



C3-540 CORIOmaster™  
C3-510 CORIOmaster mini™  
C3-503 CORIOmaster micro™  
CORIOgrapher™ V2.5 and above

Quick Start Guide V2.20

Firmware version M404 and above

QSG-C3-5x0-V2.20

Jun 2017



## In this guide

Welcome .....	1
Hardware recommendations .....	2
About your CORIOmaster™ .....	3
About your CORIOmaster mini™ .....	4
About your CORIOmaster micro™ .....	5
About the buttons of your CORIOmaster micro™ .....	6
About audio and your CORIOmaster micro™ .....	8
About CORIOgrapher™ .....	10
Quick start .....	11
Regulatory compliance .....	18
Contact us .....	18
Video wall worksheet .....	19

### Get more help



There are more Quick Start Guides available on the USB drive that came with your CORIOmaster™. CORIOgrapher™ now comes with fully searchable help, just select **?** and search, or ask a question.

# Welcome

Thanks for buying this CORIOmaster™, CORIOmaster mini™, or CORIOmaster micro™. CORIOmaster™ connects to a wide range of sources and displays, and works with CORIOgrapher™ software to allow you to build dynamic video walls with an easy-to-use visual interface.

## Features

- »» Output up to four video walls to monitors, LED screens, and projectors, including devices that support 4K
- »» Wide range of inputs, including DVI, SDI, HDBaseT™, 4K, and streaming media
- »» Audio support with CORIOmaster micro™
- »» Combination of different size and resolution of displays can be used
- »» Adjustable bezel compensation
- »» Edge blending of projectors
- »» Up-down-cross conversion
- »» Control your video wall with CORIOgrapher™, IP, or serial connection
- »» Horizontal alignment on analog PC inputs
- »» AMX & Crestron modules available
- »» CORIOmaster™: 4RU frame size
- »» CORIOmaster mini™: 1RU frame size
- »» CORIOmaster micro™: 1RU half rack size, up to two video walls

## Hardware recommendations

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

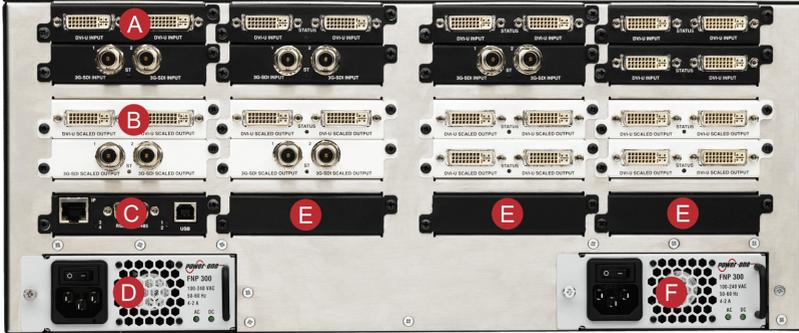
- For best results with HDMI/DVI, use cables under 15 m long, or shorter if you use connection adapters. If you need to place your products more than 15 m apart, use a signal extender.

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

- For best results with HDMI, use High Speed or Premium High Speed HDMI cables.
- In industrial environments, use shielded Ethernet cables.  
Shielded Ethernet cables are often marked F/UTP or FTP.
- Use good quality USB drives compatible with USB 3.0.

# About your CORIOmaster™

## CORIOmaster™ rear panel



- |          |                                      |   |
|----------|--------------------------------------|---|
| <b>A</b> | Input module (black)                 | Connect to sources  |
| <b>B</b> | Output module (white)                | Connect to displays   |
| <b>C</b> | CPU module                           | Connect to your network with Ethernet<br>Optional: connect to serial controller with RS-232<br>Optional: connect directly to a PC with Ethernet or RS-232 |
| <b>D</b> | Optional second PSU, sold separately | Optional: connect to electrical outlet  |
| <b>E</b> | Sealed slots                         | Not available for use   |
| <b>F</b> | Power supply unit (PSU)              | Connect to electrical outlet  |

# About your CORIOmaster mini™

This guide uses the name CORIOmaster™ to mean CORIOmaster™, CORIOmaster mini™, and CORIOmaster micro™ systems, unless specifically stated.

## CORIOmaster mini™ rear panel



Power supply unit (PSU)

Connect to electrical outlet



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



Output module (white)

Connect to displays



Input module (black)

Connect to sources

**Note:** slot 6 is a fixed input slot, included with every CORIOmaster mini™.

# About your CORIOmaster micro™

This guide uses the name CORIOmaster™ to mean CORIOmaster™, CORIOmaster mini™, and CORIOmaster micro™ systems, unless specifically stated.

