
- 16 or 128 GB internal storage



USB (LED)	Indicates the status of the USB drive. Green means that the USB drive is working correctly. Red means that the USB drive is over current.
USB 3.0 USB 2.0	Connect a USB drive to play media directly. For best results, we recommend using quality USB drives compatible with USB 3.0.
ST1 (LED)	Indicates the status of the card. Green means that the card is working correctly. Red means that the card is starting, or that there is a problem.
ST2 (LED)	Indicates the status of the module. Green means that the module is working correctly. Red means that the module is starting, or that there is a problem.
LAN	Connect an Ethernet cable to play media over IP.

If any status indicator stays red, restart your CORIOview. If that doesn't work, contact tvONE support. Contact details are at the back of this guide.

Read more about your Streaming media and 4K playback input module in the Streaming media and 4K playback input module Quick Start Guide QSG-CM-AVIP-IN, or in tvONEhelp.

Streaming media and 4K playback input module - quick start guide

Setting up the Streaming media and 4K playback input module

1. Connect your cables and power on your CORIOview™.

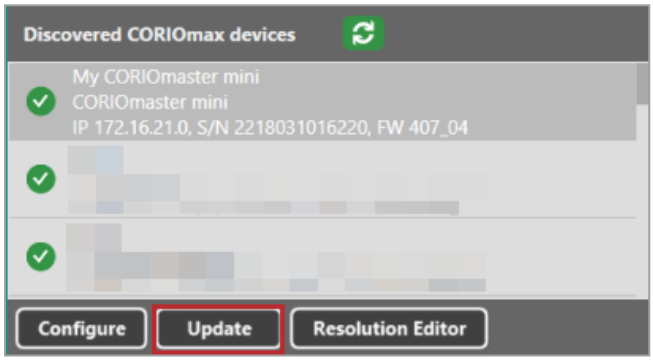
   To stream media, connect an Ethernet cable to the Streaming media and 4K playback input module, or connect a USB drive to play media directly.

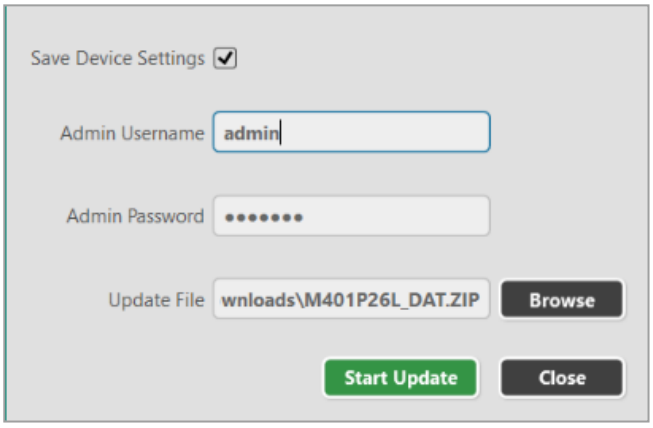
   For 4K media, use a good quality, high-speed 3.0 USB drive.



Make sure your CORIOview is connected to your display devices and to an AC power outlet.

2. Download the latest firmware for your CORIOview from tvone.com/firmware-updates.
3. Download the latest version of CORIOdiscover and CORIOgrapher from tvone.com/softwares.
4. Use CORIOdiscover to update your firmware.



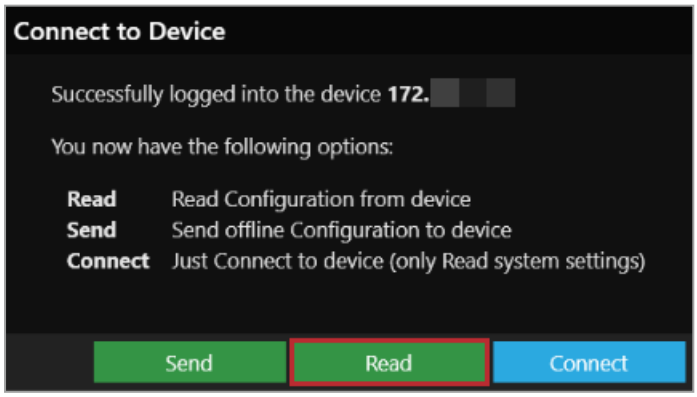


Read more about updating firmware on page 98.

If you need help with any of the following steps, select ? in CORIOgrapher and search, or ask a question.

Connecting to CORIOgrapher™ and choosing network settings

1. Open CORIOgrapher, connect to your CORIOview, and read the configuration from your device.

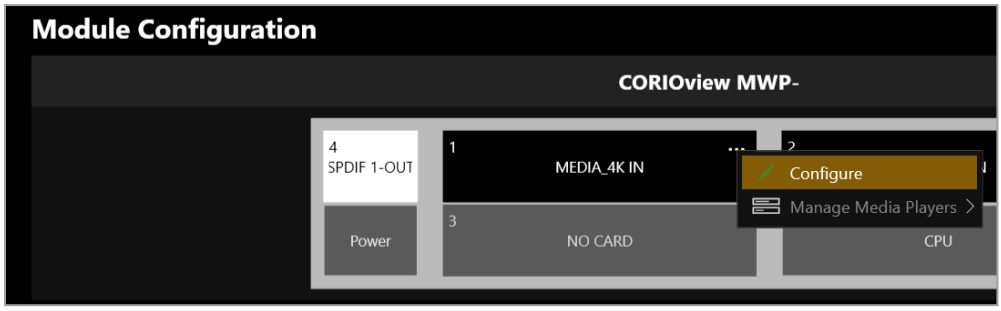


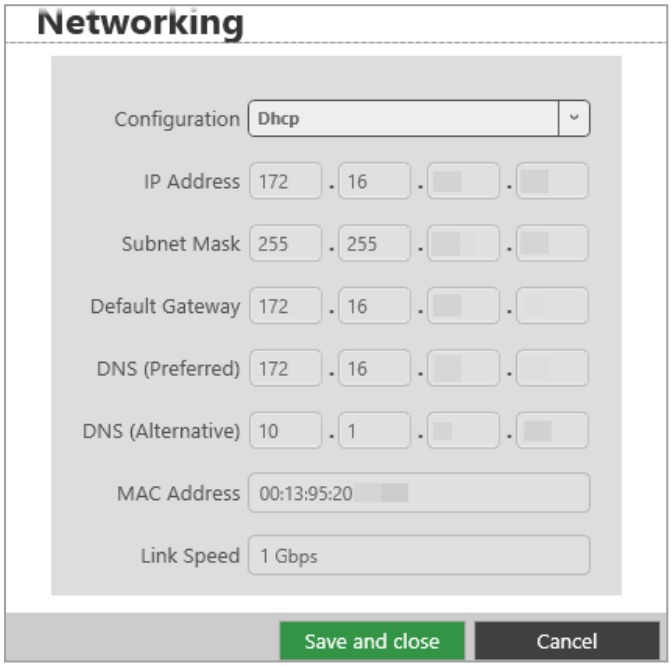
2. **OPTIONAL:** if you only want to play media from a USB drive, you don't need to do this step.

   If you want to stream media over IP, choose network settings for your Streaming media and 4K playback input module.

Select ⚙ > Module Configuration.

Find the Streaming media and 4K playback module that you want to set up, and select ••• > Configure.





If you choose DHCP, the network assigns you an IP address.

If you choose a static IP address:

- Enter a value for your IP address and subnet mask.
- If you want to stream from the internet, enter a value for your gateway.
- If you want to refer to a source by name, enter a value for DNS.

> **Static IP address**
> If you choose a static IP address, make sure you enter a unique value for your IP address. Using the same IP address for multiple devices can cause your devices to disconnect.

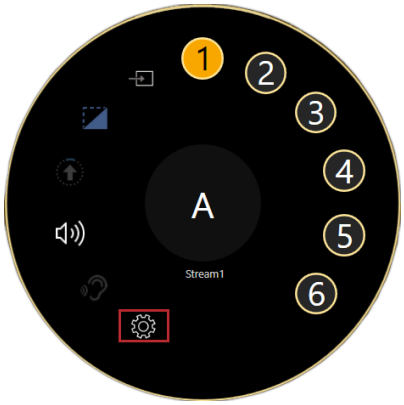
If you need help with network settings, contact your network administrator.

Playing media and streams

1. From Dashboard, select the bubble of a window playing a source from your Streaming media and 4K playback input module.



Select ⚙.



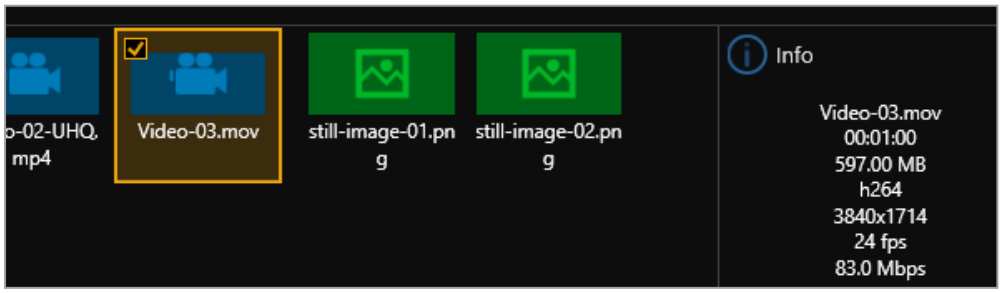
2. Select your media source.



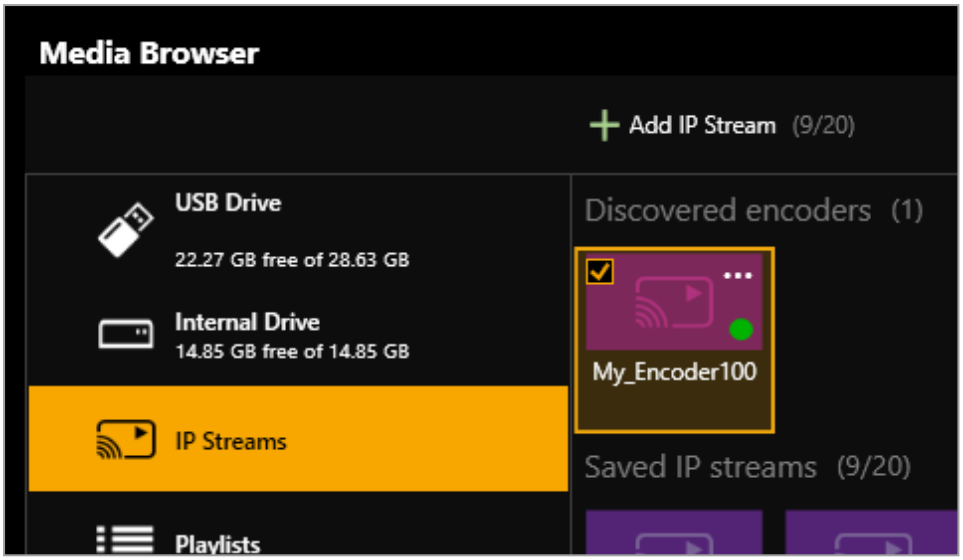
Your media items appear as icons.

	Still image		Saved stream
	Video clip		Found encoder
	Playlist		Found encoder, streaming

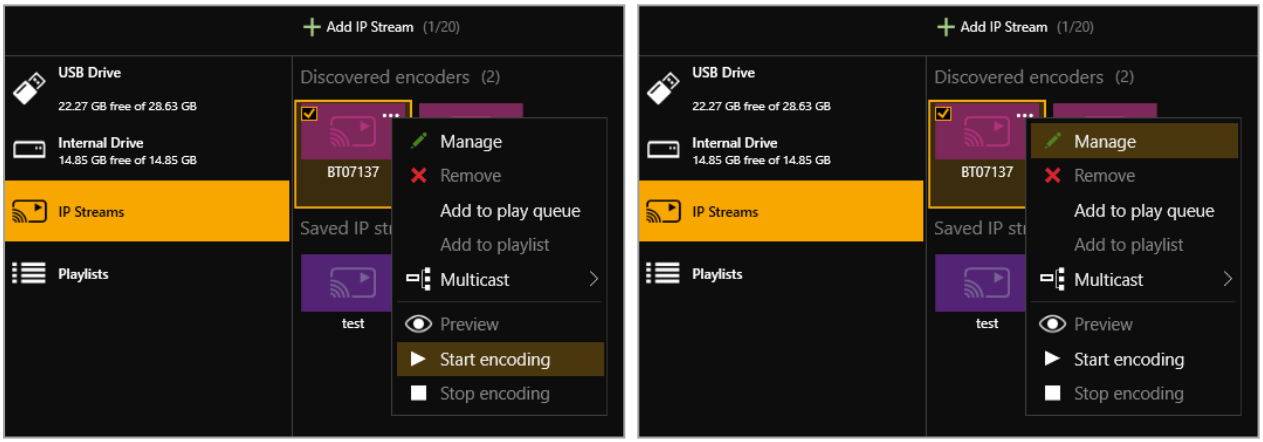
Information about the media item appears on the right.



3. **OPTIONAL:** if you want to stream media, add your streams.
   - If you want to stream from an Encoder-100, check that it is encoding. Look for the green spot.

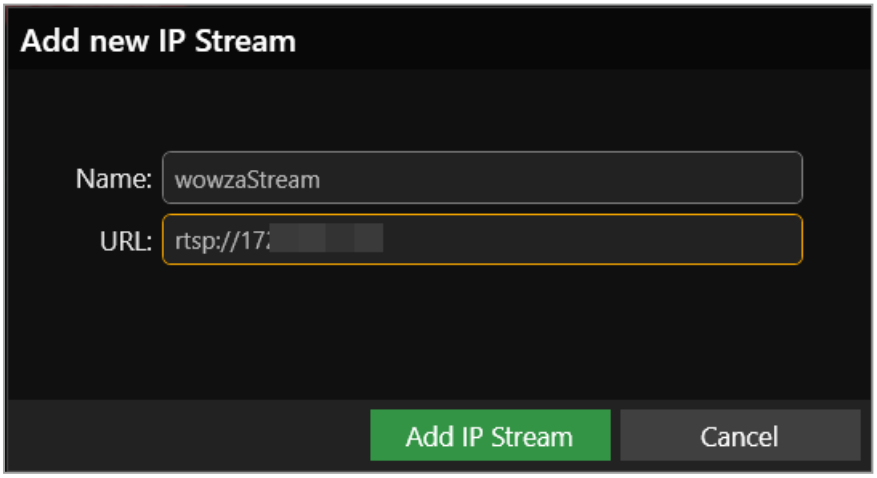


If the encoder is not encoding, you might need to start or configure it.

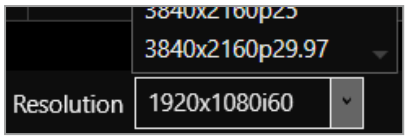


Read about the Encoder-100 at help.tvone.com/products/C3-series/C3-5XX/Content/Topics/ENCODER-100/ENCODER-100-about-E100.htm

   - If you want to stream from the internet, or from an encoder that does not appear in Discovered encoders, add the stream. Select IP Streams > Add IP Stream and enter a useful name and the URL of the media stream.

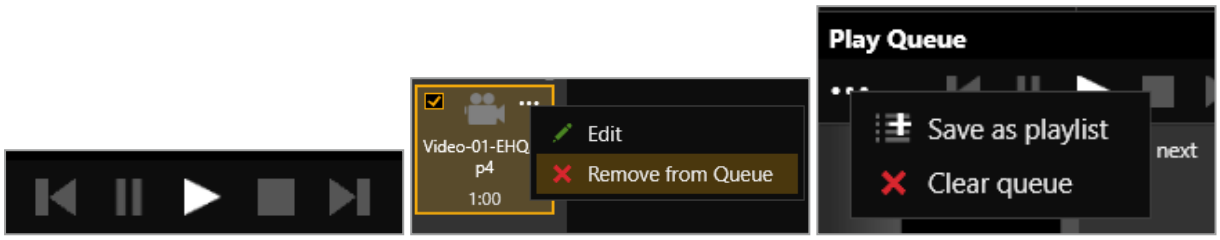


4. Choose a resolution for your media stream.



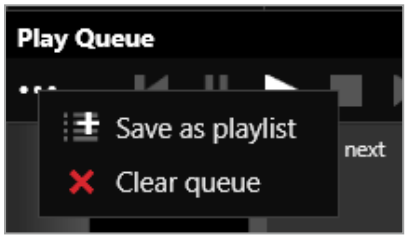
Read tips and recommendations for choosing the best resolution on page 86.

5. Drag media items and streams into the play queue and use the playback controls to play your media. Check that the media is playing on your video wall.
6. Use the playback controls to start, stop, pause, skip to the next item, and return to the previous item. You can select and delete media items, or clear the entire play queue.



To loop the play queue, first stop playback, and then select .

7. **OPTIONAL:** you can save your play queue as a playlist.



You can also create playlists in the playlist editor.

Read about creating and managing playlists on page 74.

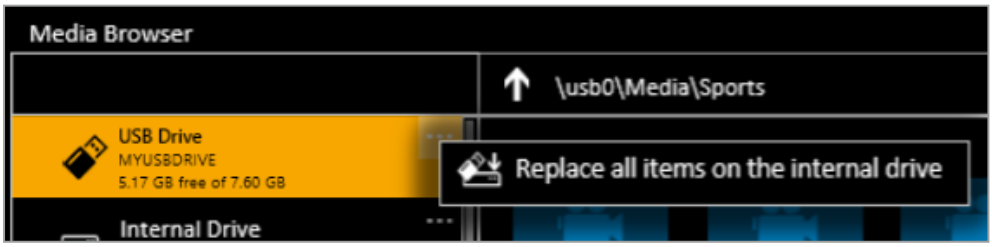
Setting up the internal drive

You can save media items from your USB drive to the internal drive.

When you first set up your internal drive, it is useful to copy the entire contents of your USB drive to the internal drive. All your media items and folders are copied to the internal drive for pathways up to 480 characters, or fewer, depending on the language you use.

> Unsupported items are also copied to the internal drive. You can't see these items but they still take up space. Check that your USB drive contains only supported items before you start.
> See a list of supported items on page 13.

- Select (USB Drive) ••• > Replace all items on the internal drive.



Read about creating and managing playlists on page 82.

Hardware recommendations

At tvONE, we design our products to the highest quality standards. To get the best results from our products, we recommend that you use the best quality connectors, cables, and adapters. Consider the points below when you choose accessories and position equipment.

- For best results with HDMI/DVI, use cables under 15 m long, or shorter if you use connection adapters. If you need to place your products more than 15 m apart, use a signal extender.

  See our range of signal extenders at tvone.com/signal-extension-systems.
- For best results with HDMI, use High Speed or Premium High Speed HDMI cables.
- In industrial environments, use shielded Ethernet cables.

  Shielded Ethernet cables are often marked F/UTP or FTP. Use shielded Cat 6 cables with HDBaseT input and output modules and Streaming media and 4K playback input modules.
- Use good quality USB 3.0 drives.

Set it up

This section contains everything you need to know about installing and setting up your CORIOview™.

In this section

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CORIOgrapher™ system requirements 24
About CORIOgrapher™ 25
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Enabling secure mode 30
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Setting an output resolution for your display 31
Changing the display orientation 32
Testing your installation 33
Settings 34
Device settings 35
Naming your CORIOview™ 35
Resetting your CORIOview™ to factory default settings 35
Backing up and restoring your settings 36
Changing the mode of your CORIOview™ 38
Locking the buttons of your CORIOview™ 39
User settings 40
Creating and editing users 40
Changing other users' passwords 41
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Network settings 41
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Configuring network settings for streaming media 43
Playlist settings 44
Renaming playlists and moving playlists between modules 45
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Managing encoders and streams 46

Planning and installing hardware

Video tearing
Using a mixture of frame rates and/or resolutions can cause video tearing. For best results, make sure your display and sources use the same frame rate.

Planning your installation

For best results, consider these questions before you start installing your hardware, and write a plan.

Display:

- What size is the display?
- What is the native resolution of the display?
- Do you need a display that supports HDCP (High-bandwidth Digital Content Protection)?
- Do you need a projector?

Sources or inputs:

- What types of source do you need?
- What is the native resolution of each source?
- What is the frame rate of each source?
- Will the sources be available at all times that the CORIOview is operating?
- Is there any switching or processing before the source reaches your CORIOview?

Positioning and location:

- Availability of electrical outlets
- Distance from CORIOview to sources and display

  For best results, use cables under 15 m long, or shorter if you use connection adapters. If you need to place your CORIOview more than 15 m away from your sources or displays, use a signal extender.

  Read about our adapters on page 13.

  See our range of signal extenders at tvone.com.
- Installation environment

  In industrial environments, use shielded Ethernet cables.

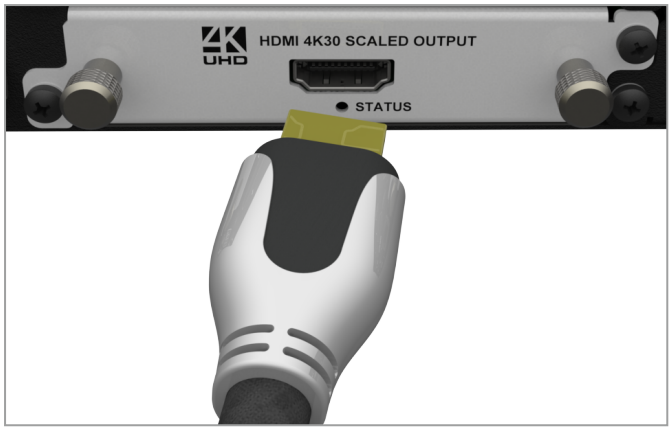
Installing hardware

Once you have planned and collected your hardware, you can set it up. First, install your displays and place your sources. Then connect your displays to your output modules and your sources to your input modules.

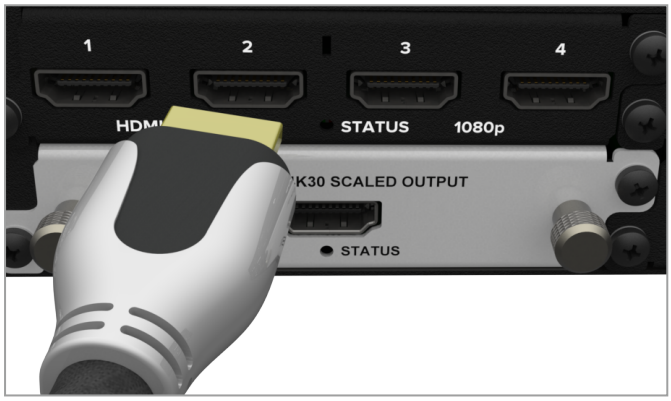
Who can do this?

Anyone can do this task, but we recommend that you consult a qualified AV installer.

1. Position your sources. Follow the advice above when you choose where to put your sources.
2. Connect your display or projector to the output module of your CORIOview.



3. Connect your sources to the input modules of your CORIOview. Connect cables for any dynamic sources.

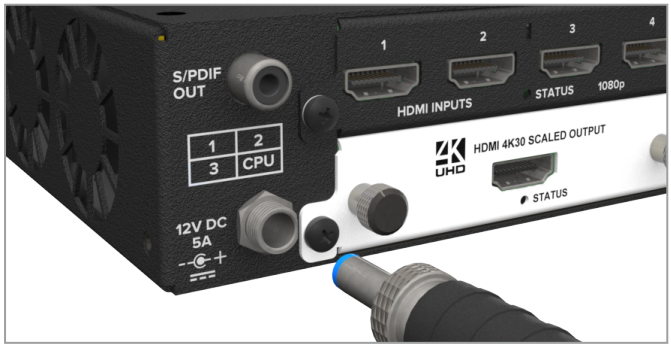


For best results, make a note of which source is connected to which port. If you want to use your CORIOview in classic mode, label your cables from 1 up to 8. If you want to use your CORIOview in dynamic mode, label your cables from A up to H.

4. Connect your CORIOview to your network. If you want to control your CORIOview with a serial controller, connect a serial controller.



5. Connect your CORIOview to an electrical outlet and power on.



You can now set up your inputs and output in CORIOgrapher.

