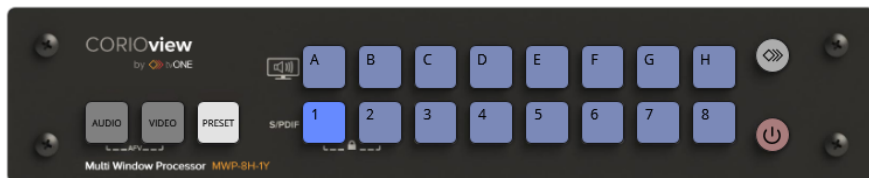


CORIOview™ Multi Window Processor



CORIOgrapher™ V2.6 and above

User Guide V1.00

In this guide

Welcome to tvONE™ Help	4
About CORIOview Made-to-Order (MTO) Variants	5
Setting up your CORIOview	6
Quick start	6
About your CORIOview	8
About the buttons of your CORIOview.....	9
About modules	11
About your Dual Stream In module	12
Dual Stream In module - quick start guide.....	13
About your Encoder-100.....	18
Encoder-100 - quick start guide.....	19
Configuring your Encoder-100.....	23
Restoring factory default settings on your Encoder-100	27
Hardware recommendations.....	28
Planning and installing.....	28
Installing display hardware	28
Setting up a CORIOview in CORIOgrapher	30
About CORIOgrapher	30
Getting started with CORIOgrapher	30
Naming input and output ports.....	32
Settings the display's output resolution.....	33
Testing your CORIOview installation	34
Testing your display and sources installation	34
Test the audio for each input.....	34
Settings	35
Device settings.....	35
Naming your CORIOview.....	35
Resetting your CORIOview to factory default settings	35
Backing up and restoring your settings	35
CORIOview settings.....	37
Configuring the buttons of your CORIOview.....	37
User settings	38
Creating and editing users	38
Changing other users' passwords	38
Changing your own password	39
Network settings.....	39
Configuring network settings for your CORIOview.....	39
Configuring network settings for streaming media.....	40
Playlist settings.....	41
Renaming playlists and moving playlists between modules	42
Deleting playlists	42
Encoders and streams settings.....	42
Managing encoders and streams	43
Using CORIOview	44
Changing between preset, video, and audio selection modes	44
Presets	44
What is a preset?	44
Loading a preset.....	45

Changing the source playing in a window.....	46
Playing audio.....	49
Showing window labels.....	52
Show the window/source information labels on the display.....	53
Standby mode.....	54
Locking the front panel buttons.....	55
Media and streams.....	56
Playing media and streams.....	56
Creating and managing playlists.....	63
Using the internal drive.....	68
Choosing the best resolution for your playlist or play queue.....	70
Creating and editing custom resolutions from CORIOdiscover.....	72
Troubleshooting and FAQs.....	79
Minimum specification for CORIOgrapher.....	79
Checking and updating the CORIOview firmware.....	79
I can't see my CORIOview in the Discovered Devices list.....	80
The picture keeps coming and going.....	82
My Dual Stream In module keeps overheating.....	83
The video signal from my Encoder-100 is delayed.....	84
I can't hear any audio.....	85
I can't update the firmware of my Dual Stream In module.....	86
CORIOgrapher can't find or connect to my Encoder-100.....	87
General troubleshooting checklist.....	87
Returning a product for repair.....	88
What's the password for my CORIOview?.....	88
Can I use HDMI extenders with CORIOview output modules?.....	88
How large is the internal storage on a Dual Stream In module?.....	88
How do I find the MAC address of my Dual Stream In module?.....	88
How fast is my connection to the Dual Stream In module?.....	88
Which media formats can I add to a play queue?.....	88
Can I save my play queue?.....	88
More.....	89
What's new in CORIOgrapherV2.6.....	89
Product specifications.....	90
CORIOview MWP specifications.....	90
Dual Stream In module specifications.....	95
Encoder-100 specifications.....	96
End user license agreement for CORIOgrapher.....	97
Regulatory compliance for CORIOview, Encoder-100, and all input and output modules.....	100
Contact us.....	100

Welcome to tvONE™ Help

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

CORIOview

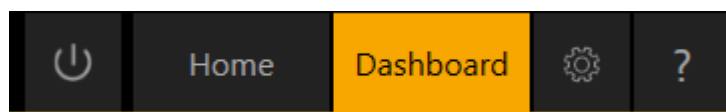
CORIOgrapher

CORIOdiscover™

All CORIOview variants

MWP-4H-1Y	4 x HDMI 1080p In & 1 x HDMI 4K Out	MWP-4Y-1Y	4 x HDMI 4K In & 1 x HDMI 4K Out
MWP-8H-1Y	8 x HDMI 1080p In & 1 x HDMI 4K Out	MWP-4Hi-1Y	4 x HDMI 1080p + AVIP & 1 x HDMI 4K Out
MWP-4D-1Y	4 x DVI_U In & 1 x HDMI 4K Out	MWP-8GS-1Y	8 x 3G SDI In & 1 x HDMI 4K Out
MWP-MTO	Made to Order		

This document is also available as a PDF document in CORIOgrapher. To open the PDF, select **?** in CORIOgrapher top right-hand side.



Meet CORIOview

Congratulations on your purchase of CORIOview, Multi-Window Processor re-defined! Your CORIOview works with CORIOgrapher software allowing you to configure your unit with ease. Your CORIOview is the best tool to make the most of your visual space.

- » 4K Processor with pixel perfect scaling
- » Crystal clear images with 4K output
- » Windows labelling allowing source naming
- » Color borders with adjustable thickness
- » 16 preset layouts ready to use
- » Intuitive front panel with 21 buttons
- » Layout activation, 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
- » Multiple control methods using CORIOgrapher, API or Crestron/AMX controllers
- » Ultra compact - up to 8 inputs in ½ RU size

Meet CORIOgrapher

CORIOgrapher V2.6 is packed with features to help you create and manage your visual space.

- » Intuitive user interface
- » Designed to be used with touch screen PC tablets as well as mouse-controlled PC [touch not fully supported, under development]
- » 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

About CORIOview Made-to-Order (MTO) Variants

CORIOview MTO variants offer ultimate flexibility in mixed input, mixed signal processing. To design your unit simply choose your output module and up to two of the offered input modules.

Choose output module → Choose up to 2 input modules → Your CORIOview



All output modules currently only support one output port.

Choice of Output Modules

Output Module	Stock code
Single 4K HDMI Scaled Out	CV-HDMI-4K-SC-1OUT-FF
Single DVI-I Scaled Out	CV-DVI-I-SC-2OUT-FF
Single 3G SDI Scaled Out	CV-3GSDI-SC-2OUT-FF
Single HDBaseT Scaled Out	CV-HDBT-SC-2OUT-1ETH-FF

Choice of Input Modules

Input Module	Stock code
Quad 1080p HDMI In	CV-HDMI-4IN-FF
Quad 3G SDI In	CV-3GSDI-4IN-FF
Dual DVI-U In	CV-DVIU-2IN-FF
Dual 4K HDMI In	CV-HDMI-4K-2IN-FF
Dual HDBaseT In on Ethernet	CV-HDBT-2IN-1ETH-FF
Dual Stream In	CV-AVIP-IN-1USB-1ETH-FF
Dual Stream In 128GB Storage	CV-AVIP-IN-1USB-1ETH-128-FF
Quad HD SDI In	CV-HDSDI-4IN-FF
Dual 3G SDI In	CV-3GSDI-2IN-FF

As an example, let us build a hybrid unit with dual 4K inputs, dual streaming input, and a single 4K output:

Output module is

“Single 4K HDMI Out” [Stock code CV-HDMI-4K-SC-1OUT-FF]

Input module is

“Dual 4K HDMI In” [Stock code CV-HDMI-4K-2IN-FF]

IP input module is

“Dual Stream In” [Stock code CV-AVIP-IN-1USB-1ETH-FF]

Setting up your CORIOview


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

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 and sources to your output and input modules. Connect the LAN port of the CPU module to your network.



 Video tearing or stuttering
Using a mixture of resolutions can cause video tearing or stuttering. For best results, make sure all your sources and display 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 28.

2. Install CORIOdiscover and CORIOgrapher.
Your CORIOview comes with a USB drive, which contains software for installing CORIOdiscover and CORIOgrapher. You can download the latest versions of software from <http://www.tvone.com/software>
3. Open CORIOgrapher and select your CORIOview. Enter your username and password to login and select Read to load your configuration.
The default username is admin, and the default password is adminpw. We suggest that you change default user name and password and keep a record of them.

Home

Start

- Create an Offline Configuration
- Load Configuration from a file
- Connect to your device
- Read Configuration from the Device


Recent Configurations

CORIOview-sample-config
CORIOview A few seconds ago

Discovered Devices

172.16.	CORIOview	FW 405_63
172.16.	S/N 221807	
172.16.	[In_Use]	
172.16.	CORIOview	FW 405_61
172.16.	S/N 221803	
172.16.	[Offline]	
172.16.	CORIOmaster	
172.16.	S/N 221803	

COM1
COM3

 Refresh

Connect to Device

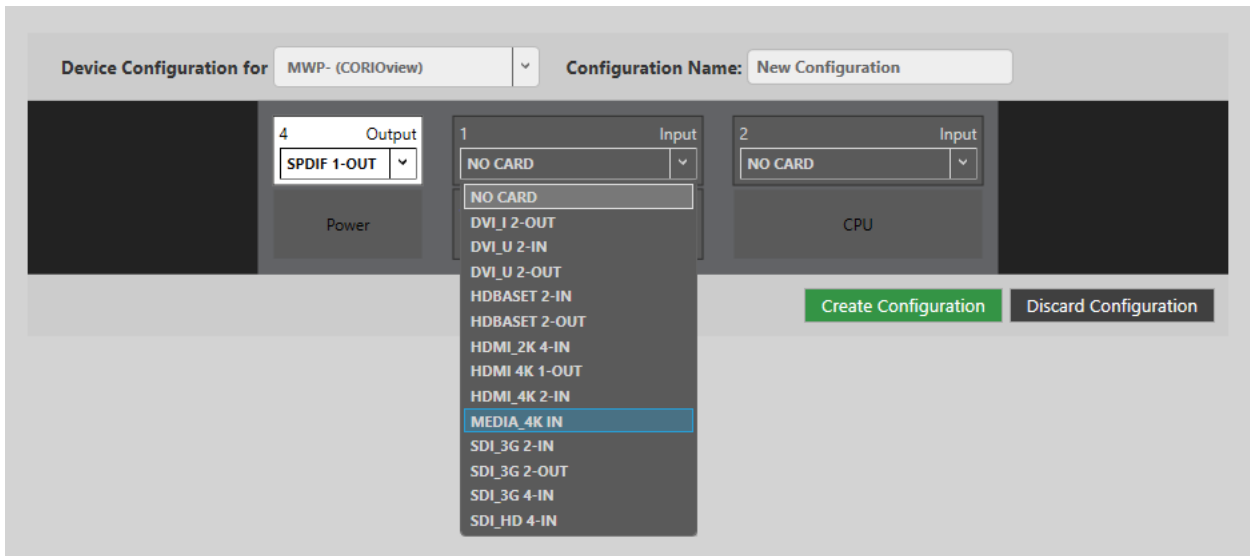
Successfully logged into the device

You now have the following options:

- Read** Read Configuration from device
- Send** Send offline Configuration to device
- Connect** Just Connect to device (only Read system settings)

Read about what to do if you can't find your CORIOview in the list on page 80.


4. **OPTIONAL**, if you aren't connected to a CORIOview, you can create an offline configuration for your device.



The media player of the Dual Stream In module is not available when you work in an offline configuration.

Read more about your first steps with CORIOgrapher on page 30.

5. **OPTIONAL, but recommended**: name your input and output ports.

Select  > Slot Status. Give each port a name that describes the device connected to it.

Input Slots

Slot	Name	Status
Slot1.In1	Stream1	OK
Slot1.In2	Stream2	OK
Slot2.In1	Bluray	INVALID
Slot2.In2	Cam1	INVALID

Read more about naming input and output ports on page 32.

Read more about testing your display on page 33.

Read troubleshooting advice on page 72.

Next steps

Congratulations, your device is set up!

If your CORIOview contains one or more Dual Stream In modules, you need to set those up too.

Read about setting up Dual Stream In modules on page 12.

About your CORIOview

Slots



Your CORIOview has four slots that contains a CPU, an output module, and up to two input modules.

CORIOview rear panel



A	S/PDIF audio output	Connect to audio device with RCA
B	Power supply input	Connect to an electrical outlet with PSU
C	Input module (black)	Connect to sources
D	Output module (white)	Connect to displays
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





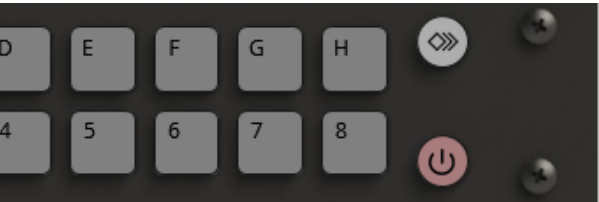



CORIOview mounting accessories

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 mounting for single CORIOview unit, it has space for external power supply
- RM-CV-1RU-DUAL mounting for two CORIOview units
- RM-CV-1RU-HANDLES handles for your rack mount unit
- RM-503-SRF surface mounting kit for CORIOview for mounting CORIOview on a flat surface [e.g. under a table]

About the buttons of your CORIOview

You can use the buttons of the front panel to load presets, choose which audio to hear, change the source playing in a window, lock the buttons, enter and exit standby, and display information about the source-to-window assignments.

Preset mode	
	<p>Buttons are lit dimly blue</p> <p>Buttons have presets available.</p> <hr/> <p>Button is lit more brightly</p> <p>The preset corresponding to button 2 is active.</p> <hr/> <p>Buttons are not lit</p> <p>Buttons do not have corresponding presets.</p>
Video mode	
	<p>Buttons are lit dimly blue</p> <p>Available but unselected.</p> <hr/> <p>Button is lit more brightly</p> <p>Source 1 is playing in window A.</p> <hr/> <p>Buttons are not lit</p> <p>Buttons do not have windows or sources.</p>
Audio mode	
	<p>Buttons are lit dimly blue</p> <p>Available but unselected.</p> <hr/> <p>Button is lit more brightly</p> <p>Source 1 is playing out of the embedded and S/PDIF outputs.</p> <hr/> <p>Buttons are not lit</p> <p>Buttons do not have sources.</p>
Front panel lock mode	
	<p>Buttons 1 and 2 are lit</p> <p>The buttons of the CORIOview are locked.</p>
Window/source info mode	
	<p> info button</p> <p>Toggles on or off information labels viewed on the display.</p>
Standby mode	
	<p> Standby button lit other buttons not lit</p> <p>Standby mode CORIOview is in low power mode and not displaying content.</p> <hr/> <p>Standby button and other buttons lit</p> <p>Normal mode</p>

Selecting the window source

- To select the window source, press and release the VIDEO button, then a window button A to H, then a source button 1 to 8.

Selecting a preset

- To select a preset, press and release the PRESET button, then a preset button A to H or 1 to 8.

Selecting an audio source

- To select a source to hear, press and release the AUDIO button, then a source button 1 to 8.


Locking and unlock the front panel buttons

- To lock or unlock, press and hold buttons 1 and 2.

Show the window/source information labels on the display

- To show or hide the information labels, press and release the  button.

Change between standby and normal operational modes

- To enter or exit standby mode, press and hold the  button.

About 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.

Input Modules

Module	Stock code	Connections
Quad 1080p HDMI In	CV-HDMI-4IN-FF	4 x HDMI each 1080p @60 HDMI and HDCP compatible
Quad 3G SDI In	CV-3GSDI-4IN-FF	4 x 3G SDI In For co-axial cable
Dual DVI-U In	CV-DVIU-2IN-FF	2 x DVI-U-In HDMI and HDCP Compliant
Dual 4K HDMI In	CV-HDMI-4K-2IN-FF	2 x HDMI up to 4096x2160 @30 or 1 x HDMI up to 4096x2160 @60 Hz HDMI and HDCP compatible
Dual HDBaseT™ In on Ethernet	CV-HDBT-2IN-1ETH-FF	2 x HDBaseT For CATx cables Supports up to 2 x 4K @30Hz, or 1 x 4K @60 Hz
Dual Stream In Read more about this input module on page 12.	CV-AVIP-IN-1USB-1ETH-FF	1 x Ethernet 1 x USB 2.0/3.0
Dual Stream In 128GB Storage Read more about this input module on page 12.	CV-AVIP-IN-1USB-1ETH-128-FF	1 x Ethernet 1 x USB 2.0/3.0
Quad HD SDI In	CV-HDSDI-4IN-FF	4 x HD SDI In For co-axial cable
Dual 3G SDI In	CV-3GSDI-2IN-FF	2 x 3G SDI In For co-axial cable

Output Modules

Module	Stock code	Connections
Single 4K HDMI Scaled Out	CV-HDMI-4K-SC-1OUT-FF	1 x HDMI up to 4K @30 Hz (UHD) HDMI and HDCP compatible
Single DVI-I Scaled Out	CV-DVI-I-SC-2OUT-FF	1 x DVI-I (HDCP compliant) HDMI and HDCP compatible
Single 3G SDI Scaled Out	CV-3GSDI-SC-2OUT-FF	1 x 3G/HD/SD-SDI using BNC, with scaling For co-axial cables
Single HDBaseT™ Scaled Out	CV-HDBT-SC-2OUT-1ETH-FF	1 x HDBaseT For CATx cables

Adapters

You can use our adapters to connect any of the following formats to the DVI input and output modules. Unless stated otherwise, 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 Dual Stream In module

The Dual Stream In module allows you to decode and play media and images from a USB drive or internal storage, and video streams from IP sources. Sources include streaming server, and from any device when used with an IP encoder, such as 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 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 1080p @60 Hz
- Full resolution and frame rate scaling
- Start playing media when your CORIOview starts
- Supports USB 2.0 and 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	Connect a USB drive to play media directly.
USB 2.0	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.

Dual Stream In module - quick start guide

Setting up the Dual Stream In module

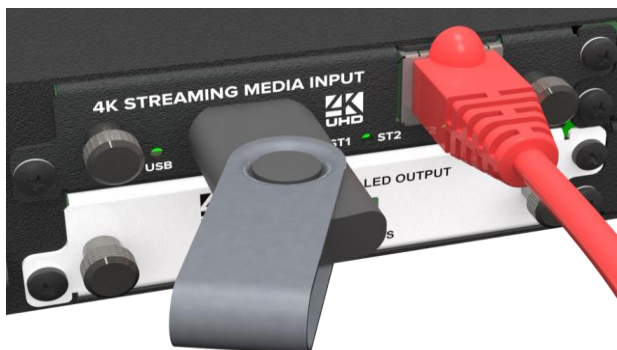
1. Connect your cables and power of your CORIOview.



To stream media, connect an Ethernet cable to the Dual Stream In module, or connect a USB drive to play media directly.

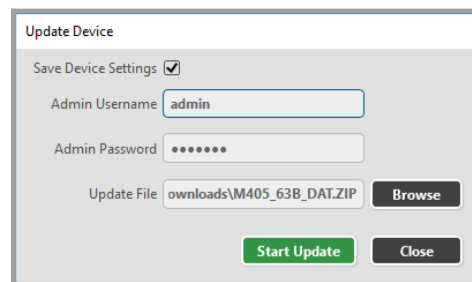
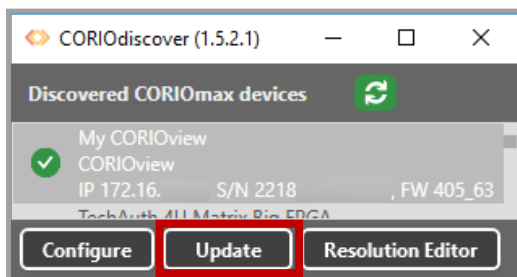


For 4K media, use a good quality, high-speed 3.0 USB drive.



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. Use CORIOdiscover to update your firmware.



Read more about updating firmware on page 79.

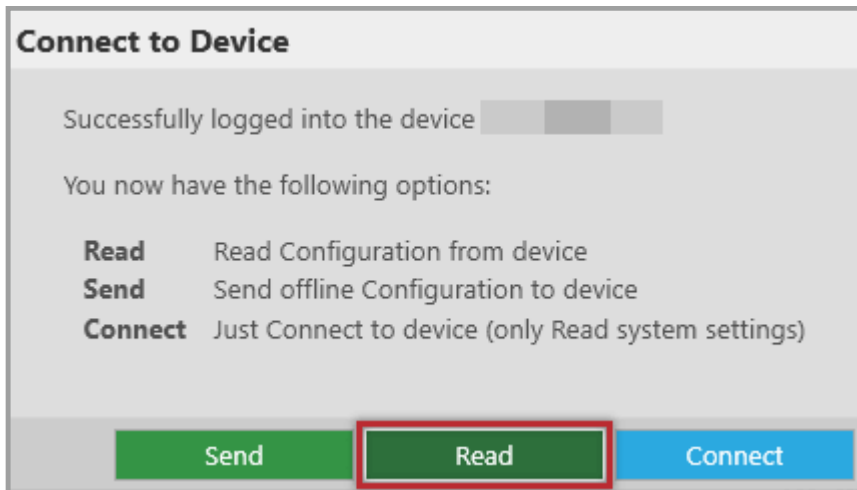
4. Download the latest version of CORIOgrapher from tvone.com/software.
5. Install the latest software.