## CORIOmaster micro™ 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

## CORIOmaster micro™ mounting accessories

You can mount your CORIOmaster micro™ to a surface, rack, or ONERack system with our mounting accessories, sold separately. Ask your distributor about:

- RM-503-1RK-MOD ONERack mounting module for CORIOmaster micro™
- RM-503-1RU-DUAL rack mounting kit for one or two CORIOmaster micro™ units
- RM-503-SRF surface mounting kit for CORIOmaster micro™

## About the buttons of your CORIOmaster micro™

You can use the buttons of the front panel to load presets, choose which window to hear, change the source playing in a window, and lock the buttons.

By default, the buttons correspond to the first eight presets, sources, or windows in your system. You can choose which button corresponds to which preset, source, or window.



Read more about mapping the buttons of your CORIOmaster micro™ in CORIOgrapher™. Just select **?** and search, or ask a question.

The buttons light up different colors depending on the mode and status of your CORIOmaster micro™.

## Colors of buttons



Buttons are lit dimly orange

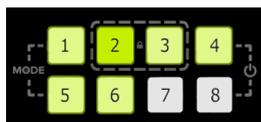
The CORIOmaster micro™ is in preset selection mode.

Button is lit more brightly

The preset corresponding to button 6 is active.

Buttons are not lit

Buttons 7 and 8 do not have corresponding presets.



Buttons are lit dimly green

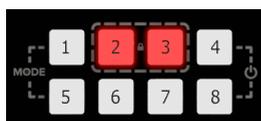
The CORIOmaster micro™ is in source selection mode.

Button is lit more brightly

The source corresponding to button 2 is playing in the active window. You hear the audio from the active window.

Buttons are not lit

Buttons 7 and 8 do not have corresponding sources.



Buttons 2 and 3 are lit red

The buttons of the CORIOmaster micro™ are locked.

## Selecting the active window

You hear the active window, and you can change the source for the active window.

- To select the active window, press and hold the button corresponding to that window until it starts flashing.

## Selecting a window to hear

When a window is active, you hear the audio from that window.

- To select a window to hear, press and hold the button corresponding to that window until it starts flashing.

## Selecting a preset or source

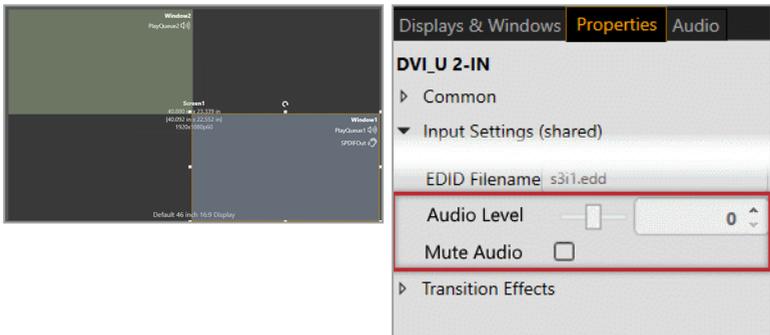
- To select a preset or source, press and release the button corresponding to that preset or source.

## Changing between preset and source selection mode

- Press and hold buttons 1 and 5 until they start flashing.  
The buttons change color.

## About audio and your CORIOmaster micro™

- Your CORIOmaster micro™ has an S/PDIF audio output that you can connect to a digital audio device with an RCA cable.
- You can listen to a source playing in a window. The window you hear is the active window. You can choose which window is active with the buttons of the front panel. On the wall editor, the active window shows .
- You can mute and adjust the audio input level of individual sources playing in windows in CORIOgrapher™.



- You can mute the audio output in CORIOgrapher™.



- The Streaming media and 4K playback input module only supports the following embedded audio formats:
  - mp3
  - aac



Read more about audio in CORIOgrapher™. Just select **?** and search, or ask a question.

# About CORIOgrapher™

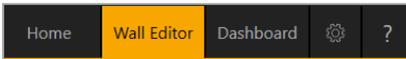
CORIOgrapher™ is the software that controls your CORIOmaster™. You can create up to four video walls with multiple screens and windows, and add transitions and effects for a state-of-the-art dynamic video wall experience.