Setting up a CORIOview™ in CORIOgrapher™

When you've finished installing your hardware and connected everything to your CORIOview, you can set up your CORIOview in CORIOgrapher.

In this section

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CORIOgrapher™ system requirements

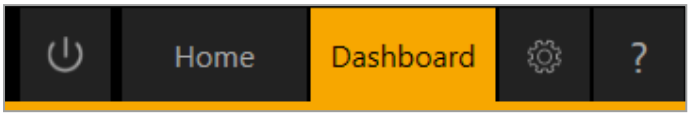
CORIOgrapher:

- Works with PCs running Windows® 7 and 10
- Works with Microsoft Surface Pros and similar touch screen devices
  Full support for touch screen devices is under development
- Installs Windows .NET 4.6, if you don't have it
- Needs 600 MB of disk space during installation
- Is approximately 60 MB in size once installed

About CORIOgrapher™

CORIOgrapher is the software that controls your CORIOview™. Depending on your operating mode, you can choose presenters and sources, customize layouts, add and edit label text, and configure system settings.

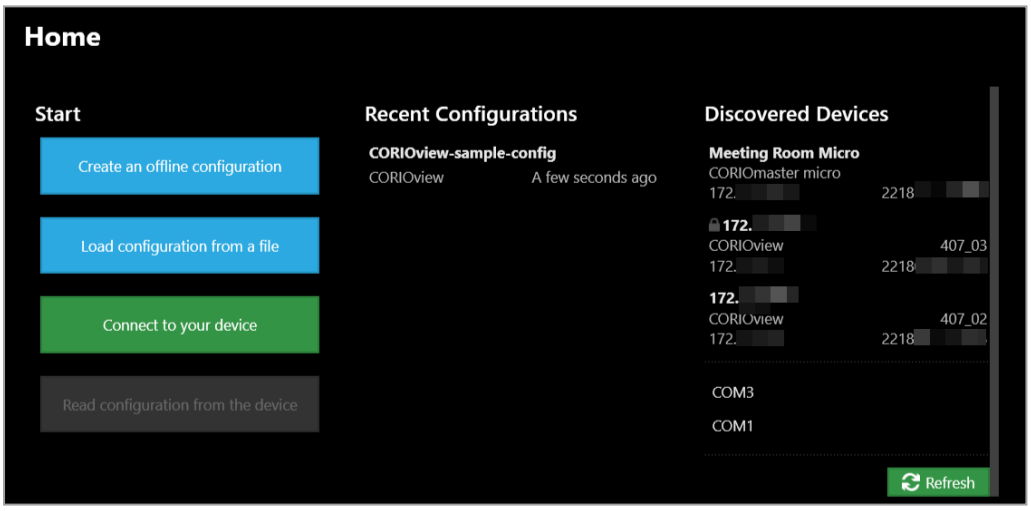
CORIOgrapher main areas



⏻	Enter standby mode.
Home	Home is where you connect to a CORIOview, load a configuration from a file, or create an offline configuration.
Dashboard	Dashboard is where you control the actions of your CORIOview.
⚙	Settings is where you configure your system, network, modules, and more.
?	? opens tvONE help.

Getting started with CORIOgrapher™

When you first open CORIOgrapher, you see the Home window.



- If you've set up your hardware already, you can connect to your CORIOview™ and get information about its configuration of modules.
- If you haven't set up your hardware yet, you can create a configuration offline. Or, if you have one, you can load a configuration from a file. You can save your configuration, and send the configuration to your CORIOview later. You can also use saved configurations to configure other CORIOview units.

Read about setting up hardware on page 22.

To connect to your CORIOview and get its configuration

The easiest way to get started using CORIOgrapher is to get the configuration of inputs and outputs directly from your CORIOview.

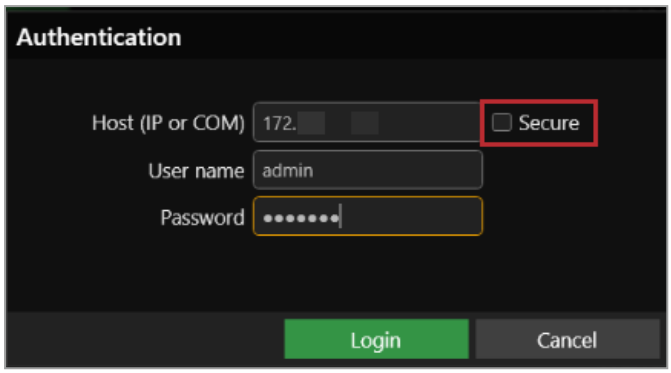
1. From Home, select your CORIOview from Discovered Devices.

   If your CORIOview isn't in the list, select Refresh.

   If you can't see your CORIOview, read troubleshooting advice on page 100.

2. Enter your administrator login details.

   When you first log in as an administrator, enter the username `admin` and password `adminpw`. Leave the Secure option clear.



   If Host (IP or COM) doesn't contain an IP address, read troubleshooting advice on page 100.
3. When you have logged in to your CORIOview, select Read to get its configuration.
4. Choose your operating mode.

   Read more about choosing an operating mode on page 38.

   If you chose classic mode, you can now name your input and output ports.

   Read about naming input and output ports on page 29.

   If you chose dynamic mode, you can now customize your window labels.

   Read about customizing window labels on page 55.

To log in with secure mode

You can communicate securely with your CORIOview. To use secure mode, enable secure mode.

Read about enabling secure mode on page 30.

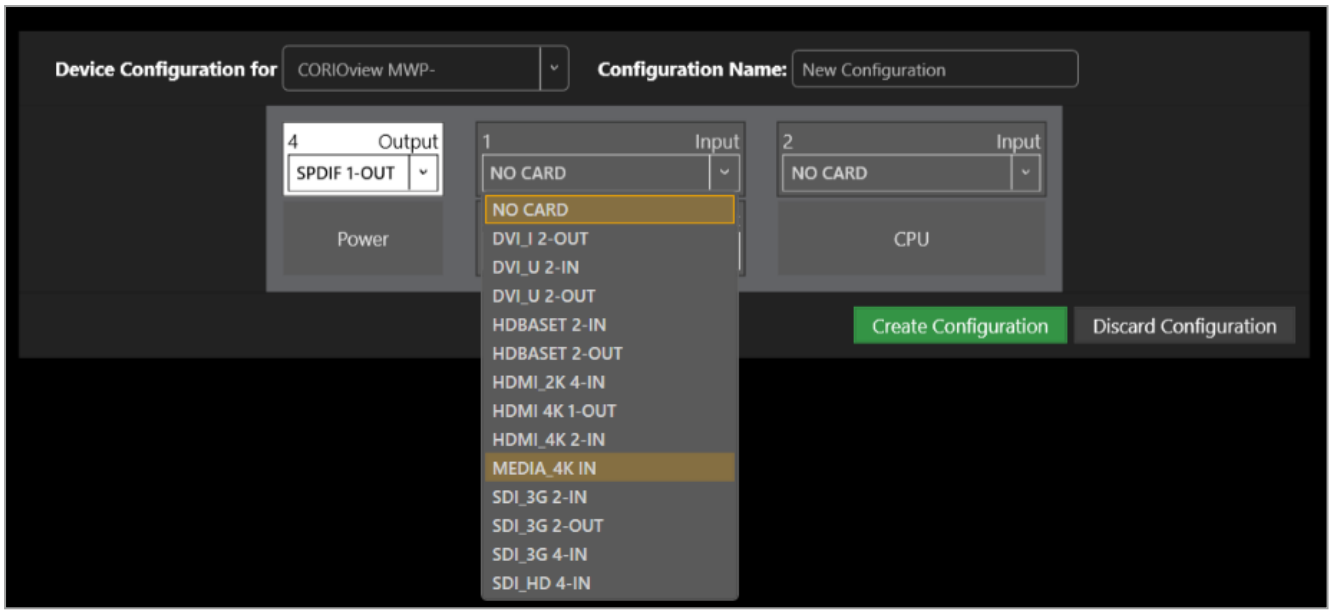
When secure mode is active, on Home you can see 🔒 next to the name of the CORIOview.

To create a configuration offline

You don't need to be connected to a CORIOview to create a display, but you do need to recreate the configuration of your CORIOview so that you're using the correct inputs, outputs, and devices.

You can also create offline configurations to help you decide what hardware you need.

1. From Home, select Create an Offline Configuration.
2. On the Configuration Editor window, choose a device, and give your configuration a name.
3. For each slot, choose an input or output module from the list.



- The number of slots available depends on your device.
- You don't have to use all the slots.
- If you are creating a configuration for an existing CORIOview, match your configuration to the modules of your CORIOview.
- If you are creating a configuration to help you decide what modules you need, there are some guidelines on where to put your modules.

  Read about the configuration of a CORIOview on page 9.

To send a configuration to your CORIOview

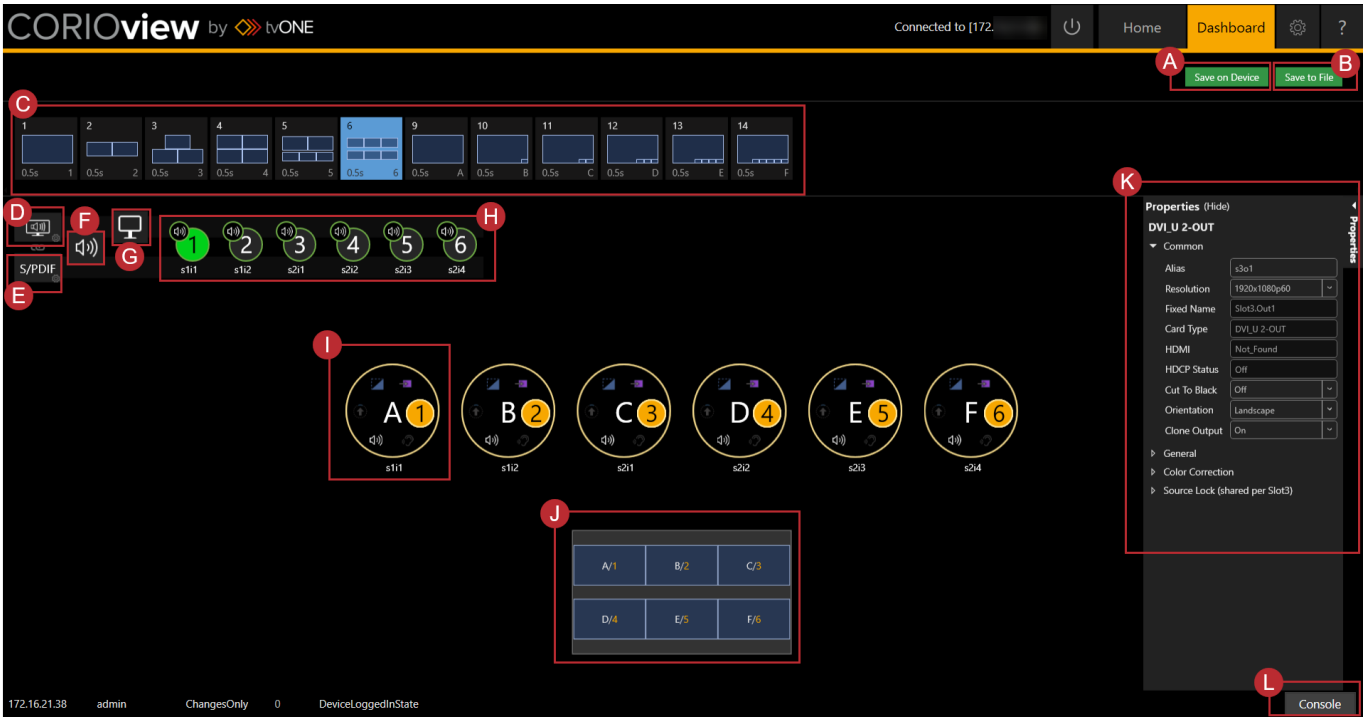
You can send a configuration to your CORIOview from Home. You can either create a configuration offline, or load a saved configuration.

1. Create or load a configuration.
2. Select Connect to your device and enter your administrator login details.

   When you first log in as an administrator, enter the username `admin` and password `adminpw`.
3. Select Send.

The dashboard

Use CORIOgrapher™ > Dashboard to select presets and sources, control audio, and configure display and source properties.



A	Save your current settings on your CORIOview™.	G	Cut everything to black.
B	Save your current settings to a file on your computer.	H	Select a source to listen to. Mute source audio.
C	Select a preset window layout.	I	Open window options, including: ▪ Select a source ▪ Choose a transition ▪ Cut window to black ▪ Open window properties
D	Open display properties.	J	See which sources are playing in which windows. Open window options.
E	Open S/PDIF audio properties.	K	Configure display, S/PDIF audio, or source properties.
F	Mute everything.	L	View all commands sent to and received from your CORIOview.

Naming input and output ports

You can name the input and output ports for each slot in CORIOgrapher™.

Why should I name input and output ports?

CORIOgrapher uses slot identifiers to give each input or output port in each slot a unique name. For example, the first port in slot 1 is named s1i1 for slot 1 input 1. These unique identifiers tell you the position, but not what is connected to that input or output.

Naming your ports with something that indicates what is connected to the port can help you identify what is what in your configuration, and will make it easier for you to see quickly which source is playing in which window. For example, you might rename s1i1 to Camera 1.

Naming the input ports of a Streaming media and 4K playback input module

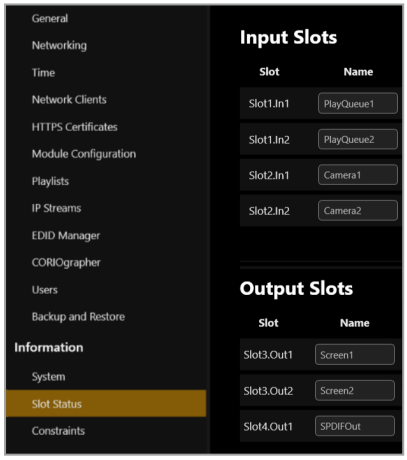
The Streaming media and 4K playback input module has two virtual input ports. Each port refers to a play queue, not to a specific streaming source. If you intend to build play queues with multiple sources, for example, one or two streaming sources and media items from a USB drive, then consider unique names such as PlayQueue1 and PlayQueue2. If you intend to always have just one streaming source in a play queue, then you could use names like WOWZAstream, or LectureTheatreStream.

Naming rules

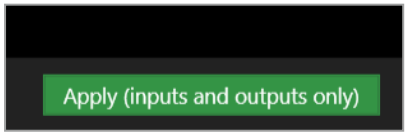
Names must be unique and start with a letter. They can contain letters, numbers, and underscores, and can be up to 21 characters long.

To name input and output ports

1. In CORIOgrapher, select ⚙ > Slot Status.
2. For each port, enter a useful name.



3. To save your new names, select Apply (inputs and outputs only).



If you are creating an offline configuration, select Dashboard > Save to File.

Enabling secure mode

You can use secure mode to encrypt information you send and receive from your CORIOview™.

About secure mode

Secure mode uses HTTPS to encrypt all communication between CORIOgrapher™, or another secure controller, and your CORIOview. HTTPS encryption uses TCP port 443.

Secure mode only works on CORIOview units with a real time clock installed in the CPU module.

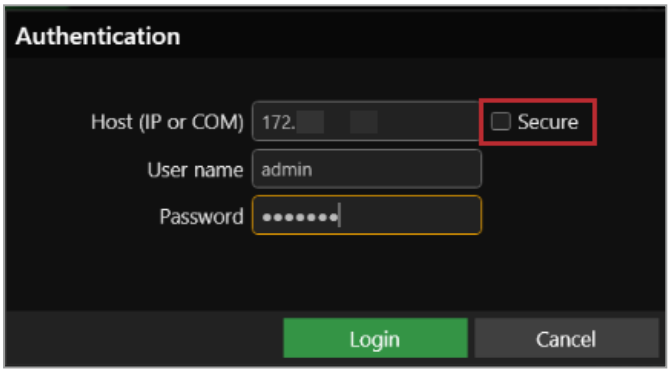
When secure mode is active, in Home you can see 🔒 next to the name of the CORIOview.

> Secure mode disables unsecured connections over Ethernet. Unencrypted third-party controllers do not work over Ethernet when you use secure mode. You can still use unsecured controllers that are connected directly to your CORIOview, using the serial port of the CPU module.

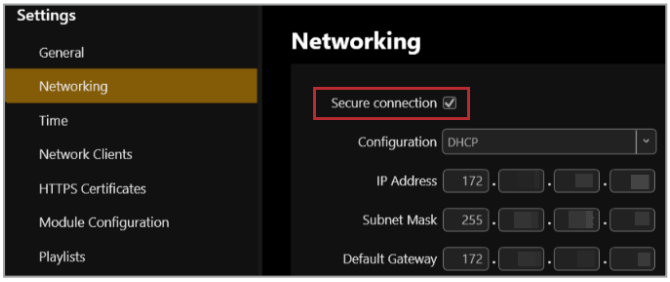
Read troubleshooting advice on page 102.

Enabling secure mode

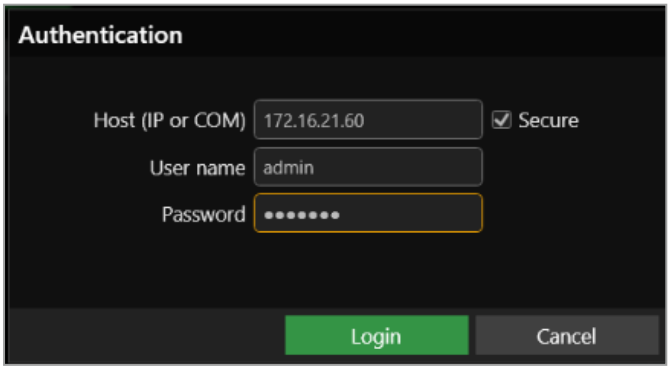
1. Clear the Secure option and log in to CORIOgrapher.



2. Select ⚙ > Networking.
3. Select Secure connection.



4. Select Save > Save.
   CORIOview restarts.
5. Select Secure and log in.



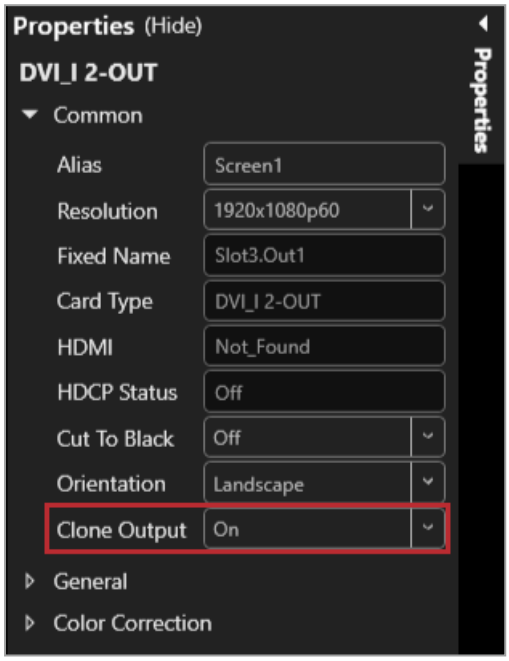
Setting up a second display

If your output module has more than one output port, you can add a second display. CORIOview™ clones your output onto your second display. Both displays show the same output at the same resolution.

Read more about output resolution on page 31.

To clone your output to a second display

1. From Dashboard, select .
2. From Properties > Clone Output select On.



Setting an output resolution for your display

> If you have more than one display, your output is cloned onto the second display. Both outputs have the same resolution.

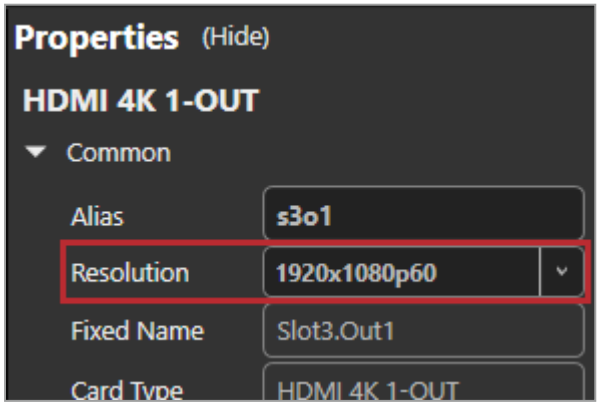
Before you set an output resolution for your display, make sure you have either loaded the configuration from your CORIOview™, or created an offline configuration.

Read about getting the configuration from your CORIOview on page 25.

Read about creating an offline configuration on page 26.

To set the output resolution of your display

1. From Dashboard, select .
2. From Properties, select a resolution for your display.



If you have more than one display, select a resolution appropriate for your primary display.

The preset previews and display preview update to match the aspect ratio of your chosen resolution, for example, 16:9 or 4:3.

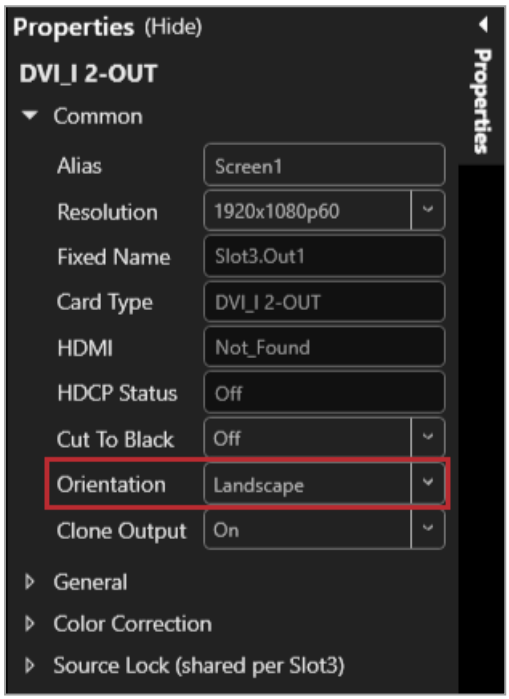
Changing the display orientation

> If you have more than one display, your output is cloned onto the second display. Both outputs have the same orientation.

Your displays can be landscape or portrait orientation. You can also show your displays flipped upside down.

To change the display orientation

1. From Dashboard, select .
2. Select an option from Properties > Orientation.



Testing your installation

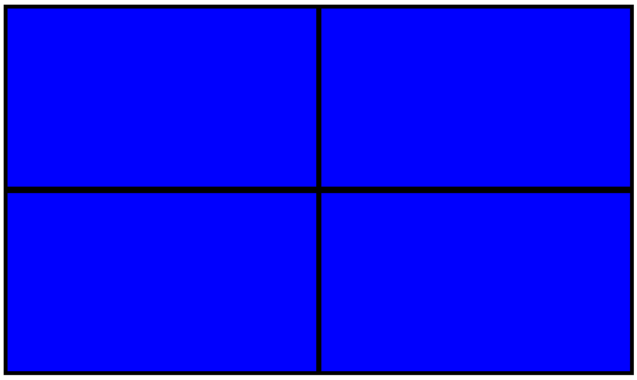
You can test the picture and audio of your sources, displays, and audio outputs.

If you have more than one display, your output is cloned, or duplicated, on the second display. If your second display doesn't show any video, you might need to enable cloning.

Read more about cloning your display on page 31.

To test your picture

1. Check your display looks correct for each source.
2. Press PRESET, and then select the available preset with the highest number. For example, if buttons 1-4 are dimly lit, press button 4.
3. Make sure your sources are playing, check that each picture looks correct.



✖ Not the source you were expecting

✖ Blue screen

✖ Display keeps dropping signal

✖ No image

Possible causes:

- Source connected incorrectly
- Input ports named incorrectly
- Source not playing
- Source resolution not supported
- Display does not support HDCP
- Source does not support the required number of HDCP keys
- Poor quality or damaged cables
- You have an invalid or unsupported custom EDID file



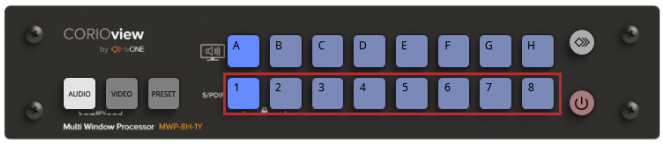
✔ Sources and display connected correctly

If your test was not successful, you might need to contact tvONE support.

