



# CM2-547 CORIOmaster2™ CORIOgrapher™ V3.0 and above

Quick Start Guide V1.0

Firmware version M500 and above

QSG-CM2-547-V1.0

Jun 2020

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Get more help  
You can read more online. To open the online help, select ? in CORIOgrapher,  
or visit [help.tvone.com/products/cm2-series/coriomaster2](http://help.tvone.com/products/cm2-series/coriomaster2).

## About CORIOgrapher™

CORIOgrapher is the software that controls your CORIOmaster2™. You can create installations over three canvases, with multiple screens and windows, and add transitions and effects for a state-of-the-art dynamic video installation.













### CORIOgrapher system requirements

CORIOgrapher:

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

To use the preview feature, your PC must have Windows Media Player installed, and it must have been launched at least once. Preview performance depends on the specifications of your PC and number of windows in your installation.

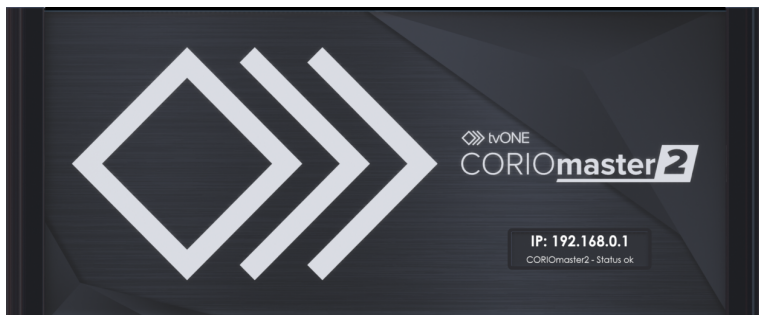
# CORIOgrapher main areas

 Home	 Home	Home is where you connect to a device, load a configuration from a file, or create an offline configuration.
 Editor	 Editor	<b>CORIOmaster and CORIOmaster2 only.</b> Editor is where you create your installations, each on its own canvas. <ul style="list-style-type: none"><li>■ If you have a CORIOmaster or CORIOmaster mini, you can create up to four installations.</li><li>■ If you have a CORIOmaster micro, you can create up to two installations.</li><li>■ If you have a CORIOmaster2, you can create up to three installations.</li></ul>
 Dashboard	 Dashboard	Dashboard is where you control the actions of your installations.
	 Standby	<b>CORIOview and CORIOmaster micro only.</b> Standby puts your device into standby mode.
 Standby	 Help	Help opens tvONE help for your product.
 Help	 Settings	Settings is where you configure your system, network, modules, and more.
 Settings		

## About your CORIOmaster2™

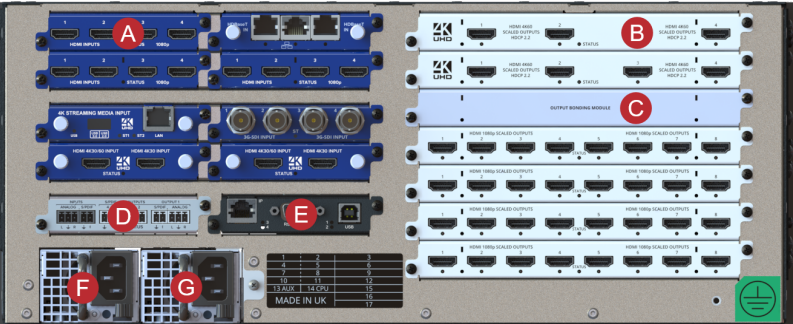
Thanks for buying this CORIOmaster2, our latest all-in-one, 12 Gigapixel, multi-window video processor. CORIOmaster2 connects to a wide range of sources and displays, and works with CORIOgrapher™ software to allow you to build dynamic video installations with an easy-to-use visual interface.

CORIOmaster2 front panel



The front panel of your CORIOmaster2 includes a customizable status screen. The status screen can show the IP address of your CORIOmaster2, its status, and the name of the server.

# CORIOmaster2 rear panel



<b>A</b>	Input module (blue)	Connect to sources
<b>B</b>	Output module (white)	Connect to displays
<b>C</b>	Output bonding module	Used to fill empty slots in a group
<b>D</b>	Optional audio module	Optional: connect to audio sources and/or playback devices
<b>E</b>	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
<b>F</b>	Power supply unit (PSU)	Connect to electrical outlet
<b>G</b>	Optional second PSU, sold separately	Optional: connect to electrical outlet

## Hardware recommendations

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

- For best results at resolutions of 1080p60 or below with HDMI or 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 active optical cables or a signal extender.

For best results at resolutions of 4K60 or higher with HDMI, use cables under 2-3 m, or shorter if you use connection adapters. If you need to place your products more than 3 m apart, use active optical cables or a signal extender.