CORIOgrapher™:

- Works with PCs running Windows® 7 and 10
- Does not work with touch-screen-only devices, including 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

To use the preview feature, your PC must have Windows® Media Player installed, and it must have been launched at least once.

## CORIOgrapher™ main areas



Home	Home is where you connect to a CORIOmaster™, load a configuration from a file, or create an offline configuration.
Wall Editor	Wall Editor is where you create up to four video walls.
Dashboard	Dashboard is where you control the actions of your video walls.
	Settings is where you configure your system, network, modules, and more.
?	? opens the online help.

# Quick start

This Quick Start Guide gives you an overview of the steps involved in setting up a video wall with your CORIOmaster™, CORIOmaster mini™, or CORIOmaster micro™ hardware and CORIOgrapher™ software.

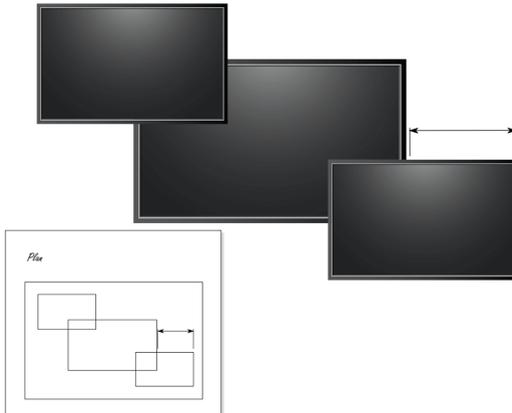
✔ It's easy to get started with your CORIOmaster™, but if you want more help with any of these steps, or with using the features of CORIOgrapher™, select **?** in CORIOgrapher™ and search, or ask a question.

1. Plan your video wall. What do you want your video wall 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.

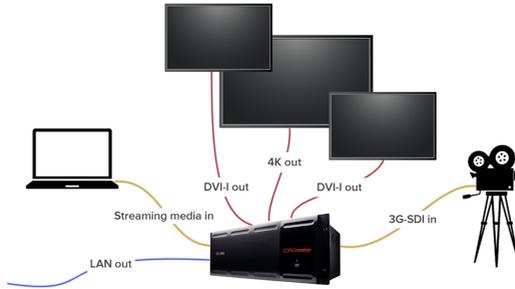
✔ **Video tearing**  
Using a mixture of display sizes and/or resolutions can cause video tearing. For best results, make sure all your displays use the same frame rate.

2. Install your hardware.
  - a. Position your displays.



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

**OPTIONAL:** If you have a CORIOmaster micro™, connect a digital audio device to the S/PDIF audio output.



- c. Power on your CORIOmaster™.



3. Install CORIOdiscover™ and CORIOgrapher™.

Your CORIOmaster™ comes with a USB drive, which contains software for installing CORIOdiscover™ and CORIOgrapher™.

4. Open CORIOgrapher™ and select your CORIOmaster™. Enter your username and password to log in, and select Read to load your configuration.

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

**Home**

**Start**

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

**Recent Configurations**

- CORIOg-sample-config**  
CORIOmaster 19/09/2016 11:56:38

**Discovered CORIOmasters**

- My CORIOmaster mini**  
CORIOmaster mini  
172. [ ] S/N 22180
- My CORIOmaster micro**  
CORIOmaster micro3  
172. [ ] S/N 2218
- 172. [ ] [Offline]**  
CORIOmaster mini  
172. [ ] S/N 2218

COM3  
COM1

Refresh

**Connect to Device**

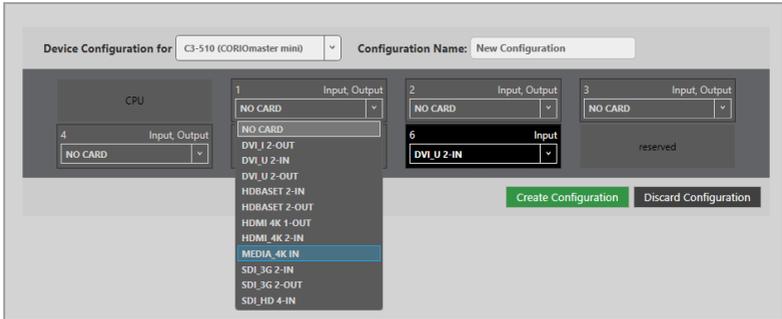
Successfully logged into the device [Progress Bar]

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)

Send Read Connect

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



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

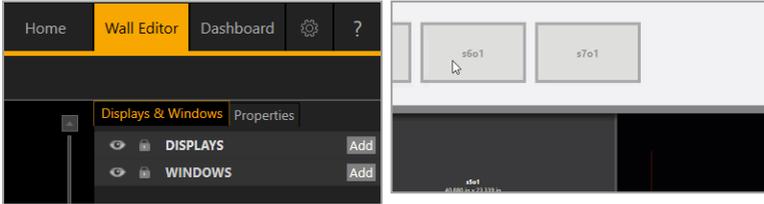
5. **Optional, but recommended:** name your input and output ports.

