



C3-340 CORIOmatrix™
C3-310 CORIOmatrix™ mini

User Guide V2.00

In this guide

Welcome	1
Features	1
Set it up	2
Quick start	2
Get to know your hardware	6
Hardware recommendations	6
Extractor tool	7
About your CORIOmatrix™	7
About your CORIOmatrix™ mini	8
About modules	9
Input modules	9
Output modules	10
Monitoring modules	10
Audio module	11
Power supply module	11
Adapters	11
Setting up your CORIOmatrix™	11
Installing your hardware	12
Getting started with CORIOmatrix™ UI	12
About CORIOdiscover	12
Opening and logging in to CORIOmatrix UI	12
About CORIOmatrix UI	13
Naming input and output ports	14
Output standby and cut to black	15
Testing your installation	15
Settings	16
Settings pane for inputs	16
Settings pane for outputs	18
Settings window - system tab	20
Settings window - slot status tab	20
Settings window - networking tab	22
Changing passwords	23
What's the difference between an administrator and a user?	23
Backup to SD, restore to SD, and reboot	23
Use it	25
Routing	25
Routing overview	25
Slot names	26
Show/Hide video and audio slots	27
Configure routing connections	27
Color coding in routing table	28
Immediate and synchronized modes	29

Video routing	30
Audio routing	31
Presets	32
Creating presets	33
Editing presets	34
Loading a preset	34
Monitoring	34
Monitoring module	34
Auto monitor card - On	35
Edit and add views	35
Custom resolutions	38
Creating and editing custom resolutions from the UI	38
About custom resolutions	39
Custom resolution options	41
Creating and editing custom resolutions	43
Creating a custom resolution from a video standard	44
Copying and editing a standard resolution	45
Deleting a custom resolution	46
Creating and editing custom resolutions from command line	46
About custom resolutions	47
Listing resolutions from command line	48
Name	49
Aspect	51
Framelock	51
Pixel Clock	51
Scan type	52
Active pixels	52
Front Porch	52
Sync Pulse	53
Back Porch	53
Polarity	53
CEA ID	54
Origin	54
List available resolutions for a slot	54
List available resolutions for a slot by index	55
View information about a specific resolution	55
View current resolution of an output	56
Assign a resolution to an output	56
View the resolution of a specific input	56
Troubleshooting and FAQs	57
Minimum PC or mac specification and supported browsers	57
Updating the CORIOmatrix™ firmware	57
Checking your firmware version and downloading new firmware	58

Updating the firmware	58
CORIOdiscover can't see my CORIOmatrix™	58
The CORIOmatrix™ UI looks wrong	59
I can't reconnect to my CORIOmatrix™ after restoring	60
A slot name turned blank	60
I got a security alert when I logged in to CORIOmatrix™ UI	61
My display goes blank when I change resolution	61
There's no output from my monitoring module	61
More	63
Regulatory compliance	63
Safety information	63
Important Safety Instructions	63
Consigne Importante De Securite	65
Wichtige Sicherheitsanweisungen	66
Instrucciones Importantes De Seguridad	67
Importantes instruções de segurança	68
Belangrijke Veiligheidsinstructie	69
Viktiga Säkerhetsanvisningar	70
Viktige Sikkerhetsanvisninger	71
Tärkeitä Turvallisuusohjeita	72
Istruzioni di sicurezza	73
Инструкции по технике безопасности	74
Intellectual property	74
Liability statement	75
Limited warranty	76
Contact us	76

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
- Optional monitor module for 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 1RU

Set it up

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


In this section

- Quick start 2
- Get to know your hardware 6
 - Hardware recommendations 6
 - Extractor tool 7
 - About your CORIOmatrix™ 7
 - About your CORIOmatrix™ mini 8
 - About modules 9
- Setting up your CORIOmatrix™ 11
 - Installing your hardware 12
 - Getting started with CORIOmatrix™ UI 12
 - Output standby and cut to black 15
 - Testing your installation 15
- Settings 16
 - Settings pane for inputs 16
 - Settings pane for outputs 18
 - Settings window - system tab 20
 - Settings window - slot status tab 20
 - Settings window - networking tab 22
 - Changing passwords 23
 - Backup to SD, restore to SD, and reboot 23

Quick start

This Quick Start Guide gives you an overview of the steps involved in setting up your CORIOmatrix or CORIOmatrix mini.