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

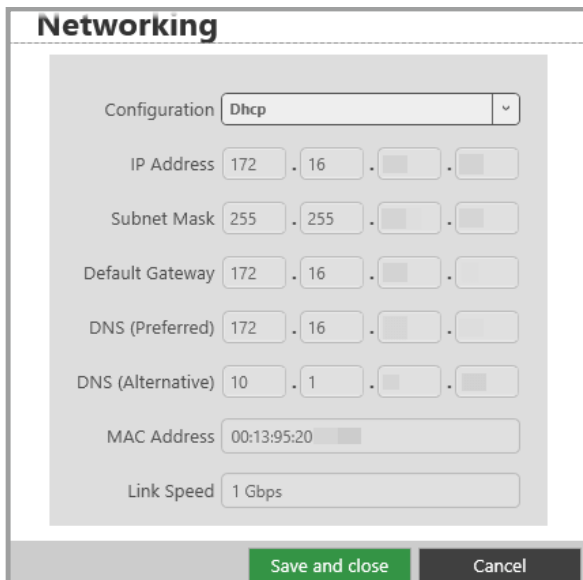
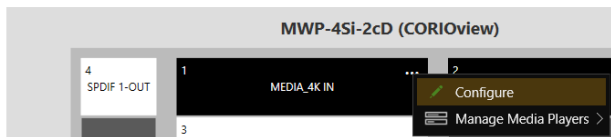
Connecting to CORIOgrapher and choosing network settings

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 Dual Stream In module. Select  > Module Configuration. Find the Dual Stream In module that you want to set up, and select  > Configure.

Module Configuration



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.



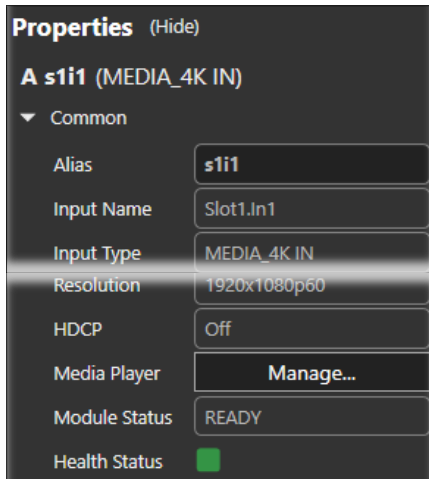
Static IP address

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

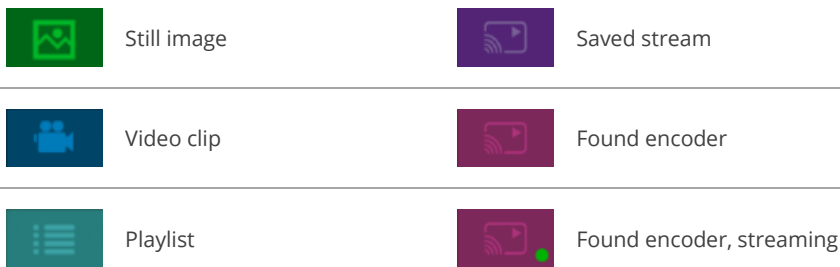
1. Select the window you wish to play streaming media, select show properties , and select (Media Player) Manage.



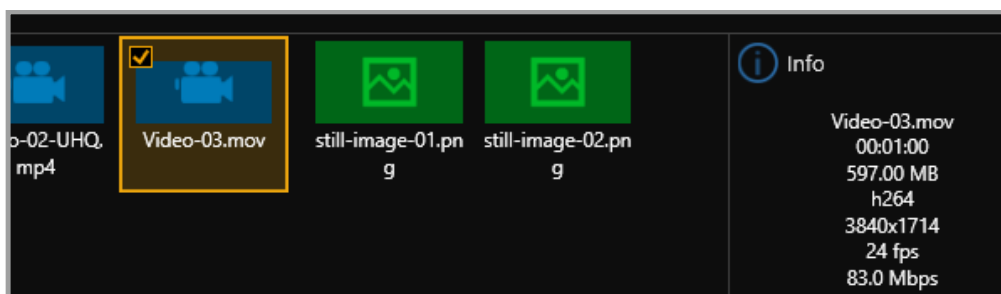
2. Select your media source.



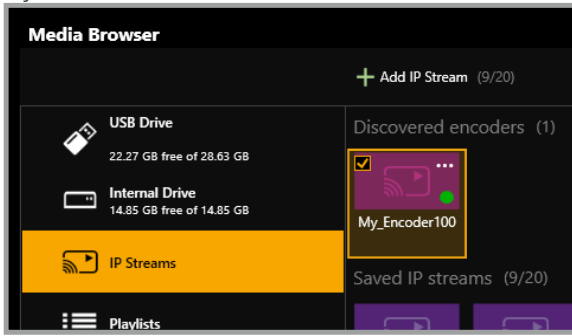
Your media items appear as icons.



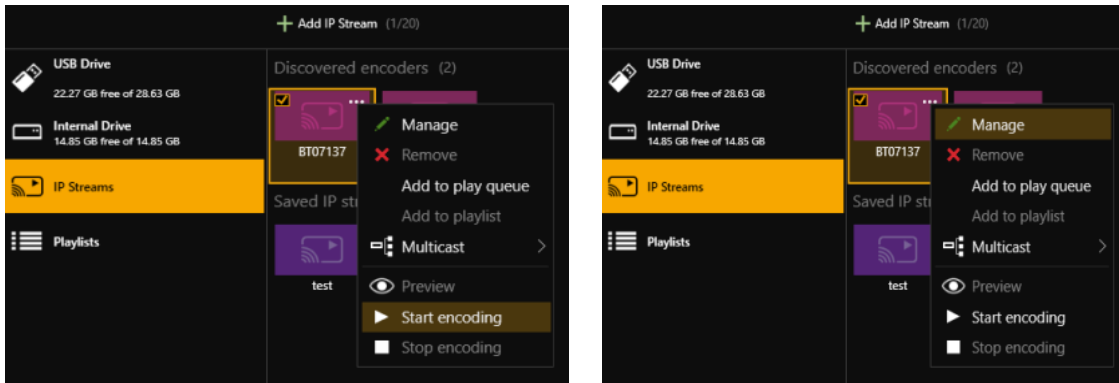
Information about the media item appears on the right.



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.

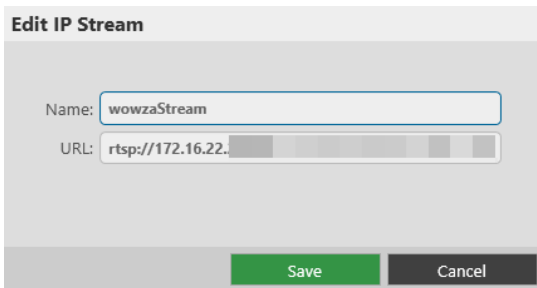


If the encoder is not encoding, you might need to start or configure it.

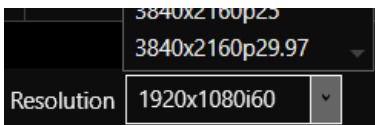


Read more about starting and configuring the Encoder-100 on page 23.

- 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.



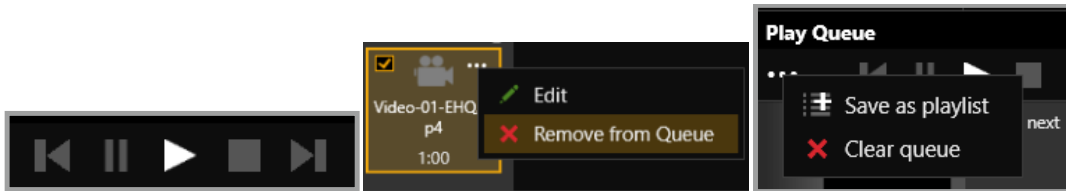
4. Choose a resolution for your media stream.



Read tips and recommendations for choosing the best resolution on page 70.

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.

- Use the playback controls 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.

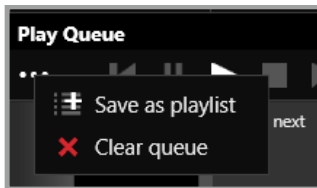


Media player will stop after the last item.



Media player will loop back to the first item.

- 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 63.

Setting up the internal drive

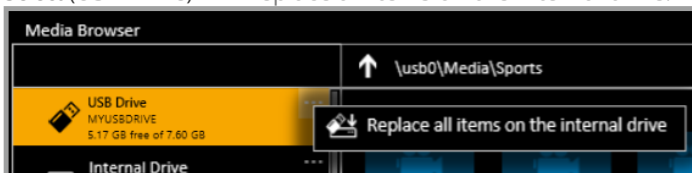
You can save media items from your USB drive to the internal drive.

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 exactly 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 95.

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



Read about creating and managing playlists on page 63.

About your Encoder-100

The Encoder-100 streaming media encoder allows you to stream high quality video and audio from a range of sources to the Dual Stream In module of your CORIOview.

Features

- Convert video and audio to high quality digital stream.
- High quality, low bandwidth encoding with H.264 compression.
- Full 1080p HD support at up to 60 frames per second.
- Single channel encoder.
- Supports unicast and multicast streaming.
- HDMI video and audio input and output.
- Analog audio input and output.
- Preview your video signal and stream separately.

Recommendations

- For best results, use Gb Ethernet cables and equipment.
- In industrial environments, use shielded Ethernet cables.
- Shielded Ethernet cables are often marked F/UTP or FTP.

Encoder-100 rear panel



DC 5V	Connect to an electrical outlet
LAN	Sends encoded signal to your network Connect to your network with Ethernet
PREVIEW	Allows you to preview your encoded signal Connect to a display with a VGA cable
HDMI OUT	Allows you to preview your encoded signal Connect to a display with an HDMI cable
HDMI IN	Receives video and digital audio signal from a source Connect to a source with an HDMI cable
AUDIO OUT	Allows you to preview your audio signal Connect a speaker with a 3.5 mm jack audio cable
AUDIO IN	Receives analog audio from a source Connect a 3.5 mm jack audio cable

Encoder-100 - quick start guide



It's easy to get started with the Encoder-100, but if you want more help with any of these steps, select [Help](#) in CORIOgrapher™ and search, or ask a question.



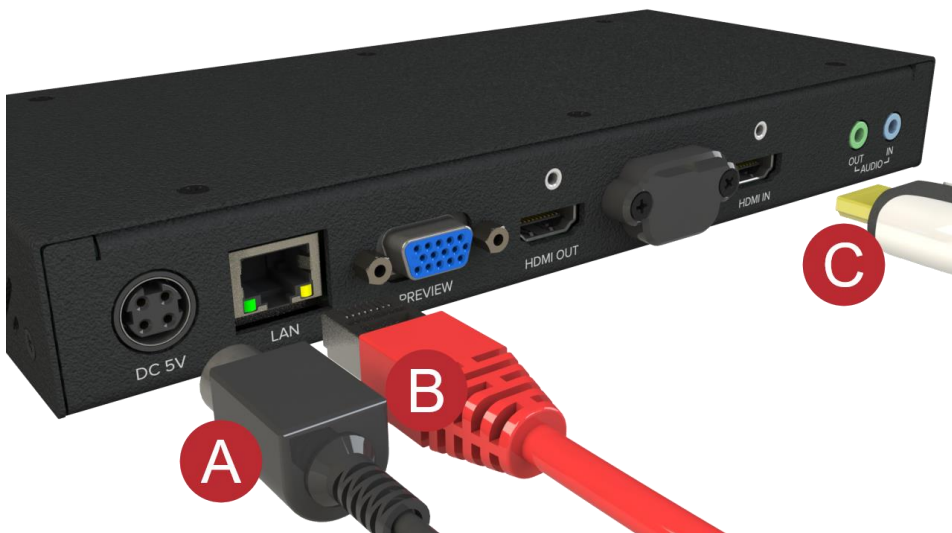
The Encoder-100 cannot encode HDCP encoded sources.

Before you start

To use an Encoder-100, you must have a Dual Stream In module installed in your CORIOview

Setting up the Encoder-100

Connect your cables.



- A. Connect the power supply to an electrical outlet.
 - B. Connect an Ethernet cable to a DHCP-enabled network, or, connect an Ethernet cable directly to a DHCP-enabled PC.
 - C. Connect an HDMI™ cable to the video source that you wish to stream.
For example, you could connect a camera, an endoscope, or a media player.
- OPTIONAL: if you want to stream analog audio, or preview your audio, connect a 3.5 mm jack audio cable.
 - OPTIONAL: if you want to see a preview of your stream, connect a VGA cable to PREVIEW, or an HDMI cable to HDMI OUT, and to a display.



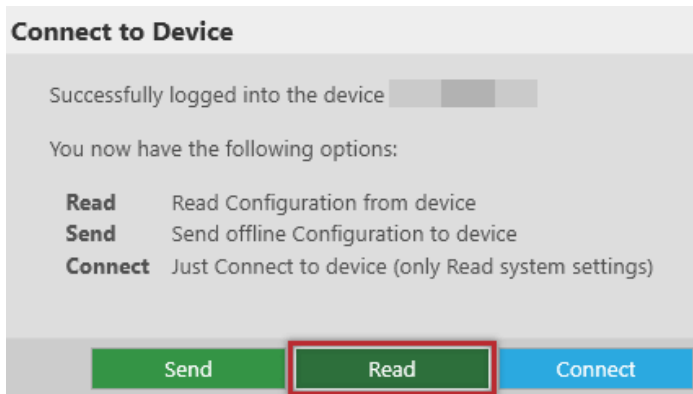
The power connector is a latching power connector. To remove the power connector from your Encoder-100, slide the sleeve backward.


Configuring the Encoder-100 with CORIOgrapher

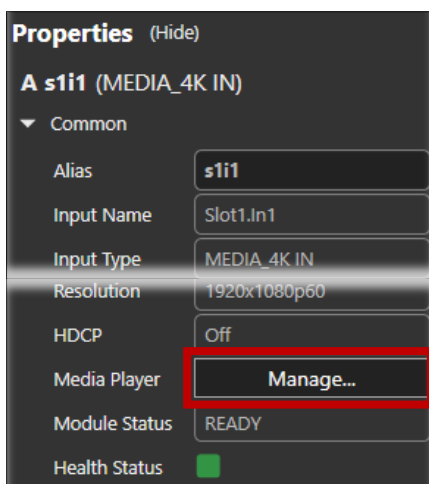


The Encoder-100 uses DHCP. Before you configure your Encoder-100, make sure DHCP is enabled on your PC.

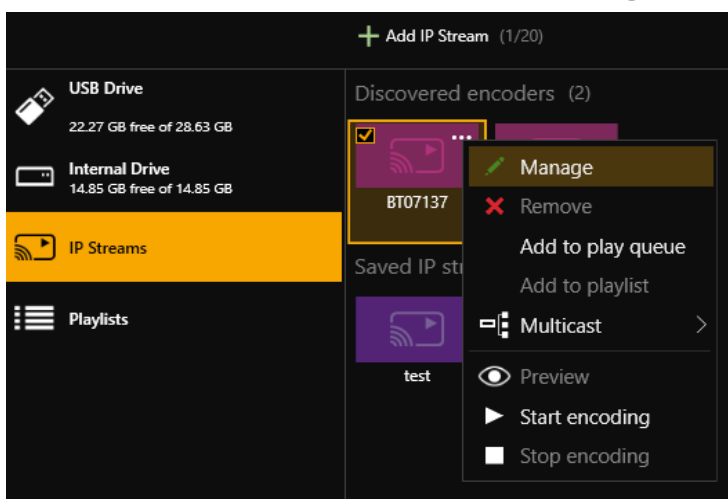
1. Open CORIOgrapher , connect to your CORIOview, and read the configuration from your device.



2. From the Dashboard, select the window bubble you wish to play streaming media to expand the options, select , and select (Media Player) Manage.



3. Select IP Streams, select your Encoder-100, and select Manage.



- When you first connect, your Encoder-100 is named with its Device ID. Find the Device ID on the bottom of your Encoder-100.
- If your Encoder-100 isn't displayed, select Find and enter the URL of your Encoder-100.
- If you can't find or connect to your Encoder-100, read troubleshooting advice on page 86.

4. Select System, and name your Encoder-100.

Names can be up to 62 characters long, and can't be blank.

The screenshot shows the 'Manage encoder [My_Encoder100] - Encoding' window with the 'System' tab selected. The 'System' section contains the following fields and controls:

- Name:** My_Encoder100
- Serial number:** BT07159
- Version:** 1.05.03.007
- Reboot:** A black button with white text.

At the bottom of the window are 'Apply' and 'Close' buttons.

5. Select Network, and choose network settings for your Encoder-100.

The screenshot shows the 'Manage encoder [My_Encoder100] - Encoding' window with the 'Network' tab selected. The 'Network' section contains the following fields and controls:

- Configuration:** A dropdown menu set to 'DHCP'.
- IP Address:** 192 . 168 . 1 . 1
- Subnet Mask:** 255 . 255 . 255 . 0
- Default Gateway:** 192 . 168 . 1 . 254
- MAC Address:** 74DAEA15DDCE

At the bottom of the window are 'Apply' and 'Close' buttons.

- 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, subnet mask, and gateway.


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

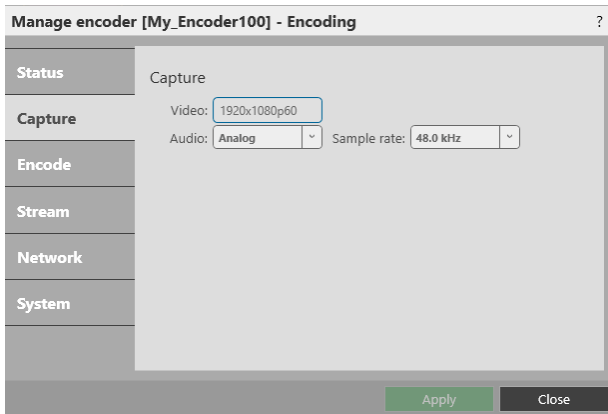
Static IP address



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.

6. Select Capture, and check that your audio source is correct.

 **Risk of delayed signal**
If your HDMI™ video doesn't contain embedded audio, select None or Analog from Audio.

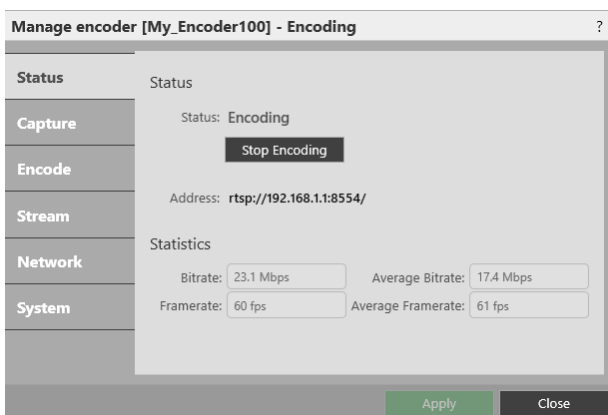


7. Select Encode, and choose a profile.

The profile you choose depends on the bandwidth of your connection and your quality requirements. The default settings produce a high quality stream.



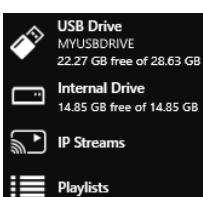
8. Select Status > Start encoding.



Read more about configuring encoders on page 23.

Playing streaming media

Select IP Streams and drag the stream from your Encoder-100 into the play queue. Use the playback controls to play your media.




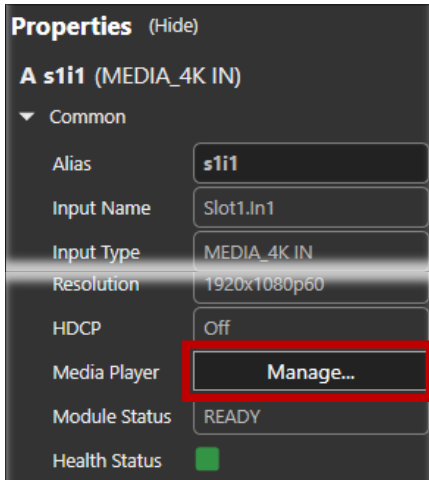
Read more about playing streaming media on page 15.

Configuring your Encoder-100

You can configure your Encoder-100 for first use, start and stop encoding, and change your settings in Encoder settings. CORIOgrapher automatically detects all Encoder-100 units on your network.

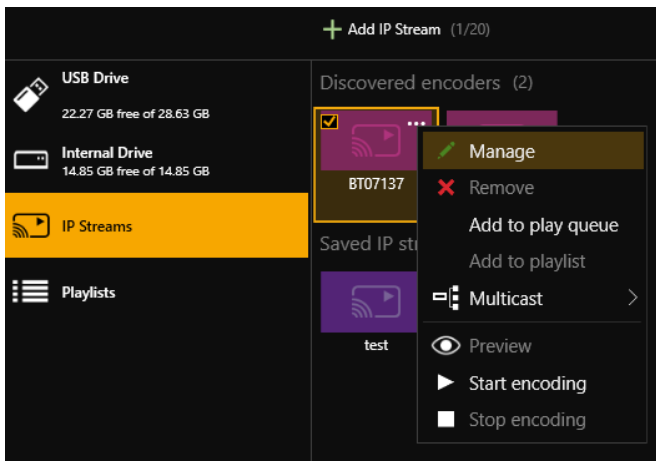
To open Encoder settings for a specific Encoder-100

1. From the Dashboard, select the window bubble you wish to play streaming media to expand the options, select , and select (Media Player) Manage.