See our range of active optical cables and signal extenders at [tvone.com/products/signal-extension-systems](http://tvone.com/products/signal-extension-systems).

- For best results with HDMI, use High Speed, Premium High Speed, or Ultra High Speed HDMI cables.
- For best results with DisplayPort, use cables under 15 m long.
- In industrial environments, use shielded Ethernet cables.

Shielded Ethernet cables are often marked F/UTP, FTP, or STP. Use shielded Cat 6 or above cables with HDBaseT input and output modules and Streaming media and 4K playback input modules.

- Use good quality USB 3.0 drives.
- For more hardware recommendations for your product, see the specification sheet.

Read more about HDMI at [hdmi.org](http://hdmi.org).

Read more about DisplayPort at [displayport.org](http://displayport.org).

# Quick start

This Quick Start Guide gives you an overview of the steps involved in setting up a video installation with your CORIOmaster2™ hardware and CORIOgrapher™ software.



Help

It's easy to get started with your CORIOmaster2, but if you want more help with any of these steps, or with using the features of CORIOgrapher, select ? in CORIOgrapher and search, or ask a question. Or visit [help.tvone.com/products/cm2-series/coriomaster2](http://help.tvone.com/products/cm2-series/coriomaster2).

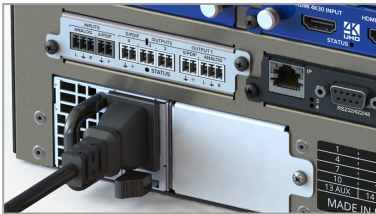
1. Plan your installation. What do you want your installation to look like? What equipment do you need to achieve this?  
At the back of this guide is a plan that you can fill out.
2. Install your hardware.
  - a. Position your displays or projectors.
  - b. Connect your displays and sources to your output and input modules. Connect the LAN port of the CPU module to your network.



## Video tearing

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

- c. Power on your CORIOmaster2.

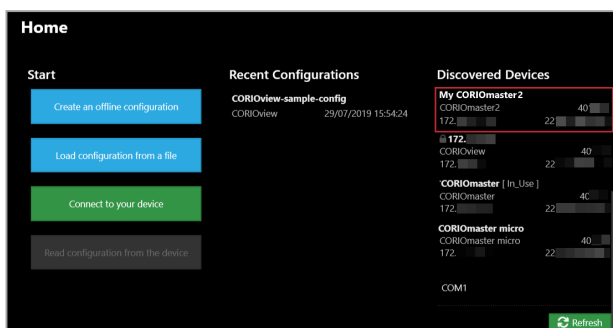


3. Install CORIOdiscover and CORIOgrapher.

Download the latest version of CORIOdiscover and CORIOgrapher from [tvone.com/tech-support/software](http://tvone.com/tech-support/software).

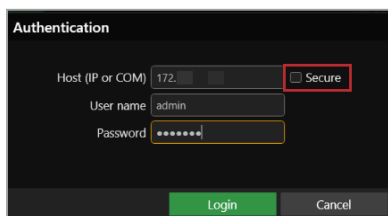


4. Open CORIOgrapher and select your CORIOmaster2.

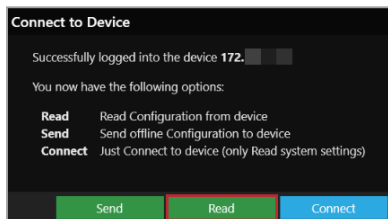


Enter your username and password to log in, and select Read to load your configuration.

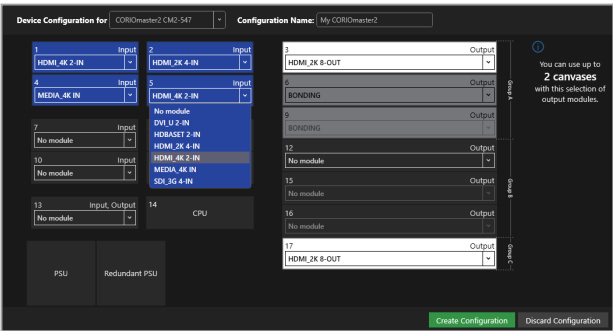
- The first time you log in, make sure the Secure option is cleared.



- The default username is admin, and the default password is adminpw.

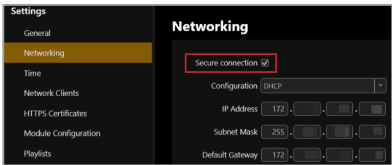


If you aren't connected to a CORIOmaster2, you can create an offline configuration for your device.

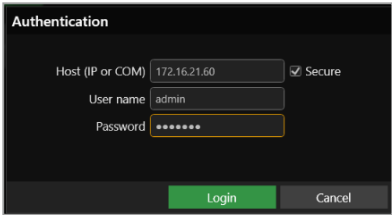


**!** The media player of the Streaming media and 4K playback input module is not available when you work in an offline configuration.