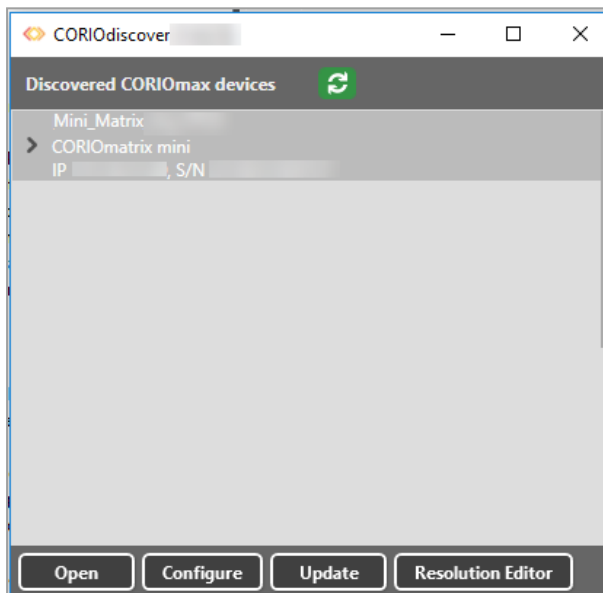
1. Plan what AV inputs and outputs you need, and check that you have the right input and output modules for the slots.

 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. See Get to know your hardware on page 6.
 - c. Connect your displays and any audio output devices to your output modules. See Get to know your hardware on page 6.
 - d. Connect your control PC.
 - e. Power on your CORIOmatrix.

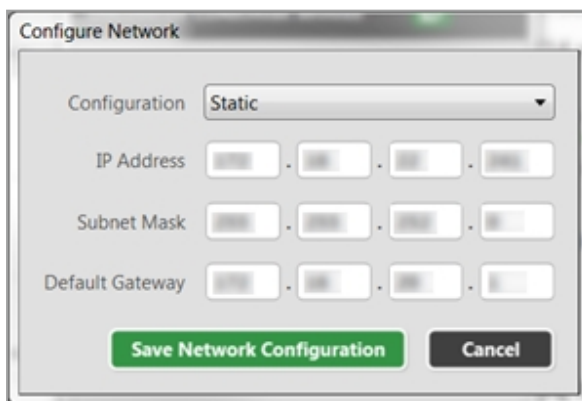
3. Your CORIOmatrix comes with a USB drive which contains software for installing CORIOdiscover as well as release notes and a PDF of the CORIOmatrix quick start guide.
 - a. After installation, check the tvONE website for any updates:
 - b. Go to <http://www.tvone.com/software>.
 - c. On the FAQ tab, select Search and search for CORIOmatrix.
 - d. If there is a firmware download, select it, read the release notes, and download it.
 - e. Then check for CORIOdiscover software updates.

See Updating the CORIOmatrix firmware on page 57.
4. Open CORIOdiscover and select your CORIOmatrix from the list.
5. If you downloaded a software updates, select Update:
 - a. Log in using the default Admin user name of `admin` and default password of `adminpw`.
 - b. Select Browse and navigate to the zipfile containing updates.
 - c. Select Start Update.
6. 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.
- 7. Log in to the CORIOmatrix UI. The default user name is `admin` and the default password is `adminpw`.
- 8. 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.



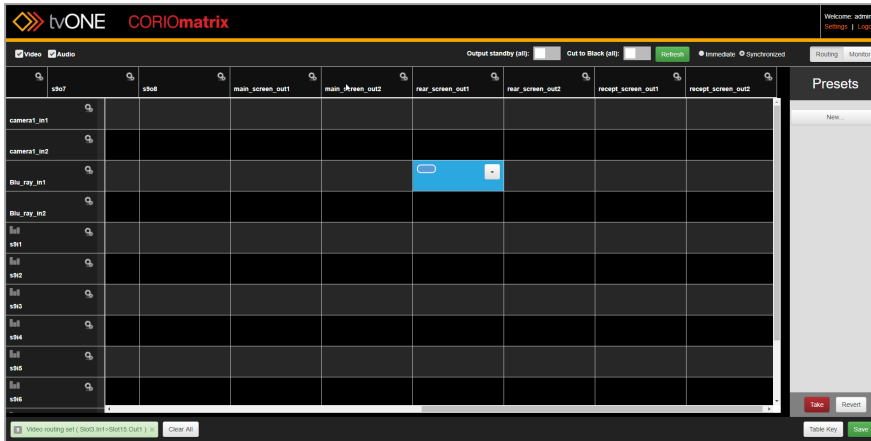
✔ If the display panes overlay each other, select Ctrl + F5 to clear the cache.