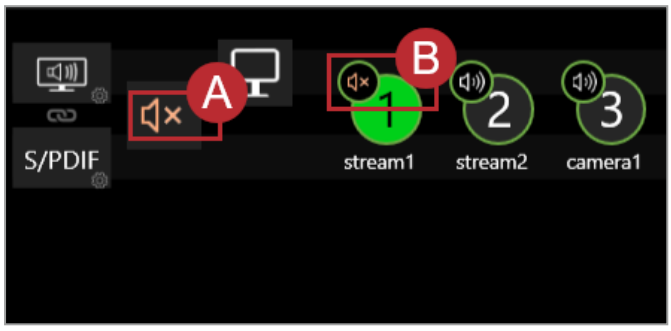
See contact details on page 115.

To test the audio from each input

1. Press AUDIO, and then press a button for an available audio source.



2. If your test is successful, repeat for each available audio source.
3. If you couldn't hear one or more of your inputs, check if they are muted in CORIOgrapher.



A All outputs are muted

B Input is muted

If you still can't hear audio, check your display hardware.

Read more about problems with audio on page 108.

Settings

You can manage device settings, network settings, and user settings. You can also get information about your CORIOview™, and name your input and output ports.

In this section

Device settings 35
Naming your CORIOview™ 35
Resetting your CORIOview™ to factory default settings 35
Backing up and restoring your settings 36
Changing the mode of your CORIOview™ 38
Locking the buttons of your CORIOview™ 39
User settings 40
Creating and editing users 40
Changing other users' passwords 41
Changing your own password 41
Network settings 41
Configuring network settings for your CORIOview™ 41
Configuring network settings for streaming media 43
Playlist settings 44
Renaming playlists and moving playlists between modules 45
Deleting playlists 45

Device settings

Administrators can configure settings for your CORIOview™, including creating and changing its name, and resetting the CORIOview to its factory default settings.

In this section

Naming your CORIOview™ 35
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Naming your CORIOview™

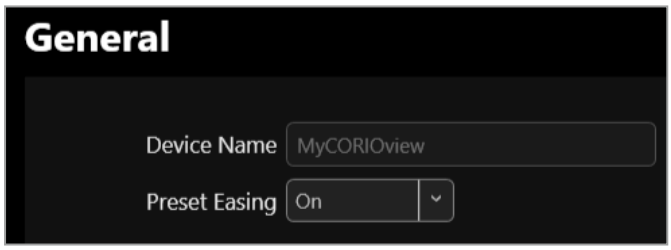
You can give your CORIOview a unique name.

Why should I name my CORIOview?

If you have more than one CORIOview unit on your network, giving each unit a unique name can make it easier to find and log in to that unit quickly.

To name your CORIOview

1. Select ⚙ > General.
2. Enter a name for your CORIOview.



Resetting your CORIOview™ to factory default settings

Why restore factory default settings?

If your CORIOview has become unstable, you have repeated errors that you can't fix, or you need to remove all settings and presets, you can reset your CORIOview to its factory default settings.

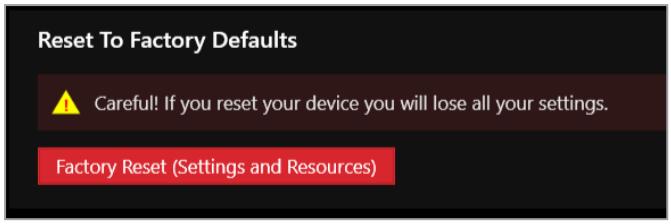
> When you reset your CORIOview to factory default settings, all of your settings and configurations are deleted.

Before you reset your CORIOview, you might want to back up your configuration. When you set up your CORIOview, you can restore your configuration.

Read about backing up and restoring your configuration on page 36.

To reset your CORIOview to factory default settings

1. Select ⚙ > General.
2. Select Factory Reset.



Backing up and restoring your settings

You can save your settings to a file on your CORIOview™, or to a file on your computer. You can restore your settings from either file. You can share a file saved on a computer between several CORIOview units that have the same configuration of modules.

Backing up your settings on your CORIOview

Settings that are saved on your CORIOview

All settings are saved to a backup file on your CORIOview, including:

- Presets
- Configuration, including custom names
- The play queue of a Streaming media and 4K playback input module
- Network settings
- Manually added streams

What isn't saved to your CORIOview

Work that you haven't saved to file, or saved to your CORIOview using Save on Device, isn't saved to a backup file on your CORIOview.



To back up your settings on your CORIOview

1. Select ⚙ > Backup and Restore > Backup.

Restoring your settings from your CORIOview

1. Select ⚙ > Backup and Restore.
2. Select Restore.

Backing up your settings to a file on your computer

Settings that are saved on your computer

Most settings are saved to a backup file on your computer, including:

- Presets
- Configuration, including custom names
- Network settings
- Manually added streams
- Custom resolutions

Note: device name and network settings are saved as part of the backup file, but are not included when you restore settings to your device. This allows you to share the backup file between devices without causing conflicts with names and network settings.

What isn't saved to your computer

The play queue and playlists of a Streaming media and 4K playback input module aren't saved to your computer.

To back up your settings to a file on your computer

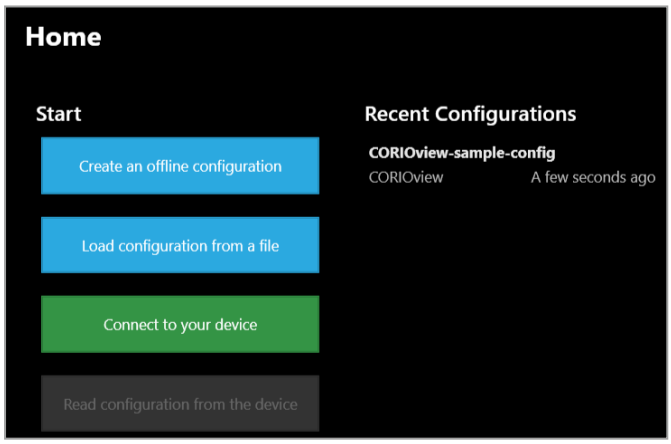
1. Select Dashboard > Save to File.



2. Choose a location for the file, and save.

Restoring or copying settings from a file on your computer

1. Connect to the CORIOview that you want to update with saved settings.
2. Select Home.
3. Under Recent Configurations, select a saved file.



If you can't see your file in the list, select Load Configuration from a file and browse to your file.

Problems sharing settings between CORIOview units

You can't share saved settings between devices with different configurations of modules.

You might not be able to copy settings from one CORIOview to another if they have very different firmware versions, or you might lose some data in the process.

Changing the mode of your CORIOview™

Your CORIOview can run in two modes, classic mode and dynamic mode.

If you find that the mode you're using is too complex, or doesn't have the feature set you need, you can switch modes in ⚙ > General.

> **Risk of losing settings**
> When you switch modes, CORIOview only keeps your network settings. Consider making a backup copy before you switch, in case you want to switch back again.
> Read more about making a backup on page 36.

I don't know which mode I'm using

Look at the front panel buttons.

On the front panel, press the PRESET button four times.

- If the PRESET button stays lit after multiple presses, your CORIOview is in classic mode.
- If the PRESET button alternates between lit and unlit with each press, your CORIOview is in dynamic mode.

Or, if you're using CORIOgrapher, connect to your CORIOview and take a look at the dashboard. If you see circles, your CORIOview is in classic mode. If you see squares, your CORIOview is in dynamic mode.

Which mode do I want?

Classic mode

Classic mode gives you more control over features like audio, transitions, borders, and rotating your output. You can more fully customize your layout, choose your output resolution, and even rotate your displays into portrait mode. Use classic mode for more sophisticated activities, such as broadcast management and medical applications.

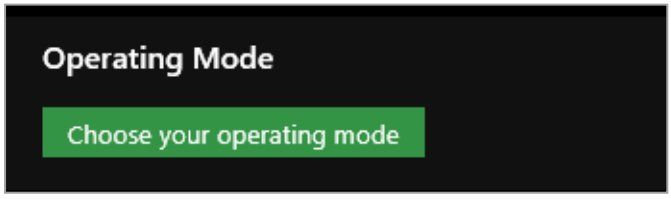
If you've had a CORIOview for a while running a firmware version below 409, you're already using classic mode.

Dynamic mode

Dynamic mode automates more of the features of your CORIOview. It has a simplified interface, automatic layouts, and is easier to use, even if you're not very experienced. As a result, dynamic mode is better for activities like running meetings and lectures, and security monitoring.

To change the mode of your CORIOview

1. From ⚙ > General, select Choose your operating mode.



2. Select a mode.
   CORIOgrapher restarts.

Locking the buttons of your CORIOview™

Locking the buttons of the front panel

1. Select ⚙ > (Front Panel) Settings.
2. Select or clear Lock.
3. Select Save front panel settings.

User settings

Administrators can create and edit users, change user roles, and enable specific timeout times. Users and power users can change their own passwords.

In this section

Creating and editing users 40
Changing other users' passwords 41
Changing your own password 41

Creating and editing users

You can create and edit users, change user roles, and enable specific timeout times. You can have up to four additional users.

Who can do this?

Administrators can do this task.

What are user roles?

CORIOgrapher has three types of user. Only the administrator role is currently supported. You can assign other roles to users, but all users can perform all tasks.

Why set a timeout time?

By default, a connection to a CORIOview must stay active, or it is disconnected after five minutes. An active connection sends at least one command to the CORIOview™ every five minutes.

To stay connected while idle for more than five minutes, set a longer timeout time for each user. You can also allow the user to stay connected permanently, with no timeout time, by clearing the Enable timeout option.

Locking out other users

CORIOgrapher only allows one connection at a time. If you allow any user to connect permanently, or with a long timeout time, they can lock out other users. This can also prevent commands from other devices reaching the CORIOview™.
If you want to allow multiple users to control a CORIOview, use our REST API with WebSocket events.

To create a new user, or edit an existing user



1. Select ⚙ > Users.
2. To create a new user, choose an empty slot. To edit an existing user, find that user's details.
3. Enter a username.
   Usernames must start with a letter, and can contain only letters, numbers, and underscores.
4. Select a user role.
5. Enter a password in the New Password box and the Confirm Password box.

Passwords must be between 5 and 32 characters, must start with a letter, and can contain any combination of alphanumeric characters and symbols. Passwords cannot contain spaces.

6. Select the Enable timeout option, and enter or select a timeout time from 1–540 minutes.

   tvONE recommends a timeout time from 1–5 minutes.

7. Select Save.

Changing other users' passwords

You can make changes to other users' accounts.

Password rules

Passwords must be between 5 and 32 characters, must start with a letter, and can contain any combination of alphanumeric characters and symbols. Passwords cannot contain spaces.

To change other users' passwords

1. Select ⚙ > Users.
2. Find the user whose password you wish to change and enter the new password in the New Password box.
3. Enter the same password in the Confirm Password box and select Save.

Changing your own password

Password rules

Passwords must be between 5 and 32 characters, must start with a letter, and can contain any combination of alphanumeric characters and symbols. Passwords cannot contain spaces.

To change your password

1. Select ⚙ > Users.
2. Find your user details and enter your new password in the New Password box.
3. Enter the same password in the Confirm Password box and select Save.

Network settings

Administrators can configure network settings for CORIOview™ units and Streaming media and 4K playback input modules.

In this section

Configuring network settings for your CORIOview™ 41
Configuring network settings for streaming media 43

Configuring network settings for your CORIOview™

You can choose a DHCP or static IP address, and configure your static IP settings.

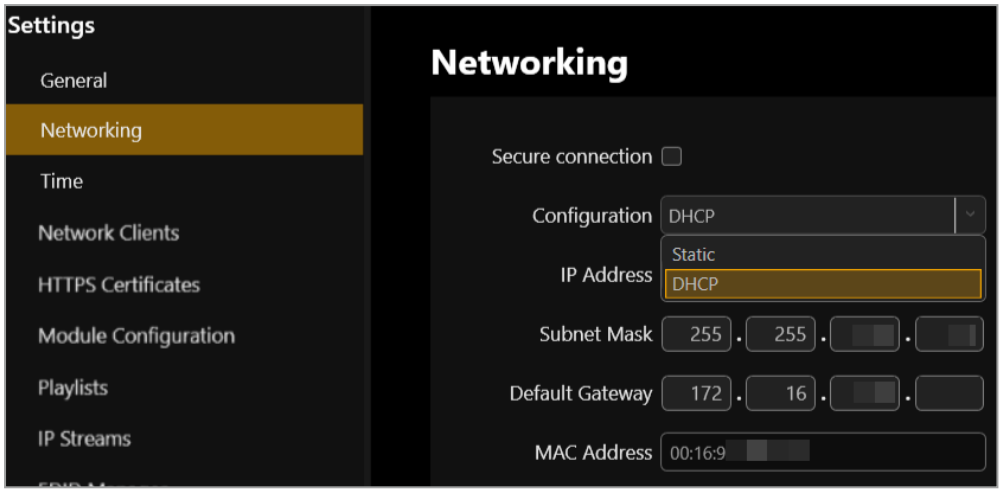
Before you start

If you want to use a static IP address, you need some information about the range of available IP addresses on your network. Your network administrator should be able to help you.

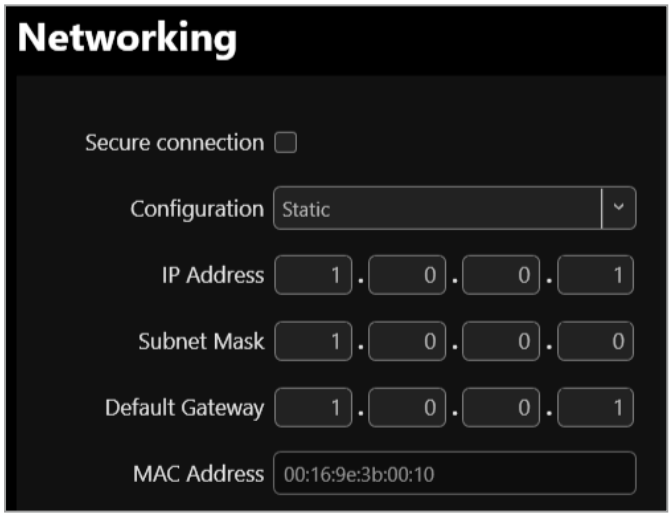
Static IP address
If you choose a static IP address, make sure you enter a unique value for your IP address. Using the same IP address for multiple devices can cause your devices to disconnect. Contact your network administrator for help.

To configure network settings for your CORIOview

1. In CORIOgrapher, select ⚙ > Networking.
2. Choose an IP configuration.



   - If you choose DHCP, an IP address is assigned to you.
   - If you choose Static, the last static IP address you saved is available to edit. If you haven't previously saved a static IP address, default values for a static IP address are available to edit.
3. **OPTIONAL:** Configure your static IP address.



   - Enter a value for your IP address and subnet mask.
   - If your CORIOview and PC are on different networks, enter a value for your gateway.

   If you need help with network settings, contact your network administrator.

Configuring network settings for streaming media

If you want to stream media over your network, or from the internet, configure the network settings for your Streaming media and 4K playback input module.

If you only want to use your Streaming media and 4K playback input module to play media from a USB drive, you don't need to configure network settings.

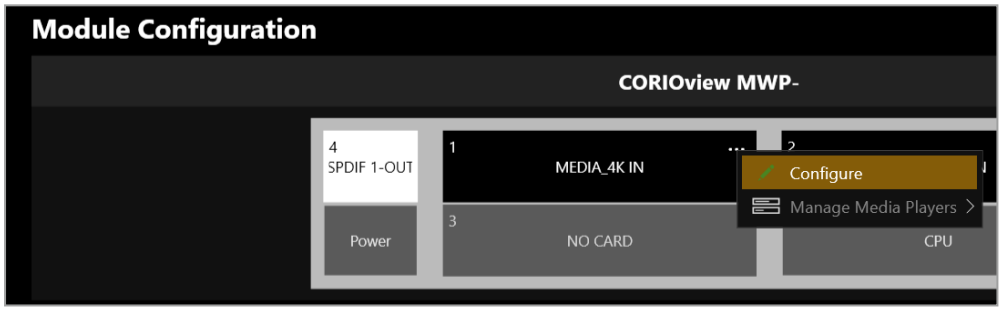
About static IP addresses

If you want to use a static IP address, you need some information about the range of available IP addresses on your network. Your network administrator should be able to help you.

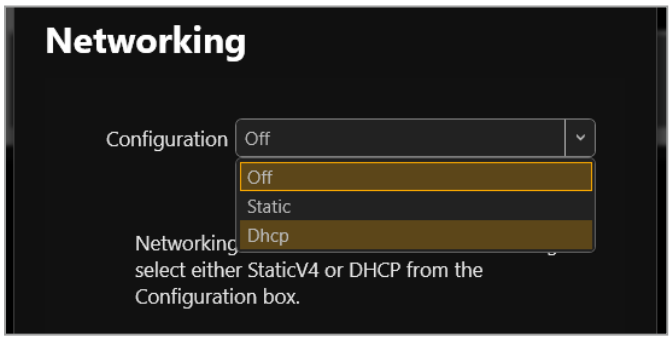
> **Static IP address**
> If you choose a static IP address, make sure you enter a unique value for your IP address. Using the same IP address for multiple devices can cause your devices to disconnect. Contact your network administrator for help.

To configure network settings for streaming media

1. In CORIOgrapher, select ⚙ > Module Configuration.
2. Find the Streaming media and 4K playback module that you want to set up, and select ••• > Configure.

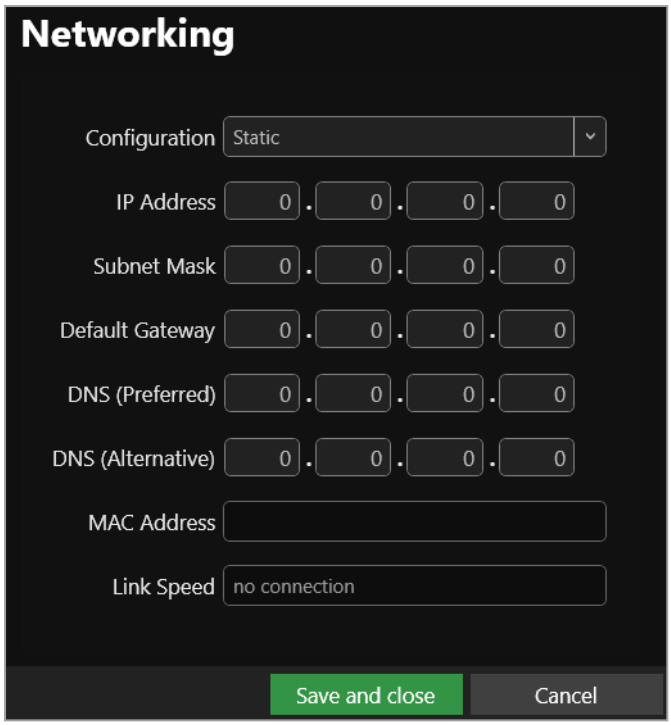


3. Choose an IP configuration.



- If you choose DHCP, an IP address is assigned to you.
- If you choose Static, the last static IP address you saved is available to edit. If you haven't previously saved a static IP address, default values for a static IP address are available to edit.

4. **OPTIONAL:** Configure your static IP address.

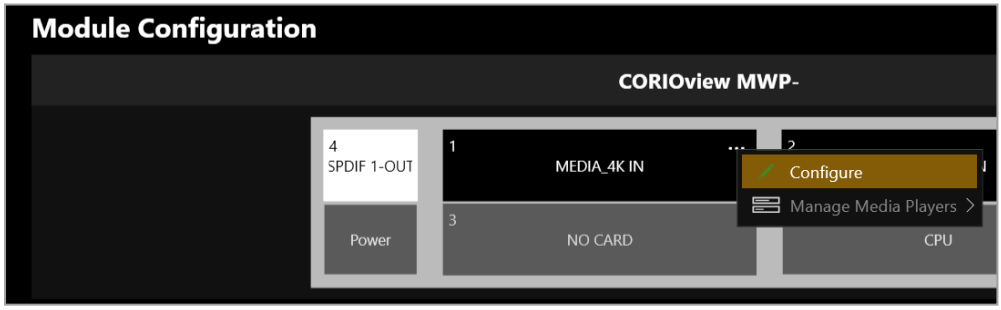


- Enter a value for your IP address and subnet mask.
- If you want to stream from the internet, for example from a Wowza server, enter a value for your gateway.
- If you want to refer to a source by name, enter a value for DNS.

If you need help with network settings, contact your network administrator.

Finding the MAC address of your Streaming media and 4K playback input module

1. In CORIOgrapher, select ⚙ > Module Configuration.
2. Find the Streaming media and 4K playback module that you want to set up, and select ••• > Configure.



3. Read the MAC address.

Playlist settings

If you have a Streaming media and 4K playback input module, you can view the status of your playlists, delete all playlists or individual playlists, move playlists between modules, and rename playlists.

In this section

Renaming playlists and moving playlists between modules 45
Deleting playlists 45

Renaming playlists and moving playlists between modules

You can see a list of all your playlists on all your Streaming media and 4K playback input modules. You can rename your playlists and move them between modules.

Renaming your playlists

1. In CORIOgrapher, select ⚙ > Playlists.
2. Find the playlist you want to rename, and enter a new name.



Moving playlists

1. In CORIOgrapher, select ⚙ > Playlists.
2. Find the playlist you want to move and select a module from the list.

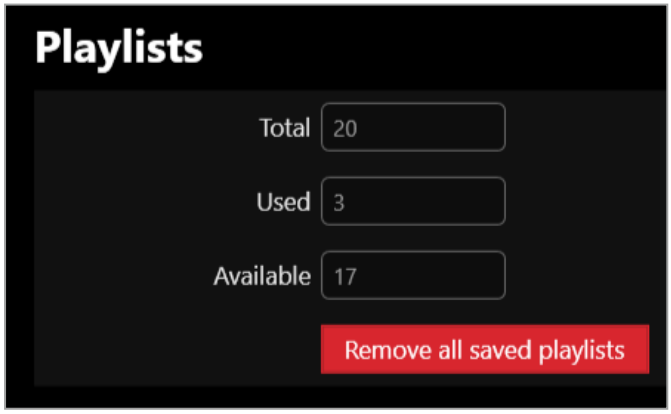


Deleting playlists

If you have a Streaming media and 4K playback input module, you can delete all your playlists, or individual playlists.

Deleting all your playlists

1. In CORIOgrapher, select ⚙ > Playlists.
2. Select Remove all saved playlists.



Deleting individual playlists

1. In CORIOgrapher, select ⚙ > Playlists.
2. Find the playlist you want to delete.
3. Select Remove.



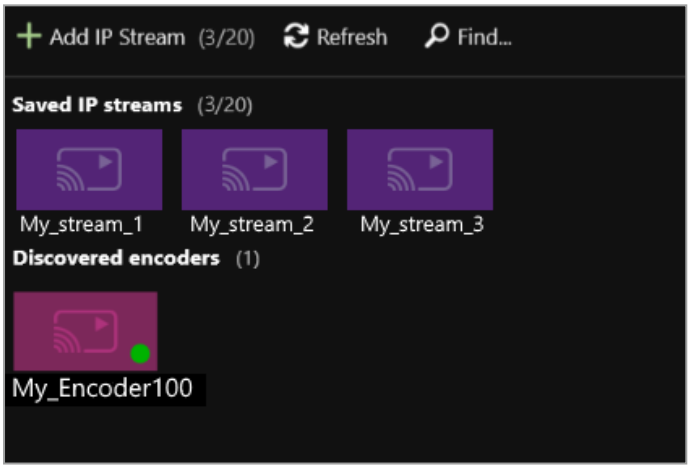
Managing encoders and streams

You can view and manage all your encoders and saved streams.

Select ⚙ > IP Streams.