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

Input Slots		
Slot	Name	Status
Slot4.In1	<input type="text" value="Camera1"/>	INVALID
Slot4.In2	<input type="text" value="Camera2"/>	INVALID
Slot5.In1	<input type="text" value="PlayQueue1"/>	OK
Slot5.In2	<input type="text" value="PlayQueue2"/>	OK

- On the wall editor, add your displays, and arrange them to match your video wall.

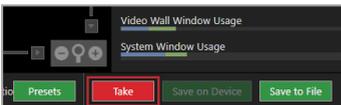
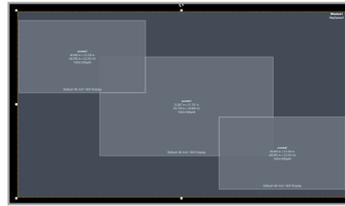
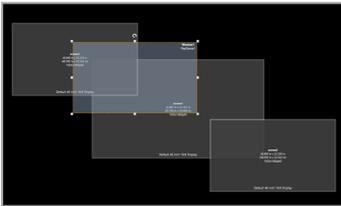
Select Wall Editor > (DISPLAYS) Add, and drag your displays onto the wall editor. Drag the displays into place.



Create a rough arrangement at this stage. When you have tested your video wall you can make your arrangement more accurate.

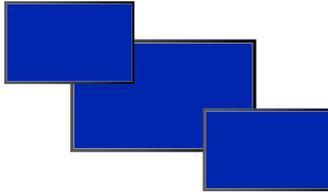
- Add a window and scale it to cover the whole video wall.

Select Wall Editor > (WINDOWS) Add, and drag a window onto the wall editor. Drag the edges until it covers all of your displays. Select Take to send the video wall to your CORIOmaster™.



8. Check that your video wall 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.

- Repeat step **7** to add windows for all of your sources. Check that all your sources and displays work as expected.
- OPTIONAL:** if you have a CORIOmaster micro™, you can test the audio for each window. From the wall editor, select **Audio** and select each window in turn from **Audio Follows**.



You should hear the audio from the source playing in that window.

Read troubleshooting advice in CORIOgrapher™ Help. In CORIOgrapher™, select **?** and search, or ask a question.

## Next steps

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

If your CORIOmaster™ 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 CORIOgrapher™ Help.

## Regulatory compliance

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.

## Contact us

 [www.tvone.com](http://www.tvone.com)

 [info@tvone.com](mailto:info@tvone.com)

 **Support NCSA:** [tech.usa@tvone.com](mailto:tech.usa@tvone.com)

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

Information in this document is subject to change without notice. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of tvONE.

Copyright © 2017 tvONE. All rights reserved.