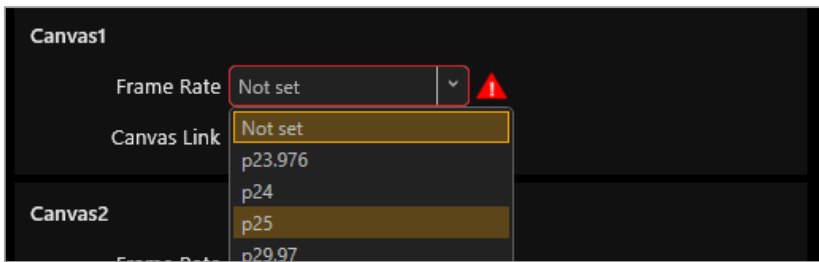
- 5. Optional: enable secure mode.
  - a. Select Settings > Networking.
  - b. Select Secure connection.



- c. Select Save > Save.
- d. Select Secure and log in.



6. Select the Frame Rate for the canvas and Apply.



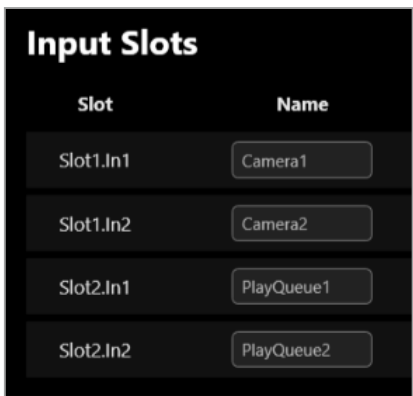
You will see a warning for each display in the Editor if the display resolution does not match the canvas frame rate.






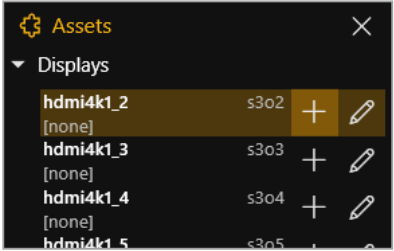
**Video tearing**  
Using a mixture of frame rates and/or resolutions can cause video tearing. For best results, make sure all your displays use the same frame rate.


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

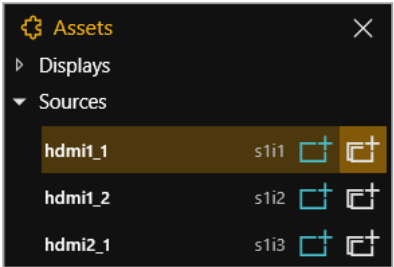
Select ⚙️ **Settings > Slot Status**. Give each port a useful name. For example, describe the device connected to it.





8. In the editor, add your displays, and arrange them to match your video wall.
  - a. Select  Editor >  Show assets > Displays.
  - b. From Assets, select  for each display you want to add.




- c. Drag the displays into place to match your installation.  
Create a rough arrangement at this stage. When you have tested your video wall you can make your arrangement more accurate.
9. In the editor, add a window and scale it to cover the whole video wall.
  - a. From Assets, select Sources.
  - b. Choose a source and select .

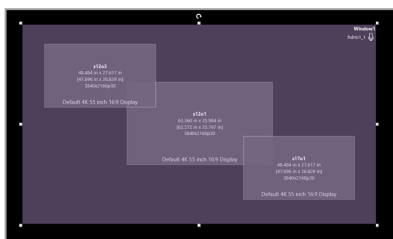


For best results, choose a source connected to hardware that is easy to play, for example, a DVD player.

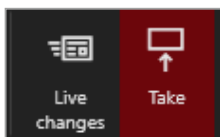
  Dedicated windows can only be used once, and have a fixed source.

  Free windows can have any source and you can select the quality.

- c. Scale the window to cover all your displays.

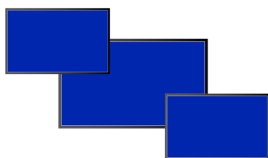


- d. Select  Take to send the video wall to your CORIOmaster2.



10. Check that your installation looks correct.

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



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

---

Possible causes:

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



- ✓ Source correct, connected, and playing.
- ✗ Image appears in the wrong places.

Possible causes:

- Displays arranged incorrectly in CORIOgrapher
- Output ports named incorrectly
- Displays connected incorrectly



- ✓ Source and displays connected and arranged correctly.

11. Repeat step 7 to add windows for all of your sources. Check that all your sources and displays work as expected.

To test any sources from Streaming media and 4K playback input modules, you need to add something to your play queues first. Read more in the Quick Start Guide that came with your module, or in tvONE Help.



Read troubleshooting advice in tvONE help. In CORIOgrapher, select ? Help and search, or ask a question. Or visit [help.tvone.com/products/cm2-series/coriomaster2](http://help.tvone.com/products/cm2-series/coriomaster2).