Managing your encoders

Encoders that CORIOgrapher™ detects appear under Discovered encoders.

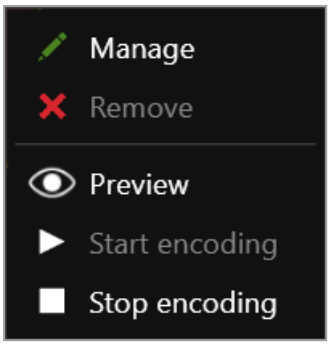


You can:

- Refresh the list of encoders.
- Search for an encoder that doesn't appear automatically.
- Select an encoder to see details about that encoder.
- Select ••• to:
  - Manage the encoder, or change your configuration.

    Read about configuring an Encoder-100at help.tvone.com/products/C3-series/C3-5XX/Content/Topics/ENCODER-100/ENCODER-100-configure-encoders.htm.
  - Remove an inactive encoder.
  - Preview the stream from an encoder.

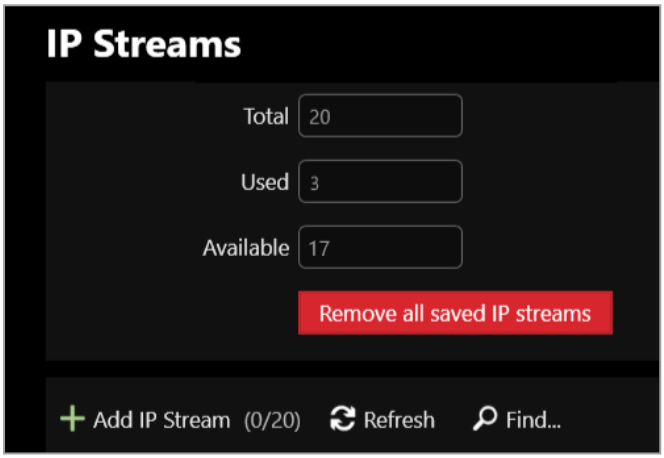
- Start or stop encoding.



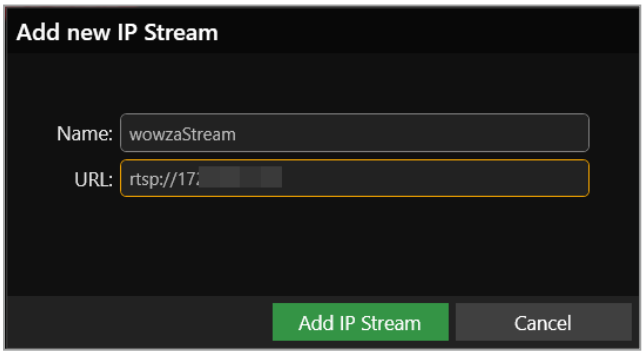
Managing your saved streams

Streams that you add and save manually appear under Saved IP streams.

- You can see how many streams you have, and how many slots you have left.
- You can add new streams, and remove all your saved streams.



- You can edit the name and URL of saved streams.
  1. Select the stream and then select ••• > Edit.
  2. Edit the name or URL of the media stream.



Get more help with an Encoder-100 at help.tvone.com/products/C3-series/C3-5XX/Content/Topics/ENCODER-100/ENCODER-100-about-E100.

Using your CORIOview™

When your CORIOview™ is set up, you can play streaming media, change presets and sources, and play audio.

In this section

Selecting a preset window layout 48
Changing the source playing in a window 51
Changing the transition of a source 54
Viewing and customizing window labels 55
Cutting video to black 57
Playing audio 58
Media and streams 61
- Playing media and streams 62
- Creating and managing playlists 74
- Using the internal drive 82
- Choosing the best resolution for your playlist or play queue 86

Creating and editing custom resolutions 88
Adding and managing custom EDID files 95

Selecting a preset window layout

CORIOview™ has a range of built-in presets. Presets are pre-programmed window layouts. The number of presets available depends on the number of inputs you have.

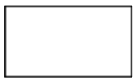
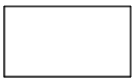
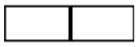
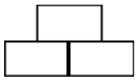
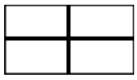
Your default preset is the highest numbered preset available, showing the most possible windows. For example, if you have four sources, your default preset is number 4.

You can select presets using the buttons of the front panel, and in CORIOgrapher.

Presets mapped to buttons

The number of presets available depends on the number of inputs you have.

If a preset is available, the button for that preset is lit dimly. The button for the active preset is lit brightly.

Preset button	Window layout	Preset button	Window layout
1		A	
2		B	
3		C	
4		D	
5		E	

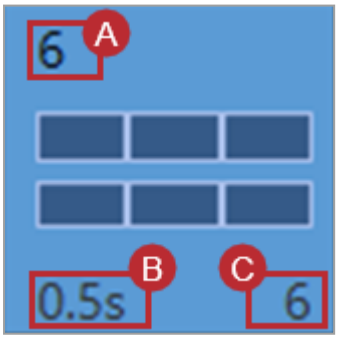
Preset button	Window layout	Preset button	Window layout
6		F	
7		G	
8		H	

Presets in CORIOgrapher

In CORIOgrapher you select presets from Dashboard. Only available presets appear on Dashboard.



In this example there are six inputs, so preset 6 is the highest available preset.



A	The preset number used by the CORIOview API.
B	Duration of transition. Read more about transitions
C	The front panel button.

Windows are represented as bubbles. If a window appears in the active preset, the bubble is black.



If a window doesn't appear in the active preset, the bubble is gray.



To select a preset with the buttons of the front panel

1. Press PRESET.
2. Press a lit button from 1-8 or A-H.



Wait for the button to stop flashing before you press another button.

To select a preset in CORIOgrapher

- From Dashboard, select a preset.



Changing the source playing in a window

Each source is automatically associated with a window. You can swap the sources between windows. You cannot show the same source in more than one window.

You can choose how the sources appear when they swap. This is called a transition.

Read more about transitions on page 54.

Show me an example

For example, window A shows source 1, and window C shows source 3.

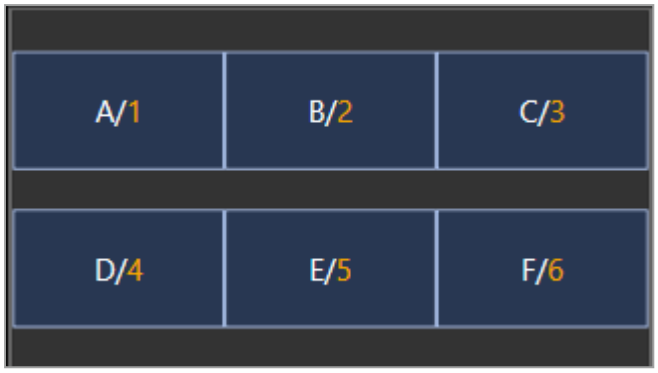


You select window A and source 3. Windows A and C swap sources. Window A now shows source 3, and window C now shows source 1.



See which windows are playing which sources

- In CORIOgrapher, select Dashboard.
  Letters are windows, numbers are sources.



- From the front panel, select ⋙.





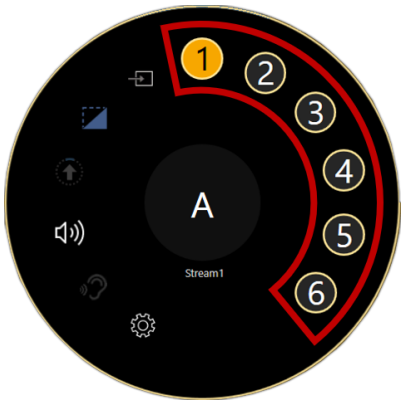
Read more about labels on page 55.

Changing sources with CORIOgrapher™

1. From Dashboard, select the bubble for the window you want to choose a source for.
   For example, to change the source playing in window A, select bubble A.



2. Select a source.



Changing sources with the front panel

On the front panel of your CORIOview:

1. Press VIDEO.
2. To select a window, press a lit button from A to H.
3. To select a source to play in that window, press a lit button from 1 to 8.

Changing the transition of a source

You can choose how sources move to new positions when you change the source playing in a window. The way a source moves is a transition.

The transition that plays depends on the window you opened and selected a new source for. For example, if you select a new source for window A, the sources swap places with the transition associated with window A.

Set transitions for each window separately.

You can choose between two transitions.

	The current transition mode is fade-through-black. The source fades to black, and then fades from black in its new position.
	The current transition mode is move. The source moves smoothly to its new position.

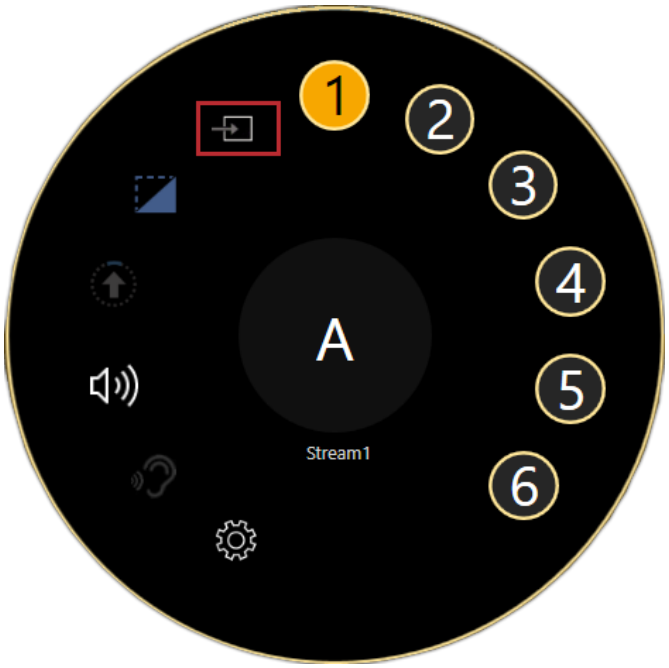
Read more about changing sources on page 51.

To associate a transition with a window

1. From Dashboard, select the bubble for the window you want to associate with a transition.
   For example, to associate a transition with window A, select bubble A.



2. Select  or  to toggle between two transition modes.



Viewing and customizing window labels

You can create customized window labels and show them on your display.



A	Label text only
B	Source alias only
C	Label text plus source alias
D	Source alias plus label text

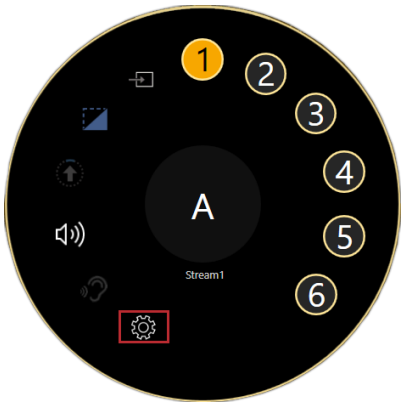
- To toggle between viewing customized window labels and viewing sources assigned to windows, press ⟫ on the front panel.
- You can show labels on specific windows in CORIOgrapher.

To show customized labels on specific windows

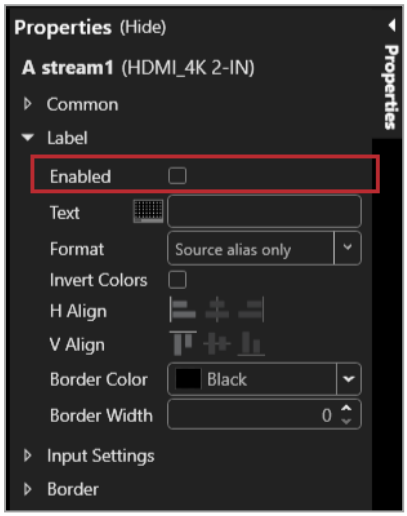
1. From Dashboard, select the bubble of the window you want to show a label.



2. Select ⚙.



3. From Properties, select Label > Enabled.

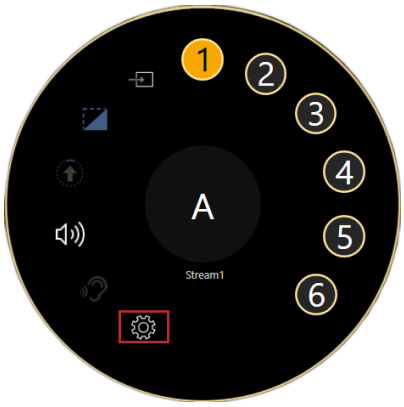


To customize labels

1. From Dashboard, select the bubble of the window you want to show a label.

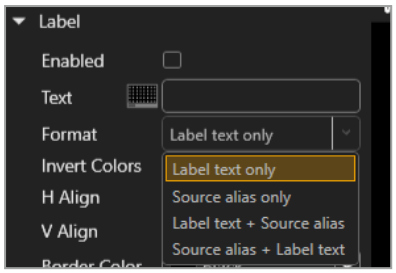


2. Select ⚙.

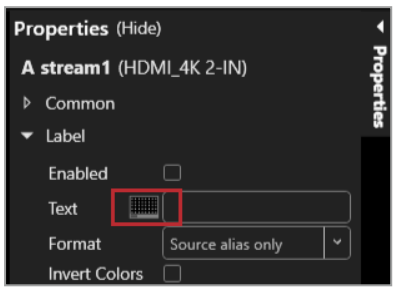


3. From Properties, customize your label.
4. OPTIONAL: Add custom text.

a. Select an option that includes label text from Format.



b. Enter your text. To see allowed characters, open the keyboard.



5. OPTIONAL: If your label is hard to see against your background, select Invert Colors.
6. OPTIONAL: Change the location of the label on the window.
   Choose a position using the alignment buttons in H Align and V Align.
7. OPTIONAL: Add a border around the label.
   Select an option from Border Color, and enter the width in pixels.

Cutting video to black

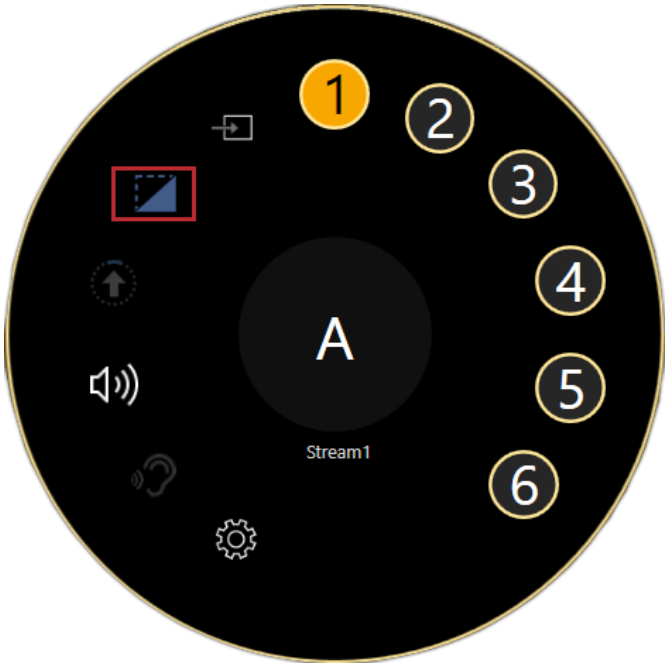
You can cut a single window to black, or cut all windows to black. You still hear audio.

To cut a window to black

1. From Dashboard, select the bubble for the window you want to cut to black.

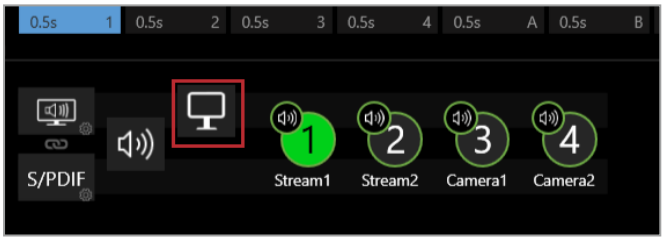


2. Select or to cut to black, or to restore from black.



To cut all windows to black

- From Dashboard, select to cut all windows to black, or to restore from black.



Playing audio

You can play audio on your displays, and you can play audio on a digital audio device connected to the S/PDIF output of your CORIOview™.

Only the active presenter can share audio.

Read about making a presenter the active presenter on page 1.

About audio

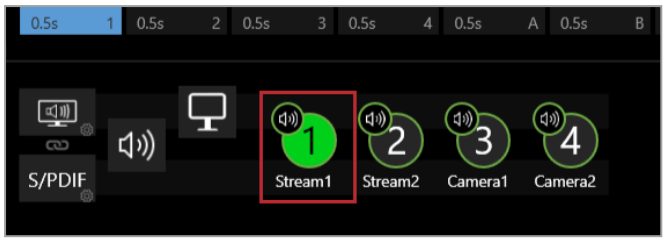
- Your CORIOview has an S/PDIF audio output that you can connect to a digital audio device with an RCA cable.
- Your CORIOview sends embedded audio to your display.
- You can mute and adjust the audio input level of individual sources playing in windows in CORIOgrapher™.
- The Streaming media and 4K playback input module supports embedded audio as long as the audio is in mp3 or aac format.
- You can play embedded audio from any input port on any input module, as long as the embedded audio is in uncompressed PCM format, at 48 kHz.

  Laptops and tablets provide audio in uncompressed PCM format, at 48 kHz.

- CORIOview supports 2-channel audio, and does not support surround sound.

Choosing what to listen to with CORIOgrapher

- From Dashboard, select a source to listen to.

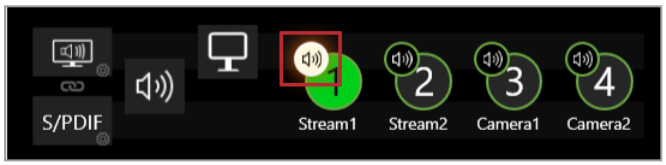


Choosing what to listen to with the buttons of the front panel

1. Press AUDIO.
2. Press a lit button from 1-8.

Muting a source

- From Dashboard, find the source you want to mute, and select 🔊.



- To unmute the source, select 🔇.

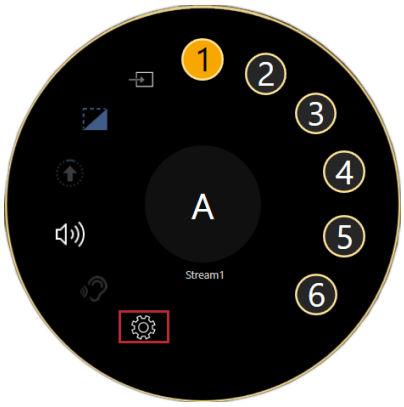
Adjusting the audio input level of a source

Adjust the input audio level to match and balance the audio levels of different sources. For example, if you have one very loud source, lower the input audio level until it matches your other sources.

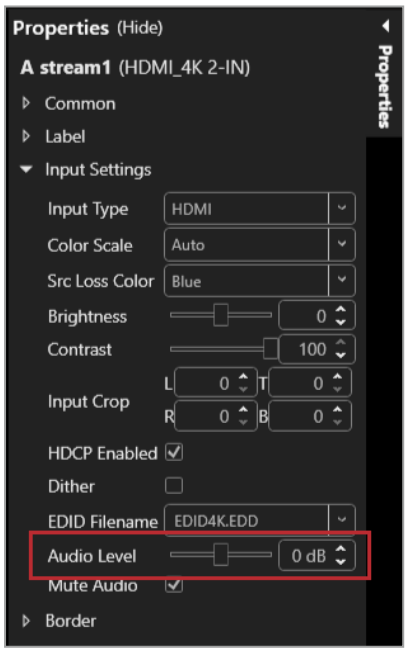
1. From Dashboard, select the bubble playing the source you want to adjust. The source is the number in the yellow circle.



2. Select ⚙.



3. From Properties, select Input Settings (shared).
4. Adjust the audio level.

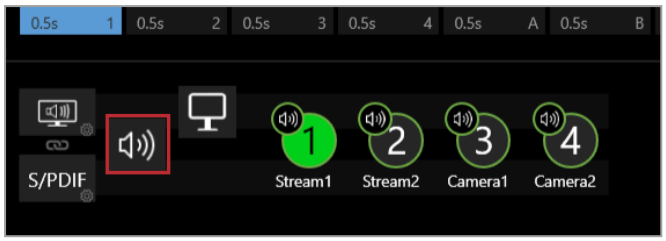


- Slide to the right to increase audio input.
- Slide to the left to reduce audio input.

Muting all audio

You can mute all output audio.

- From Dashboard, select .



- To unmute audio, select .

Muting specific outputs

Muting outputs in CORIOgrapher mutes all outputs. This includes muting the S/PDIF output in properties.

If you want to mute a specific display, mute it on the display hardware.

Media and streams

If you have a Streaming media and 4K playback input module, you can play media items and streams.

In this section

Playing media and streams 62
Creating and managing playlists 74
Using the internal drive 82
Choosing the best resolution for your playlist or play queue 86

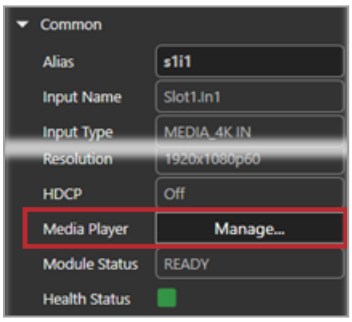
Playing media and streams

If you have a Streaming media and 4K playback input module, you can play media items and video streams. Add up to 20 media items or streams to a play queue or saved playlist. Each Streaming media and 4K playback input module can play up to two simultaneous play queues.

In this article

Before you start 64
Adding and editing media streams 64
Adding media items, streams, and playlists to your play queue 66
Playing a multicast stream from an Encoder-100 on multiple CORIOview units 68
Changing the duration of media items 69
Playing streams with low latency 70
Using the playback controls 70
Managing the play queue 71
Saving the play queue 71
Playing the play queue automatically 73
Saving media to internal storage 73

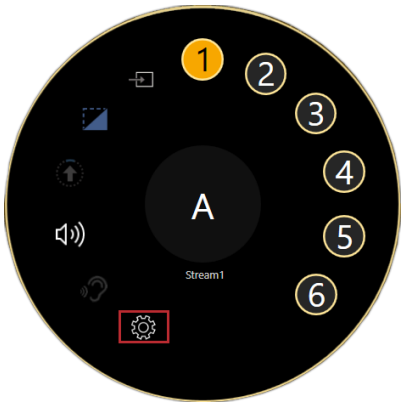
Manage your media and streams in CORIOgrapher™.



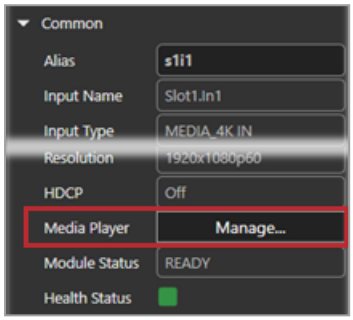
1. From Dashboard, select the bubble of a window playing a source from your Streaming media and 4K playback input module.



2. Select ⚙.



3. From Properties, select (Media Player) Manage.



> The media player is not available when you work offline.

Streaming media and 4K playback input modules in CORIOview™ units support embedded audio, for streams and media items with the following embedded audio formats:

- mp3
- aac

> CORIOview automatically mutes audio from streams with low latency.

Read more about playing audio with your CORIOview on page 58.

Before you start

- To stream media from the internet or your network, you need to connect an Ethernet cable and configure the network settings for your Streaming media and 4K playback input module.



> For best results, use Gigabit equipment and cables.

Read about configuring network settings for a Streaming media and 4K playback input module on page 43.

- To turn any video source into a stream, you need an encoder. The encoder takes video and audio signals, converts them to an AVIP (Audio-Visual over Internet Protocol) signal, and sends them over your network. For example, you could encode and stream the signal from an endoscope, or from a camera in a lecture theater.
- To play media directly from a USB drive, or copy media from a USB drive to internal storage, you need to connect a USB drive to your Streaming media and 4K playback input module.

> Use a good quality, high-speed USB 3.0 drive.

- To play media saved in the internal storage of the Streaming media and 4K playback input module, you don't need to connect anything.

Adding and editing media streams

You can manually add media streams from your network or from the internet. You can configure and add streams from an Encoder-100.