## 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?

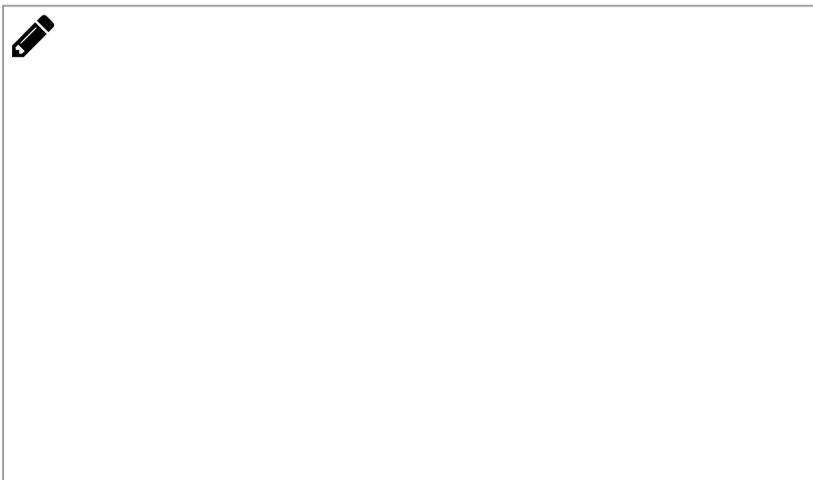
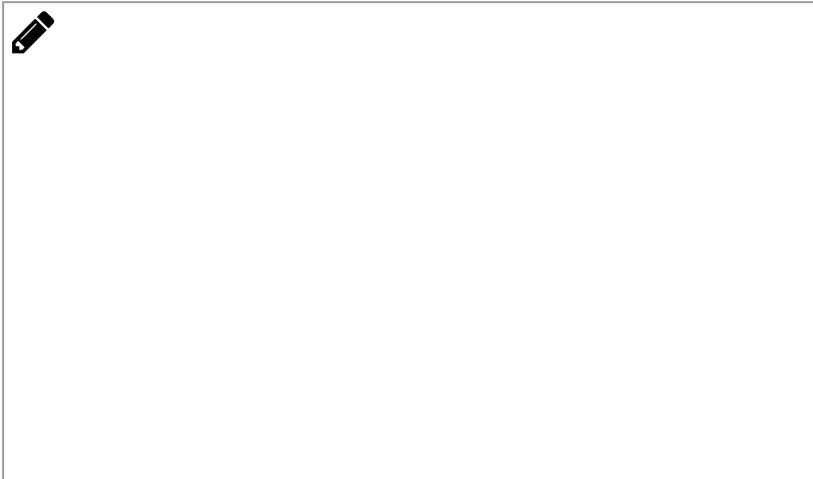
How many windows will be required for the video wall? Include all windows even windows that are not active at all times.

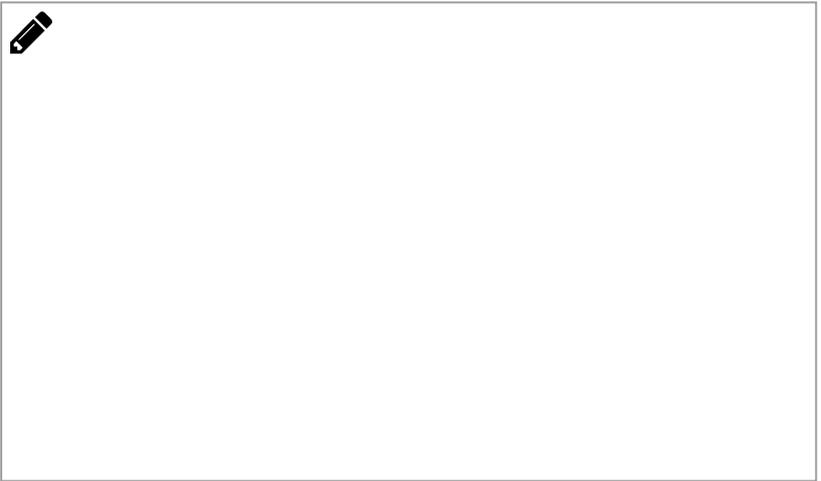
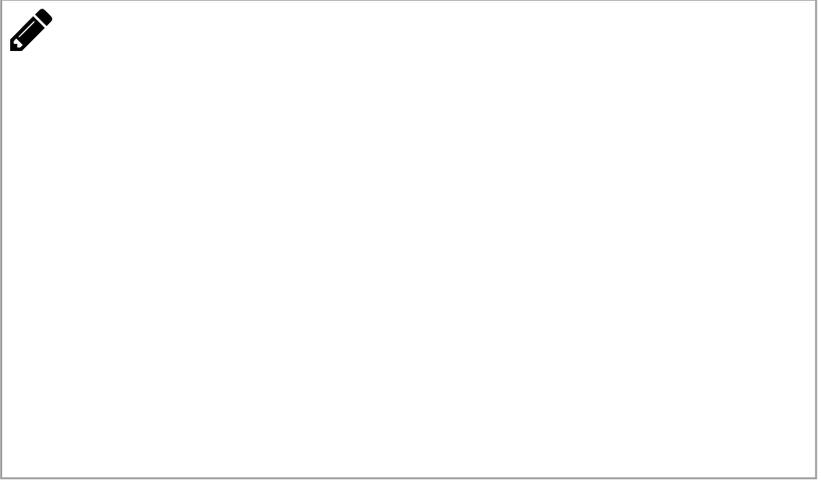
What level of quality is required for each window? Not all windows can have the highest quality in most cases.

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.







See our full range of scalers and video processors at [www.tvone.com](http://www.tvone.com)