2. Select IP Streams, select your Encoder-100, and select Manage.

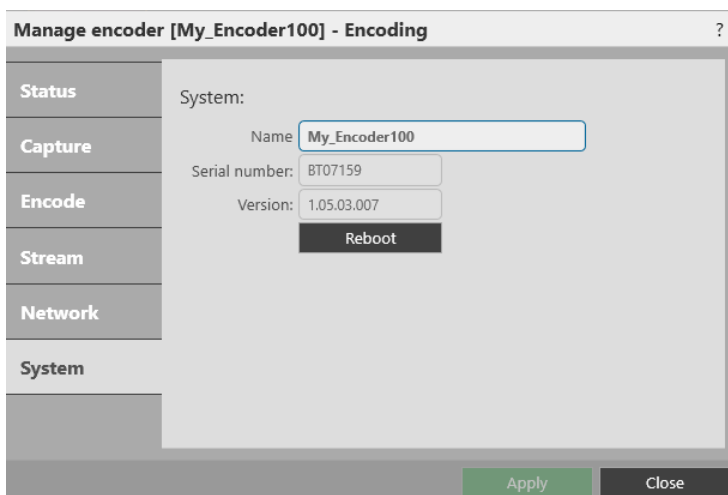
When you first connect, your Encoder-100 is named with its Device ID. Find the Device ID on the bottom of your Encoder-100.



If you can't see your Encoder-100 in the list, select Find and enter the IP address of the encoder.

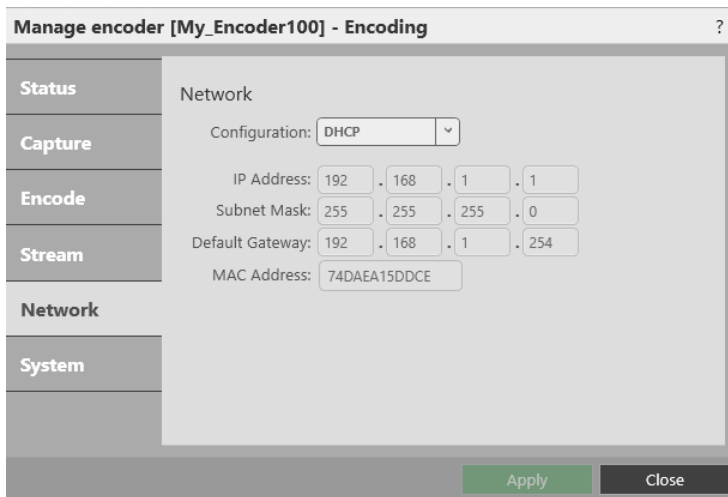
Naming your Encoder-100

Select System, and enter a name for your Encoder-100. Names can be up to 62 characters long, and can't be blank.



Configuring network settings

Select Network, and choose network settings for your Encoder-100.



- 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, subnet mask, and gateway.

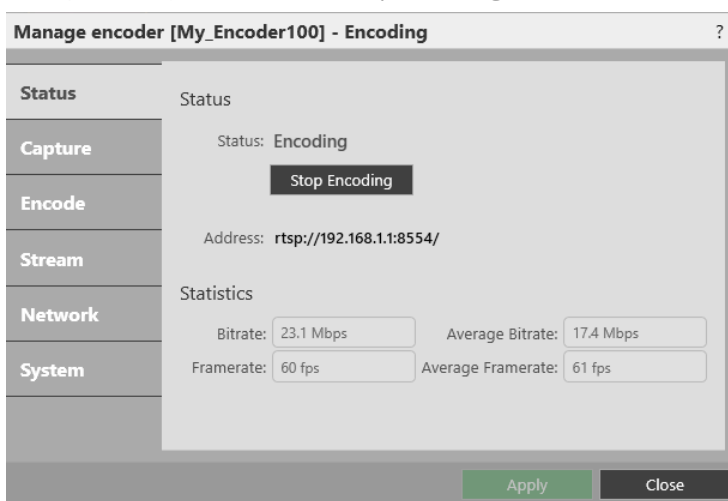
If you need help with network settings, contact your network administrator.

Static IP address

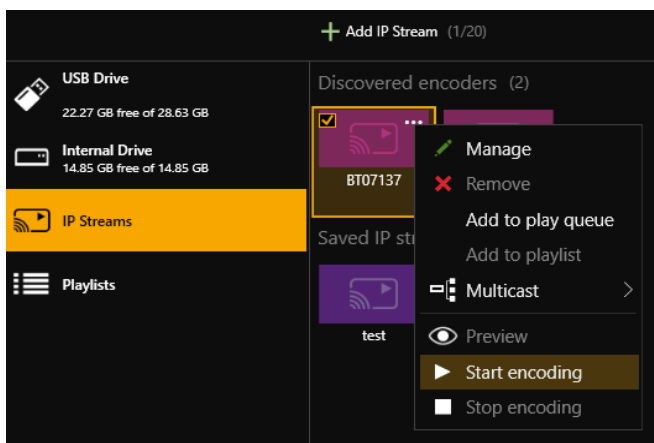
⚠ If you choose a static IP address, make sure you enter a unique value for your IP address. Using the same IP address for multiple devices can cause your devices to disconnect. Contact your network administrator for help.

Starting and stopping encoding

- To start encoding, select Status > Start encoding.
- To stop encoding, select Status > Stop encoding.




You can also start and stop encoding from Media Browser.



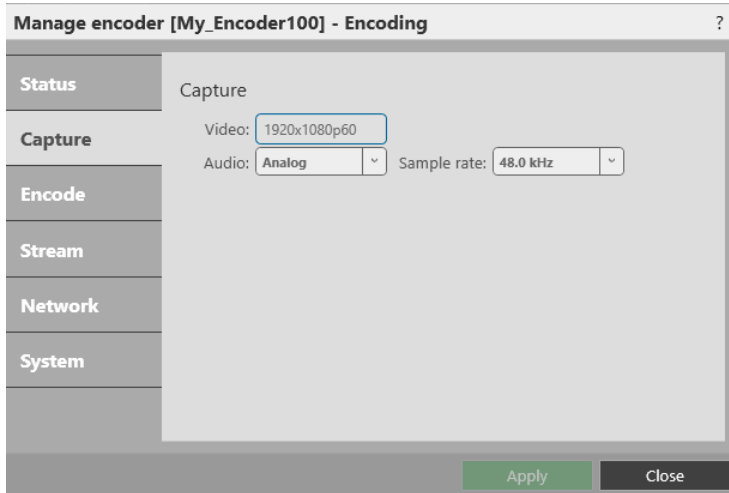
Configuring audio

This task is optional.

The Encoder-100 can receive digital audio by HDMI and analog audio by 3.5 mm jack. You can choose which source to include in your stream in Capture. The default audio source is HDMI.

 **Risk of delayed signal**
If your HDMI™ video doesn't contain embedded audio, select None or Analog from Audio.

If you choose to include analog audio, choose an appropriate sample rate. The default sample rate is 48.0 kHz.

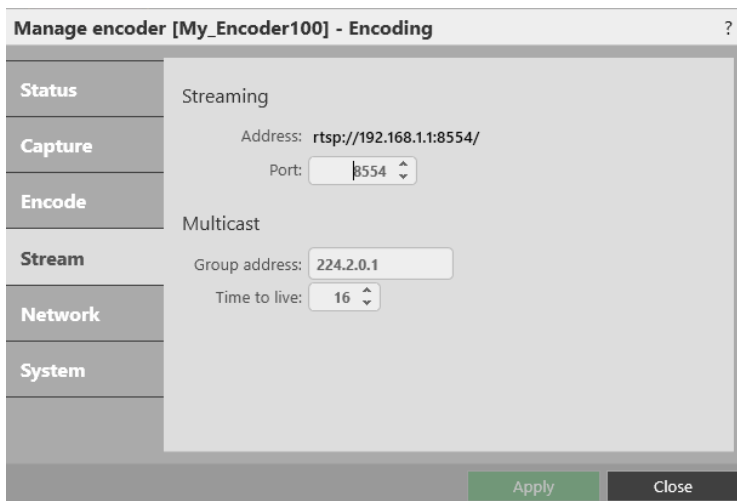


The screenshot shows the 'Manage encoder [My_Encoder100] - Encoding' window. The 'Capture' tab is selected. The 'Video' field is set to '1920x1080p60'. The 'Audio' dropdown menu is set to 'Analog'. The 'Sample rate' dropdown menu is set to '48.0 kHz'. The 'Apply' and 'Close' buttons are visible at the bottom.

Changing the port number

This task is optional.

You can change the port number of your Encoder-100 in Stream.

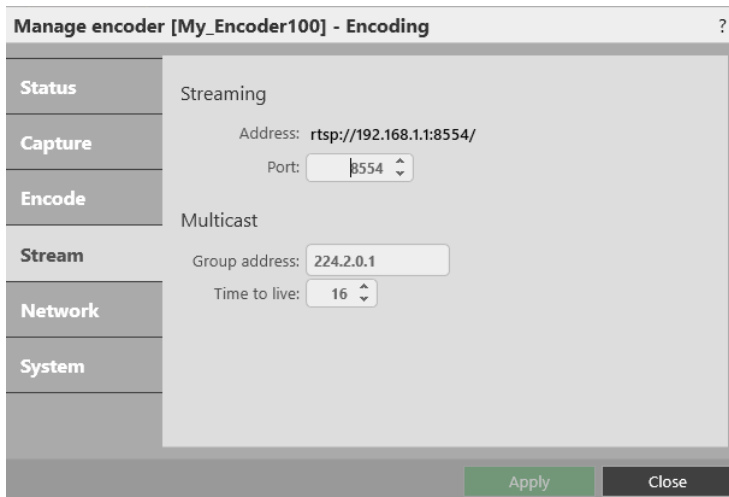


The screenshot shows the 'Manage encoder [My_Encoder100] - Encoding' window. The 'Stream' tab is selected. The 'Address' field is set to 'rtsp://192.168.1.1:8554/'. The 'Port' field is set to '8554'. The 'Group address' field is set to '224.2.0.1'. The 'Time to live' field is set to '16'. The 'Apply' and 'Close' buttons are visible at the bottom.

Multicasting

This task is optional.

You can configure multicasting in Stream.



The screenshot shows the 'Manage encoder [My_Encoder100] - Encoding' window. The 'Stream' tab is selected, and the 'Multicast' section is active. The 'Group address' is set to 224.2.0.1, and the 'Time to live' is set to 16. The 'Address' is rtsp://192.168.1.1:8554/ and the 'Port' is 8554. The 'Apply' and 'Close' buttons are visible at the bottom.

Group address

Enter the address of the group of devices to receive the stream.

We recommend you use addresses in the range 224.2.0.1 to 224.2.255.255.

Time to live

Enter a value between 1 and 255.

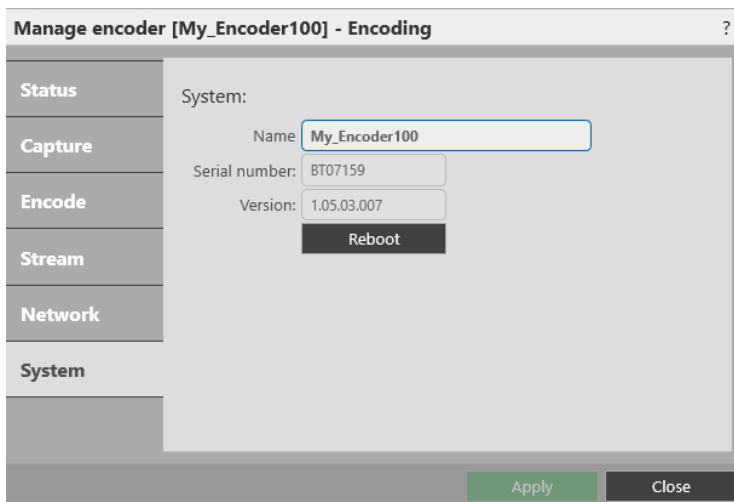
Contact your network administrator for recommended time to live values.

Time to live is an advanced setting, for experienced users only. Contact your network administrator for help.

Restarting your Encoder-100

If you're having problems, you can restart your Encoder-100. You don't need to restart your Encoder-100 when you change your settings.

- Select System > Reboot.

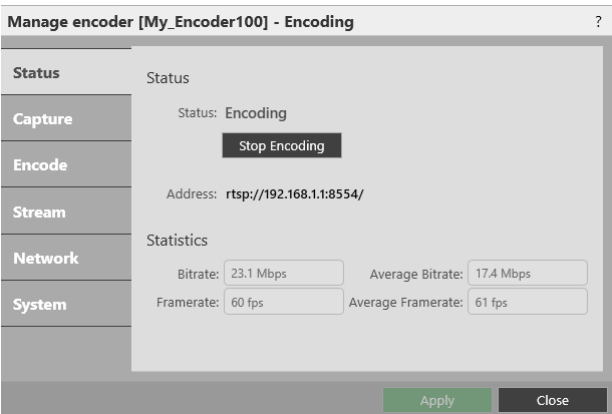
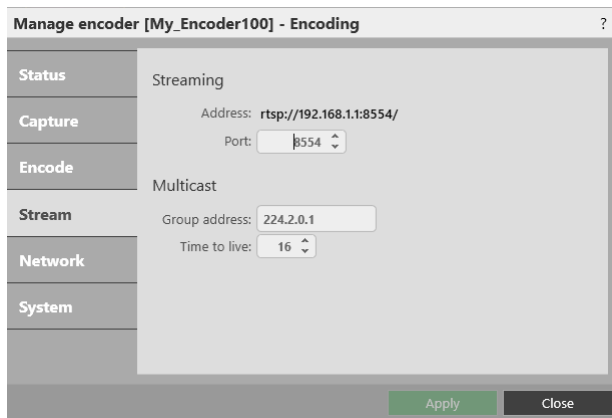


The screenshot shows the 'Manage encoder [My_Encoder100] - Encoding' window. The 'System' tab is selected, and the 'System' section is active. The 'Name' is My_Encoder100, the 'Serial number' is BT07159, and the 'Version' is 1.05.03.007. A 'Reboot' button is visible. The 'Apply' and 'Close' buttons are visible at the bottom.

Finding the address of your stream

If you want to save your encoder as a saved stream, or your encoder doesn't appear in Discovered encoders, you need to know the address of your stream.

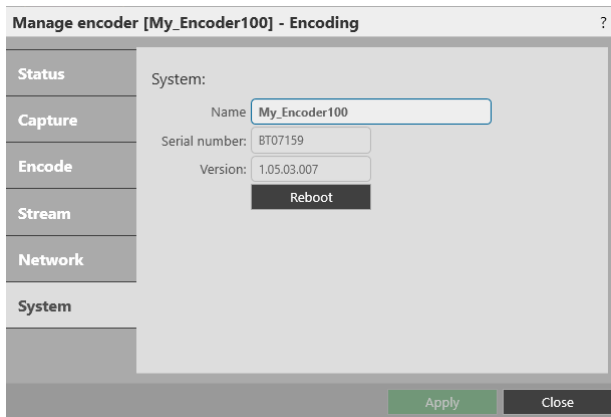
Find the address of your stream in Stream or Status.



Read more about saving streams on page 15.

Finding the serial number and firmware version of your Encoder-100

- Find the serial number and firmware version of your Encoder-100 in System.



You can also manage your encoders in Settings > IP Streams.

Read more on page 42.

Restoring factory default settings on your Encoder-100

To restore factory default settings, use a paperclip or other slim object to press and hold the reset button on the front of the Encoder-100 until the LED light turns orange.



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 choosing accessories and positioning 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. This is relevant when using HDBaseT modules for Cat 6 and AVIP module for USB.
- Use good quality USB drives compatible with USB 3.0.

Planning and installing



Video tearing

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

Display

- What size is the display?
- What is the native resolution of the display?
- Do you need a display that support 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?

Installing display 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.

Placing your CORIOview and display

When you decide where to place your hardware, consider these points:

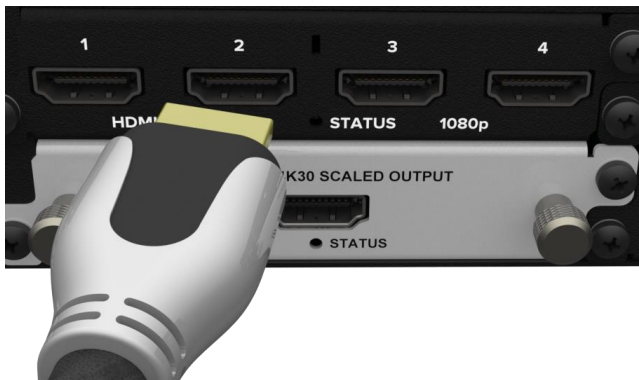
- Availability of electrical outlets
- Distance from CORIOview to sources and display
For best results, use cables under 15 m long, or shorter if you use connection adapters. If you need to place your CORIOview more than 15 m away from your video wall or sources, use a signal extender.
Read about our adapters on page 11.
See our range of signal extenders at tvone.com.
- Installation environment
In industrial environments, use shielded Ethernet cables.

Position your displays and sources

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.



Keep a note of which source is connected to which port. You can use this information later when you name inputs and outputs in CORIOgrapher.

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 create your video wall in CORIOgrapher.

Setting up a CORIOview in CORIOgrapher

About CORIOgrapher

CORIOgrapher is the software that controls your CORIOview for example window sources, preset layout, and transitions for a state-of-the-art dynamic video wall experience.

CORIOgrapher:

- Works with PCs running Windows® 7 and 10
- Works with Surface Pros and similar touch screen devices [touch not fully supported, under development]
- Does not work with touch-screen-only devices such as tablets or phones
- Installs Windows® .NET 4.6, if you don't have it
- Needs 600 MB of disk space during installation
- Is approximately 50 MB in size once installed

CORIOgrapher main areas



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 the help.

Getting started with CORIOgrapher

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

Home

The screenshot shows the Home window with three main sections:

- Start:** Contains four buttons: 'Create an Offline Configuration' (blue), 'Load Configuration from a file' (blue), 'Connect to your device' (green), and 'Read Configuration from the Device' (grey).
- Recent Configurations:** Shows a single entry: 'CORIOview-sample-config' (CORIOview) with a timestamp 'A few seconds ago'.
- Discovered Devices:** Lists three devices:
 - 172.16. [In_Use] CORIOview (FW 405_63, S/N 221807)
 - 172.16. [In_Use] CORIOview (FW 405_61, S/N 221803)
 - 172.16. [Offline] CORIOmaster (S/N 221803)Below this list are labels for 'COM1' and 'COM3', and a 'Refresh' button.

- You can connect to your CORIOview and get information about its configuration of input and output modules.
- 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 or configure other CORIOviews with same configuration.

Read about setting up hardware on page 28.

To connect to your CORIOview and get its configuration

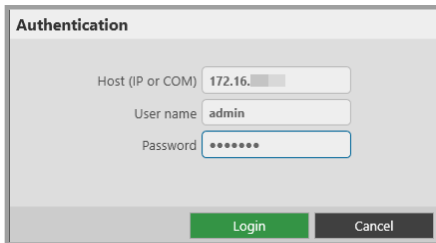
The easiest way to get started using CORIOgrapher is to get the configuration of inputs and outputs directly from your CORIOview.

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 80.

2. Enter your administrator login details.

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



The image shows an authentication dialog box titled "Authentication". It contains three input fields: "Host (IP or COM)" with the value "172.16.", "User name" with the value "admin", and "Password" with masked characters "*****". At the bottom, there are two buttons: "Login" (green) and "Cancel" (black).

If Host (IP or COM) doesn't contain an IP address or COM port, read troubleshooting advice on page 81.

3. When you have logged in to your CORIOview, select Read to get its configuration.

You can now name your input and output ports.

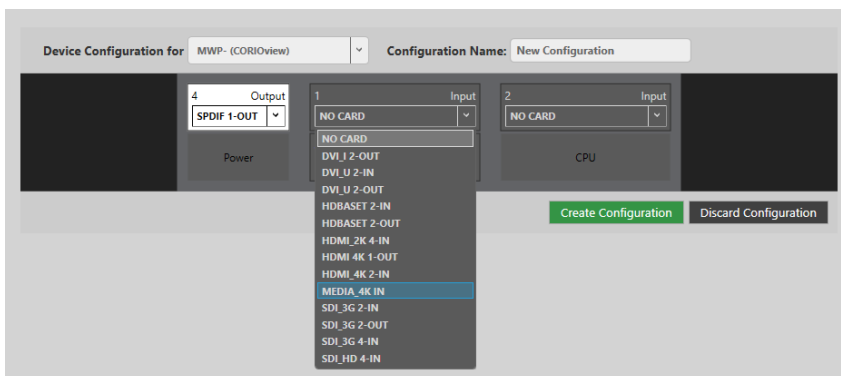
Read about naming input and output ports on page 32.

To create a configuration offline

You don't need to be connected to a CORIOview to create video walls, 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 image shows the Configuration Editor window. At the top, it says "Device Configuration for" followed by a dropdown menu showing "MWP- (CORIOview)". To the right, there is a "Configuration Name:" field with the text "New Configuration". Below this, there are three slots for configuration. The first slot is labeled "4" and "Output", with a dropdown menu showing "SPDIF 1-OUT". The second slot is labeled "1" and "Input", with a dropdown menu showing "NO CARD". The third slot is labeled "2" and "Input", with a dropdown menu showing "NO CARD". Below the slots, there are two buttons: "Create Configuration" (green) and "Discard Configuration" (black). A list of input and output modules is shown in the center, including "NO CARD", "DVI_I 2-OUT", "DVI_U 2-IN", "DVI_U 2-OUT", "HDBASET 2-IN", "HDBASET 2-OUT", "HDMI_2K 4-IN", "HDMI_4K 1-OUT", "HDMI_4K 2-IN", "MEDIA_4K IN", "SDI_3G 2-IN", "SDI_3G 2-OUT", "SDI_3G 4-IN", and "SDI_HD 4-IN".