- 9. Select **Synchronized**. In synchronized mode, the routing you set in the main workspace is only applied to the CORIOmatrix itself when you select **Take**. See **Immediate** and **synchronized** modes on page 29.
- 10. **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.
- 11. **Set up your basic video routing**

! For further details of routing in general and video routing specifically, see **Routing** on page 25.

- 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

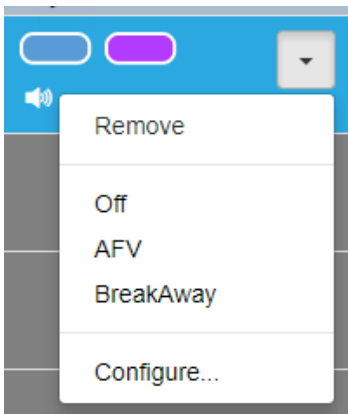
- d. The cell turns blue, with a blue lozenge in it.



12. Set up your basic audio routing

! For further details of routing in general and audio routing specifically, see Routing on page 25.

- 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.
13. 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. If you change the video source, the audio source changes as well. Audio in AFV mode shows as a yellow lozenge.
- In breakaway mode, you define the audio source in relation to the output module, which could be a video 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, which initially have the same source for video and audio input. To set audio to come from a different source, select **Configure...** from the cell's dropdown menu.

For further details, see Routing audio on page 31.

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

15. 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

For further advice, see Troubleshooting on page 57.

Next steps

Congratulations, your CORIOmatrix is set up!

The rest of this user guide has more detailed information on topics including:

- Get to know your hardware on page 6.
- Monitoring inputs and outputs with a monitoring module on page 34.
- Output standby and cut to black on page 15.
- Settings for input, output, and users on page 16.
- Presets on page 32.
- Routing on page 25.
- Creating and using custom resolutions on page 38.

Get to know your hardware

In this section

Hardware recommendations	6
Extractor tool	7
About your CORIOmatrix™	7
About your CORIOmatrix™ mini	8
About modules	9

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. 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.

Extractor tool

Modules with four inputs or outputs can be difficult to remove. Some, including HDMI four input, are designed with a small notch. Use the extractor tool to hook into the notch and pull out the module, as illustrated.

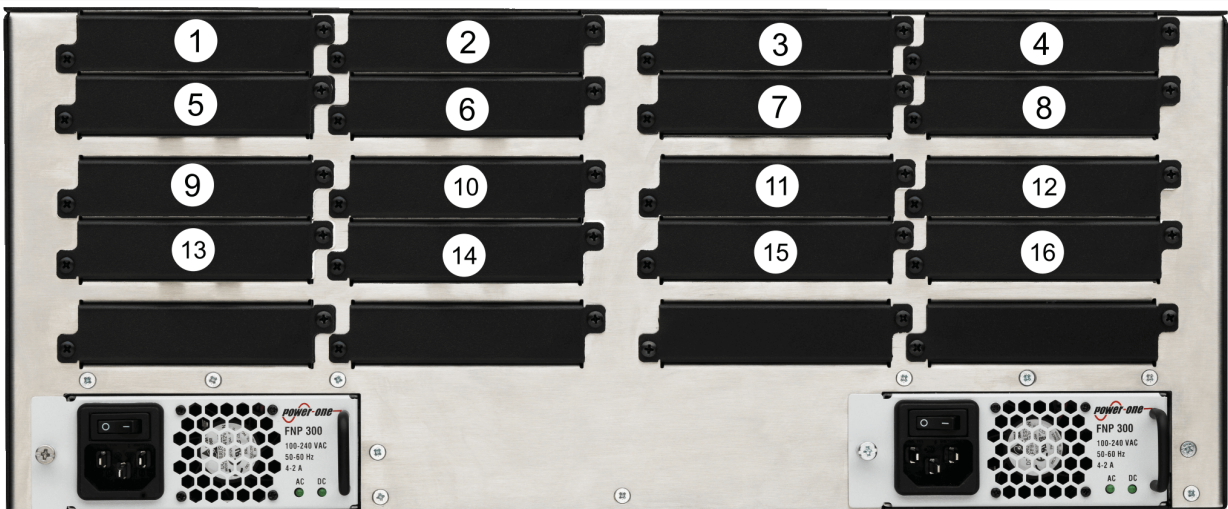


About your CORIOmatrix™

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.