Read about configuring an Encoder-100 at help.tvone.com/products/C3-series/C3-5XX/Content/Topics/ENCODER-100/ENCODER-100-configure-encoders.htm.

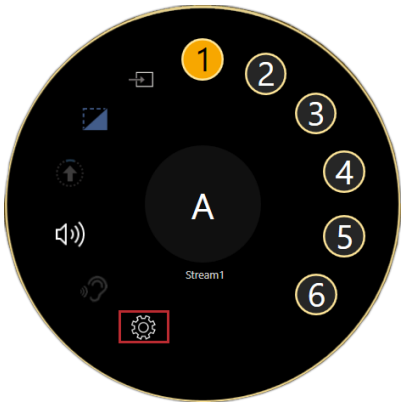
To manually add a stream

If you know the URL of the stream and the stream is not hosted by an Encoder-100, use this method.

1. From Dashboard, select the bubble of a window playing a source from your Streaming media and 4K playback input module.



Select ⚙.



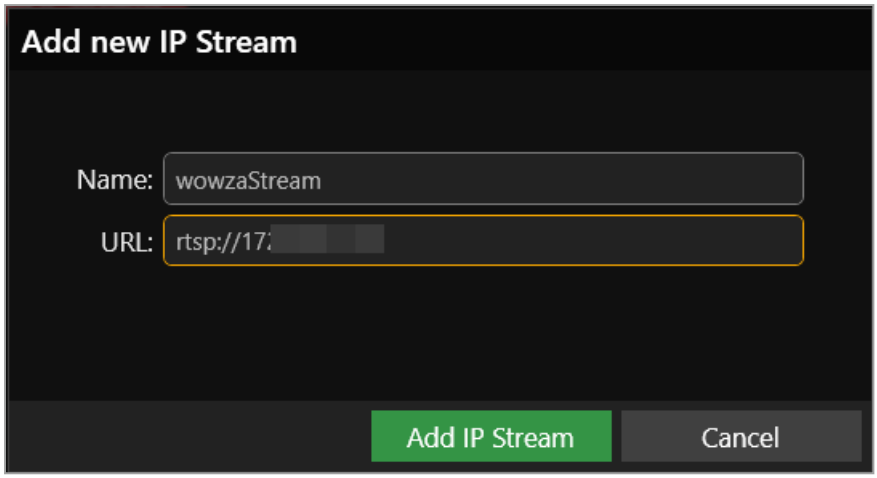
From Properties, select (Media Player) Manage.

2. Select IP Streams.



3. Select Add IP Stream.
4. Enter a descriptive name and the URL of the media stream, and then select Add IP Stream.

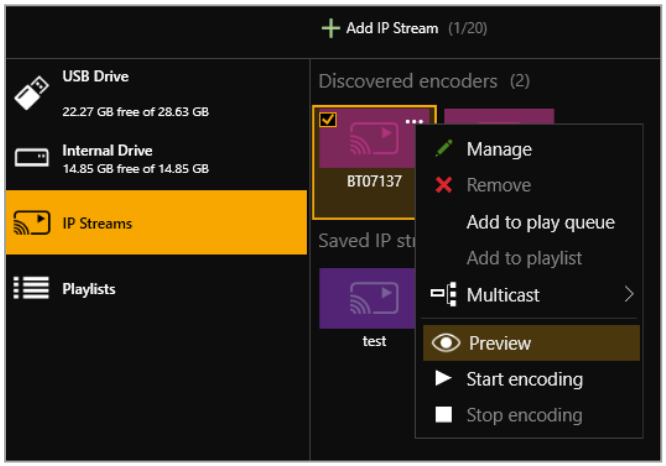
5. To edit the details of a media stream, select the stream and then select ••• > Edit.
6. Edit the name or URL of the media stream.



Previewing the stream from your Encoder-100

If you have an Encoder-100 that is streaming, you can preview the stream.

- Select the Encoder-100, and then select ••• > Preview.



Adding media items, streams, and playlists to your play queue

You can add video clips, still images, and media streams to a play queue, up to a total of 20 items. Media items can be on a USB drive, in internal storage, streamed from your network, or streamed from the internet.

You can play audio embedded in video clips and media streams. You cannot play audio-only files.

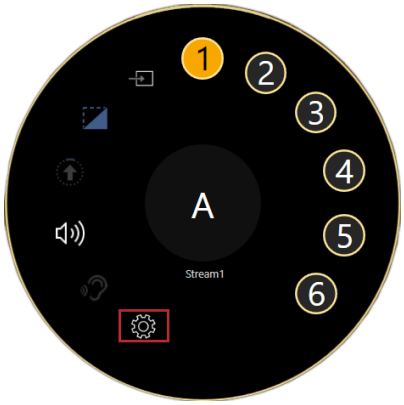
You can also add a playlist to a play queue. When you add a playlist to a play queue, the playlist replaces all the items in the play queue.

You add all types of media, streams, and playlists the same way, when the play queue is playing, paused, or stopped.

1. From Dashboard, select the bubble of a window playing a source from your Streaming media and 4K playback input module.



Select ⚙.



From Properties, select (Media Player) Manage.

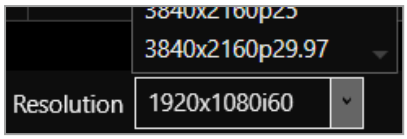
2. Select your media source.



3. Drag media items and streams, or a playlist, into the play queue.

	Still image		Saved stream
	Video clip		Found encoder
	Playlist		Found encoder, streaming

4. Choose a resolution for your play queue.



Read about choosing the right resolution on page 86.

Read more about playlists on page 74.

Playing a multicast stream from an Encoder-100 on multiple CORIOview units

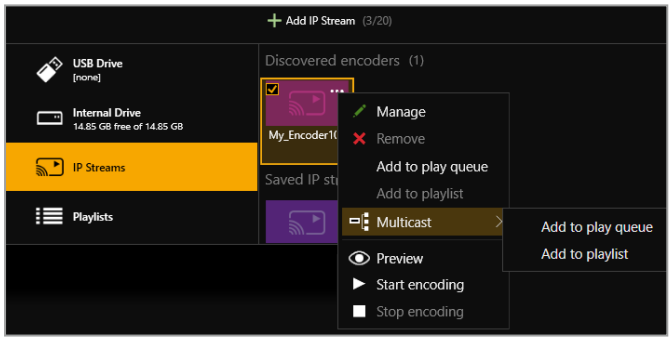
By default, your Encoder-100 supplies a single stream to a single CORIOview. You can supply a multicast version of that stream to more than one CORIOview.

Adding a multicast stream from an Encoder-100 to a play queue or playlist

- You don't need to configure your Encoder-100 to send a multicast stream, if your default address and TTL are correct for your network.

  For more help, contact your network administrator.
- To add a multicast stream to the play queue, the play queue must be stopped.
- To add a multicast stream to a playlist, first select a playlist.

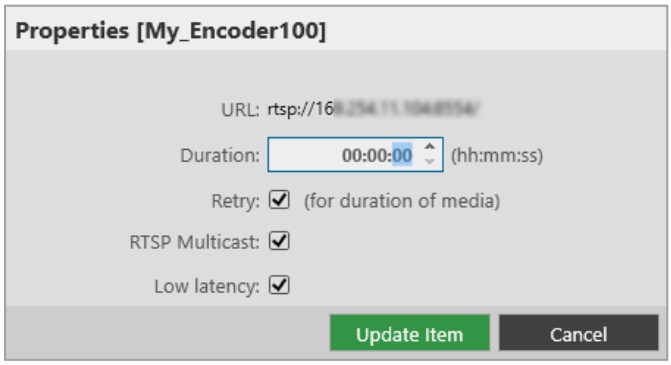
1. Select IP Streams.
2. Select the Encoder-100 you want to add.
3. Select ••• > Multicast > Add to play queue or Add to playlist.



Changing a single stream to a multicast stream

If you already added a single stream from an Encoder-100 to the play queue or a playlist, you can change the single stream to a multicast stream.

1. If the encoder is in a playlist, open the playlist.
2. Select the encoder, and select ••• > Edit.
3. Select RTSP Multicast.



For best results

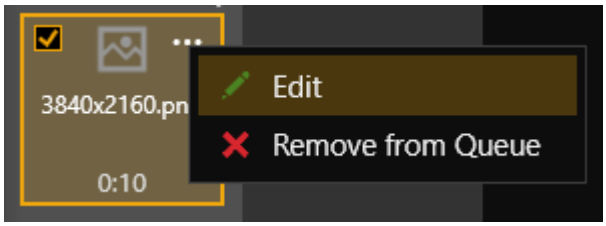
If you send a multicast stream on a large network, tvONE™ recommends using equipment with IPv4 multicast addressing, and/or IGMP v2 support. For more information, contact your network administrator.

Changing the duration of media items

By default, still images play for 10 seconds, video clips play for the length of the clip, and streams play indefinitely, until the stream ends.

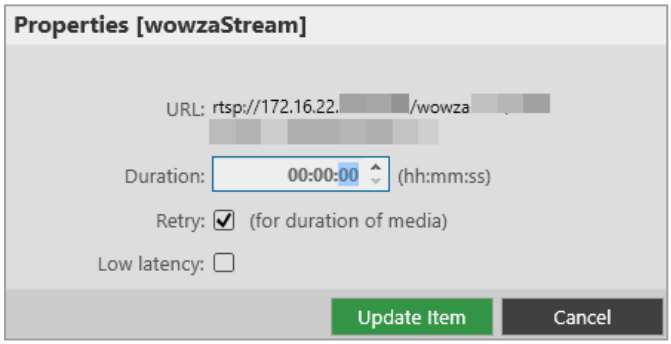
You can choose how long to play each media stream, video clip, or still image in the play queue.

1. In the play queue, select the media item.
2. Select ••• > Edit.



3. Edit the duration of the item and select Update Item.

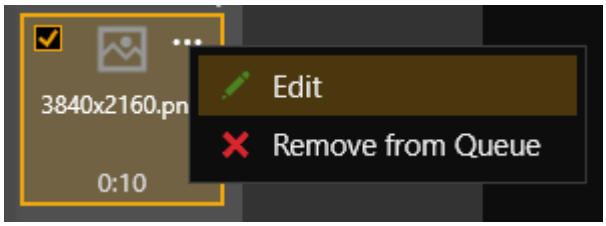
   The maximum duration is 23 hours, 59 minutes, and 59 seconds.



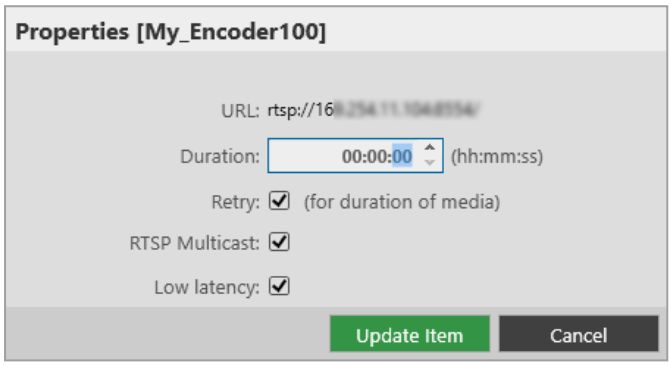
Playing streams with low latency

You can play streams with low latency.

1. In the play queue, select the stream.
2. Select ••• > Edit.



3. Select Low latency.

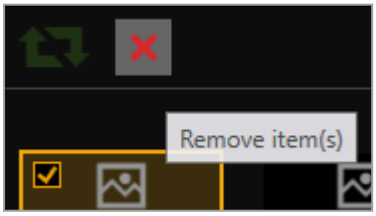


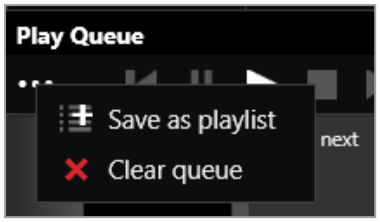
Repeat these steps for every item in the play queue that you want to play with low latency.

> CORIOview automatically disables the audio of streams with low latency. If you want to listen to audio from your stream, clear Low latency.

Using the playback controls

When the play queue is playing, you can:

	Stop playback
	Pause playback
	Skip to the next item
	Return to the previous item
	Remove an item from the play queue



Clear the play queue

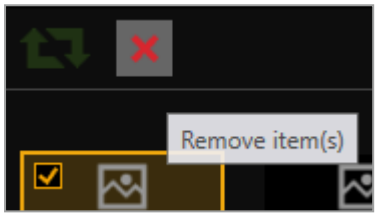
When the play queue is stopped, you can:



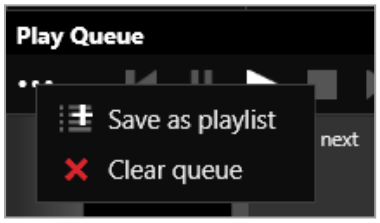
Enable and disable looping



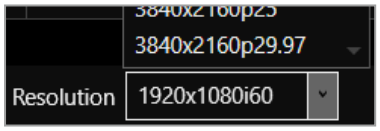
Play the play queue



Remove an item from the play queue



Clear the play queue



Change the resolution of the play queue

Managing the play queue

When the play queue is playing or stopped, you can:

- Drag new media items or streams into the play queue, up to a total of 20 items.
- Drag items to re-order the play queue.
- Change the duration of a media item in the play queue.
- Remove any item from the play queue.
- Clear the entire play queue.
- Choose to play the play queue when your CORIOview starts up.
- Drag a playlist into the play queue.
  Dragging a playlist into the play queue replaces the existing play queue.

Saving the play queue

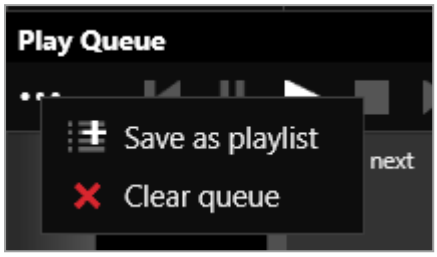
You can save your play queue so that it is available the next time you start your CORIOview.

- Build your play queue and select Save on Device.



You can save your play queue as a playlist.

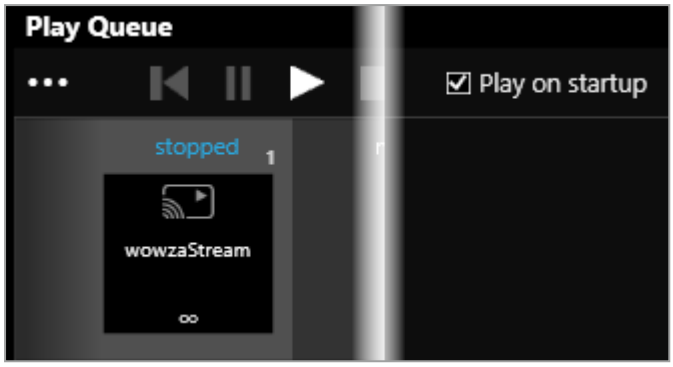
- Build your play queue and select ••• > Save as playlist.



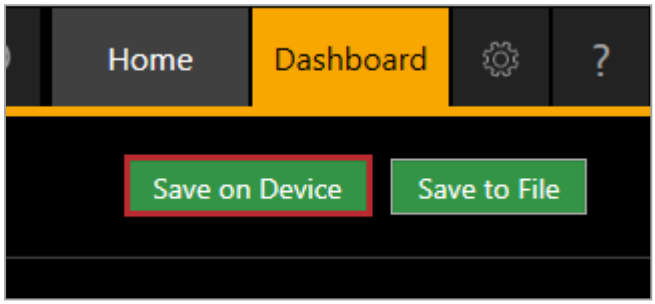
Playing the play queue automatically

You can choose to play the play queue automatically when you start your CORIOview.

1. Build your play queue and select Play on startup.



2. Select Save on Device.



Saving media to internal storage

You can save media items from your USB drive to the internal drive.

Read more about the internal drive on page 82.

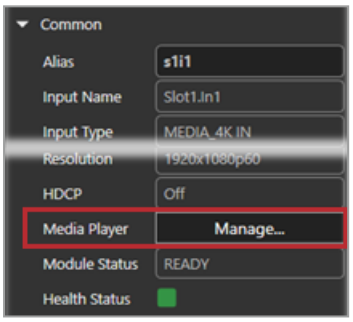
Creating and managing playlists

If you have a Streaming media and 4K playback input module, you can save media items and video streams to playlists. Your CORIOview™ can store up to 20 playlists.

In this article

About playlists 75
Creating a new playlist 75
Saving the play queue to a playlist 76
Managing and editing playlists 77
Deleting a playlist 80
Moving playlists between modules 80
Deleting all playlists 80
Duplicating playlists 81

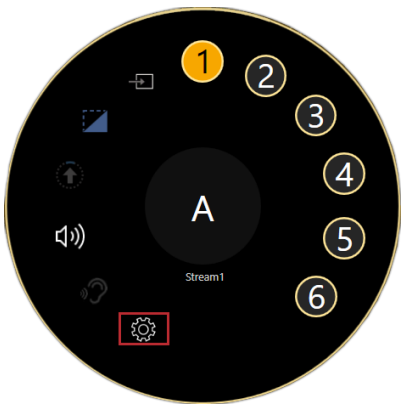
Manage your media and streams in CORIOgrapher™.



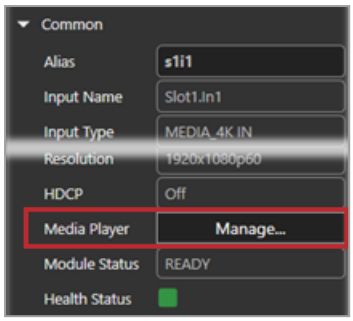
1. From Dashboard, select the bubble of a window playing a source from your Streaming media and 4K playback input module.



2. Select ⚙.



3. From Properties, select (Media Player) Manage.



The media player is not available when you work offline.

About playlists

- Your CORIOview can store up to 20 playlists.
- Each playlist can include up to 20 items, including still images, video clips, and streams.
- Playlists are shared between the two channels of a Streaming media and 4K playback input module, but are not shared between Streaming media and 4K playback input modules.
- Playlists save the names and pathways of media items and streams. If you change the name, path name, or location of an item, the playlist cannot find it.
- You can create new playlists from scratch, or save your play queue as a playlist.
- Playlists are saved on your CORIOview.
- You can choose to save or delete your playlists when you restore your CORIOview to factory default settings.

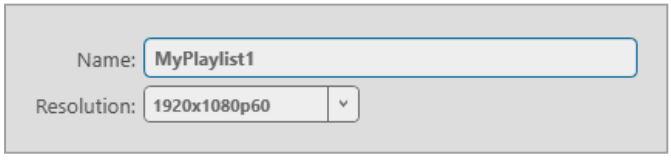
Creating a new playlist

1. Select Playlists > +.



2. Enter a name and choose a resolution for your playlist.

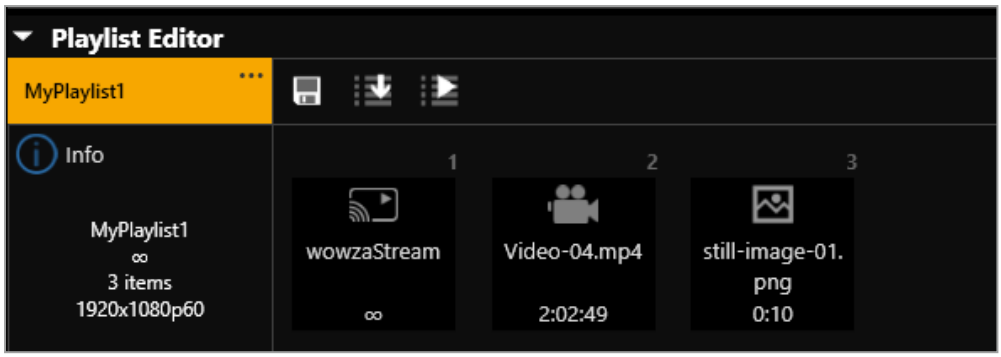
   Names can be up to 64 characters long, or fewer, depending on your character set.



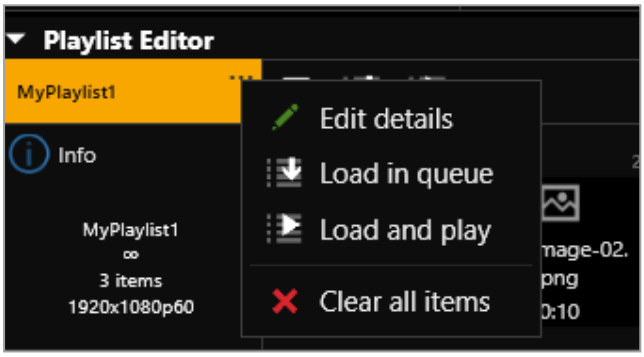
Read about choosing the right resolution on page 86.

3. Select your new playlist.

   The playlist opens in the playlist editor. If the playlist editor is collapsed, select ▶ to open it.

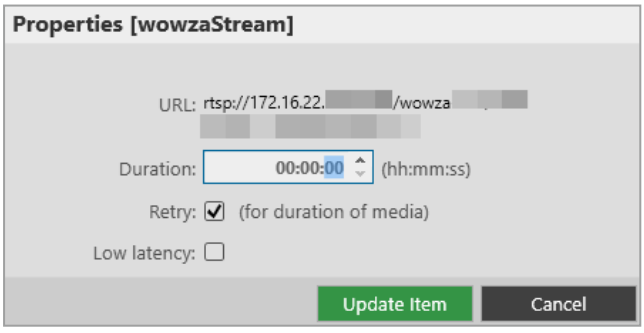


4. Drag up to 20 media items and streams from the media browser into the playlist editor.
5. Make any changes to your playlist.
   - To reorder the playlist, drag and drop media items and streams.
   - To remove something from the playlist, select the media item or stream and select ••• > Remove from playlist.
   - To remove all items from the playlist, select ••• > Clear all items.



   - To change the properties of an item, select the item, and then select ••• > Edit.
     You can change the duration of an item in the playlist.
     You can choose to play a stream with low latency.

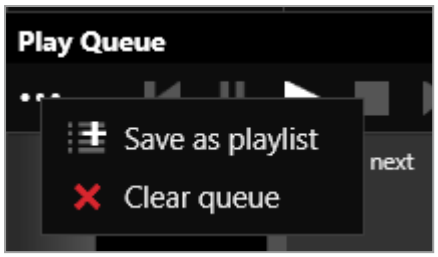
> If you choose to play a stream with low latency, CORIOview disables the audio from your stream.



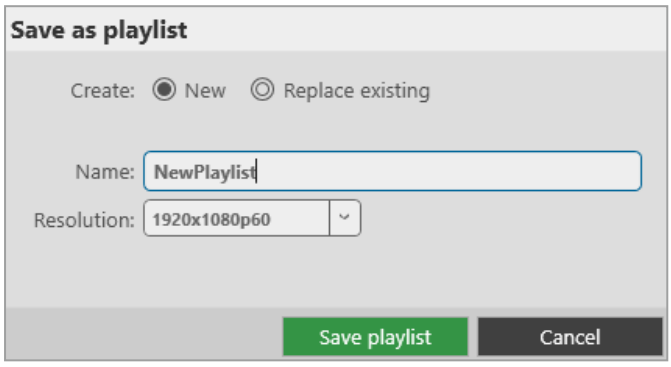
6. To save your playlist permanently, select 🖫.

Saving the play queue to a playlist

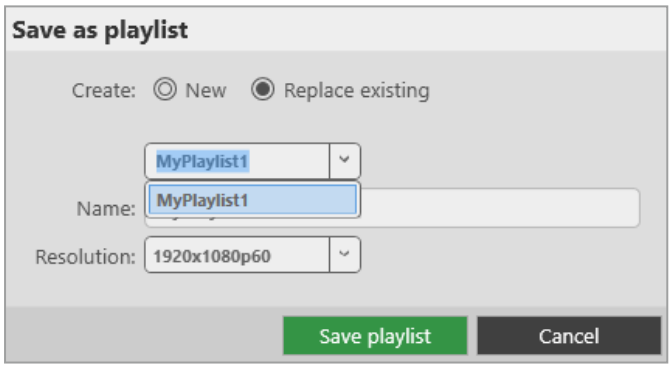
1. From the play queue, select ••• > Save as playlist.