- 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 8.

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.

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 Camera1.


Naming the input ports of a Dual Stream In module

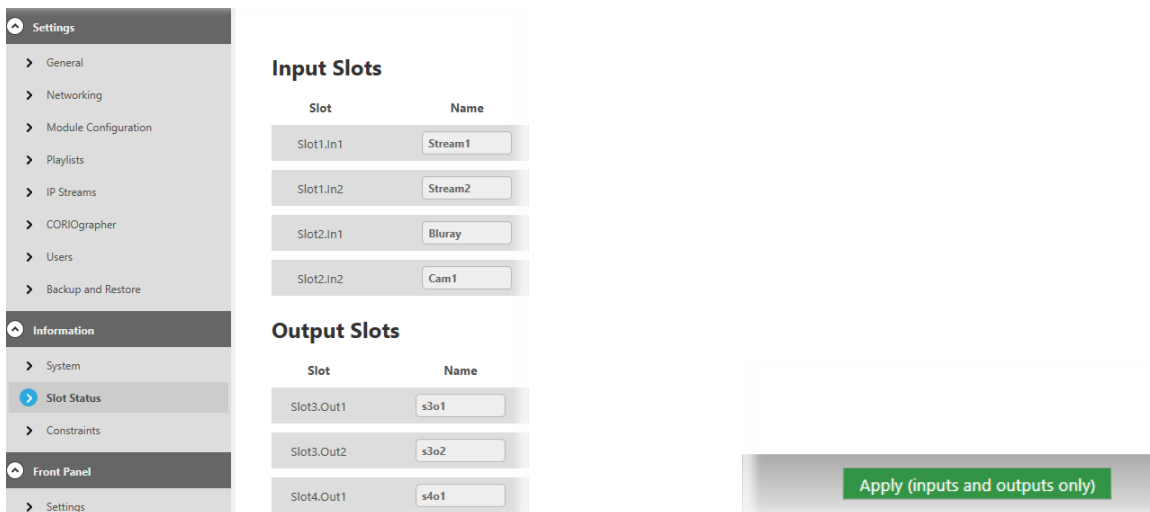
The Dual Stream In module has two virtual input ports. Each port refers to a play queue, not to a specific streaming source. If you intend to build play queues with multiple sources, for example, one or two streaming sources and media items from a USB drive, then consider unique names such as PlayQueue1 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 19 characters long.

To name input and output ports

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



3. To apply your new names, select Apply (inputs and outputs only).
If you are creating an offline configuration, select Dashboard > Save to File.

Settings the display's output resolution

To set the display output resolution make sure you've either loaded your configuration from your CORIOview, or created an offline configuration.

Read about reading the configuration from your CORIOview on page 30.

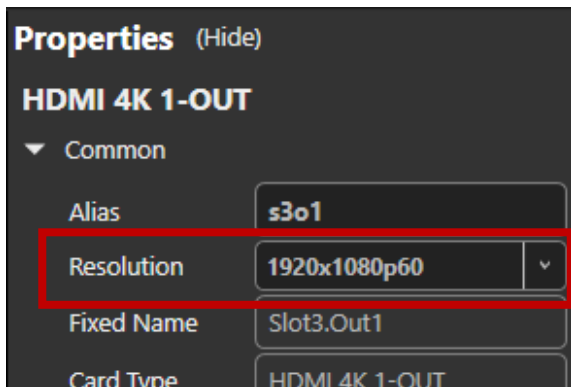
Read about creating an offline configuration on page 31.

To set the display output resolution.

1. From the Dashboard, select the embedded output button to show the Properties panel.



2. Select the display out resolution from the Properties panel.



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

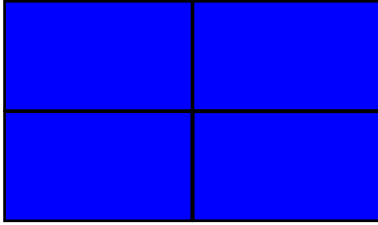
Testing your CORIOview installation

Testing your display and sources installation

1. Check that your display looks correct for each source.

Select the highest numbered preset to display all the sources.

Make sure that the source for the window is playing, and check that the picture is correct.



✗ Not the source you were expecting, blue screen, display keeps dropping signal, or no image.

✓ Sources and display connected.

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

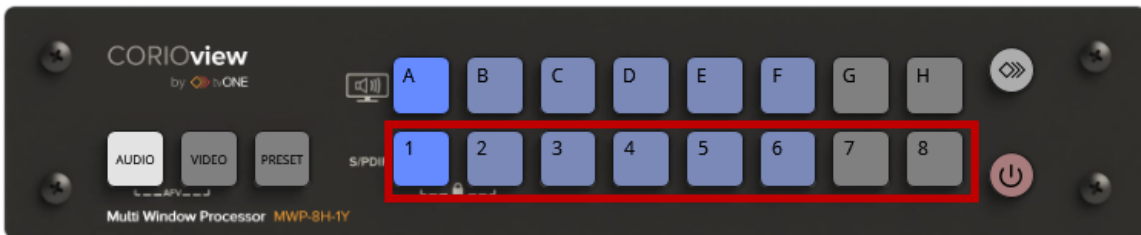
2. If your test was not successful, you might need to contact tvONE support.

See contact details on page 100.

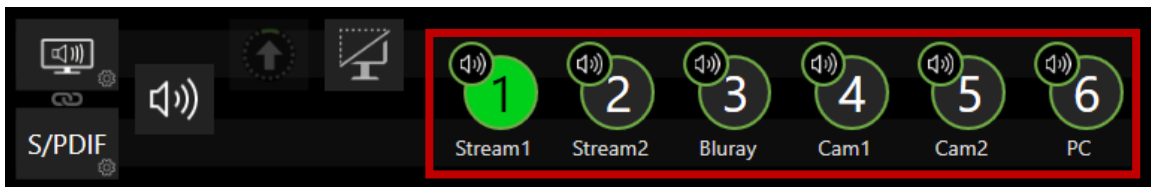
Test the audio for each input

OPTIONAL: You can test the audio of each audio source.

- Press and release the AUDIO button, then press and release an available audio source button.



- From Dashboard, in the outputs panel select an audio source.



Make sure your inputs and embedded output are not muted from CORIOgrapher.

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 modules.

Device settings

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


Naming your CORIOview

You can give your CORIOview a unique name.

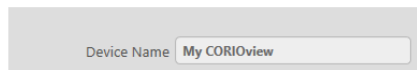
Why should I name my CORIOview?

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.


General



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.

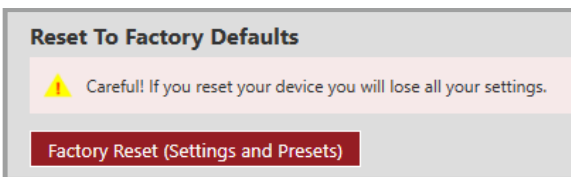
 When you reset your CORIOview to factory default settings, all of your settings and configurations are deleted.

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 35.

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 Dual Stream In module
- Network settings
- Manually added streams

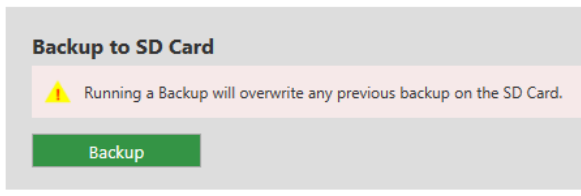
What isn't saved to your CORIOview

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

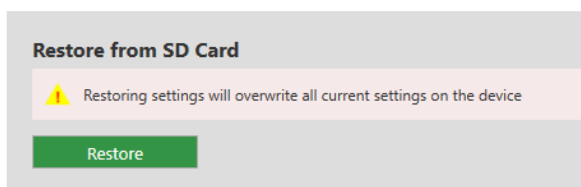
1. Check that you've saved all your work.
2. Select ⚙️ > Backup and Restore > Backup.

Backup and Restore



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 CORIOview, including:

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



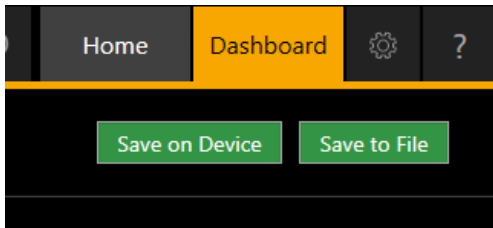
Device name and network settings are saved as part of the backup file, but are not included when you restore settings to your device. This allows you to share the backup file between devices without causing conflicts with names and network settings.

What isn't saved to your computer

The play queue and playlists of a Dual Stream In module aren't saved to your computer.

To back up your settings to a file on your computer

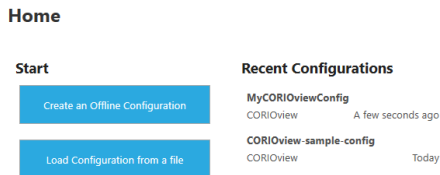
1. Select Dashboard > Save to File.



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 different CORIO units. For example, if you save the settings from a CORIOmaster micro™, you can't use it in a CORIOview.
- 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.

CORIOview settings

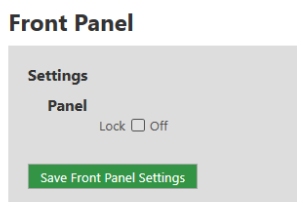
Configuring the buttons of your CORIOview

Changing the brightness of the buttons of the front panel

- Not yet supported by the CORIOview.

Locking the buttons of the front panel

1. Select > (Front Panel) Settings.
2. Select or clear Lock.



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.

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.

What are user roles?

CORIOgrapher has four 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 over Ethernet. 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.

To create a new user, or edit an existing user

User 4

Username Enable timeout

User Role minutes

New Password

Confirm Password

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 Dual Stream In modules.

Configuring network settings for your CORIOview

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


Before you start

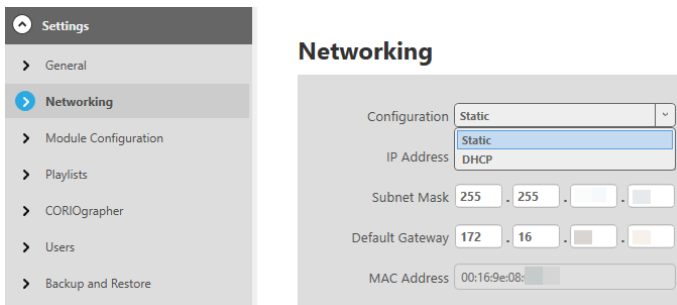
If you want to use a static IP address, you need some information about the range of available IP addresses on your network. Your network administrator should be able to help you.

 **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.

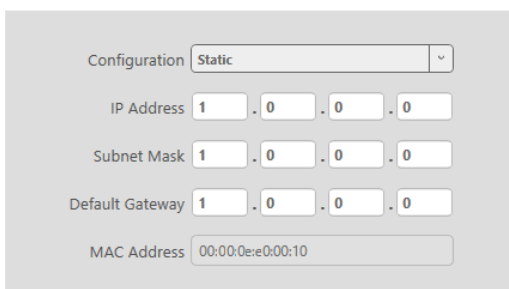
To configure network settings for your CORIOview

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.

Networking



- 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 Dual Stream In module. If you only want to use your Dual Stream In module to play media from a USB drive, you don't need to configure network settings. You can also configure the network settings for your Encoder-100.

Read about configuring your Encoder-100 on page 23.

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.



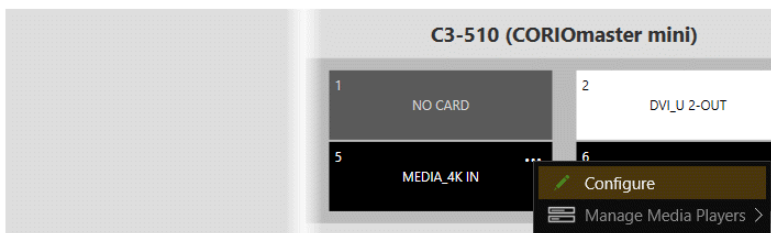
Static IP address

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

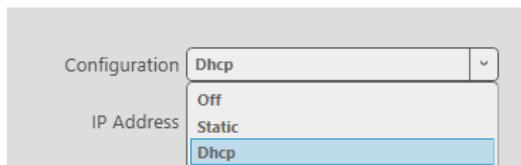
1. In CORIOgrapher, select  > Module Configuration.
2. Find the Dual Stream In module that you want to set up, and select  > Configure.

Module Configuration



3. Choose an IP configuration.

Networking



- 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.

- OPTIONAL: Configure your static IP address.

Networking

Configuration:

IP Address: . . .

Subnet Mask: . . .

Default Gateway: . . .

DNS (Preferred): . . .

DNS (Alternative): . . .

MAC Address:

Link Speed:

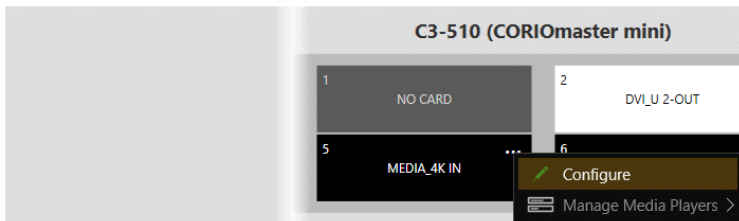
- Enter a value for your IP address and subnet mask.
- If you want to stream from the internet, for example from a Wowza server, enter a value for your gateway.
- If you want to refer to a source by name, enter a value for DNS.

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

Finding the MAC address of your Dual Stream In module

- In CORIOgrapher, select > Module Configuration.
- Find the Dual Stream In module that you want to set up, and select > Configure.

Module Configuration



- Read the MAC address.

Networking

Configuration:

IP Address: . . .

Subnet Mask: . . .

Default Gateway: . . .

DNS (Preferred): . . .

DNS (Alternative): . . .

MAC Address:

Link Speed:


Playlist settings

If you have a Dual Stream In module, you can view the status of your playlists, delete all playlists or individual playlists, move playlists between modules, and rename playlists.

Renaming playlists and moving playlists between modules


You can see a list of all your playlists on all your Dual Stream In 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.

Number	Name	Module	Resolution	
1	<input type="text" value="Playlist 1"/>	Slot2	1920x1080p60	Remove
2	<input type="text" value="Playlist 2"/>	Slot2	1920x1080p60	Remove
3	<input type="text" value="Playlist 3"/>	Slot2	1280x720p60	Remove

Moving playlists


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

Number	Name	Module	Resolution	
1	<input type="text" value="Playlist 1"/>	Slot2	1920x1080p60	Remove
2	<input type="text" value="Playlist 2"/>	Slot2	1920x1080p60	Remove
3	<input type="text" value="Playlist 3"/>	Slot2	1280x720p60	Remove

Deleting playlists

If you have a Dual Stream In module, you can delete all your playlists, or individual playlists.


Deleting all your playlists

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

Playlists

Total	<input type="text" value="20"/>
Used	<input type="text" value="3"/>
Available	<input type="text" value="17"/>
Remove all playlists	

Deleting individual playlists

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

Number	Name	Module	Resolution	
1	<input type="text" value="Playlist 1"/>	Slot2	1920x1080p60	Remove
2	<input type="text" value="Playlist 2"/>	Slot2	1920x1080p60	Remove
3	<input type="text" value="Playlist 3"/>	Slot2	1280x720p60	Remove

Encoders and streams settings

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

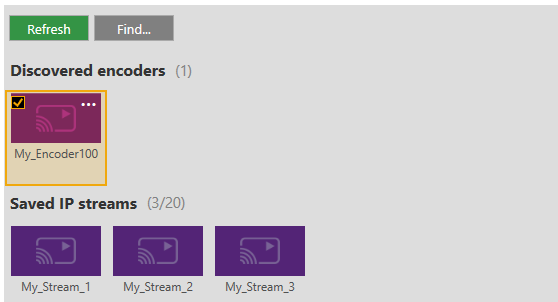
Managing encoders and streams

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

Select  > IP Streams.

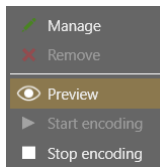
Managing your encoders

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 your Encoder-100 on page 23.
 - Remove an inactive encoder.
 - Preview the stream from an encoder.
 - Start or stop encoding.

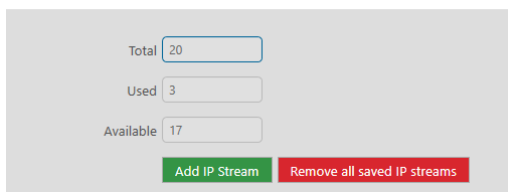


Managing your saved streams

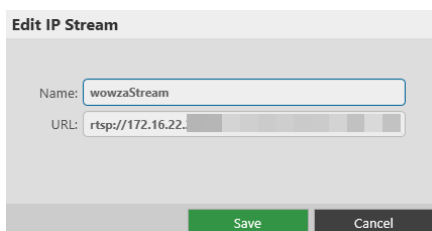
Streams that you add and save manually appear under Saved IP streams.

- 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.

IP 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.



Using CORIOview

Changing between preset, video, and audio selection modes

You can use the buttons of your CORIOview to select presets and sources.

To change between preset selection mode, video selection mode, and audio selection mode, press and release PRESET, VIDEO, or AUDIO buttons respectively.

When the mode changes, the button is lit.



Audio Follows Video (AFV) mode is not yet supported in the CORIOview.

Presets

CORIOview has built-in presets with a selection of layouts to pick from depending on the number of inputs. The highest numbered preset from 2 to 8 is the default selection.

Top number is the preset number used via the API, bottom left is the duration, bottom right is the CORIOview front panel associated button.



What is a preset?

Presets store information about windows including position and size. The preset layouts of windows are preconfigured and can't be changed in CORIOview.

Loading a preset

You can choose from a selection of presets in CORIOgrapher, and from the buttons of your CORIOview.

Loading a preset from CORIOgrapher

You can load any of the presets from the dashboard in CORIOgrapher.



Visible windows on the display have bubbles with a black background.



Hidden windows have bubbles with a grey background.
You can change the settings while hidden.

Loading a preset with the buttons of your CORIOview

You can choose from up to 16 presets using the buttons of your CORIOview. The buttons correspond to presets 1 to 16, where A to H are 9 to 16 respectively.



When your CORIOview is in preset selection mode the PRESET button is lit. Any buttons that do not have a corresponding preset are unlit.

1. Check that your CORIOview is in the correct mode for choosing presets.
If your CORIOview is not in the correct mode, press and release the PRESET button.
2. Press and release the button that corresponds to your chosen preset.
The button flashes while the preset loads, and is then lit more brightly.

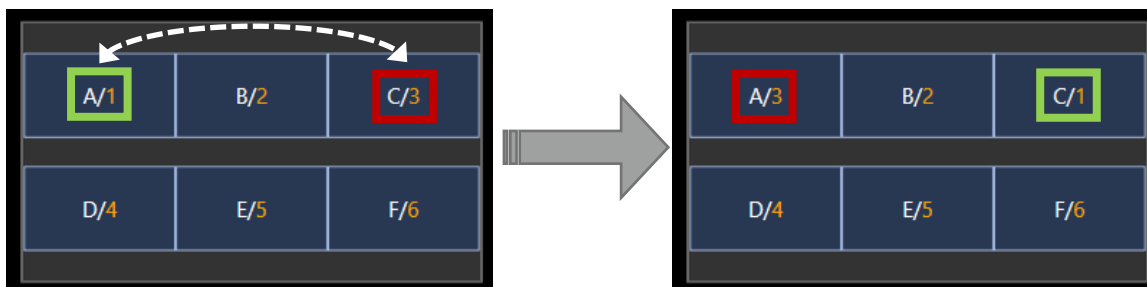


While a preset is loading and the button is flashing, you cannot select another preset. Wait until the button stops flashing.

Changing the source playing in a window

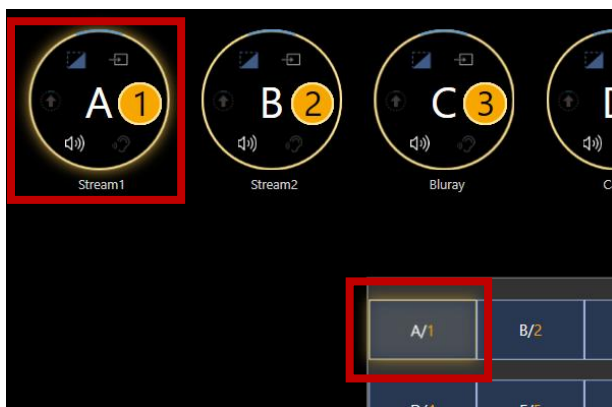
You can exchange sources in CORIOgrapher, and from the buttons of your CORIOview.

CORIOview will exchange the selected source with the window that currently has that source. For example, selecting 3 for window A will exchange window A/1 source with window C/3 source.