CORIOmatrix Slots

Your CORIOmatrix has 16 slots that can contain input or output modules.



You can have up to 15 input modules and up to 12 output modules.

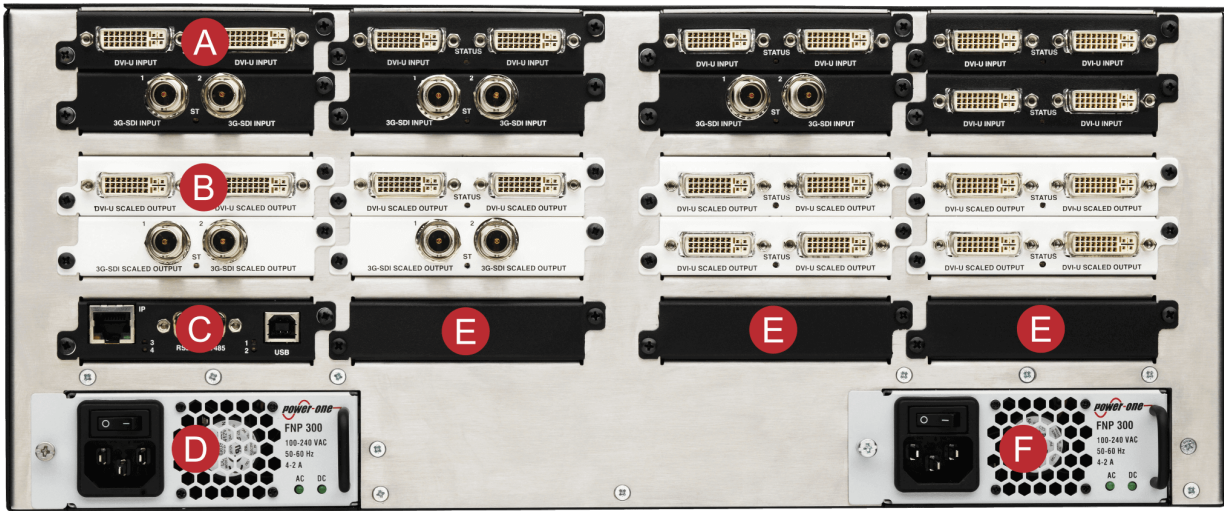


In a CORIOmatrix, slots 1 to 4 can only contain input modules. This means you can't put an audio module that has both input and output in those slots.

We recommend that you group your input and output modules. Add input modules from slot 1 upwards, and add output modules from slot 16 downwards.

CORIOmatrix rear panel

A CORIOmatrix rear panel with modules in some of the 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.

CORIOmatrix mini Slots

Your CORIOmatrix mini has five slots that can contain input or output modules. Slot six is a fixed DVI input module.

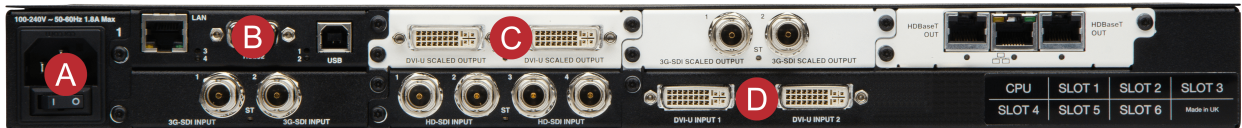


You can have up to five input modules and up to five output modules.

! In a CORIOmatrix mini, slot 4 can only contain an output module and slot 6 always contains a fixed DVI input module. This means you can't put an audio module that has both input and output in slot 4, or anything in slot 6.

CORIOmatrix mini rear panel

A CORIOmatrix mini rear panel with modules in the slots:



- 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
- D

Input module (black)

Connect to sources




Note: slot 6 is a fixed DVI input slot, included with every CORIOmatrix mini.

About modules

CORIOmatrix or CORIOmatrix mini supports six types of input module, and five types of output module. Each module supports specific connections, but our range of adapters means you can connect almost any type of source or display to your CORIOmatrix.