2. Choose to create a new playlist, or to replace an existing playlist.
3. If you create a new playlist, enter a name and choose a resolution for your playlist.



4. If you replace an existing playlist, select a playlist to replace from the list. You can enter a new name and choose a new resolution for the playlist if you want to.



Names can be up to 50 characters long.

Read about choosing the right resolution on page 86.

Managing and editing playlists

You can edit playlists, clear all the items from a playlist, and open a playlist to edit the items. You can load a playlist to the play queue, and play a playlist.

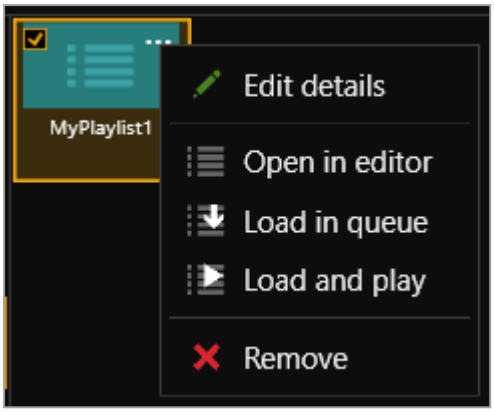
You can also manage the names and locations of your playlists in Settings > Playlists.

Read more about configuring playlist settings on page 45.

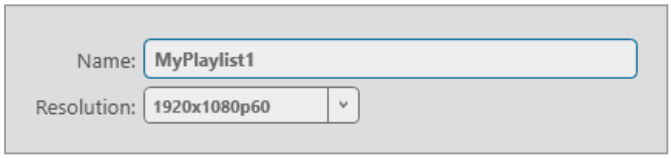
Editing a playlist

You can change the name and resolution of a playlist.

1. Select Playlists and select a playlist.
2. Select ••• > Edit details.

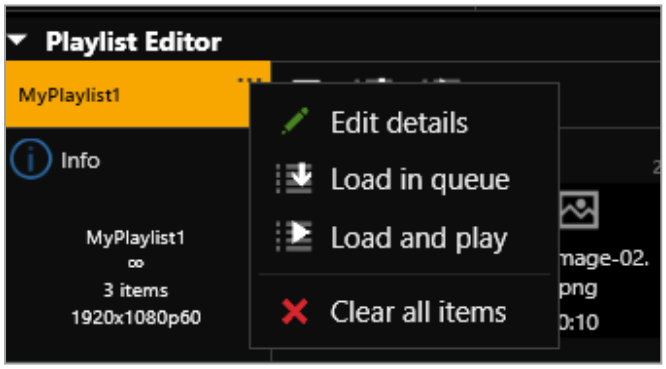


3. Enter a new name or choose a new resolution.



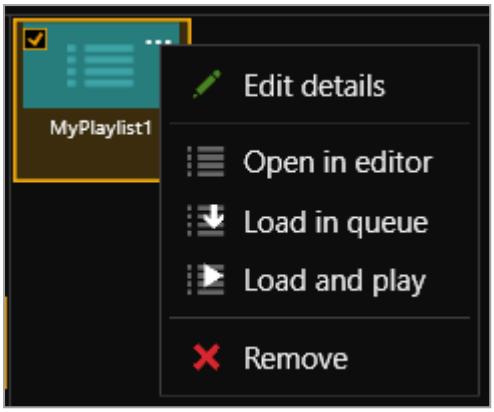
Clearing all the items from a playlist

- From the playlist editor, select ••• > Clear all items.



Opening a playlist to edit the items

1. Select Playlists and select a playlist.
2. Select ••• > Open in editor.



Read about the changes you can make to a playlist in Creating a new playlist above.

Loading a playlist to the play queue

When you load a playlist, any items in the play queue are replaced, and playback stops.

You can:

- Drag a playlist into the play queue
- Select a playlist and select ••• > Load in queue.
- From the playlist editor, select .

Playing a playlist

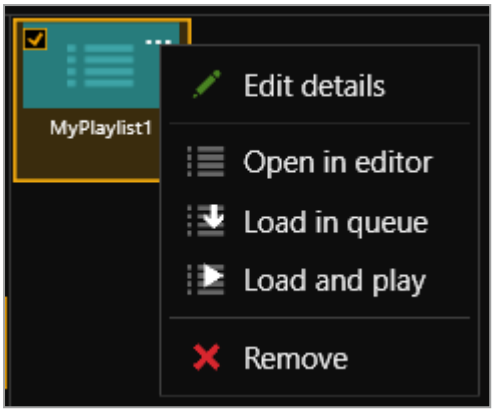
When you load and play a playlist, any items in the play queue are replaced.

You can:

- Drag a playlist into the play queue and select .
- Select a playlist and select ••• > Load and play.
- From the playlist editor, select .

Deleting a playlist

- Select a playlist and select ••• > Remove.



Moving playlists between modules

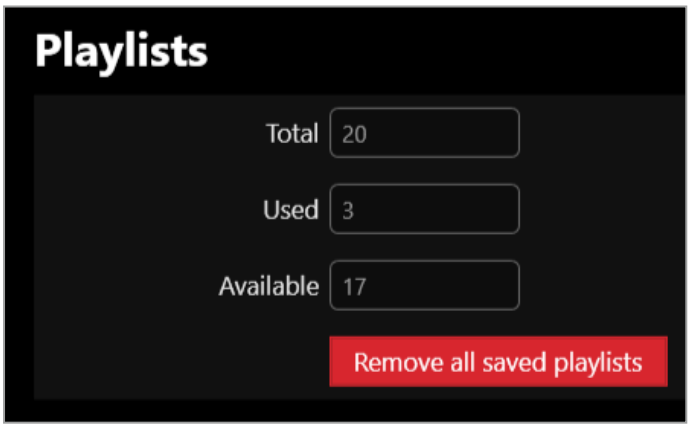
You can change the slot that a playlist is associated with in Settings > Playlists.



Read more about configuring playlist settings on page 44.

Deleting all playlists

You can delete all your playlists in Settings > Playlists.



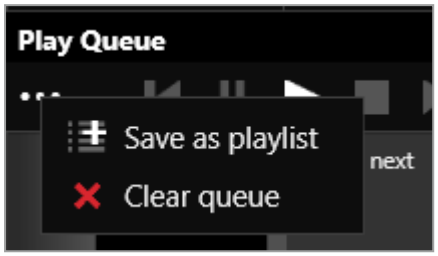
Read more about configuring playlist settings on page 44.

Duplicating playlists

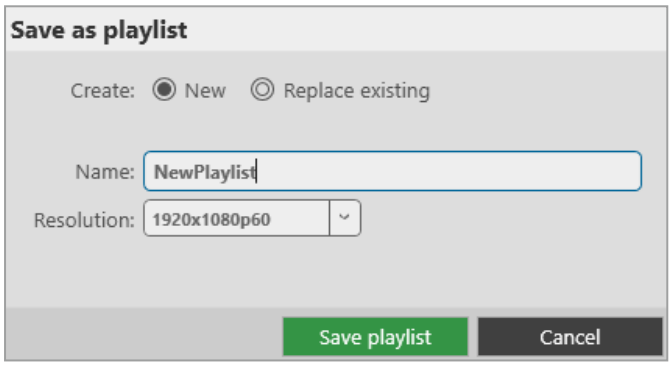
If you want several playlists to contain the same items, you can create a play queue and then save it under several different names.

For example, you might want all your playlists to contain a particular stream, and your company logo.

1. Drag items into the play queue.
2. From the play queue, select ••• > Save as playlist.



3. Enter a name and choose a resolution for your playlist.



4.
5. Repeat steps **2** and **3**. Enter a unique name for the playlist each time.
6. Open each new playlist and add items in the playlist editor.

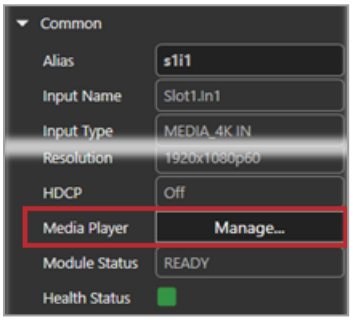
Using the internal drive

You can save media to the internal drive of your Streaming media and 4K playback input module. You can manage your saved media, and add media items to a playlist or play queue.

In this article

Replacing all items on the internal drive with all items on the USB drive 83
Removing all items from the internal drive 83
Current location 83
Copying a single item or folder to the internal drive 84
Managing media on the internal drive 84
Playing items from the internal drive 85

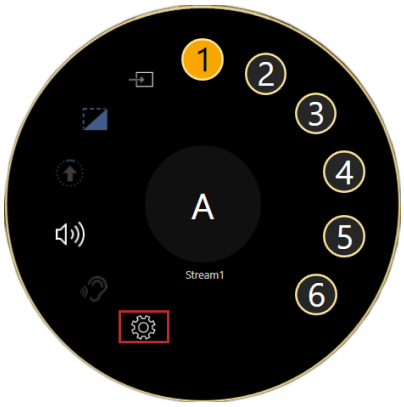
Manage your media and streams in CORIOgrapher™.



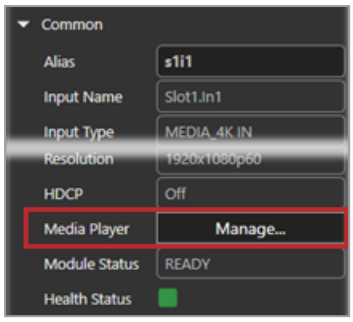
1. From Dashboard, select the bubble of a window playing a source from your Streaming media and 4K playback input module.



2. Select ⚙.



3. From Properties, select (Media Player) Manage.



The media player is not available when you work offline.

Replacing all items on the internal drive with all items on the USB drive

Use this option when you first set up your Streaming media and 4K playback input module to easily copy all your media items from your USB drive to the internal drive.

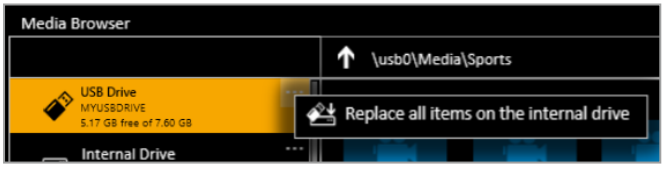
You can replace all the items on your internal drive with the items on the USB drive. All items currently on the internal drive are deleted.

All items on your USB drive are copied exactly to the internal drive, including folders and folder structure, up to path names of 480 characters, or fewer, depending on the language you use.

Items that aren't compatible with your Streaming media and 4K playback input module are copied to the internal drive, but not displayed. These items use memory, and you can't remove them manually. To remove hidden items, remove all items from the internal drive.

To replace all items on the internal drive with all items on the USB drive

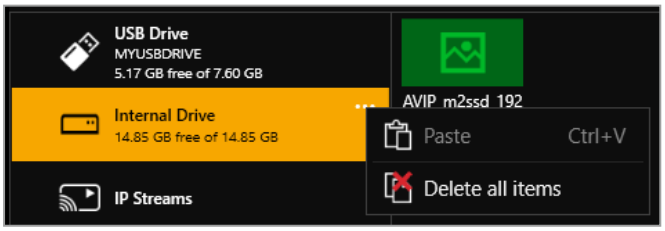
- Select (USB Drive) ••• > Replace all items on the internal drive.



Removing all items from the internal drive

You can remove all visible and hidden items from the internal drive.

- Select Internal Drive > Clear all items.



Current location

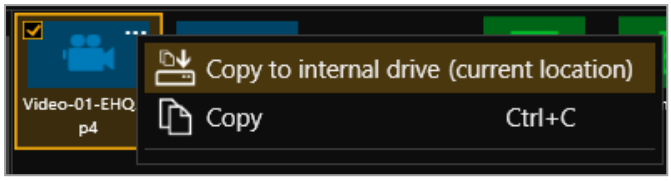
When you copy media items from your USB drive to the internal drive, the items are copied to the last location you visited on the internal drive.

For example, you create a folder on the internal drive called Videos. You open Videos and then select USB Drive. You select a media item and copy it to the internal drive. The media item is copied to Videos.

Copying a single item or folder to the internal drive

You can copy individual media items and folders from your USB drive to the internal drive. Items are copied to the last location you visited on the internal drive.

1. From USB Drive, select a media item or folder.
2. Select ••• > Copy to internal drive (current location).



You can also copy and paste individual items and folders from your USB drive to the internal drive with Ctrl+C and Ctrl+V.

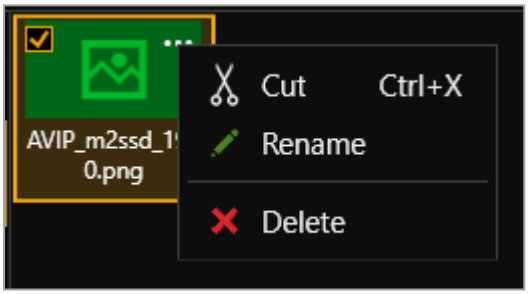
Managing media on the internal drive

From Internal Drive, you can:

- Copy or cut and paste individual items and folders.

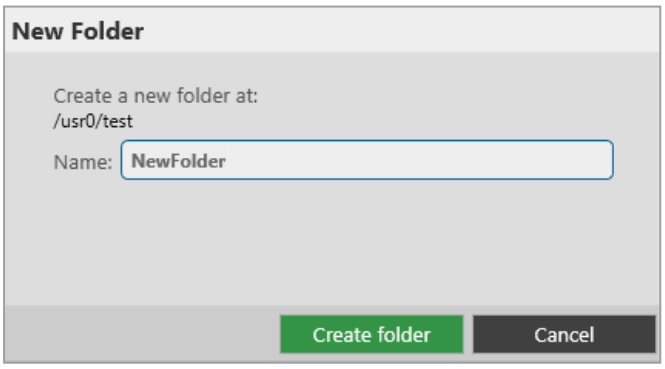
  Select a media item or folder, and then select ••• > Copy or Cut. Right-click in an empty space and select Paste.
- Copy or cut and paste individual items and folders with Ctrl+C or Ctrl+X, and Ctrl+V.
- Delete media items and folders.

  Select a media item or folder, and then select ••• > Delete.



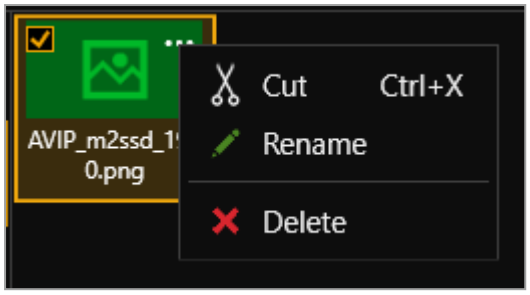
- Create a new folder.

  Right-click in an open space, and select New folder. Enter a name for your folder.



- Rename media items and folders.

Select a media item or folder, and then select ••• > Rename.



Playing items from the internal drive

You play items from the internal drive in the same way you play all media items and streams. Drag items into the play queue, or into a playlist.

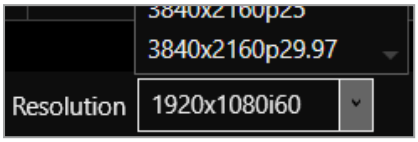
Read more about playing media and streams on page 62.

Read more about playlists on page 74.

Choosing the best resolution for your playlist or play queue

The best resolution for your play queue or playlist depends on the frame rate of your media items, and their size in pixels.

The resolution you choose determines the input resolution going into your CORIOview. All media items in the play queue or playlist are automatically scaled to fit this resolution. If you find that the resolution you choose doesn't give you the results you want, you can change this resolution whenever you want.



The Streaming media and 4K playback input module supports two simultaneous channels playing media. The two channels can have different resolutions, and you can choose a custom value for channel one (slot *n* position 1). Channel two (slot *n* position 2) only supports 1920x1080p60.

Understanding the format of resolution

Resolution is shown in the form:

Width x **Height** (in pixels), **p** or **i**, **Frame Rate** (in Hz, or frames per second)

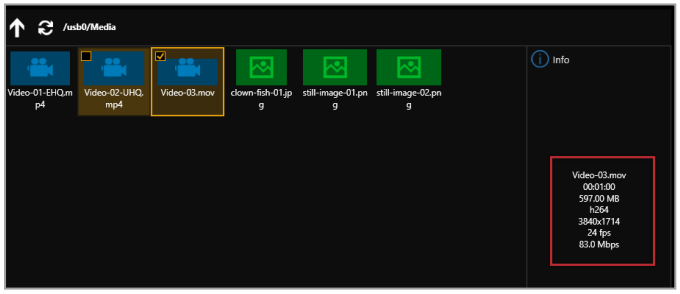
Where **p** means progressive scanning, and **i** means interlaced scanning.

For example, 1920x1080i60 is 1920 pixels wide, 1080 pixels high, interlaced, and has a frame rate of 60 Hz.

How do I know what resolution my media items are?

To find the resolution of a media stream, visit the source of the stream.

To find the resolution of a media item, select the item in the media browser. Information about that item is displayed on the right.



Frame rate

- For best results, add video clips and media streams with the same frame rate to a play queue. You can then choose a resolution with a frame rate that matches your media items.

	Video clip 1	Video clip 2	Video clip 3
✔	1920x1080p**60**	3840x2160p**60**	1600x1200p**60**

- If you have a mixture of frame rates, choose a resolution with a frame rate that is a factor of your frame rates. For example, you can add media items with frame rates of 30 Hz and 60 Hz, and then choose a resolution with a frame rate of 60 Hz. You can do this because you can divide 60 by 30.

  Note: don't round up frame rates. For example, don't treat 23.98 Hz as 24 Hz.

	Video clip 1	Video clip 2	Video clip 3	Best frame rate	Reason
✔	1920x1080p**60**	3840x2160p**30**	1600x1200p**60**	60	Both frame rates are a factor of 60. 60/60 = 1 60/30 = 2
✔	3840x2160p**25**	1920x1080p**50**	1280x720p**50**	50	Both frame rates are a factor of 50. 50/50 = 1 50/25 = 2
✖	1280x720p**23.98**	1280x720p**24**	1920x1080p**60**	-	This play queue doesn't work because 24 is not a factor of 60, and you can't round 23.98 up to 24.

Resolution

- Choose a resolution no larger than your largest media item. Upscaling at this stage takes up unnecessary bandwidth.
- Don't choose a resolution that is much smaller than your media items. Downscaling at this stage can cause your media to appear blocky and low in quality when it is upscaled later in the process.
- If you have a play queue with a wide range of resolutions, you could choose a resolution in the middle of the range. This means that your largest items are downscaled.
- Consider the types of media you want to play. If you have, for example, two large 4K video clips and two smaller still images, you might prefer to put up with poorer quality still images in return for best quality video. In this case, choose your resolution based on the size of the video clips.

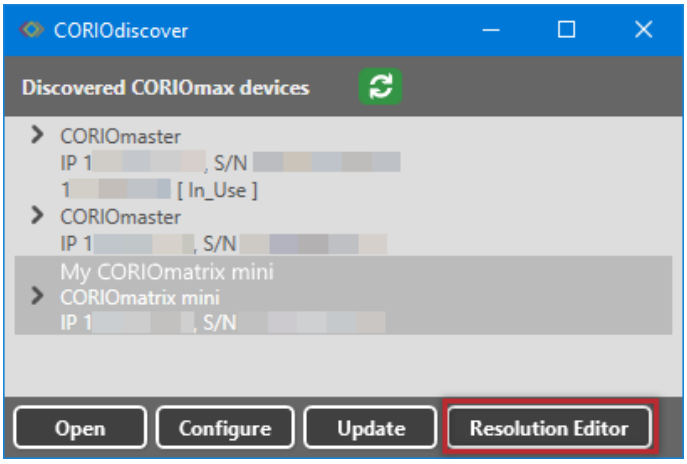
Scanning

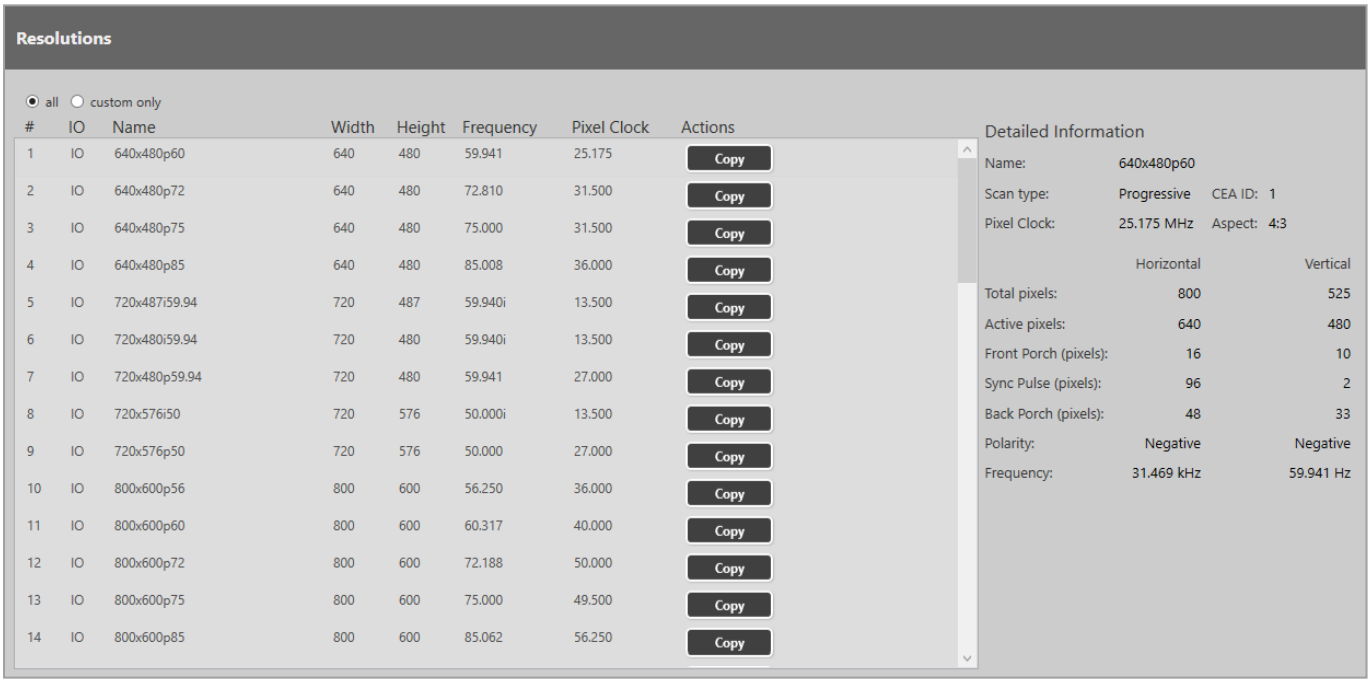
- Avoid mixing media items with progressive scanning and media items with interlaced scanning in the same play queue.

Creating and editing custom resolutions

You can use CORIOdiscover to create and save up to 10 custom resolutions to use on your CORIOview™. Custom resolutions are for both inputs and outputs. You can get the specific values for creating a custom resolution from the manufacturer of your source or display.

View standard resolutions and create custom resolutions in the resolution editor of CORIOdiscover. Open CORIOdiscover, select your device, and then select Resolution Editor.





Select a resolution to see detailed information on the right-hand side.

In this article

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Custom resolution options 89
Creating and editing custom resolutions 92
Creating a custom resolution from a video standard 93
Copying and editing a standard resolution 95
Deleting a custom resolution 95

About custom resolutions

Guidelines for all custom resolutions

- All numeric values are in pixels, unless otherwise stated.
- All numeric values are positive integers, or zero.
- String values may not contain spaces.
- String values may only be valid, printable ASCII characters.
- Strings have a limited number of characters.
- For resolutions with HActive up to and including 1920 pixels, the pixel clock must be between 13.5 MHz and 162 MHz.
  - You can have also have a pixel clock of 297 MHz, on the HDMI output module only.
- The value for active video cannot be zero.
- The maximum size for a resolution created for a DVI module is 1920x1200 @60 Hz.