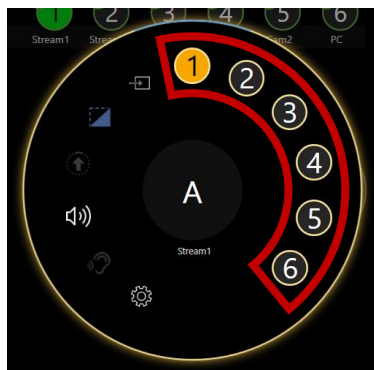


Changing the source in CORIOgrapher

1. From the Dashboard, select either the window bubble or window preview to expand the options.



2. Select a source you want in window A.



3. OPTIONAL: You can choose from two different transitions on each window by selecting the transition button:

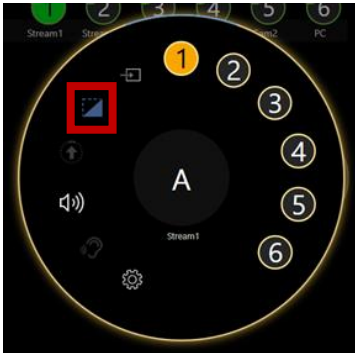


Fade through black: windows will fade to black, exchange location, and then fade from black.



Move: windows will move to their new locations.

4. OPTIONAL: You can cut the window to black



Show window content.



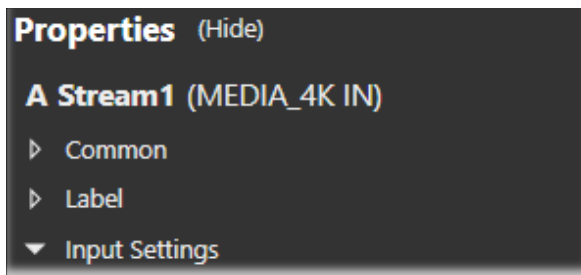
Black window content.

Change source settings

1. From the Dashboard, select the window bubble or window preview to expand the options.
If the Properties panel is hidden select the show settings button.



2. In Properties, adjust the settings.

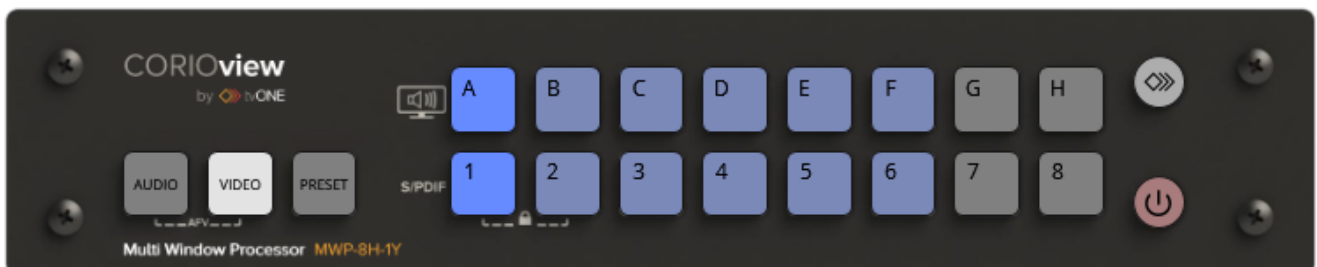


The Properties panel will automatically show the expanded window bubbles source properties.

Changing the source with the buttons of your CORIOview

You can choose from up to 8 windows and sources depending on the number of inputs with the buttons of your CORIOview.

When your CORIOview is in video selection mode the VIDEO button is lit. Any buttons that do not have a corresponding window or source are unlit.



1. Check that your CORIOview is in the correct mode for choosing video sources.
If your CORIOview is not in the correct mode, press and release the VIDEO button.
2. Press and release the button, A to H, that corresponds to the window that you want to change.
NOTE: The current window source button 1 to 8 is lit.
3. Press and release the button, 1 to 8, that corresponds to your chosen source.
The button flashes, and is then lit more brightly.



Playing audio

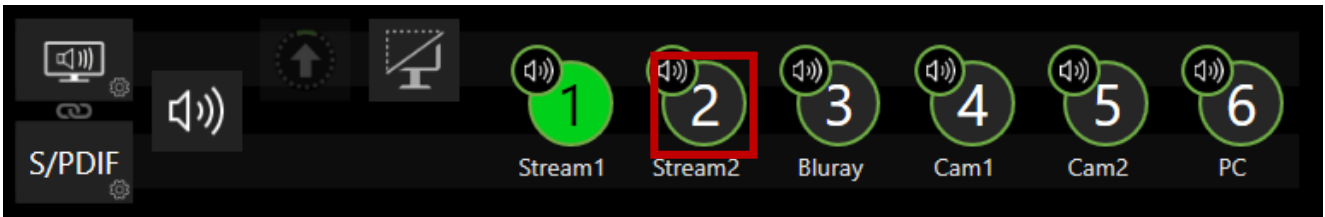
You can play audio with your CORIOview. Connect the S/PDIF port of your CORIOview to a digital audio device, with an RCA cable, or a display that support audio and video output.

About audio

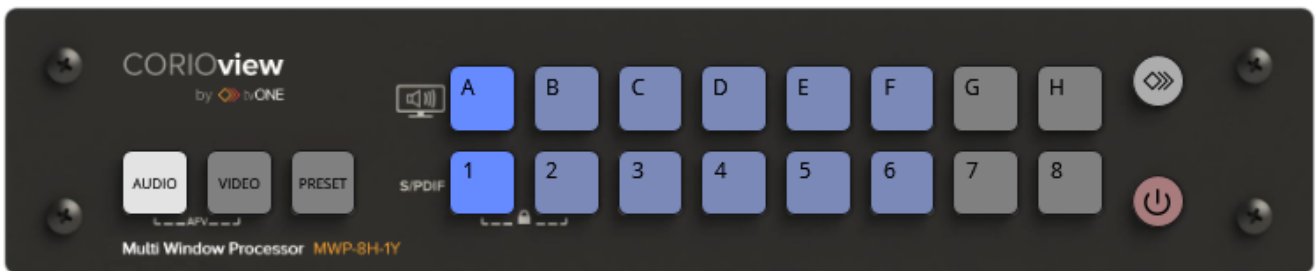
- Your CORIOview has an S/PDIF audio output that you can connect to a digital audio device with an RCA cable.
- You CORIOview embeds audio in the display output that you can connect to your display or receiver.
- You can mute and adjust the audio input level of individual sources playing in windows in CORIOgrapher.
- The Dual Stream In module only supports the following embedded audio formats:
 - mp3
 - aac

Choosing what to hear with CORIOgrapher

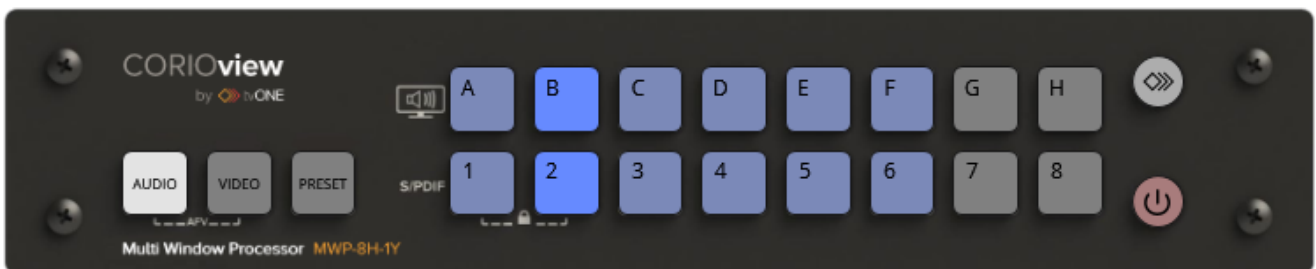
1. From the Dashboard, in the outputs panel select the button that corresponds to your chosen source.



Choosing what to hear with the buttons of the front panel

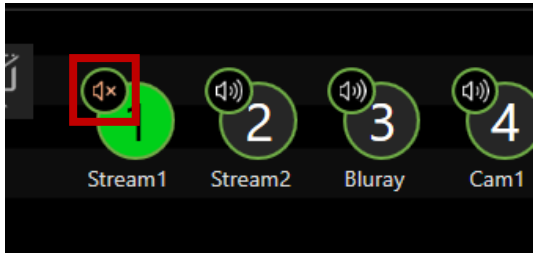


1. Check that your CORIOview is in the correct mode for choosing audio sources.
If your CORIOview is not in the correct mode, press and release the AUDIO button.
2. Press and release the button that corresponds to your chosen source.
The button is then lit more brightly.




Muting individual sources

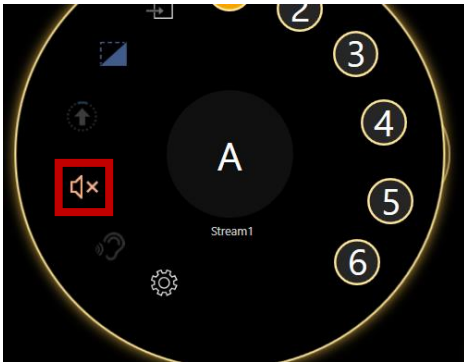
1. From the Dashboard, in the outputs panel select the mute button for the source you want to mute.



To mute audio, select .

To unmute audio, select .

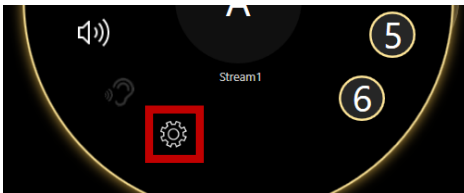
2. **OPTIONAL:** From the Dashboard, to mute the selected window source, select the window bubble or window preview to expand the options, and then select the mute button.



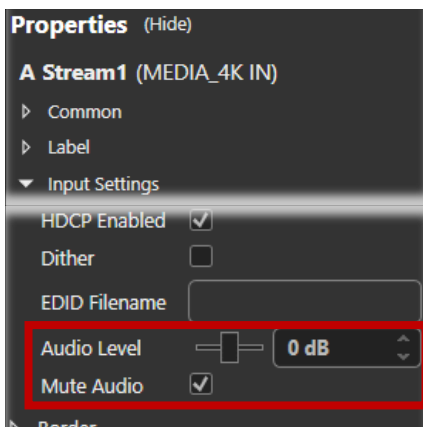
Adjusting audio input level and muting using source properties

1. From the Dashboard, select the window bubble or window preview to expand the options.

If the Properties panel is hidden select the show settings button.



2. In Properties, adjust the audio.
 - Use the Audio Level slider to set audio input level.
 - To mute the audio, select Mute Audio.
 - To restore audio, clear Mute Audio.

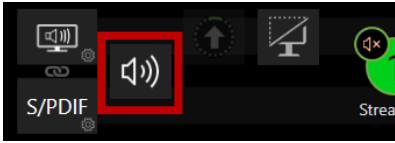


Muting the audio output

You can mute and unmute the linked S/PDIF and embedded audio outputs in CORIOgrapher.

Muting the audio outputs from the dashboard

1. From the Dashboard, in the outputs panel select the output mute button.

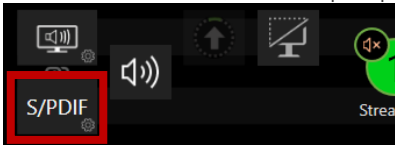


To mute audio, select .

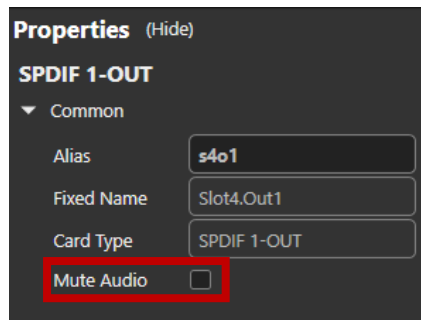
To unmute audio, select .

Muting using audio properties

1. From the Dashboard, in the outputs panel select S/PDIF output button to show the Properties panel.



2. In the Properties panel adjust the audio.
 - To mute the output audio, select Mute Audio.
 - To restore output audio, clear Mute Audio.



Muting the S/PDIF output audio also mutes the embedded audio as they are linked.

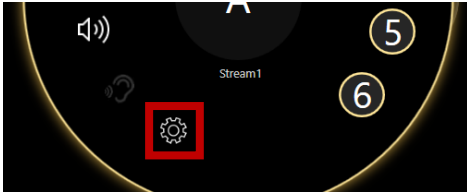
Showing window labels

You can have source alias or custom text window labels shown on each window with your CORIOview.

Showing window labels using CORIOgrapher

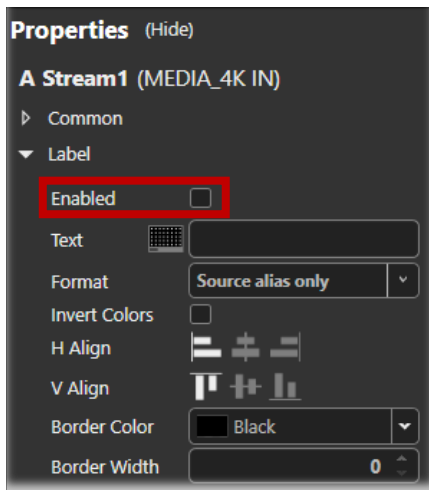
1. From the Dashboard, select the window bubble or window preview to expand the options.

If the Properties panel is hidden select the show settings button.



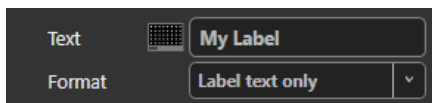
2. In Properties, adjust the label settings.


- To show the label, select Enabled.
- To hide the label, clear Enabled.



If the label is hard to see with your media try inverting the colors, select **Invert Colors**.

3. **OPTIONAL:** you can show custom label text.
 - To show custom text select Format > **Label text only**
 - Enter the custom label text



Use the show keyboard  button to enter supported characters.

4. **OPTIONAL:** you can change the location of the label in the window.
 - Select from the horizontal H Align, and vertical V Align alignment buttons.
5. **OPTIONAL:** you can have a border around the label.
 - Enter the Border Color, and Border Width.

Show the window/source information labels on the display

You can show the source-to-window assignment using the front panel buttons of your CORIOview.




- To show or hide the information labels, press and release the  button.





Standby mode

To save power you can go into standby mode which puts the CORIOview in a low power state and stops displaying content.

 In standby mode you cannot load presets, or exchange window sources.

CORIOview Standby mode in CORIOgrapher

- To enter standby mode select  > Confirm standby?
- To leave standby mode select .




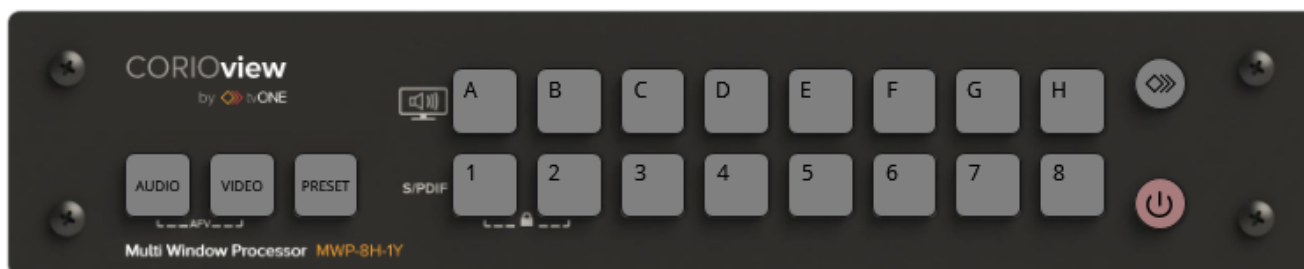
Normal: Operating normally and displaying content.



Standby: Low power state and not displaying content.

CORIOview Standby mode with the front panel

- To enter or leave standby mode press and hold .

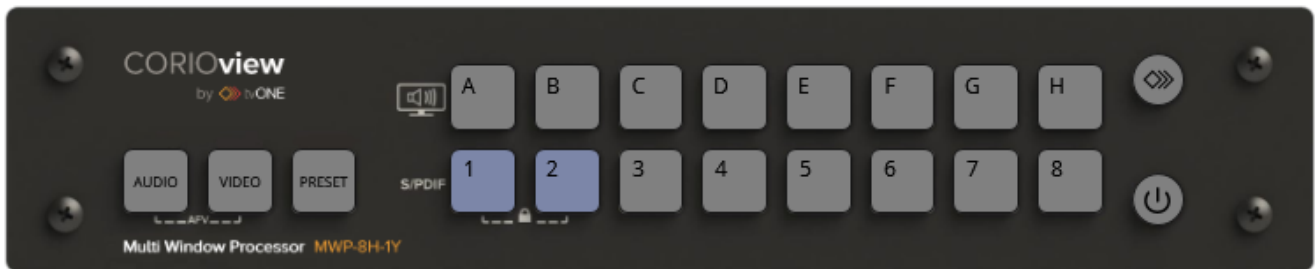


Locking the front panel buttons


Locking your CORIOview with the front panel

To lock or unlock your CORIOview, press and hold buttons 1 and 2.

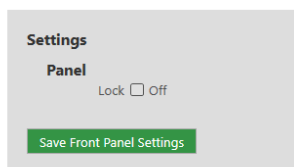
When your CORIOview is locked only buttons 1 and 2 will be lit.



Locking your CORIOview in CORIOgrapher

1. Select  > (Front Panel) Settings.
2. Select or clear Lock.

Front Panel




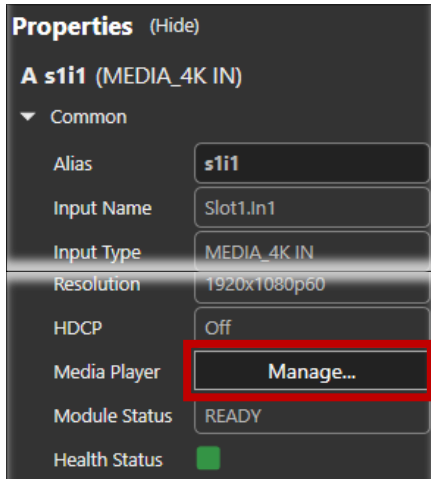
Media and streams

If you have a Dual Stream In module, you can play media items and streams on your display.

Playing media and streams

If you have a Dual Stream In 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 Dual Stream In module can play up to two simultaneous play queues on your display.

Manage your media and streams in CORIOgrapher. From the Dashboard, select the window bubble you wish to play streaming media to expand the options, select , and select (Media Player) Manage.



The media player is not available when you work offline.


Dual Stream In modules in CORIOview units only support embedded audio, for streams and media items with the following embedded audio formats:

- mp3
- aac

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 Dual Stream In module.




 For best results, use Gigabit equipment and cables.

Read about configuring network settings for a Dual Stream In module on page 40.

- 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.

Read about the Encoder-100 on page 18.

- 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 Dual Stream In module.

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

- To play media saved in the internal storage of the Dual Stream In module, you don't need to connect anything.


Adding and editing media streams

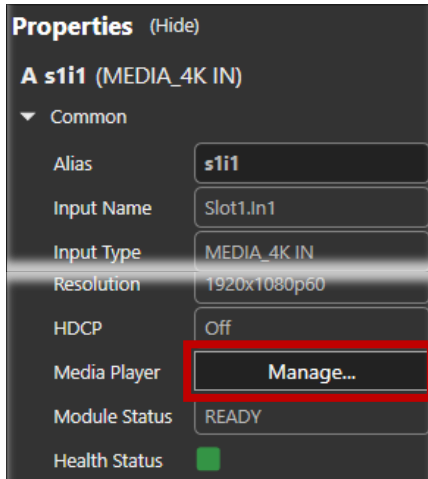
You can manually add media streams from your network or from the internet. You can configure and add streams from an Encoder-100.

Learn how to configure your Encoder-100 on page 23.

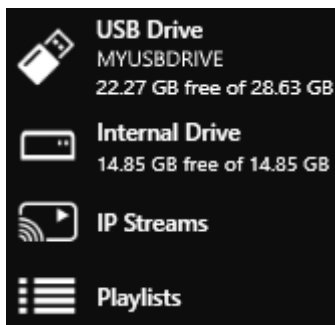
To manually add a stream


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

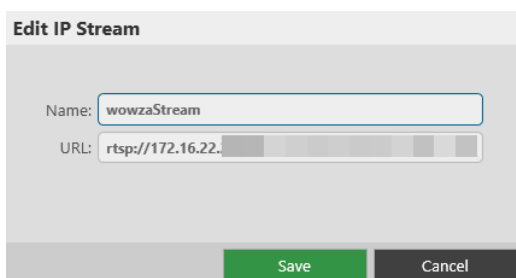
1. In CORIOgrapher, From the Dashboard, select the window bubble you wish to play streaming media to expand the options, select , and select (Media Player) Manage.



2. Select IP Streams.



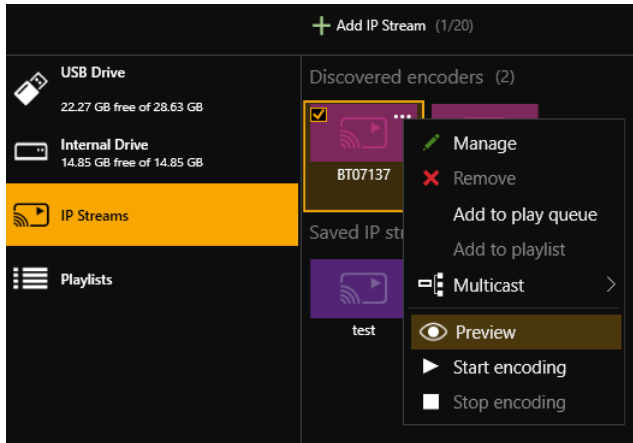
3. Select Add IP Stream.
4. Enter a descriptive name and the URL of the media stream, and then select Add IP Stream.
5. To edit the details of a media stream, select the stream and then select  > Edit.
6. Edit the name or URL of the media stream.



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**.




