C3-340 CORIOmatrix™
C3-310 CORIOmatrix™ mini

Quick Start Guide V2.00

In this guide

Welcome

Thanks for buying this CORIOmatrix™ from tvONE™.

> ❗ This guide uses the name CORIOmatrix™ to mean CORIOmatrix or CORIOmatrix mini systems, unless specifically stated.

CORIOmatrix is a high performing, modular AV matrix router. Use it to create custom video displays, with optional audio. Use the CORIOmatrix UI to configure, switch, convert, and scale multiple inputs and outputs, in a variety of analog and digital formats and resolutions, including 4K.

Features

- Modular and scalable video and audio matrix
- Wide range of analog and digital inputs and outputs, including HDMI, DVI, HD-SDI, and HDBaseT™
- Supports 4K and higher inputs and 4K custom resolutions
- Powerful up, down, cross, and format conversion
- Resolution editor for up to 10 custom input and output resolutions
- Flexible multiviewer supports broadcast and AV signals in parallel
- Input and output monitoring
- Control your configuration with CORIOmatrix UI, IP, or serial connection
- Create custom presets
- Space saving: CORIOmatrix is 4RU and CORIOmatrix mini is 2RU

Get to know your hardware

In this section

Hardware recommendations

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

- For best results with HDMI/DVI, use cables under 15 m long, or shorter if you use connection adapters. If you need to place your products more than 15 m apart, use a signal extender.
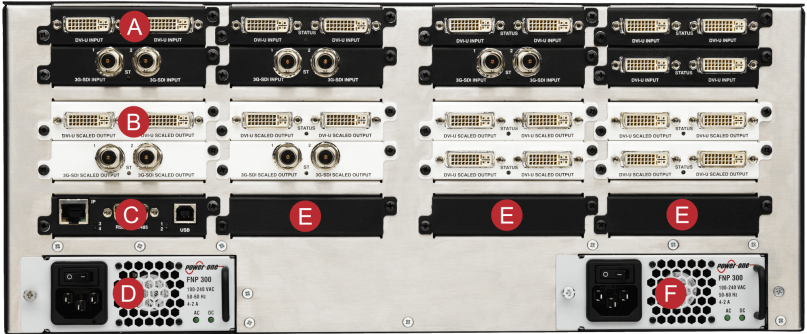
  See our range of signal extenders at tvone.com/signal-extension-systems.

- For best results with HDMI, use High Speed or Premium High Speed HDMI cables.

- In industrial environments, use shielded Ethernet cables.

  Shielded Ethernet cables are often marked F/UTP or FTP.

- Use good quality USB drives compatible with USB 3.0.

About your CORIOmatrix™

CORIOmatrix connects to a wide range of sources and displays, and works with the CORIOmatrix UI web application to give you complete control over your video and audio routing, with up, down, and cross conversion.

A CORIOmatrix rear panel with modules in some of the slots:

> In a CORIOmatrix, slots are numbered from 1 at the top left to 16 at the bottom right. Slots 1 and 2 can only contain input modules, and slots 15 and 16 can only contain output modules. This means you can't put an audio module that has both input and output in those slots.

A	Input module (black)	Connect to sources
B	Output module (white)	Connect to displays
C	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
D	Optional second PSU, sold separately	Optional: connect to electrical outlet
E	Sealed slots	Not available for use

F	Power supply unit (PSU)	Connect to electrical outlet

About your CORIOmatrix™ mini

CORIOmatrix mini connects to a wide range of sources and displays, and works with the CORIOmatrix UI web application to give you complete control over your video and audio routing, with up, down, and cross conversion.

A CORIOmatrix mini rear panel with modules in the slots:

> ❗ In a CORIOmatrix mini, slot 4, at the bottom left, can only contain an output module and slot 6, at the bottom right, can only contain an input module. This means you can't put an audio module that has both input and output in slot 4 or slot 6.

A	Power supply unit (PSU)	Connect to electrical outlet
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
C	Output module (white)	Connect to displays

		Connect to sources
D	Input module (black)	**Note:** slot 6 is a fixed input slot, included with every CORIOmatrix mini.

Quick start

This Quick Start Guide gives you an overview of the steps involved in setting up your CORIOmatrix or CORIOmatrix mini. See your CORIOmatrix™ User Guide for more details.
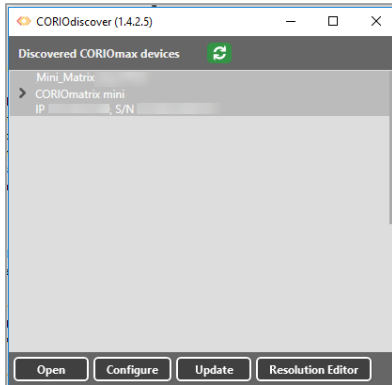
1. Plan what AV inputs and outputs you need, and check that you have the right input and output modules for the slots.