Supported video standards

- VESA CVT
- CEA-861-D
- VESA DMT

Not supported

You can't create custom resolutions for SDI sources or displays.

Guidelines for 4K custom resolutions

If the HActive value is not divisible by 64, you cannot rotate the output.

The maximum values for a 4K custom resolution are:

- HActive = 3840
- VActive = 2528
- Pixel clock = 297 MHz

Supported values for pixel clocks, for the HDMI output module, for resolutions with HActive > 1920:

- 27 MHz
- 74.175824 MHz
- 74.25 MHz
- 148.351648 MHz
- 148.5 MHz
- 260 MHz
- 296.703296 MHz
- 297 MHz

If the pixel clock your source or display is within 0.0001 MHz of a value in this list, it might work, depending on your other settings. If you can't see anything on your display, try using the exact values given here.

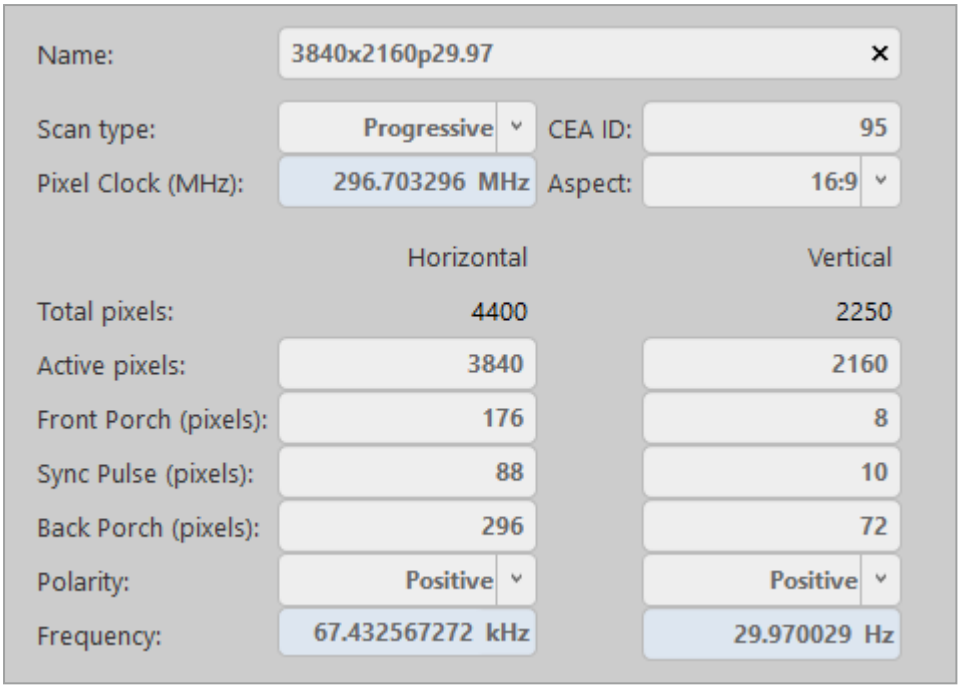
Guidelines for interlaced custom resolutions

- The vertical front and back porches must be twice the even field.
- The vertical sync pulse must be twice the even value.

Custom resolution options

When you create a custom resolution, you need to enter values for the following options. The values come from

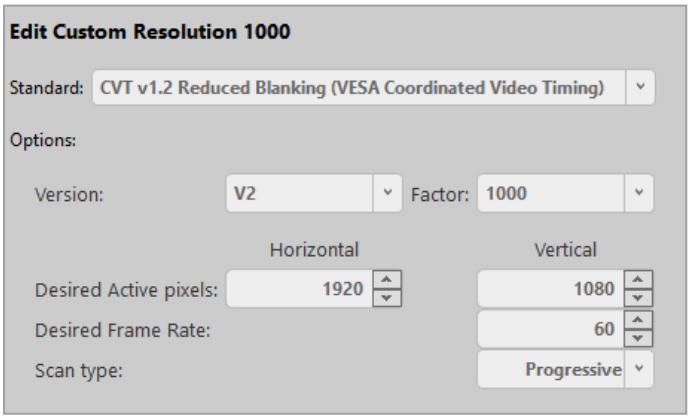
the manufacturer of your source or display.



Option	Notes
Name	Enter a useful name for your resolution. **General naming rules** **Note:** it is possible to create more than one custom resolution with the same name. Check the list of custom resolutions available from Resolutions. Names: ■ Can be 1–23 characters long. ■ May only contain valid, printable ASCII characters. ■ Must not contain spaces. **Best practice naming rules** For best results, use the name format below: `[width]x[height][scantype][rate][optional]` Where: ■ `[width]` and `[height]` are values in pixels ■ `X` is the letter x ■ `[scantype]` is i or p ■ `[rate]` is the frame rate, and can contain a decimal point ■ `[optional]` is any additional, optional, text
Scan type	Choose between progressive and interlaced scanning.
CEA ID	Only enter a value when you define a custom resolution that complies with the CEA-861-D profile for that value. The CEA identifier information option (CEA ID) does not affect the custom resolution. It is there for providing information on the resolution to any connected equipment. If you enter a value for CEA ID and your custom resolution does not conform to the CEA format for that value, you might not see an image on your display.

Option	Notes
Pixel Clock	Enter a value between 13.5 and 162 MHz, or, for 4K resolutions, see the guidelines for 4K custom resolutions. If the specification of your source or display does not include a value for pixel clock, set the vertical and horizontal frequency instead. See below.
Aspect	If you are creating a custom resolution for a CORIOmatrix or CORIOmatrix mini, select an aspect ratio from the list. Choose from: 16:9 16:10 16:6 4:3 5:3 64:27 5:4 1:1 256:135
Active pixels	Enter a number of pixels between 64 and 3840 to set the width of the visible image. Enter a number of pixels between 64 and 2528 to set the height of the visible image.
Front Porch	The front porch is the gap between the end of the active video and the start of the sync pulse, in pixels. Enter a number of pixels between 1 and 2000 to set the horizontal and vertical front porch.
Sync Pulse	The sync pulse identifies the start of each row or frame of video. Enter a number of pixels between 8 and 500 to set the horizontal sync pulse. Enter a number of pixels between 10 and 100 to set the vertical sync pulse.
Back Porch	The back porch is the gap between the end of the sync pulse and the start of the active video, in pixels. Enter a number of pixels between 1 and 2000 to set the horizontal back porch. Enter a number of pixels between 1 and 100 to set the vertical back porch.
Polarity	The sync pulse separates the video fields into positive and negative polarity. Choose between positive and negative.
Frequency	You only need to enter values here if the specification for your source or display specification does not include a value for pixel clock. Enter a value in kHz to set the horizontal frequency, and a value in Hz to set the vertical frequency.

Options for custom resolutions based on the VESA CVT standard

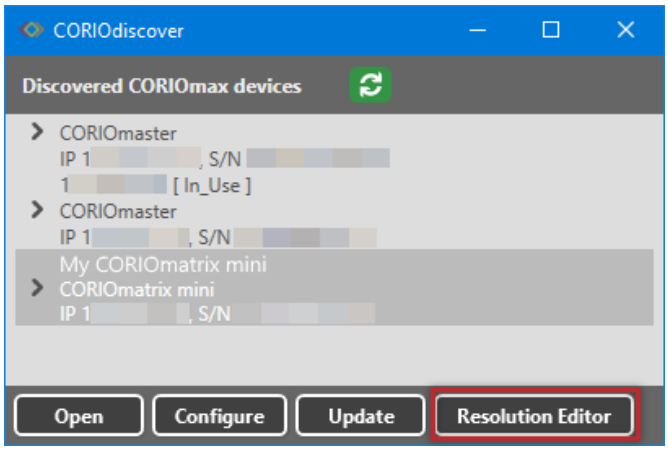


Option	Notes
Version	Enter the version number of the VESA CVT standard you want to use.

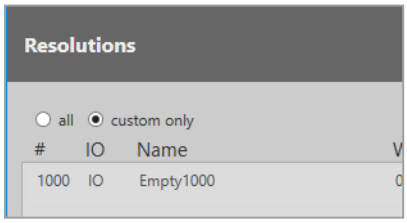
Option	Notes
Factor	The factor converts from an exact frame rate into an NTSC-compatible vertical frequency. Choose between 1000 and 1001. Select 1000 to make the vertical frequency the same as your desired frame rate. Select 1001 if you need a vertical frame rate that does not exactly match your desired frame rate. For example, select 1001 if your desired frame rate is 60, but you need a vertical frequency of 59.94.
Desired Active pixels	Enter a number of pixels to set the width and height of the displayed area. The highest resolution we support is 1920x1200p60, with reduced blanking. See the VESA standard for other CVT standard resolutions.
Desired Frame Rate	Enter a frame rate in Hz.

Creating and editing custom resolutions

1. Select your device, and then select Resolution Editor.

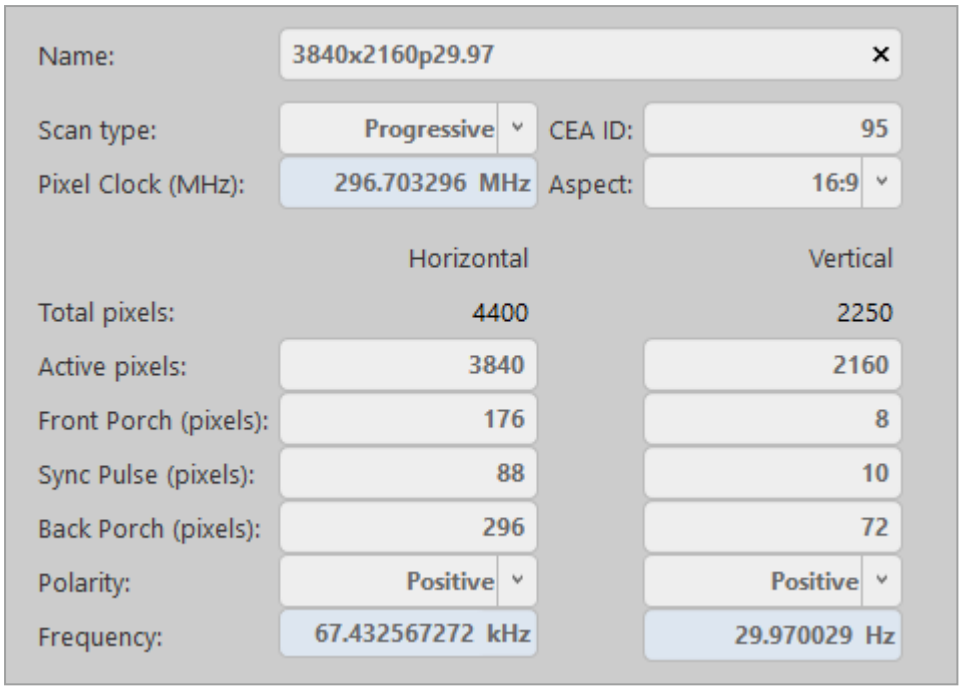


2. Enter your administrator username and password.
   The default username is admin, and the default password is adminpw.
3. Select custom only.



4. Find an empty custom slot, or choose a custom resolution to edit, and then select Edit.
5. Enter a useful name for your custom resolution.

6. Enter values for any other options as needed.

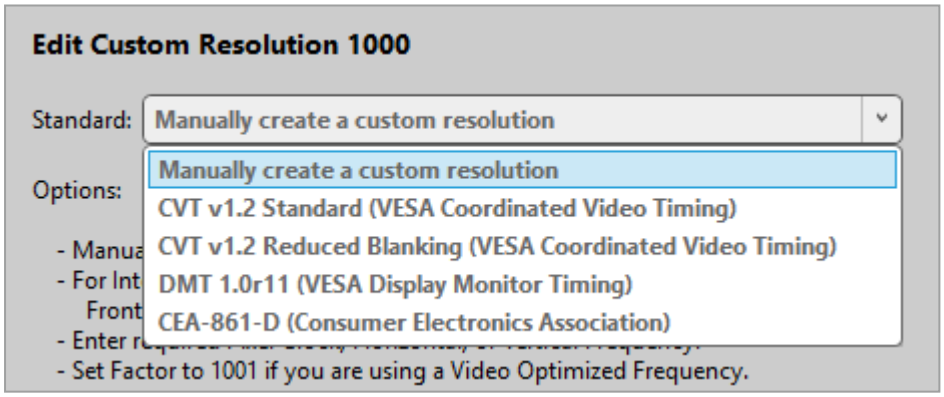


Read about rules for names and other options on page 89.

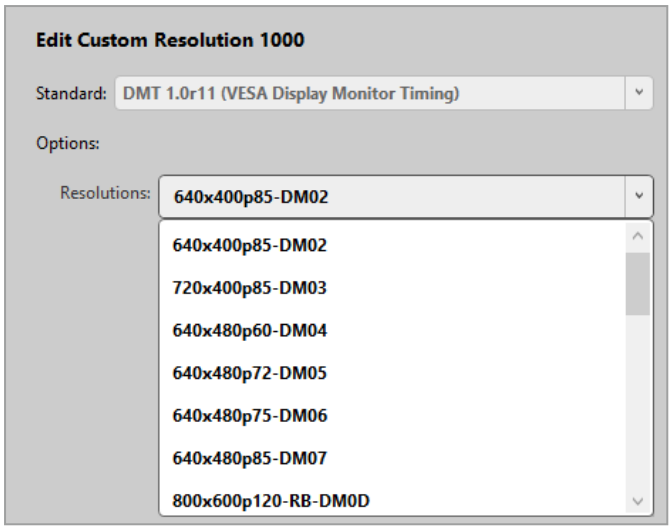
Creating a custom resolution from a video standard

Creating a custom resolution from the CEA-861-D or VESA DMT standard

1. From Resolutions, find an empty custom slot, or choose a custom resolution to edit, and then select Edit.
2. Select your standard from the list.



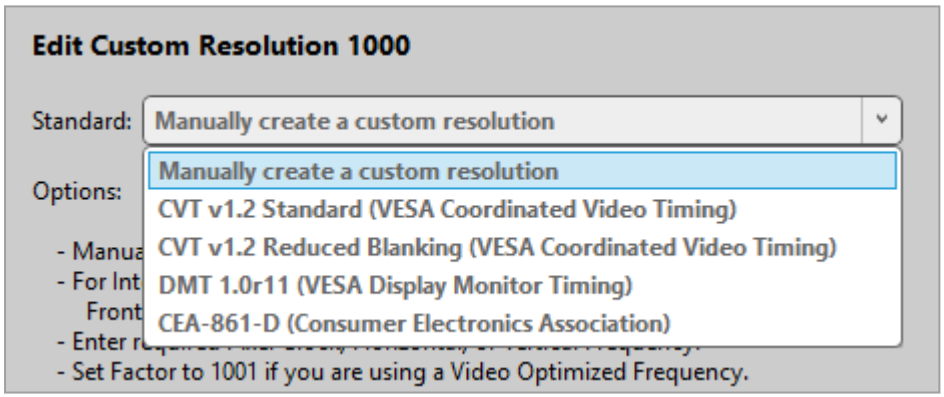
3. Select a resolution from the list.



4. Enter a useful name for your custom resolution.
5. Enter values for any other available options as needed.

Creating a custom resolution from the VESA CVT standard

1. From Resolutions, find an empty custom slot, or choose a custom resolution to edit, and then select Edit.
2. Select your standard from the list.



3. Enter a useful name for your custom resolution.
4. Enter values for any other available options as needed.

Read about rules for names and other options on page 89.

Copying and editing a standard resolution

If you want to create a custom resolution that is only slightly different to a standard resolution, you can copy the closest resolution and then edit it.

CORIOdiscover saves the new custom resolution in the first available empty slot. If there are no empty slots available, choose which custom resolution to overwrite.

1. From Resolutions, find the resolution closest to the resolution you want, and select Copy.



2. Edit your new custom resolution.
   For full instructions, see Creating custom resolutions on page 92.

Deleting a custom resolution

You can't delete a custom resolution, but you can return it to factory default settings, which removes your custom settings.

- From Resolutions, find the custom resolution you want to delete, and select Reset.

Adding and managing custom EDID files

You can upload an EDID file saved to your PC to your CORIOview™. You can manage the EDID files saved to your CORIOview in CORIOgrapher™.

You can only upload custom EDID files for sources.

You might want to upload a saved EDID file if a source, for example, a PC, is using the preferred resolution from CORIOview rather than the resolution you selected for the source device. This can cause unexpected effects. You can create an EDID file for the resolution you selected for the source device, and upload it to CORIOview.

EDID files must:

- Be a binary EDID file
- Have a filename in 8.3 format
- Have a .edd extension
- Have a filename no longer than 8 ASCII characters

> **Risk of unexpected results**
> CORIOgrapher does not check that a custom EDID file is valid or supported. Uploading an invalid or unsupported EDID file can cause source loss and unexpected results. Creating custom EDID files is an advanced task. If in doubt, contact a qualified AV professional.

Before you start

Before you add custom EDID files or remove saved EDID files, we recommend that you make a backup copy of your configuration.

> **Risk of losing EDID data**
> Firmware version M407 contains updates to system EDID files. When you've updated from version M406 or below to version M407 or above, do not restore a backup from a lower firmware version.

Read more about backing up and restoring on page 36.

Adding a saved EDID file

1. In CORIOgrapher, select ⚙ > EDID Manager.
2. Select Install new EDID.
3. Select Select EDID file and browse to an EDID file on your PC.
4. Select Start install.

Removing EDID files

> **Risk of unexpected effects**
> If you delete an EDID file that is in use and then reboot your CORIOview, your CORIOview says it is using the deleted EDID file but is actually using the default EDID file.
> Take care to not delete EDID files that are in use.

1. In CORIOgrapher, select ⚙ > EDID Manager.
2. Find the EDID file you want to delete.
3. Select Remove.

Troubleshoot it

This section contains frequently asked questions and advice on troubleshooting problems with your CORIOview™. If you can't find the help you need, contact your distributor, and if they can't help, contact tvONE™ support. Contact details are at the back of this guide.

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Checking and updating the CORIOview™ firmware

You must be connected to your CORIOview to check and update firmware.

Find your firmware version on CORIOgrapher™ > Home. Update your firmware from CORIOdiscover > Update Device.

> When you update the firmware, any unsaved configuration in CORIOgrapher is deleted. Make sure you save any configurations that you want to keep before you start the updating process. You can also save a backup file on your PC. Read about saving a backup file on page 36.

Before you start

To install the latest CORIOview firmware, you need CORIOdiscover V1.7 or above. V1.7 of CORIOdiscover is available from the CORIOview page at tvone.com/firmware-updates.

Checking your firmware version and downloading new firmware

CORIOdiscover warns you if you try to install firmware that is older or the same as your existing firmware. If you don't want to check your existing firmware version, skip to step **2**.

1. In CORIOgrapher > Home, find your current firmware version next to the name of your CORIO device.



2. Check for newer firmware at tvone.com/firmware-updates.
   Select your device from the list and compare the firmware version to your own.
3. If your firmware is out of date, download the zipped DAT file.
   You don't need to extract the DAT file.

Updating the firmware

1. In CORIOdiscover, select .

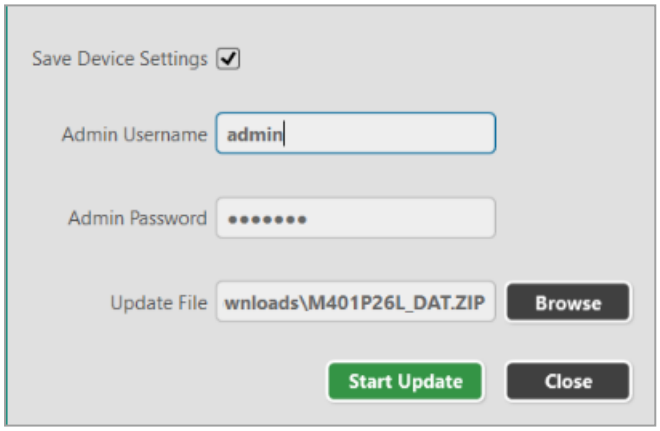


2. Select your CORIOview from the list and select Update.
3. To save your CORIOview settings, select Save Device Settings.

   When you save your settings, your CORIOview keeps all your saved configurations.

> **Risk of losing custom EDID file and/or secure certificate when updating from firmware version M406**
> If you have a custom EDID file and/or a secure certificate from firmware version M406 or below, your EDID file and/or secure certificate is not saved when you select Save Device Settings.
> For help updating to firmware versions M407 and above, contact customer support.
> See contact details on page 115.

4. Enter your administrator login details.



5. Browse to the zipped DAT file that you downloaded.
6. Select Start Update.

   When the update is finished, you can log in to your CORIOview again.

   The first time you log in you might be asked to choose which mode you want to use. Once you've chosen a mode, you won't be asked again.

   If you've been using CORIOview for a while and want to keep things the same, choose classic mode. Classic mode is best for applications like control rooms.

   If you want to use your CORIOview for meetings or security monitoring, you can try out dynamic mode. Dynamic mode has a simplified version of CORIOgrapher, and automatic window layouts that change dynamically to reflect when sources are connected to your CORIOview.

   You can change modes whenever you like in CORIOgrapher.

   Read more about choosing a mode on page 38.

I can't see my CORIOview™ in the Discovered Devices list

What's the problem?

When I tried to find my CORIOview in the Discovered Devices list on the Home window of CORIOgrapher™, I couldn't see it. I tried refreshing the list and it still wasn't there.

Why does this happen?

There might be a lot of devices on your network and you're having trouble identifying yours.

Your device might be on a different network, there might be a problem with your network or firewall, or you might be in a high-security environment.

What to do

First try this

If you've got a long list of devices with similar names, try these steps to find out which one is yours.

1. Write down the list or take a screenshot, and then turn off your device.
   After a few seconds, your device should show as offline.
2. If nothing shows as offline, close and open CORIOgrapher.
3. Compare the list to your screenshot.
   If a device is missing, it is most likely your device.
4. Turn on your device, wait for ten seconds, and see if that device appears again in the list.
   You can now select your device.

Then try this

If your device definitely isn't in the Discovered Devices list, first check your hardware.

If your device still isn't in the list, connect directly to your device with an RS-232 serial connection, find the IP address of your device, and use that IP address to log in.

> API commands are not case-sensitive.

To check your hardware and firmware

1. Check that your device is turned on and the LED on the front panel is green.
2. Turn your device off and on again.
3. When the LED on the front panel is green, on the Home window of CORIOgrapher, select Refresh.
4. Check the Ethernet or serial connectors that connect your device to your computer.
5. Check that you are using the latest firmware. You might need to update your firmware.
   Read about checking and updating your firmware on page 98.

To find out the IP address of your device

1. Connect the RS-232 port on your device to the RS-232 port on your computer with an RS-232 cable.
2. Open a suitable terminal application, such as puTTY or HyperTerminal.
3. Set your COM port settings to the following:

Speed (baud)	115200
Data bits	8
Stop bits	1
Parity	None
Flow control	None

4. To log in to your device as an administrator, enter `login(admin,adminpw)`.

   Admin and adminpw are the default administrator login details. If you've changed them, use your own login details.
5. To check that DHCP is enabled, enter `System.Comms.Ethernet.DHCP` and press Return.

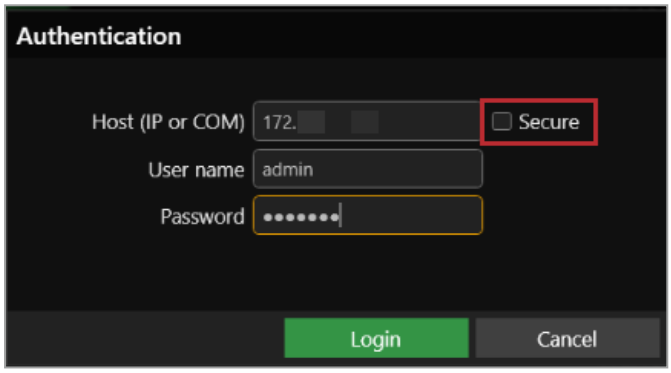
   If the Enabled property is set to Off, then go to step **6**.