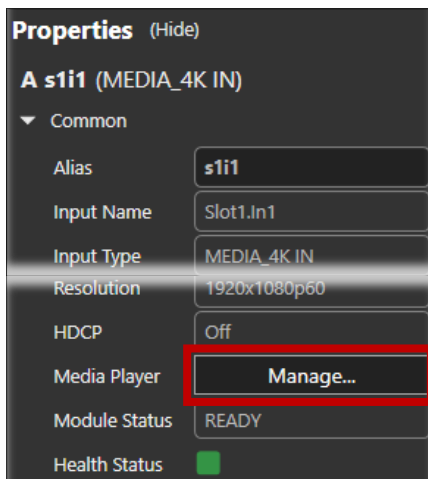
Adding media items, streams, and playlists to your play queue

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 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.

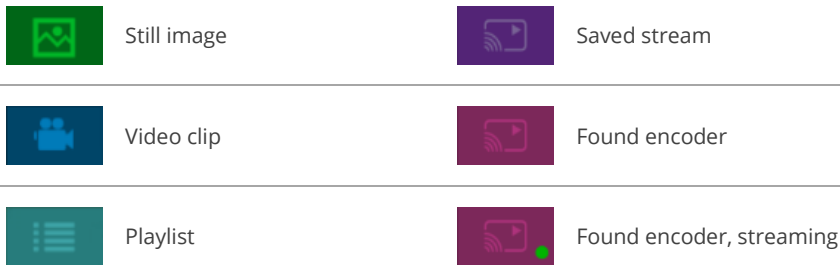
1. In CORIOgrapher, From the Dashboard, select the window bubble you wish to play streaming media to expand the options, select , and select (Media Player) **Manage**.



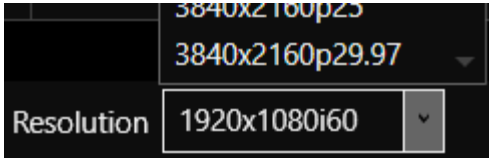
2. Select your media source.



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



4. Choose a resolution for your play queue.



Read about choosing the right resolution on page 70.

Read more about playlists on page 63.

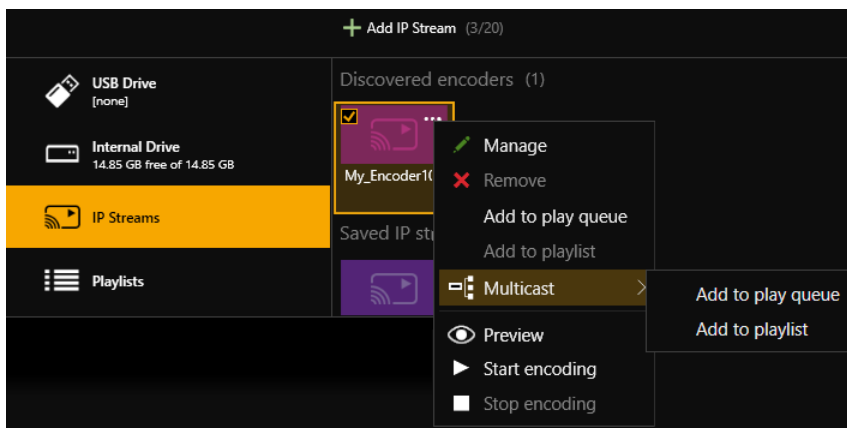
See a list of supported video formats on page 95.

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

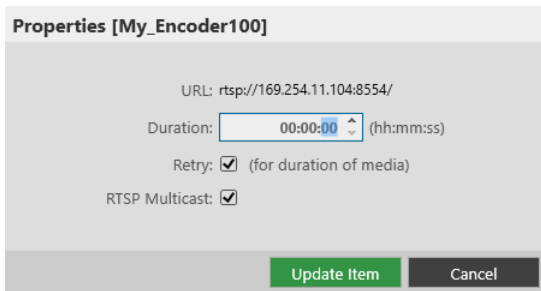
- You don't need to configure your Encoder-100 to send a multicast stream, if your default address and TTL are correct for your network.
For more help, contact your network administrator.
 - To add a multicast stream to the play queue, the play queue must be stopped.
 - To add a multicast stream to a playlist, first select a playlist.
- Select IP Streams.
 - Select the Encoder-100 you want to add.
 - 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

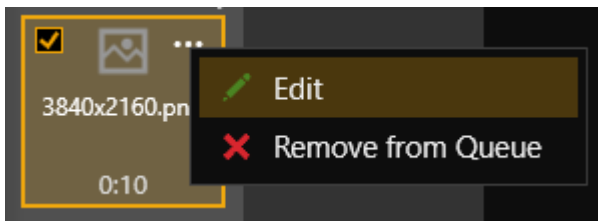
If you send a multicast stream on a large network, tvONE recommends using equipment with IPv4 multicast addressing, and/or IGMP v2 support. For more information, contact your network administrator.

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.

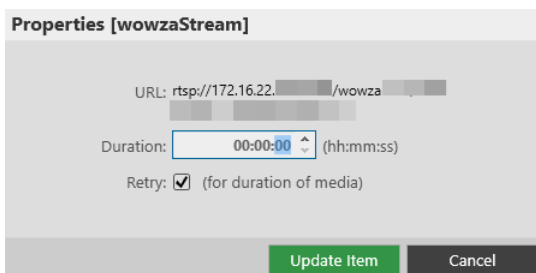
You can choose how long to play each media stream, video clip, or still image in the play queue.

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.



Using the playback controls

When the play queue is playing, you can:



Stop playback



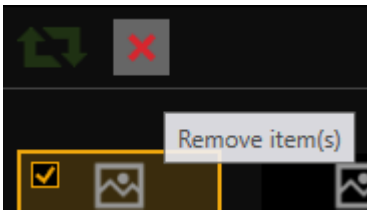
Pause playback



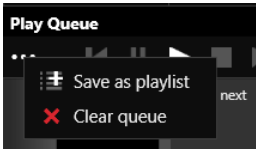
Skip to the next item



Return to the previous item



Remove an item from the play queue



Clear the play queue

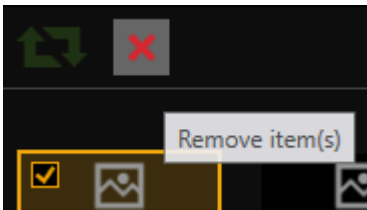
When the play queue is stopped, you can:



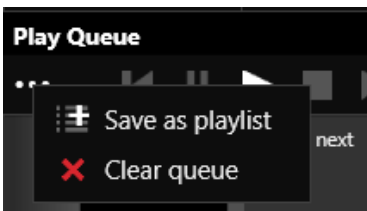
Enable and disable looping



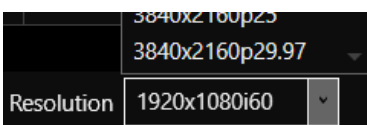
Play the play queue



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:

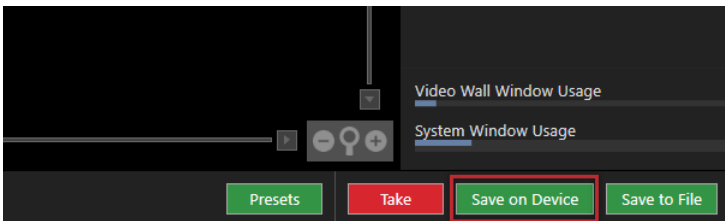
- Drag new media items or streams into the play queue, up to a total of 20 items.
- Drag items to re-order the play queue.
- Change the duration of a media item in the play queue.
- Remove any item from the play queue.
- Clear the entire play queue.
- Choose to play the play queue when your CORIOview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

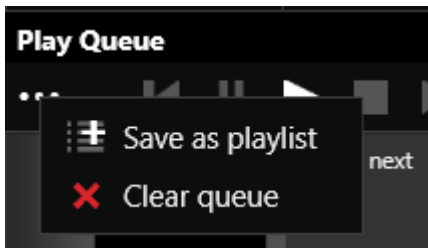
You can save your play queue so that it is available the next time you start your CORIOview.

Build your play queue and select Save on Device.



You can save your play queue as a playlist.

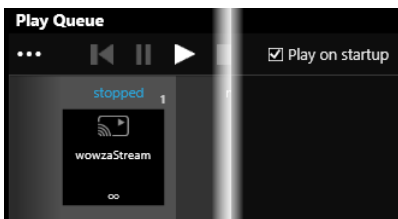
- Build your play queue and select ... > Save as playlist.



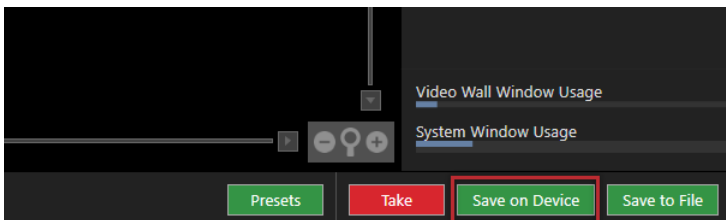
Playing the play queue automatically

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

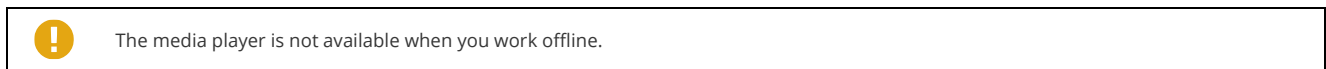
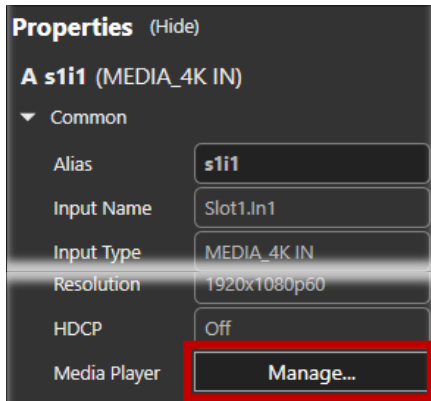
You can save media items from your USB drive to the internal drive.

Read more about the internal drive on page 68.

Creating and managing playlists

If you have a Dual Stream In module, you can save media items and video streams to playlists. Your CORIOview can store up to 20 playlists.

Create and manage your playlists in CORIOgrapher. From the Dashboard, select the window bubble you wish to play streaming media to expand the options, select , and select (Media Player) Manage.

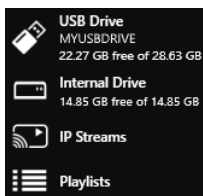


About playlists

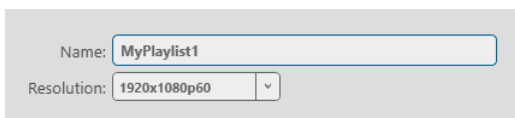
- Your CORIOview can store up to 20 playlists.
- Each playlist can include up to 20 items, including still images, video clips, and streams.
- Playlists are shared between the two channels of a Dual Stream In module, but are not shared between Dual Stream In modules.
- Playlists save the names and pathways 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 device
- 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 > .



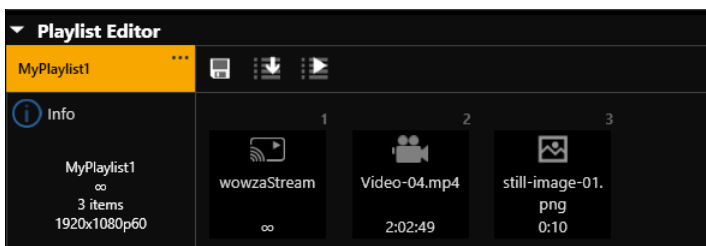
2. Enter a name and choose a resolution for your playlist.
Names can be up to 64 characters long, or fewer, depending on your character set.



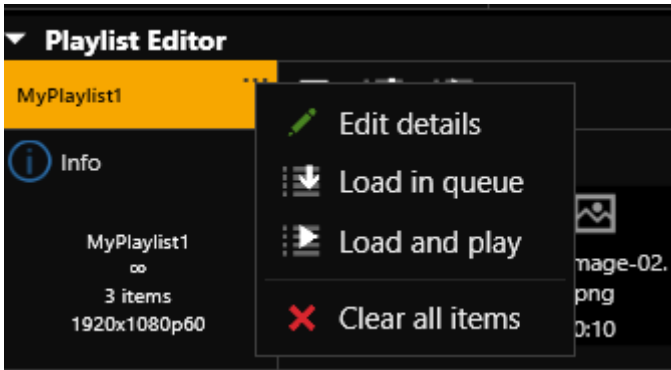
Read about choosing the right resolution on page 70.

3. Select your new playlist.

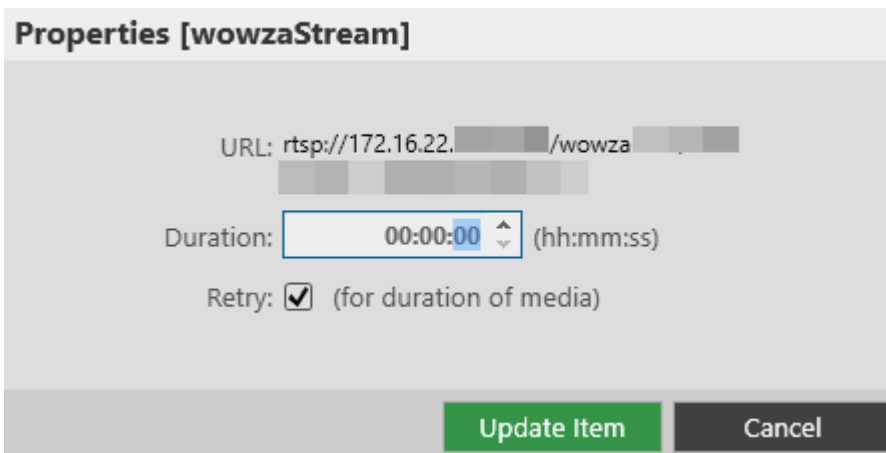
The playlist opens in the playlist editor. If the playlist editor is collapsed, select  to open it.



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 items and streams.
 - To remove something from the playlist, select the item or stream and select **⋮** > Remove from playlist.
 - To remove all items from the playlist, select **⋮** > Clear all items.



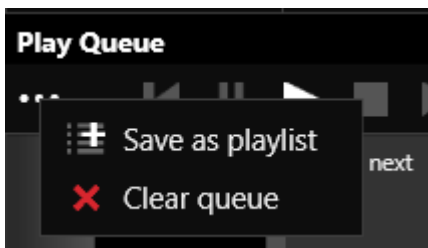
- To change the duration of an item in the playlist, select the item, and then select **⋮** > Edit.



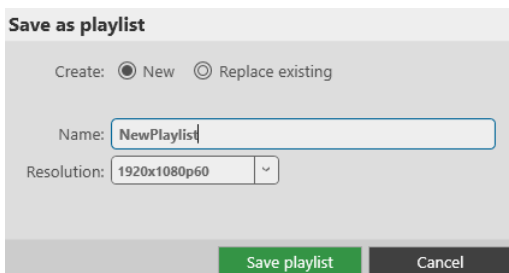
6. To save your playlist permanently, select **📁**.

Saving the play queue to a playlist

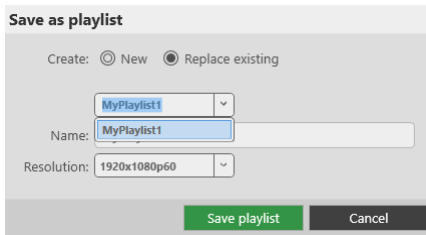
1. From the play queue, select **⋮** > Save as playlist.



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.



- 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 70.

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.

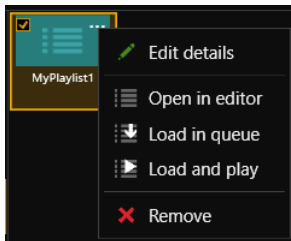
You can also manage the names and locations of your playlists in Settings > Playlists.

Read more about configuring playlist settings on page 41.

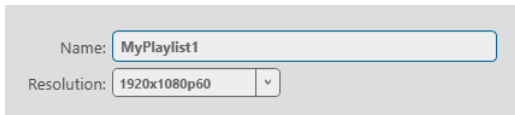
Editing a playlist

You can change the name and resolution of a playlist.

- Select Playlists and select a playlist.
- Select **⋮** > Edit.

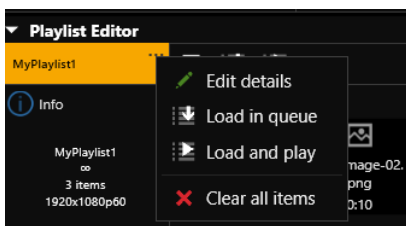


- Enter a new name or choose a new resolution.



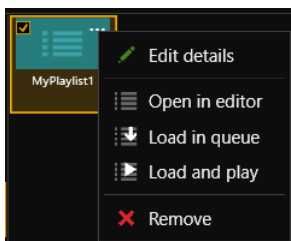
Clearing all the items from a playlist

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



Opening a playlist to edit the items

- Select Playlists and select a playlist.
- 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

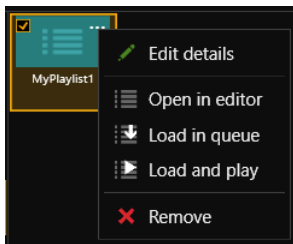
When you load and play a playlist, any items in the play queue are replaced.

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.

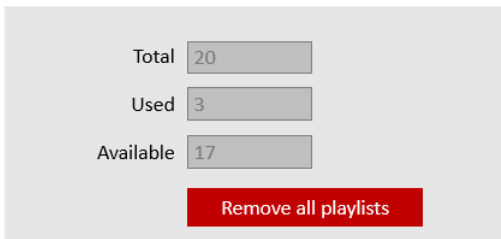
Number	Name	Module	Resolution	
1	Playlist 1	Slot2	1920x1080p60	Remove
2	Playlist 2	Slot2	1920x1080p60	Remove
3	Playlist 3	Slot2	1280x720p60	Remove

Read more about configuring playlist settings on page 41.

Deleting all playlists

You can delete all your playlists in Settings > Playlists.

Playlists

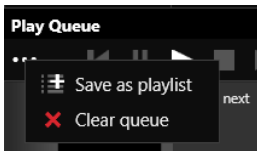


Read more about configuring playlist settings on page 41.

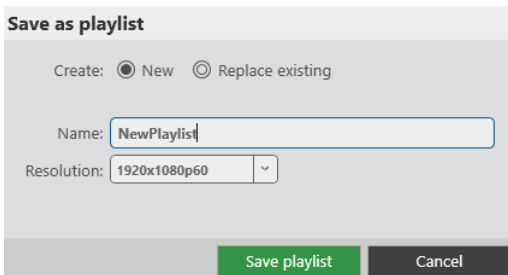
Duplicating playlists

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.

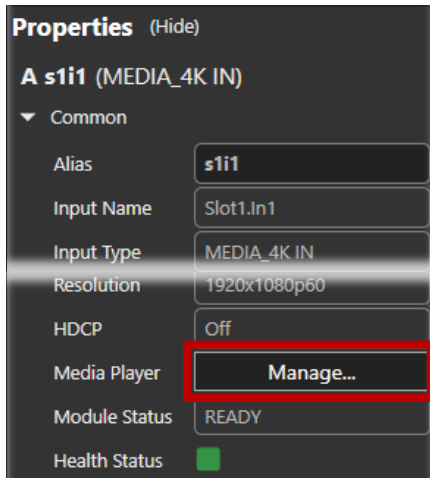



4. Repeat steps 2 and 3. Enter a unique name for the playlist each time.
5. Open each new playlist and add items in the playlist editor.

Using the internal drive

You can save media to the internal drive of your Dual Stream In module. You can manage your saved media, and add media items to a playlist or play queue.

Manage your media and streams in CORIOgrapher. From the Dashboard, select the window bubble you wish to play streaming media to expand the options, select , and select (Media Player) Manage.




 The media player is not available when you work offline.

Dual Stream In modules in CORIOview units only support embedded audio, for streams and media items with the following embedded audio formats:


- mp3
- aac

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

 Use this option when you first set up your Dual Stream In module to quickly 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 Dual Stream In 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.
See a list of compatible file types on page 95.

- 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

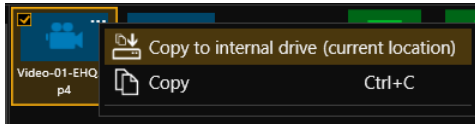
When you copy media items from your USB drive to the internal drive, the items are copied to the last location you visited on the internal drive.

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)**.



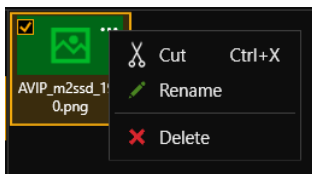
You can also copy or cut and paste individual items and folders from your USB drive to the internal drive with **Ctrl+C** or **Ctrl+X**, and **Ctrl+V**.

Managing media on the internal drive

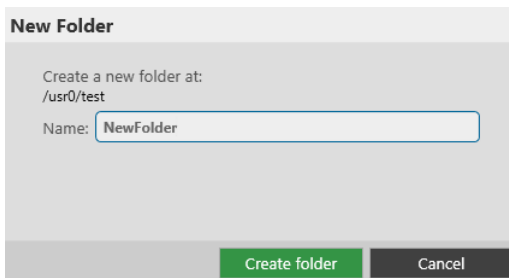
From **Internal Drive**, you can:

- 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.

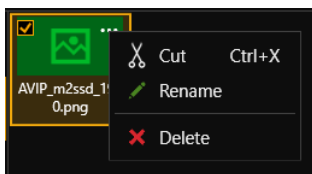
Select a media item or folder, and then select **...> Delete**.