## Next steps

Congratulations, your video installation is set up! You can now set up and test audio, make your installation more accurate, configure the best quality settings, and add transitions and effects.

If your CORIOmaster2 contains one or more Streaming media and 4K playback input modules, you need to set those up too.

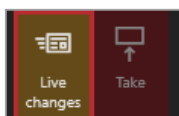
Read about setting up the Streaming media and 4K playback input module in tvONE help.

## Set up and test audio

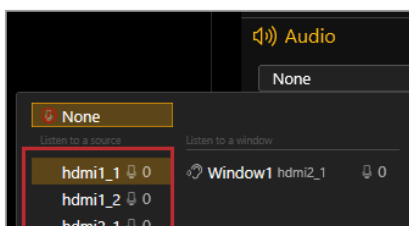
Your CORIOmaster2™ supports embedded audio in uncompressed PCM format.

### Testing embedded audio inputs

1. From Editor, select Live changes.




2. Select an audio source from the list.



You hear the audio source from all the displays and output devices associated with this canvas.

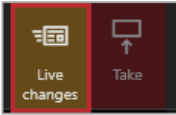
3. Select each source in turn.

If you cannot hear a source:

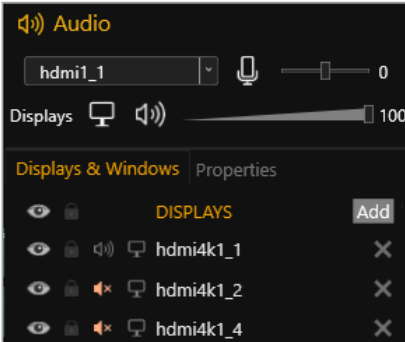
- check the audio settings of the source device.
- On Editor, make sure the source is not muted. A muted source shows .
- In Settings > Slot Status, make sure Audio Enabled is selected for the source.
- If you cannot hear any sources, check the audio settings of the output devices.
- If your source is a stream with low latency, your CORIOmaster2 mutes the audio.
- The Streaming media and 4K playback input module only supports the following embedded audio formats:
  - mp3
  - aac



## Testing embedded audio outputs

1. From Editor, select Live changes.

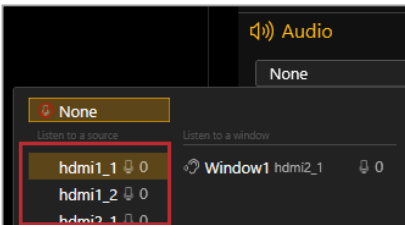


2. From Displays & Windows, mute all the displays, except the one you want to test.



Select  to mute a display, and  to unmute a display.

3. Select an audio source from the list.




You hear the audio source from the display that isn't muted.



4. Mute and unmute each display until you have heard audio from all displays.

If you can't hear audio:

- Check the audio settings on the display itself.
- In **Editor**, make sure the source is not muted. A muted source shows .
- In **Settings > Slot Status**, make sure **Audio Enabled** is selected for the source and for the display.
- If your source is a stream with low latency, CORIOmaster2 mutes the audio.
- The Streaming media and 4K playback input module only supports the following embedded audio formats:
  - mp3
  - aac



Read more about audio in tvONE Help. In CORIOgrapher, select ?Help and search, or ask a question. Or visit [help.tvone.com/products/cm2-series/coriomaster2](https://help.tvone.com/products/cm2-series/coriomaster2).

For more information, download the full user guide at  
[help.tvone.com/products/cm2-series/coriomaster2](http://help.tvone.com/products/cm2-series/coriomaster2).



## Contact us

🌐 [tvone.com](http://tvone.com)

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✉ **Support EMEA:** [tech.europe@tvone.com](mailto:tech.europe@tvone.com)

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## Video wall worksheet



What is my video wall layout? In the space above, draw a picture showing what kind of wall you have in mind. Show both the displays you have in mind as well as the video windows that you would like to show.

What am I trying to accomplish with this video wall?

How many displays or outputs are needed?

How many monitors are needed?

How many projectors are needed?

How many LED walls are needed?

Is edge blending required?

What is the blending overlap size?

What are the sizes of the displays?

What are the bezel sizes for the monitors?

What are the native resolutions of the displays?

How many source signals or inputs are required?

What are the source signal types?

What are the source resolutions?

What are the frame rates of the inputs?

Will the signal feeds be available at all times that the video wall is operating?

Is there any switching or processing before the signal enters the video wall processor?

How many windows will be required for the video wall? Include all windows even windows that are not active at all times.

What level of quality is required for each window? Not all windows can have the highest quality in most cases.

Are presets (video switching, source transitions, window movement) required for the video wall?

What type of control system will operate the wall, if any?

In the spaces below, draw your preset destinations with window and transition attributes noted.