Input modules

Module	Product number	Connections
4K 30 HDMI input module, two inputs	CM-HDMI-X-4K-2IN	2 x HDMI up to 4096x2160 @30 HDMI compatible and HDCP compliant
Universal DVI input module	CM-DVIU-X-2IN	2 x DVI-U (HDCP compliant, and HDMI compatible with an adapter)
HD/SD-SDI input module	CM-HDSDI-X-4IN	4 x HD/SD-SDI using BNC For co-axial cables

Module	Product number	Connections
HDBaseT input module	CM-HDBT-2IN-1ETH	2 x HDBaseT For CATx cables Supports up to 2 x 4K @30Hz, or 1 x 4K @60 Hz
3G-SDI input module, two inputs	CM-3GSDI-X-2IN	2 x 3G/HD/SD-SDI using BNC For co-axial cables
3G-SDI input module, four inputs	CM-3GSDI-X-4IN	4 x 3G/HD/SD-SDI using BNC For co-axial cables
		 We do not recommended this for interlaced signals.
4K 30 HDMI input module, two input	CM-HDMI-4K-X-2IN	2 x HDMI up to 4096x2160 @30
		 We do not recommended this for interlaced signals.
		HDMI compatible and HDCP compliant
HDMI input module, four input	CM-HDMI-X-4IN	4 x HDMI up to 1920x1080 @60
		 We do not recommended this for interlaced signals.
		HDMI compatible and HDCP compliant
HDBaseT input module, two input	CM-HDBT-X-2IN-1ETH	2 x HDBaseT For CATx cables

Output modules

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

Monitoring modules

Module	Product number	Connections
DVI-U monitoring module	CM-DVIU-MON-2OUT (Discontinued)	2 x DVI-U (HDCP compliant)
DVI-I monitoring module	CM-DVI-I-MON-2OUT	2 x DVI-I (HDCP compliant)

Audio module

Module	Product number	Connections
Audio IO module	CM-AUD-8IN-8OUT	1 x 3.5 mm headphone jack 1 x HD-44 Connection for use with A2-7300 series audio breakout units

Power supply module

Module	Product number	Connections
Redundant PSU for 4RU series units	CM-4RPS	1 x IEC power cord

Adapters

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

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

Setting up your CORIOmatrix™

This section contains detailed information about how to set up your CORIOmatrix system.

In this section

Installing your hardware	12
Getting started with CORIOmatrix™ UI	12
Output standby and cut to black	15
Testing your installation	15

Installing your hardware

We supply your CORIOmatrix with the modules you ordered and covers on empty slots. Each module has its description printed on it, for example, 3G-SDI INPUT. See descriptions and screenshots in Get to know your hardware on page 6.



In a **CORIOmatrix**, slots 1 to 4 can only contain input modules.
In a **CORIOmatrix mini**, slot 4 can only contain an output module and slot 6 is a fixed DVI input.
This means you can't put an audio module that has both input and output in those slots.

Connect your sources to the appropriate input modules and your displays to the appropriate output modules. For example, a screen to DVI-U SCALED OUTPUT and a camera to SDI_3G.



Label your cables with the source or display they are connected to.

Getting started with CORIOmatrix™ UI

You can access CORIOmatrix UI with CORIODiscover, or by entering its IP address in a supported browser. Use CORIOmatrixUI to set up and control your CORIOmatrix.

Download the latest version of CORIODiscover from the CORIOmatrix C3-340 page at www.tvone.com/firmware-updates.

About CORIODiscover

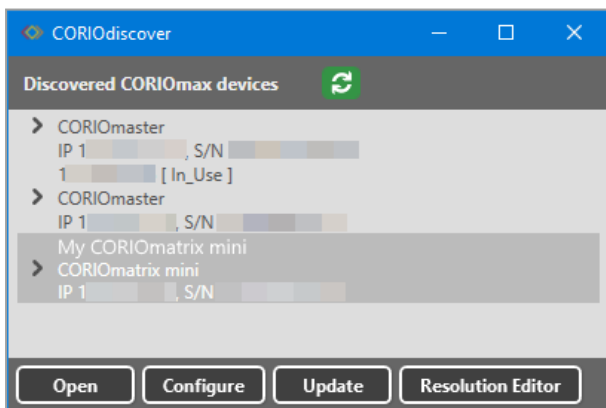
CORIODiscover software allows you to connect to CORIOmatrix UI, configure network settings for your CORIOmatrix, update your firmware, and create and edit custom resolutions.