- 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.

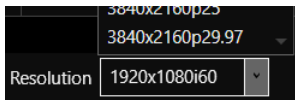
Read more about playing media and streams on page 15.

Read more about playlists on page 63.

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 Dual Stream In 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)

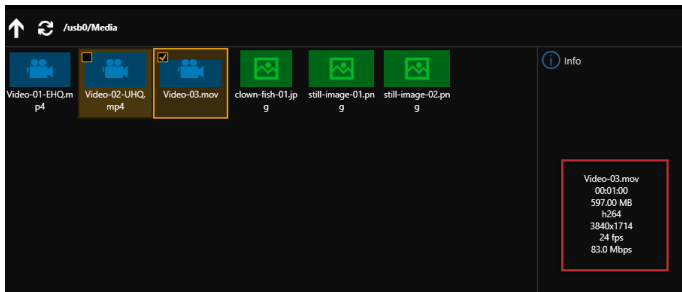
Where **p** means progressive scanning, and **i** means interlaced scanning.

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
✓	1920x1080p60	3840x2160p60	1600x1200p60

- 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
✓	1920x1080p60	3840x2160p30	1600x1200p60	60	60 is a factor of both frame rates. 60/60 = 1 60/30 = 2
✓	3840x2160p25	1920x1080p50	1280x720p50	50	50 is a factor of both frame rates. 50/50 = 1 50/25 = 2
✗	1280x720p23.98	1280x720p24	1920x1080p60	-	This play queue doesn't work because 60 can't be divided by 24, 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.

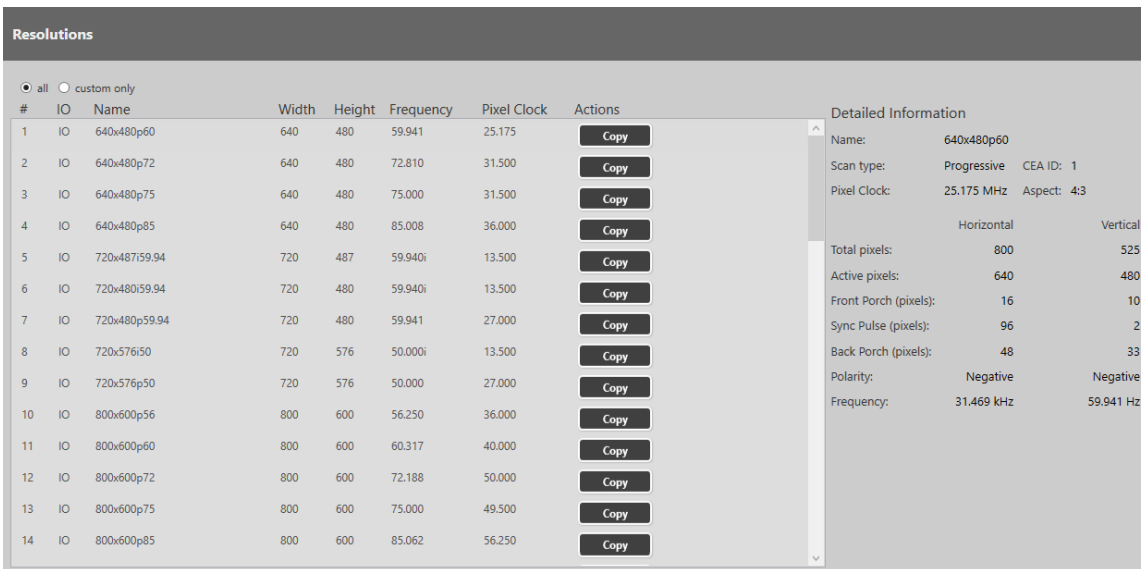
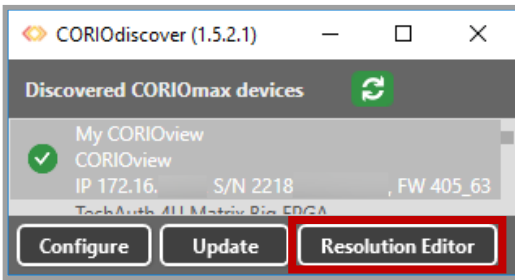
Scanning

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

Creating and editing custom resolutions from CORIOdiscover

You can use CORIOdiscover to create and save up to 10 custom resolutions to use on your CORIOview, CORIOmaster, or CORIOmatrix device. 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.

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 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.

Name:	3840x2160p29.97		x
Scan type:	Progressive	CEA ID:	95
Pixel Clock (MHz):	296.703296 MHz	Aspect:	16:9
	Horizontal	Vertical	
Total pixels:	4400	2250	
Active pixels:	3840	2160	
Front Porch (pixels):	176	8	
Sync Pulse (pixels):	88	10	
Back Porch (pixels):	296	72	
Polarity:	Positive	Positive	
Frequency:	67.432567272 kHz	29.970029 Hz	

Option	Notes									
Name	<p>Enter a useful name for your resolution.</p> <p>General naming rules</p> <p>Note: it is possible to create more than one custom resolution with the same name. Check the list of custom resolutions available from Resolutions.</p> <p>Names:</p> <ul style="list-style-type: none"> • Can be 1–23 characters long. • May only contain valid, printable ASCII characters. • Must not contain spaces. <p>Best practice naming rules</p> <p>For best results, use the name format below: <code>[width]x[height][scantype][rate][optional]</code></p> <p>Where:</p> <ul style="list-style-type: none"> • <code>[width]</code> and <code>[height]</code> are values in pixels • <code>X</code> is the letter x • <code>[scantype]</code> is i or p • <code>[rate]</code> is the frame rate, and can contain a decimal point • <code>[optional]</code> is any additional, optional, text 									
Scan type	Choose between progressive and interlaced scanning.									
CEA ID	<p>Only enter a value when you define a custom resolution that complies with the CEA-861-D profile for that value.</p> <p>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.</p> <p>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.</p>									
Pixel Clock	<p>Enter a value between 13.5 and 162 MHz, or, for 4K resolutions, see the guidelines for 4K custom resolutions.</p> <p>Read the guidelines on page 73.</p> <p>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.</p>									
Aspect	<p>If you are creating a custom resolution for a CORIOmatrix or CORIOmatrix mini, select an aspect ratio from the list. Choose from:</p> <table border="0"> <tr> <td>16:9</td> <td>16:10</td> <td>16:6</td> </tr> <tr> <td>4:3</td> <td>5:3</td> <td>64:27</td> </tr> <tr> <td>5:4</td> <td>1:1</td> <td>256:135</td> </tr> </table>	16:9	16:10	16:6	4:3	5:3	64:27	5:4	1:1	256:135
16:9	16:10	16:6								
4:3	5:3	64:27								
5:4	1:1	256:135								
Active pixels	<p>Enter a number of pixels between 64 and 3840 to set the width of the visible image.</p> <p>Enter a number of pixels between 64 and 2528 to set the height of the visible image.</p>									
Front Porch	<p>The front porch is the gap between the end of the active video and the start of the sync pulse, in pixels.</p> <p>Enter a number of pixels between 1 and 2000 to set the horizontal and vertical front porch.</p>									
Sync Pulse	<p>The sync pulse identifies the start of each row or frame of video.</p> <p>Enter a number of pixels between 8 and 500 to set the horizontal sync pulse.</p> <p>Enter a number of pixels between 10 and 100 to set the vertical sync pulse.</p>									

Option	Notes
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

Edit Custom Resolution 1000

Standard: CVT v1.2 Reduced Blanking (VESA Coordinated Video Timing) ▼

Options:

Version: V2 ▼ Factor: 1000 ▼

Horizontal: 1920 ▲▼ Vertical: 1080 ▲▼

Desired Active pixels: 1920 ▲▼ 1080 ▲▼

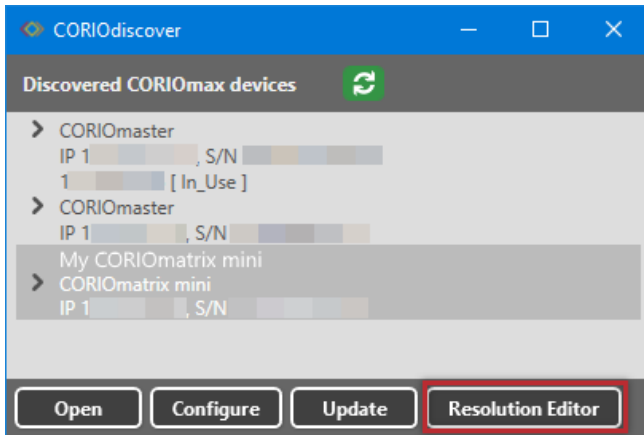
Desired Frame Rate: 60 ▲▼

Scan type: Progressive ▼

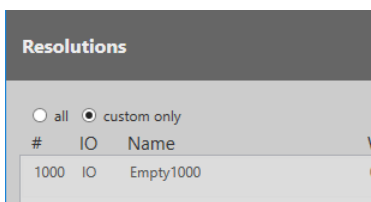
Option	Notes
Version	Enter the version number of the VESA CVT standard you want to use.
Factor	The factor converts from an exact frame rate into an NTSC-compatible vertical frequency. Choose between 1000 and 1001. <ul style="list-style-type: none"> Select 1000 to make the vertical frequency the same 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

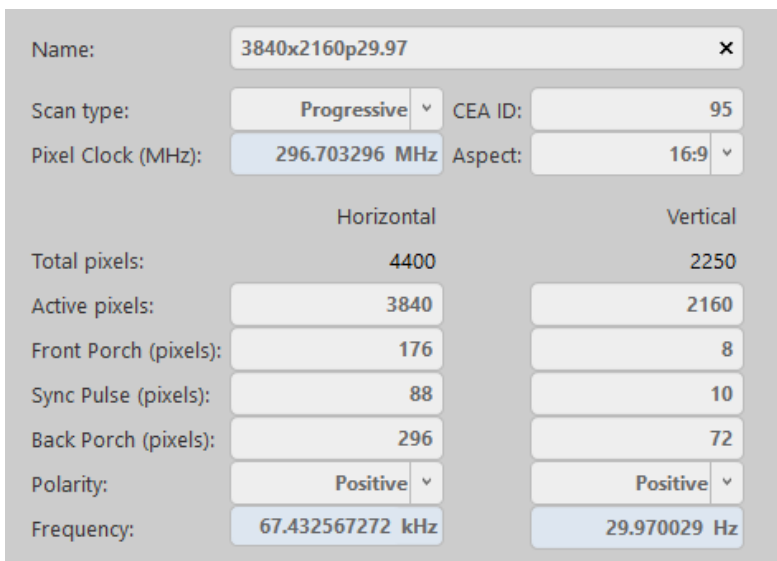
1. Select your device, and then select Resolution Editor.



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.

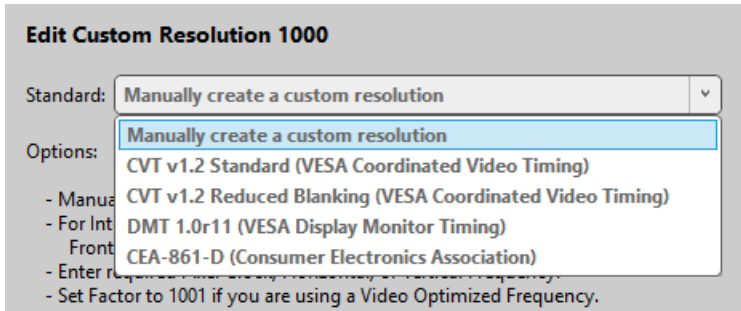
The screenshot shows the Resolution Editor dialog box. It has a "Name:" field with the value "3840x2160p29.97". Below this are several configuration options: "Scan type:" set to "Progressive", "CEA ID:" set to "95", "Pixel Clock (MHz):" set to "296.703296 MHz", and "Aspect:" set to "16:9". There are two columns of settings: "Horizontal" and "Vertical". Under "Horizontal", "Total pixels:" is 4400, "Active pixels:" is 3840, "Front Porch (pixels):" is 176, "Sync Pulse (pixels):" is 88, and "Back Porch (pixels):" is 296. Under "Vertical", "Total pixels:" is 2250, "Active pixels:" is 2160, "Front Porch (pixels):" is 8, "Sync Pulse (pixels):" is 10, and "Back Porch (pixels):" is 72. At the bottom, "Polarity:" is set to "Positive" for both horizontal and vertical, and "Frequency:" is set to "67.432567272 kHz" for horizontal and "29.970029 Hz" for vertical.

Read about rules for names and other options on page 73.

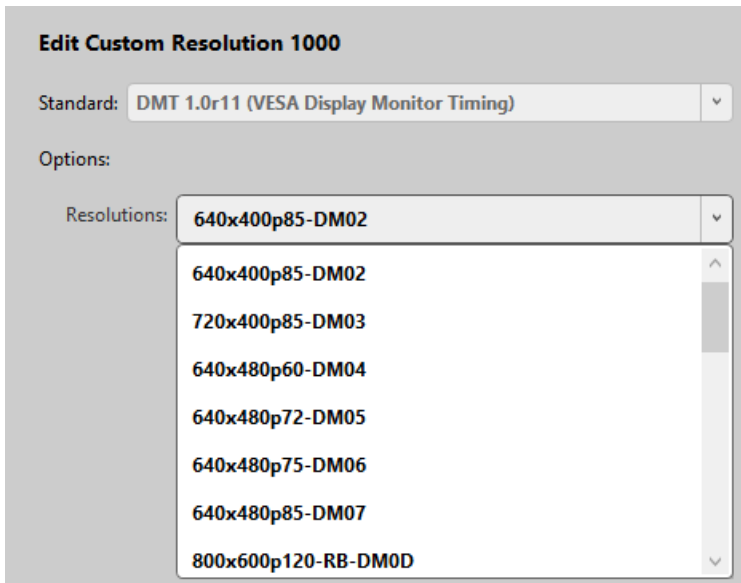
Creating a custom resolution from a video standard

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.



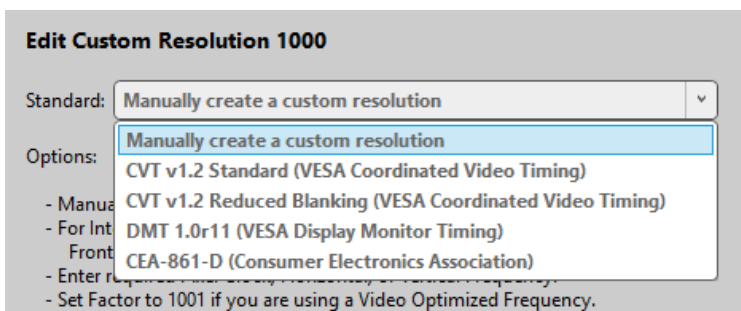
3. Select a resolution from the list.



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.

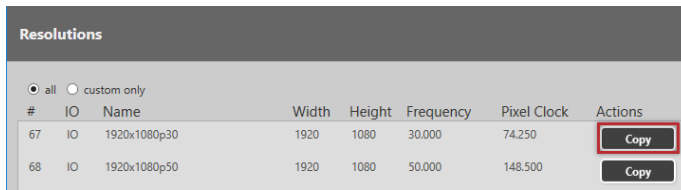
Read about rules for names and other options on page 73

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.



#	IO	Name	Width	Height	Frequency	Pixel Clock	Actions
67	IO	1920x1080p30	1920	1080	30.000	74.250	Copy
68	IO	1920x1080p50	1920	1080	50.000	148.500	Copy

2. Edit your new custom resolution.

For full instructions, see [Creating custom resolutions](#) on page 75.

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.

Troubleshooting and FAQs

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.

Minimum specification for 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
- To use the preview feature, the PC must have Windows® Media Player installed, and it must have been launched at least once before being used with CORIOgrapher

CORIOgrapher does not work with touch-screen-only devices, including tablets and phones.

Checking and updating the CORIOview firmware

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

You check the firmware of your CORIOview on the Settings window of the CORIOgrapher™ software. You update the firmware of your CORIOview on the Update Device window of the CORIODiscover software.




When you update the firmware, any unsaved configuration in CORIOview 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.

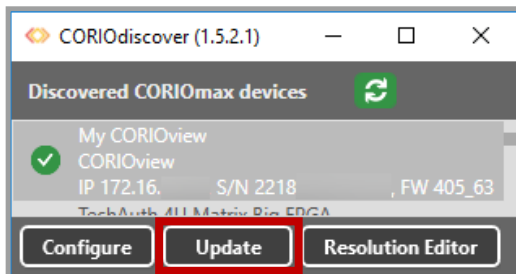
Read about saving a backup file on page 63.

Before you start

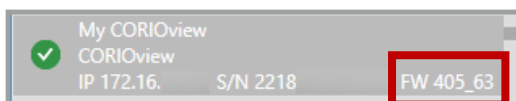
To install the latest CORIOview firmware, you need CORIODiscover V1.5 or above. V1.5 of CORIODiscover is available from the CORIOview page at tvone.com/software.

Updating the firmware

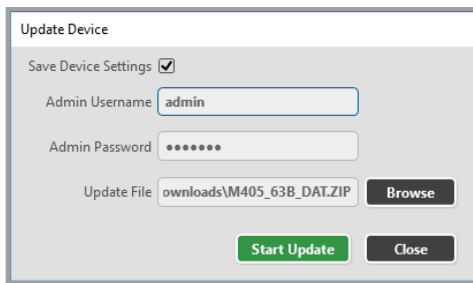
1. In CORIODiscover, select 



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.
4. Select your CORIOview from the list and select Update.
5. To save your CORIOview settings, select Save Device Settings.
6. When you save your settings, your CORIOview keeps all your saved configurations and video walls.
7. Enter your administrator login details.



8. Browse to the zipped DAT file that you downloaded.
9. Select Start Update.

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

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 CORIOview 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 CORIOview.
2. After a few seconds, your CORIOview should show as offline.
3. If nothing shows as offline, close and open CORIOgrapher.
4. Compare the list to your screenshot.
If a device is missing, it is most likely your device.
5. Turn on your CORIOview, wait for ten seconds, and see if that device appears again in the list.

You can now select your CORIOview.

Then try this

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



You can't connect to a CORIOview using Ethernet and serial connection at the same time. Make sure you log out when you've finished with the serial connection.



API commands are not case-sensitive.

To check your hardware and firmware

1. Check that your CORIOview is turned on and the LED on the front panel is green.
2. Turn your CORIOview 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 CORIOview 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 page 79.

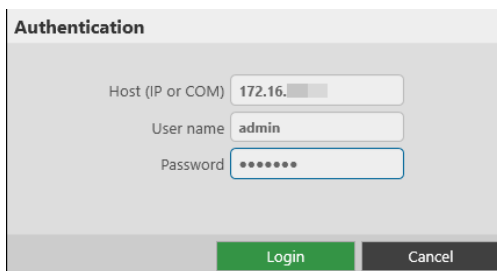
To find out the IP address of your CORIOview

1. Connect the RS-232 port on your CORIOview 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 the CORIOview as an administrator, enter `login (admin, adminpw)`.
5. Admin and adminpw are the default administrator login details. If you've changed them, use your own login details.
6. To check that DHCP is enabled, enter `System.Comms.Ethernet.DHCP` and press Return.
If the Enabled property is set to On, then go to step 6.
If the Enabled property is set to Off, then go to step 7.
7. Find the IP address of your CORIOview in the IP_Address property and make a note of it.
8. Go to step 9.
9. Enter `System.Comms.Ethernet` and press Return.
10. Find the IP address of your CORIOview in the IP_Address property and make a note of it.
11. Enter `logout ()` and press Return.

To log in to your CORIOview with an IP address

Log in to your CORIOview 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 screenshot shows a dialog box titled "Authentication". It contains three input fields: "Host (IP or COM)" with the value "172.16.", "User name" with the value "admin", and "Password" with seven asterisks. At the bottom of the dialog are two buttons: "Login" (green) and "Cancel" (black).

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 CORIOview a specific IP address.

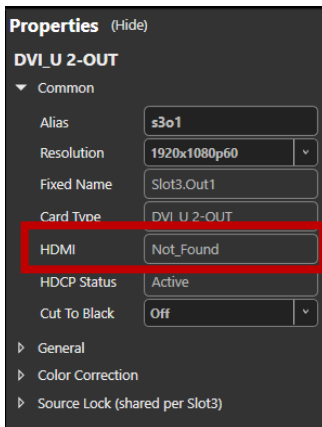
Read about changing the IP address of your CORIOview on page 39.

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

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.



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 or tech.europe@tvone.com.

Why does this happen?

You probably have a display or output that doesn't support HDCP (High Definition Copy Protection).

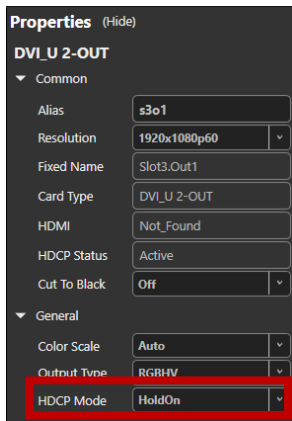
What to do

First try this

1. On the 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 or tech.europe@tvone.com.

My Dual Stream In module keeps overheating

What's the problem?

I keep seeing an error message that tells me my Dual Stream In 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 Dual Stream In module is too warm, 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 Dual Stream In 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 or tech.europe@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.