   If the Enabled property is set to On, then go to step **7**.
6. Enter `System.Comms.Ethernet` and press Return.
7. Find the IP address of your device in the IP_Address property and make a note of it.
8. Enter `logout()` and press Return.

To log in to your device with an IP address

Log in to your device on the Home window of CORIOgrapher.

1. Select Connect to your device.
2. Enter the IP address that you got from the serial connection, and your administrator login details.



   The first time you log in, make sure Secure is clear.

If that doesn't work

There might be a problem with your network or firewall. Talk to your network administrator. You might need to give your device a specific IP address.

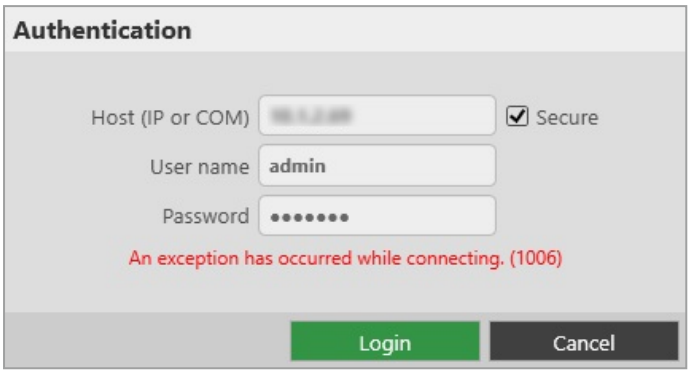
Read about changing the IP address of your device on page 41.

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com , tech.europe@tvone.com or tech.asia@tvone.com.

I can't log in securely to CORIOgrapher™

What's the problem?

When I select Secure and try to log in, I get an error message.



Why does this happen?

Your CPU module might not have a Real Time Clock (RTC) installed. CORIOview units purchased from 2019 include an RTC.

If your CPU module includes an RTC, it might not have generated a secure certificate.

What to do

First try this

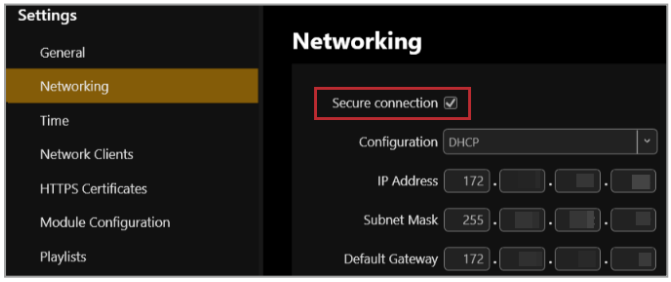
Check if you have an RTC installed.

1. Clear the Secure option and log in to CORIOgrapher.
2. Select ⚙ > Networking.

   If you see error message You cannot set the time on a device that does not have a real time clock, your CPU does not have an RTC installed.

If you do not see the error message, generate a secure certificate.

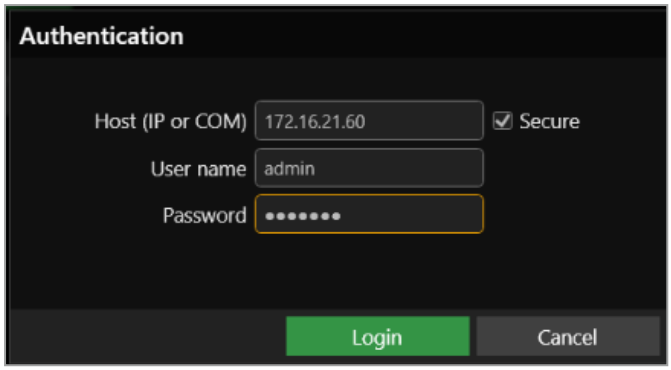
1. From Networking, select Secure connection.



2. Select Save > Save.

Your device restarts.

3. Select Secure and log in.



Then try this

If your CPU module does not include an RTC, purchase a new CPU.

Ask your distributor for part number CM-CV-CPU-HTTPS.

With your new CPU, generate a secure certificate.

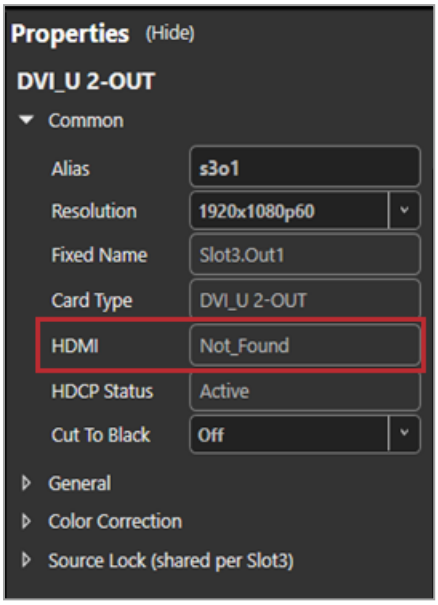
If that doesn't work

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com , tech.europe@tvone.com or tech.asia@tvone.com.

The picture keeps coming and going on my CORIOview™

What's the problem?

The display is continually dropping the signal and attempting to reconnect. The HDMI status property of the display switches between Found and Not_Found.



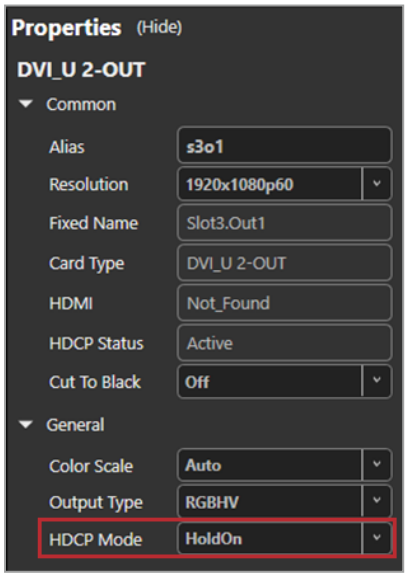
Why does this happen?

You probably have a display or output that doesn't support HDCP (High-bandwidth Digital Content Protection).

What to do

First try this

1. From Dashboard, select .
2. Select General and set HDCP Mode to KeepOff.



If that doesn't work

If setting HDCP Mode to KeepOff doesn't work, try setting HDCP Mode to FollowSources.

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com , tech.europe@tvone.com or tech.asia@tvone.com.

My Streaming media and 4K playback input module keeps overheating

What's the problem?

I keep seeing an error message that tells me my Streaming media and 4K playback input module is too hot, or has overheated. The performance of the module is reduced. I've tried restarting my CORIOview™.

Why does this happen?

If the environment around the Streaming media and 4K playback input module is too hot, the module runs above specification, or the fans can't do their job properly, the module can overheat. When the module becomes hot and there is a risk of overheating, the performance of the module is reduced to lower the amount of data processed.

What to do

First try this

1. Switch off your CORIOview.
2. Allow your CORIOview to cool down for at least 20 minutes.
3. Restart your CORIOview.

Then try this

1. Place your hand near each fan outlet in turn and check that air is flowing out of your CORIOview.
2. Check the environment around your CORIOview.
   - Is there anything covering the fan outlets?
   - Is the space large enough?
   - Is there enough ventilation or cooling? For best results, make sure the air around your CORIOview is a maximum of 20 °C.
   - Is there an air gap all around your CORIOview?
3. If there are any issues with the environment around your CORIOview, switch off your CORIOview and allow it to cool down while you fix the issues.

If that doesn't work

Is your Streaming media and 4K playback input module playing media items or streams that are very high resolution and/or high bitrate? Try reducing the resolution or bitrate as much as you can without losing too much quality.

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com , tech.europe@tvone.com or tech.asia@tvone.com.

The video signal from my Encoder-100 is delayed

What's the problem?

I am streaming an HDMI™ signal from my Encoder-100. The video is delayed.

Why does this happen?

- If there's no embedded audio in the HDMI signal, but you selected HDMI as your audio source, the video can be delayed.

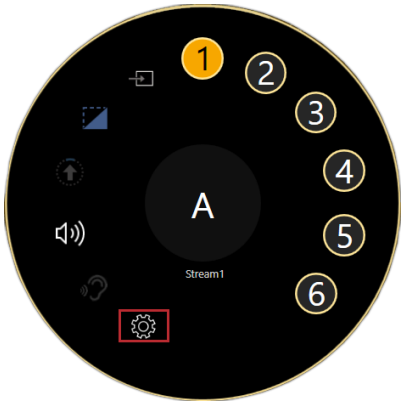
What to do

First try this

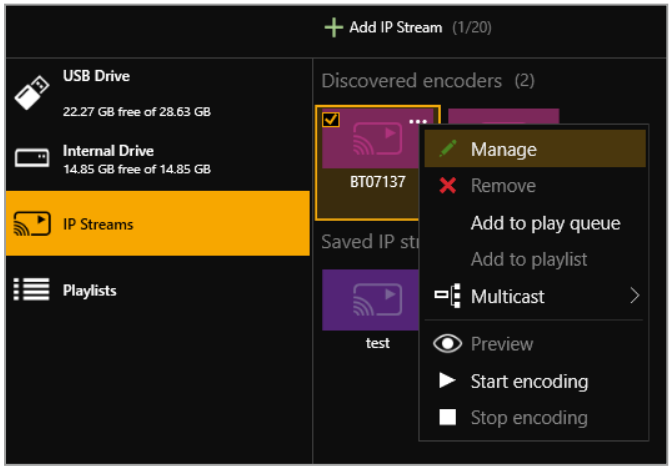
1. From Dashboard, select the bubble of a window playing a source from your Streaming media and 4K playback input module.



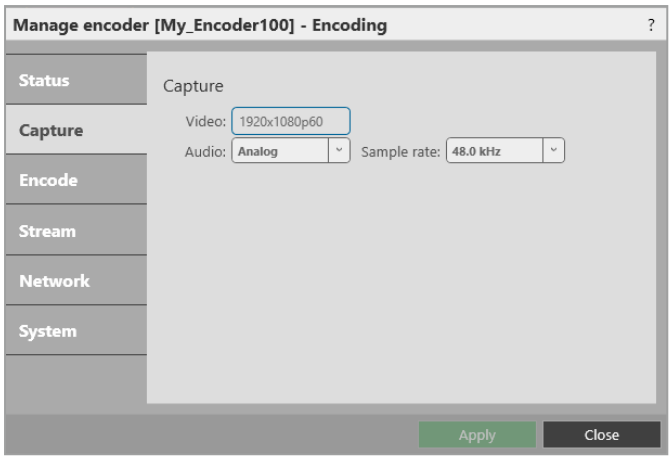
2. Select ⚙.



3. From Properties, select (Media Player) Manage.
4. Select IP Streams, select your Encoder-100, and select Manage.



5. Select Capture.



6. Select None or Analog from Audio.

If that doesn't work

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com , tech.europe@tvone.com or tech.asia@tvone.com.

I can't hear any audio

What's the problem?

I am trying to play audio but I can't hear it, or the sound is poor.

Why does this happen?

- You might be listening to the wrong input.
- The source or output might be muted, or the audio input level is turned down too low.
- The audio from a media item might not be compatible with your Streaming media and 4K playback input module.
- There might be a loose connection or problem with your audio device.

What to do

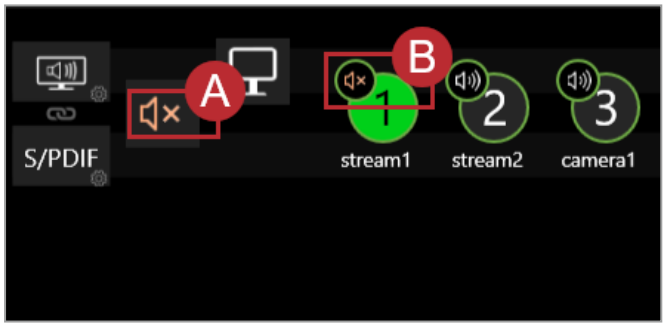
First try this

Select the source you want to listen to

1. Press AUDIO.
2. Press a button from 1 to 8.

Check if a source or output is muted

- From CORIOgrapher > Dashboard, check if the output or a source is muted.



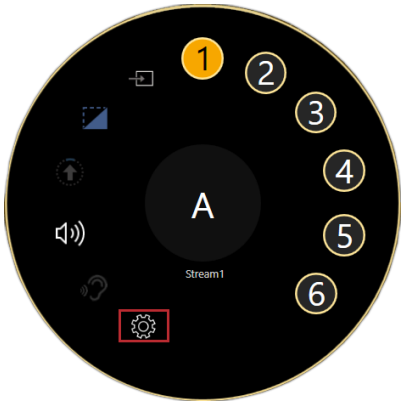
A	The output is muted
B	The source is muted

Check if the audio input level is turned down

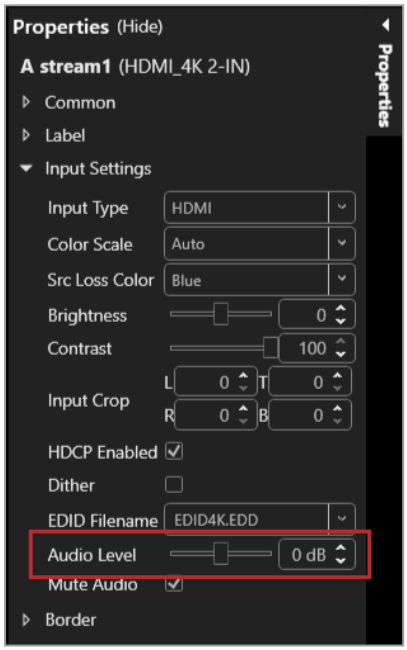
1. From CORIOgrapher > Dashboard, select the bubble playing the source you want to check. The source is the number in the yellow circle.



2. Select ⚙.



3. From Properties, select Input Settings (shared).
4. Check the position of the audio level slider.



- Slide to the right to increase audio input.
- Slide to the left to reduce audio input.

Then try this

If your are playing media from a Streaming media and 4K playback input module, check the format of your media items:

- The Streaming media and 4K playback input module only supports .mp3 and .aac formats.
- If your media items are not supported, consider converting them.

If that doesn't work

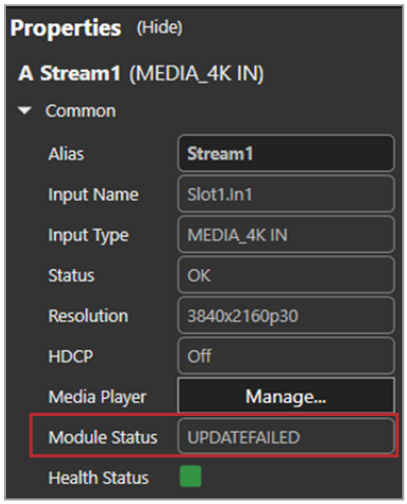
1. Restart your CORIOview.
2. Check all hardware connections.
3. Check that your audio device is working. Try connecting a different source.
4. Make sure you have the latest firmware and software.
   Download the latest software from tvone.com/softwares.
   Read about updating your firmware on page 98.

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com, tech.europe@tvone.com, or tech.asia@tvone.com.

I can't update the firmware of my Streaming media and 4K playback input module

What's the problem?

1. In CORIOdiscover, I have an error message that tells me one or more of my Streaming media and 4K playback input modules failed to update.
2. In CORIOgrapher™ I have an error message that tells me the firmware of my Streaming media and 4K playback input module failed to update. The module status is UPDATEFAILED.



Why does this happen?

- There was an error when you updated the firmware of your CORIOview™.
- The firmware download might be corrupted.
- There is a problem with a module.

What to do

First try this

1. Restart your CORIOview.
2. In CORIOgrapher, select ⚙ > Module Configuration.
3. For each Streaming media and 4K playback input module, select ••• > Configure and check the status.

Then try this

1. Download the firmware update again.
   Make sure you download the correct version.
2. Repeat the firmware update.

Read more about updating your firmware on page 98.

If that doesn't work

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com , tech.europe@tvone.com or tech.asia@tvone.com.

General troubleshooting checklist

If specific troubleshooting advice isn't helping, or your product has stopped working, go through the points below. If your product still doesn't work, you might need to return it for repair.

Read about returning your product on page 111.

1. Make sure your product is set up correctly, as shown in this guide.
2. Check that your cables and equipment are all connected firmly.
3. Check that your product is connected to an electrical outlet that is switched on.
   Can you see LED lights on the front of your product?
4. Test your sources by connecting them directly to a display.
5. Test your display by connecting it directly to a source.
6. Test each cable.
7. Try restoring your product to factory default settings.
   Note: during factory reset your custom settings are deleted.
8. Try updating your firmware.
   Note: during a firmware update your custom settings are deleted.

Returning a product for repair

You can request to return your product to tvONE™ for repair. When you contact tvONE support, have the following information ready.

- Product type
- Serial number of the faulty unit (this is on the underside of the unit)
- Full details of the issue
- Invoice number (if available)

Contact tvONE support for your area.

- Customers in North, Central, and South America (NCSA), email tech.usa@tvone.com.
- Customers in Europe, the Middle East, and Africa (EMEA), email tech.europe@tvone.com.
- Customers in Asia, email tech.asia@tvone.com.

EMEA and Asia

Customers in EMEA and Asia receive an RMA Request form from tvONE support. Complete the form and return it to tvONE support for your area.

All customers

tvONE support decides if your product needs to return for repair, and, if needed, provide a return authorization number.

Send your product to tvONE by insured carrier or registered mail. Write your return authorization number on the outside of the packaging, and on any documents you send with your product.

You must arrange and pay for shipping and insurance. Products in transit are your responsibility. tvONE does not accept responsibility for products lost in transit.

> Do not return a product for warranty repair without a return authorization number. tvONE will not repair your product.

What are the minimum requirements for running CORIOgrapher?

The minimum requirements for running CORIOgrapher are:

- PC running Windows® 7 or 10
- Windows® .NET 4.6
- 600 MB of disc space during installation
- Approximately 50 MB of disc space after installation

What's the password for my CORIOview™?

The default administrator username and password for CORIOgrapher™ are `admin` and `adminpw`.

Can I use HDMI extenders with CORIOview™ output modules?

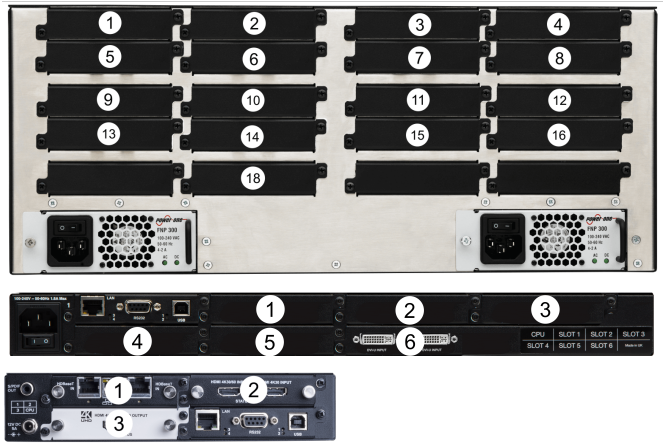
Yes. You can use HDMI extenders that draw up to 100 mA directly with DVI-I and DVI-U output modules. If you want to use an HDMI extender that draws more than 100 mA, use an external power supply.

See our range of HDMI extenders at tvone.com/signal-extension-systems.

Where can I put Streaming media and 4K playback input modules?

The number of Streaming media and 4K playback input modules you can have, and where you can install them, depends on the CORIO unit you have.

CORIOmaster™ series



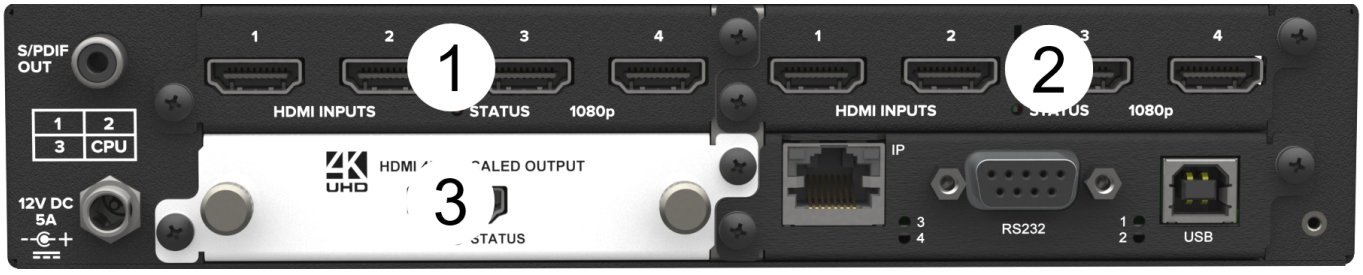
In a CORIOmaster, only slots 4, 8, 5, 1, and 3 can contain Streaming media and 4K playback input modules.

For best results, fit in the order given above.

In a CORIOmaster mini, only slots 1 and 2 can contain Streaming media and 4K playback input modules.

In a CORIOmaster micro, only slots 1 and 2 can contain Streaming media and 4K playback input modules.

CORIOview™



In a CORIOview, slots 1 and 2 can contain Streaming media and 4K playback input modules.

How large is the internal storage on a Streaming media and 4K playback input module?

There are two models of Streaming media and 4K playback input module. One comes with 16 GB of internal storage, the other comes with 128 GB.

How do I find the MAC address of my Streaming media and 4K playback input module?

You can find the MAC address in Networking. Select ⚙ > Module Configuration, find the module, and select ••• > Configure.

How fast is my connection to the Streaming media and 4K playback input module?

You can find the connection speed in Networking. Select ⚙ > Module Configuration, find the module, and select ••• > Configure.

Which media formats can I add to a play queue?

You can add media streams, video clips, and still images to a play queue. For the full list of supported formats, see the specification sheet.

Specification sheets can be found on our website tvone.com.

Can I save my play queue?

If you add media items or streams to a play queue and select Save on Device from the wall editor, then when you restart your CORIOview™, the media items and streams remain in the play queue.

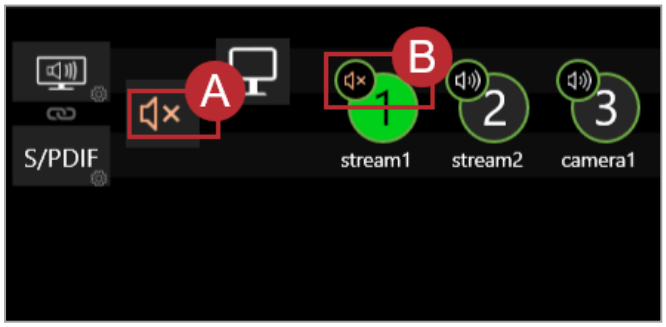
You can save all your settings, including your play queue, to a backup file on your CORIOview. If you want to load the same play queue at a later date, you can restore your settings from the backup file. **Note:** you will lose any work that you have done since creating the backup file.

From CORIOgrapher™ V2.4 onwards, you can save your play queue as a playlist.

How do I mute audio?

You can mute a source or the output in CORIOgrapher.

- From Dashboard, mute the output or the source.



A	Mute the output
B	Mute a source

More

In this section

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Contact us 115

What's new in CORIOgrapher™ V2.9 for CORIOview™

CORIOgrapher V2.9 supports:

- Dual mode operation. Choose from classic mode and dynamic mode.
- Read more on page 38.

CORIOdiscover V1.7 supports:

- Updating from standby mode.

For the full list of new features and things we've fixed, see the release notes.

Release notes are available at tvone.com/softwares.

Regulatory compliance for CORIOview™ and all modules

This product has been tested for compliance with appropriate FCC and CE rules and regulations. The power adapter and supply has been tested for compliance with appropriate UL, CUL, CE, PSE, GS, rules, regulations and/or guidelines. This product and its power adapter is RoHS compliant.

WEEE directive



The wheelie bin symbol on this product or its packaging indicates that this product shall not be treated as household waste. In line with EU Directive 2012/19/EU for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste. Dispose of this product by returning it to the point of sale, or to your local municipal collection point for recycling. Doing this helps conserve our environment.

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