   > ✅ Label your cables with the source or display they are connected to.
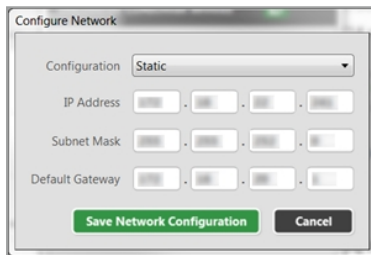
2. Install your hardware.

   a. Set up your displays.

   b. Connect your sources to your input modules.

   c. Connect your displays and any audio output devices to your output modules.

   d. Connect your control PC.

   e. Power on your CORIOmatrix.

3. Your CORIOmatrix comes with a USB drive which contains software for installing CORIOdiscover as well as release notes and a PDF of the CORIOmatrix quick start guide.

4. Open CORIOdiscover and select your CORIOmatrix from the list.

   If you can't see your CORIOmatrix listed, see the full user guide. The user guide is available on the USB drive that came with your CORIOmatrix.

5. If you use DHCP, select your CORIOmatrix from the list in CORIOdiscover, and select Open to access the CORIOmatrix UI.

If you don't use DHCP or need a static IP address:

a. Select your CORIOmatrix in CORIOdiscover.

b. Select Configure.

c. In the Configuration field, select Static.
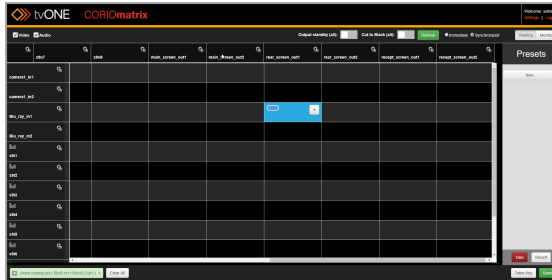

d. Note the IP address.

e. Open an internet browser and enter the CORIOmatrix's IP address.

6. Log in to the CORIOmatrix UI. The default user name is `admin` and the default password is `adminpw`.

7. When you first log in to CORIOmatrix UI, you see the routing screen, which lists all video and audio slots. It lists input slots vertically and output slots horizontally. You configure routing in the cells where the inputs and outputs intersect.

> ✅ If the display panes overlay each other, select Ctrl + F5 to clear the cache.

8. Select Synchronized. In synchronized mode, the routing you set in the main workspace is only applied to the CORIOmatrix itself when you select Take.

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

   a. Select ⚙ to define a new name for a slot in the Settings pane.

   b. Give each port a name that describes the device connected to it. Names must be unique and start with a letter. They can contain letters, numbers, and underscores, and can be up to 19 characters long.

   c. Select Done then Save.

   d. If in synchronized mode, select Take to apply the names to your CORIOmatrix.

10. **Set up your basic video routing**

    a. Find the video source you want to play on the left-hand side.

    b. Find the display you want your source to appear on along the top.

    c. Select the cell in the row for your source, and the column for your display
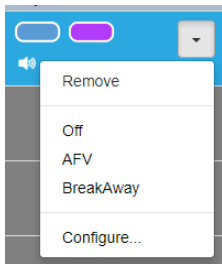
d. The cell turns blue, with a blue lozenge in it.

11. **Set up your basic audio routing**

    a. Clear Video at the top left.

    b. If you have an audio module, you can route the inputs and outputs of your audio module in the same way that you route video. Select the cell in the row of your audio input, and the column of your audio output.

    c. If you are routing audio from an AV source, select the cell in the row of your AV input, and the column of your audio output.

    d. The cell you select turns blue, with a purple lozenge in it. This means that the audio is in breakaway mode.

12. Choose a mode for your audio routing.

    a. Select a cell, and then select one of two modes from the list: Audio Follows Video (AFV) or Breakaway.

- In AFV mode, you define the audio source in relation to the video source. When you select a specific video source for an output, the related audio plays. Audio in AFV mode shows as a yellow lozenge.

- In breakaway mode, you define the audio source in relation to the output, which could be a display or an audio device. Whatever video source you choose, you always hear the audio that you chose for that output. Audio in breakaway mode shows as a purple lozenge. Breakaway is the default for audio modules. It uses the same source for video and audio input, but you can then configure it to come from a different source.

See your CORIOmatrix™ User Guide for further details.

13. Select Take to apply the video and audio routing to your CORIOmatrix and reset the cells to a black background.

14. Check that the sources you expect to see are playing on the devices you expect them to play on. If not, check:

    - You've connected your sources and displays to the correct ports

    - You've named your ports correctly

    - You've selected the right cells for routing

    - Your sources are playing

    - That your cables are connected and not damaged

See your CORIOmatrix™ User Guide, in the Troubleshooting section, for further advice.

Next steps

Congratulations, your CORIOmatrix is set up!

See your CORIOmatrix™ User Guide for topics including:

- Monitoring: using a monitor module to view inputs and outputs

- Settings for input, output, and users

- Output standby and cut to black

- Presets: setting up and using presets

- Routing: more advanced audio routing
- Creating and using custom resolutions

Regulatory compliance

This relates to CORIOmatrix™, CORIOmatrix™ mini, 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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