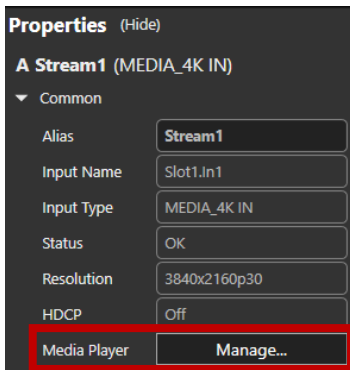
Why does this happen?

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

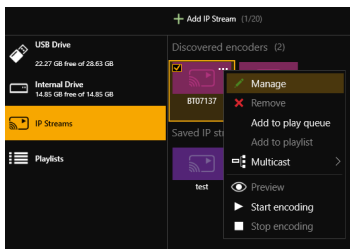
What to do

First try this

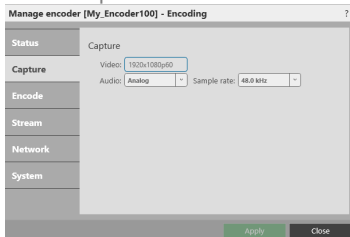
1. Expand the window bubble playing the streaming media, select , and select (Media Player) Manage.



2. Select IP Streams, select your Encoder-100, and select Manage.



3. Select Capture.



4. 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 or tech.europe@tvone.com.

I can't hear any audio

What's the problem?

I am trying to play audio but I can't hear it.

Why does this happen?

- You might be listening to the wrong input.
- The source or output might be muted, or the audio input level turned down low.
- The audio from a media item might not be compatible with your Dual Stream In module.
- There might be a loose connection or problem with your audio device.


What to do

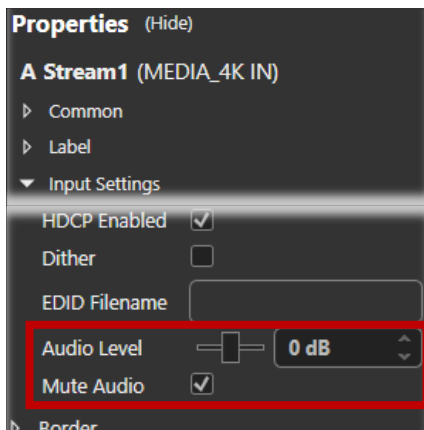
First try this

Check which input is active:

- On the front panel of your CORIOview, press and release the AUDIO button, and preset and release the corresponds to the input you want to hear.

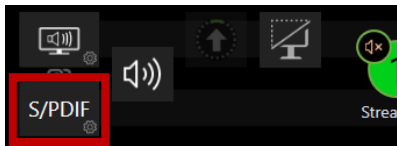
Check if the source is muted or the audio input level is turned down:

1. In CORIOgrapher, select Dashboard
2. Select the window bubble to expand, select .
3. In Properties, check the position of the Audio Level slider.
4. Make sure the Mute Audio option is cleared.

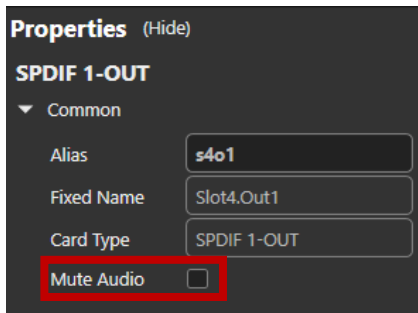


Check if the output is muted:

1. From the Dashboard, select the S/PDIF button



2. Make sure the Mute Audio option is cleared.



Then try this

Check the format of your media items:

- If you are playing audio from a Dual Stream In module, check the format of your media items.

The Dual Stream In 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 plugging in another source.
4. Make sure you are running the latest firmware and software.

You can download the latest versions of software from <http://www.tvone.com/software>s

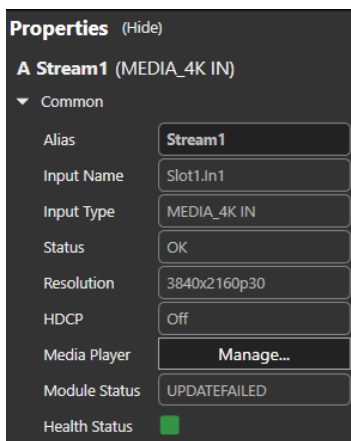
Read about updating your firmware on page 79.

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 or tech.europe@tvone.com.

I can't update the firmware of my Dual Stream In module

What's the problem?

1. In CORIOdiscover, I have an error message that tells me one or more of my Dual Stream In modules failed to update.
2. In CORIOgrapher I have an error message that tells me the firmware of my Dual Stream In 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 Dual Stream In module, select  > Configure and check the status.

Then try this

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

Read more about updating your firmware on page 79.

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 or tech.europe@tvone.com.

CORIOgrapher can't find or connect to my Encoder-100

What's the problem?

1. I tried to find my Encoder-100 in Media Browser > IP Streams, but it wasn't in the list. I tried to add it manually with an IP address, but that didn't work either.
2. I can see my Encoder-100, but can't connect to it, or stream media.

Why does this happen?

- Your Encoder-100 might not be on the same network as the PC running CORIOgrapher. For example, the Encoder-100 is set to use DHCP and the PC has a static address in a different IP range, or they are on separate physical networks.
- Your Encoder-100 is behind a router that does not allow UPnP (Universal Plug and Play) or API commands to pass through.

What to do

First try this

1. Restore the factory default settings of the Encoder-100.
Read about restoring factory default settings on page 27.
2. Change the network settings of the PC running CORIOgrapher so that it uses DHCP.
3. Check that the PC running CORIOgrapher and your Encoder-100 are on the same physical network.

Then try this

If the PC running CORIOgrapher and your Encoder-100 are on different physical networks deliberately, for example, if you have a dedicated video network, then follow these steps:

1. Put the Encoder-100 and the PC running CORIOgrapher on the same network temporarily, and configure the Encoder-100.
2. Configure the Encoder-100 with a static IP address.
3. Read about configuring your Encoder-100 on page 23.
4. Write down the IP address of the stream.
5. Return the Encoder-100 and the PC running CORIOgrapher™ to their original networks.
6. Manually add an IP stream with the IP address you wrote down in step 2.

Read about manually adding streams on page 57.

If that doesn't work

Check that your network settings are correct.

For more help, contact your network administrator.

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 or tech.europe@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 88.

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's the password for my CORIOview?

The default administrator username and password for your CORIOview 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.

How large is the internal storage on a Dual Stream In module?

There are two models of Dual Stream In module. One comes with 16 GB of internal storage, the other comes with 128 GB.

How do I find the MAC address of my Dual Stream In 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 Dual Stream In 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 specifications.

Read the specification sheet for the Dual Stream In module on page 95.

Can I save my play queue?

If you add media items or streams to a play queue and select `Save on Device` from the Dashboard, then when you restart your CORIOview, the 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.

More

What's new in CORIOgrapherV2.6

CORIOgrapher™ V2.6 supports:

- CORIOview support.

Read more on page 44.

CORIOdiscover V1.5 supports:

- CORIOview support.
- Displays firmware version of supported device.

Read more on page 44.



Firmware version M404 or M405 does not support Genlock. If you need to use Genlock, do not upgrade to this firmware version.

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

Release notes are available at tvone.com/software.

Release notes are available at tvone.com/firmware-updates.

Product specifications

CORIOview MWP specifications

Video Processing

Technology	CORIO®3
Performance	Inputs up to 4K60 & Output up to 4K30
Format conversion	Up/Down/Cross Conversion
Max. number of Windows	8
Windows	
Windows	Up to eight windows*
Borders	Configurable color & thickness
Labels	Available on all windows
Transitions	Available when changing sources or Presets
Presets	
Number of presets available	16*
Accessible from front panel	16*
Preset effects	Transitions, fade through black or window movement
Configuration & Control	
Application	CORIOgrapher software
Platform	PC with Windows 10 & Windows 7 minimum
Standby Mode	Faster boot up & saves power
Control Ports	
RS-232	D9 Female Connector
IP Interface	RJ45 Connector
USB	Type B - for future use

4H-1Y

Input connectors	4 x HDMI - HDMI 1.4 & HDCP 1.4 compatibility
Resolution support (4:4:4)	480i, 576i - 24Hz to 60Hz
	720p (1280x720) - 23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
	1035i (1920x1035) - 59.94, 60Hz
	HDMI-4in - 1080i 50, 59.94, 60Hz
	1080p (1920x1080) -23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
Color format support	RGB, YCbCr 4:4:4, 4:2:2 & 4:2:0
Color depth	8 bpc (24 bit/px)
Color space support	BT.601 on standard resolutions
	BT.709 for 720p, 1080i, 1080p

8H-1Y

Input connectors	8 x HDMI - HDMI 1.4 & HDCP 1.4 compatibility
Resolution support (4:4:4)	480i, 576i, 24Hz to 60Hz
	720p (1280x720) - 23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
	1035i (1920x1035) - 59.94, 60Hz
	1080i (1920x1080) - 50, 59.94, 60Hz
	1080p (1920x1080) -23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
Color format support	RGB, YCbCr 4:4:4, 4:2:2 & 4:2:0
Color depth	8 bpc (24 bit/px)
Color space support	BT.601 on standard resolutions
	BT.709 for 720p, 1080i, 1080p

4Y-1Y

Input connectors	4 x HDMI - HDMI 1.4 & HDCP 1.4 compatibility
Input maximum capability	Up to 2x 4K@30, 1x 4K@60 per module (2 modules)
Resolution support (4:4:4)	480i, 576i, 24 to 60Hz
	720p (1280x720) - 23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
	1035i (1920x1035) - 59.94, 60Hz
	1080i (1920x1080) - 50, 59.94, 60Hz
	1080p (1920x1080) -23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
	2160p (3840 x 2160) - 23.98 24, 25, 29.97 & 30Hz
	2160p (4096x2160) - 50/59.94/60Hz
Resolution support (4:2:0)	2160p (3840 x 2160) - 50, 59.94, 60Hz
Color format support	RGB, YCbCr 4:4:4, 4:2:2 & 4:2:0
Color depth	8 bpc (24 bit/px)
Color space support	BT.601 on standard resolutions
	BT.709 for 720p, 1080i, 1080p and 2160p

8GS-1Y

Input connectors	8 x BNC	
SDI support	3G-SDI	1080p 60/59.94 SMPTE424M-A 2.97/2.967Gbps < 0.3 UI jitter
	HD-SDI	720p, 1035i, 1080i (reduced quality with this because quad input is 4:2:0), 1080p SMPTE292M 1.485/1.4835Gbps < 0.2 UI jitter
	SD-SDI	(526/625 lines) SMPTE259M-C 270Mbps < 0.1UI jitter
Color format support	SDI 4:2:2	
Color depth	20 bit	

4D-1Y

Input connectors	4 on DVI-U connector - HDMI 1.4 & HDCP 1.4 compatibility
DVI-U Connector supports	HDMI, DVI-I, YC, CV, VGA via optional adapters
Resolution support (4:4:4)	480i, 576i - 23.98, 24, 25, 29.97, 30Hz, 50, 59.94, 60Hz 720p (1280x720) - 50, 59.94, 60Hz 1035i (1920x1035) - 59.94, 60Hz 1080i (1920x1080) - 50, 59.94, 60Hz 1080p (1920x1080) -23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
Analog Sync	TTL Level, 10KΩ, Pos or Neg
RGB Level Range	0.5-2.0 Vp-p
Scan Rate Detection	Automatic
Max Horizontal Scan Rate	150kHz
Color format support	Digital - RGB, YCbCr 4:4:4 & 4:2:2 Analog - RGBHV, RGBS, RGsB, YPbPr
Color depth	8 bpc (24 bit/px)
Color space support	BT.601 on standard resolutions BT.709 for 720p, 1080i, 1080p
Television Standards	NTSC, PAL

4Hi-1Y

HDMI module	
Input connectors	4 x HDMI - HDMI 1.4 & HDCP 1.4 compatibility
Resolution support (4:4:4)	480i, 576i - 24Hz to 60Hz 720p (1280x720) - 23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz 1035i (1920x1035) - 59.94, 60Hz 1080i (1920x1080) - 50, 59.94, 60Hz 1080p (1920x1080) -23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
Color format support	RGB, YCbCr 4:4:4, 4:2:2 & 4:2:0
Color depth	8 bpc (24 bit/px)
Color space support	BT.601 on standard resolutions BT.709 for 720p, 1080i, 1080p

AVIP module

IP Input connector	1 on RJ45 connector
Resolution support	Channel 1 : PC and HD resolutions up to 1920x1080p60 1920x1200p, 60cvt-rb 3840x2160p 30, 29.97, 25, 24, 23.98Hz 4096x2160p 30, 29.97, 25, 24, 23.98Hz Full scaling support for other resolutions. Channel 2 : 1920x1080p60 Full scaling support for other resolutions.
Interface	1Gb Ethernet port

Decoding	H.264 (CBP, Main, High)
Stream bit rates	2 Streams each 25Mbps
Streaming resolutions	Configurable up to 1080p60
Color depth	4:2:0
Unicast Streams	RTSP, RTMP, HTTP, MPEG-TS
Multicast Streams	RTSP, MPEG-TS
Media/Images	
Interfaces	USB 3.0, Internal Storage
Video Codecs	H.264 (CBP, Main, High)
Video Formats	mp4, .mov, .mkv, .m4v, .ts, .mts, .m2ts, .mt2
Playback Bit Rates	Single stream to 100Mbps, Dual Streams to 40Mbps
File Playback Resolutions Supported	
Up to 3480x2160@30fps	1
Up to 1080p60@60fps	Up to 2
Up to 7680 x 4320	Up to 2 (still images only)
Media Handling	
External	1 x USB 3.0 interface
Supported devices	Flash file systems FAT, FAT32, ext3, ext4, NTFS
Internal	High speed storage up to 128GB per module

Audio Inputst

Supported sampling rate	48KHz
Sample size	24 bits
Supported channels	1 Stereo pair on each input
†4H-1Y, 8H-1Y, 4D-1Y, 4Y-1Y, 8GS-1Y	

Audio Output

Connector	RCA
Format	S/PDIF
Supported sampling rate	48KHz
Sample size	24 bits
Supported channels	1 Stereo pair

Video Output

Output connector	HDMI
Resolution support	720p, 1080i & 1080p @ 24Hz to 60Hz 3840 x 2160 @ 23.98Hz 24Hz, 25Hz, 29.97Hz & 30Hz
Chroma sampling	4:4:4
Scaling	All supported resolutions
Compatibility	HDMI 1.4 & HDCP 1.4
Color depth	8 bpc (24 bit/px)

Color space support	BT.709 for 720p, 1080i, 1080p and 2160p
Embedded Audio Output	
Supported sampling rate	48KHz
Sample size	24 bits
Supported channels	1 Stereo pair
Mechanical	
Size (H x W x D)	1.73" x 8.54" x 9.61" (44 x 217 x 244mm)
Weight	3.75 lbs (1.7 Kg) approximately
Regulatory Compliance	
Main unit	FCC, CE, RoHS, UL
Environmental	
Operating Temperature	0° to +40°C (+32° to +104°F)
Operating Humidity	10% to 85%, Non-condensing
Storage Temperature	-10° to +70° C (+14° to +158° F)
Storage Humidity	10% to 85%, Non-condensing
MTBF	50,000 Hours
BTU	205 BTU/hr
Fan Noise	44dBA @ 0.5m
Power Supply	
External	110v-240v 50-50Hz auto-detecting
Connector	Locking
Power cable	US, UK, EU or AU
Accessories included	
Quick Start Guide	Printed
USB Key	Documentation & Links
Power Supply	Included
Warranty	
Limited Warranty	5 Years Parts and Labor

* number of presets/windows depends on exact unit configuration Specifications subject to change without notice

Dual Stream In module specifications

Dual Stream In module

Modules available	CORIOview: up to 2	Color Depth	4:2:0, 4:2:2
Interface	1x GbE Ethernet port per module	Supported IP Resolutions	Configurable to 1920x1080p @60 Hz
IP Video Decoding	H.264 (CBP, Main, High), H.265/HEVC1 (Main)	Unicast Streams	RTSP, RTMP, HTTP, MPEG-TS
IP Bit Rates	2x streams per module, up to 25 Mbs per stream	Multicast Streams	RTSP, MPEG-TS

Media/Images

Interfaces	1x USB 3.0, internal storage, network per module	Multimedia container formats	.mp4, .mov, .mkv, .m4v, .ts, .mts, .m2ts, .mt2
Video Codecs	H.264 (CBP, Main, High), H.265/HEVC1 (Main)	Playback Bit Rates	Single stream to 100 Mbs (per module), Dual Streams to 40 Mbs (per module)

Audio

Audio formats	mp3, aac
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File Playback Resolutions Supported

Up to 4096x2160 @30 Hz	1 per module	Up to 1080p60 @60 Hz	2 per module
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Media Handling

External	1x USB 3.0 interface per module	Internal	High speed storage at 16 or 128 GB per module
Supported devices	Flash file systems FAT, FAT32, ext3, ext4, NTFS	Remote	File transfer supported

Still image support

Up to 7680x4320	Rendered to 4K	Supported file types	JPEG, PNG, BMP
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Encoder-100 specifications

Encoder

Video Input:	HDMI w/ L-PCM audio	Audio Support:	L-PCM audio via HDMI
Resolutions:	up to 1920x1080p60 1920x1200	Audio Line-In:	3.5 mm analog stereo audio
Video Output (loop out):	HDMI w/ L-PCM audio,	Audio Line-Out (loop out):	3.5 mm analog stereo audio
Preview mode:	w/ optional scaling; HDMI™ and VGA	Network Connector:	RJ45
Bit Rates:	100 Kbps to 20 Mbps	Compression Standard:	H.264/Mpeg4 Part 10 (AVC)
Channels:	1		
Dimensions Size (H x W x D) mm	30 x 220 x 107	Weight (Net), Kg	0.75
Size (H x W x D) inches	1.2 x 8.7 x 4.2	Weight (Net), lbs	1.65

Environmental

Operating Temperature	0-45 °C (32-113 °F)	Storage Temperature	-40-55 °C (-40-131 °F)
Operating Humidity	20% to 80%, non-condensing	Storage Humidity	5% to 95%, non-condensing
MTBF	Approximately 1,118,000 hours at 40 °C		

Power

Power in	100-240 V AC	Power connector	15 W DIN4 locking power connector
Power out	5 V DC		

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9. **Compliance with Law; Export Restrictions.** You will comply with all applicable international and national laws, rules and regulations that apply to the Software and your use of the Software, including the U.S. Export Administration Regulations, as well as end user, end use, and destination restrictions issued by U.S. or other governments.

10. **Governing Law and Jurisdiction.** This Agreement will be construed and controlled by Ohio law, without giving effect to its conflict of law provisions. Each party consents to exclusive jurisdiction and venue in the state and federal courts in Hamilton, Ohio for any and all disputes, claims and actions arising from or in connection with the Software and this Agreement. The United Nations Convention on Contracts for the International Sale of Goods does not apply to this Agreement. The Uniform Computer Information Transactions Act does not apply to the Agreement.

11. General.

11.1 *Titles and Terminology.* The section titles in this Agreement are used solely for the parties' convenience and have no legal or contractual significance. Any list of examples following "including" or "e.g.," is illustrative and not exhaustive, unless qualified by terms like "only" or "solely."

11.2 *No Waiver.* Licensor's failure to act with respect to a breach by you or others does not waive its right to act with respect to subsequent or similar breaches. No waiver of any provision of this Agreement will be effective unless it is in a signed writing, and no waiver will constitute a waiver of any other provision(s) or of the same provision on another occasion.

11.3 *Survival of Terms.* If a court of competent jurisdiction holds any term, covenant or restriction of this Agreement to be illegal, invalid or unenforceable, in whole or in part, the remaining terms, covenants and restrictions will remain in full force and effect and will in no way be affected, impaired or invalidated.

11.4 *Assignment.* You may not assign, transfer or sublicense this Agreement or your rights (if any) under this Agreement. This Agreement will be binding upon all successors and assigns.

11.5 *Entire Agreement.* This Agreement constitutes the entire agreement between you and Licensor with respect to the Software (including support services (if any)) and merges all prior and contemporaneous communications and proposals, whether electronic, oral or written, between you and Licensor with respect to the Software.

11.6 *Authority to Bind.* You represent that you have validly entered into this Agreement and have the power and authority to do so.

11.7 *Force Majeure.* Licensor shall not be responsible for failure or delay of performance if caused by: an act of war, hostility, or sabotage; act of God, pandemic, electrical, internet, or telecommunication outage that is not caused by Licensor; government restrictions (including the denial or cancellation of any export, import or other license); or other event outside the reasonable control of Licensor.

11.8 *Right to Update Terms*. Licensor may update the terms of the Agreement without prior notice to you in order to, among other things, reflect changes in laws, regulations, rules, technology, industry practices, patterns of system use, and availability of content.

11.9 *Independent Contractors*. Licensor is an independent contractor and you agree that no partnership, joint venture, or agency relationship exists between you and Licensor. Each party will be responsible for paying its own employees, including employment related taxes, and insurance.

11.10 *Third Parties*. This Agreement is personal to the parties. For the purposes of the Contracts (Rights of Third Parties) Act 1999, this Agreement is not intended to and does not give any person who is not a party to it any right to enforce any of its provisions.

Contact us

If you have any questions about this Agreement, or want to contact Licensor for any reason, please direct all correspondence to:

tvONE Limited Legal Department

621 Wilmer Avenue

Cincinnati

OH 45226

For customer support please contact:

tech.usa@tvone.com, tech.europe@tvone.com, or tech.asia@tvone.com

Regulatory compliance for CORIOview, Encoder-100, and all input and output 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.


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