Read more about updating your firmware on page 57.

Read more about creating and editing custom resolutions on page 38.

To perform tasks in CORIODiscover

1. Start up your CORIOmatrix.
2. Open CORIODiscover.
3. Select your CORIOmatrix from the list.

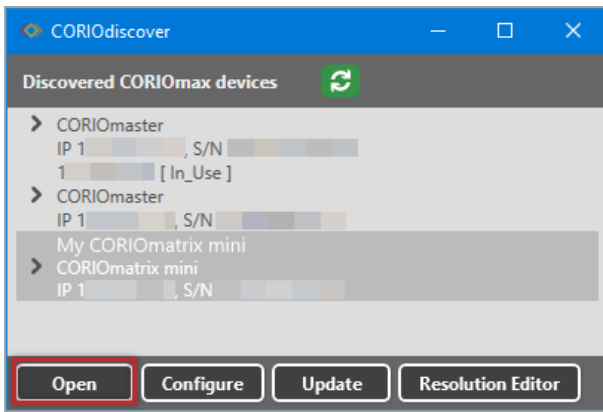


4. Select a task button.

Read what to do if you can't see your CORIOmatrix in the list on page 58.

Opening and logging in to CORIOmatrix UI

1. In CORIODiscover, select your CORIOmatrix from the list.



2. Select Open, which opens a tab in your default web browser.
3. Enter your username and password.

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

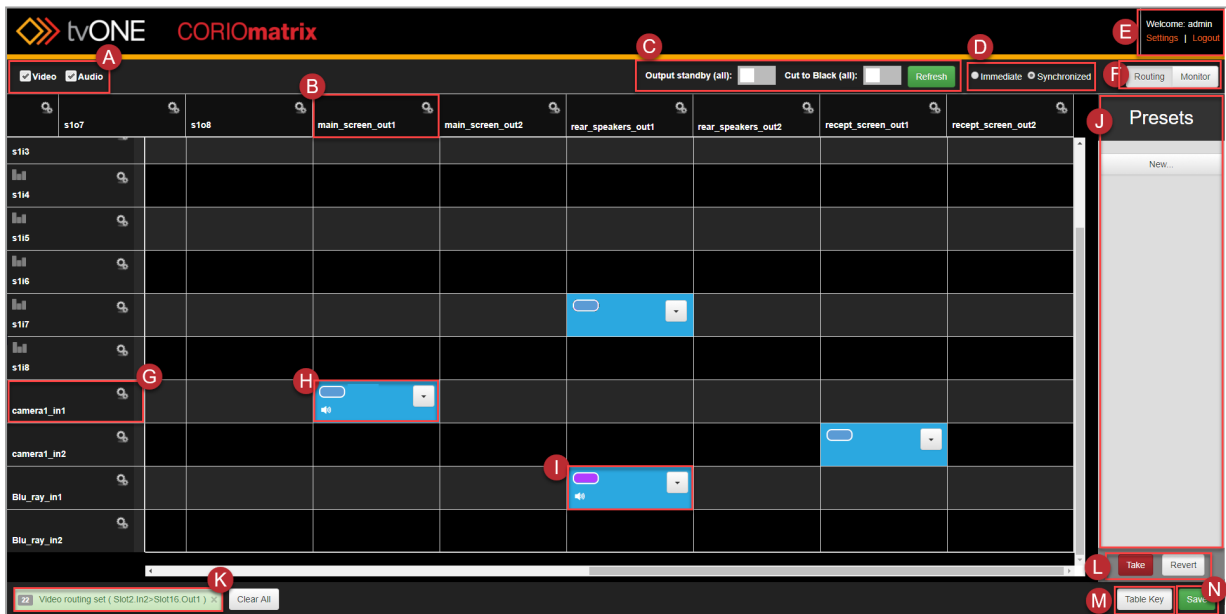
About CORIOmatrix UI

When you first log in to CORIOmatrix, you see the routing page, which lists all video and audio slots. It lists input slots vertically and output slots horizontally. You configure routing at the cross-points, in the cells where the inputs and outputs intersect.

The default names are sequential slot numbers. An *i* means input and *o* means output. For example, if the physical module in slot two has four inputs, `s2i4` is slot 2 input 4. Audio inputs have three bars above their name. Other inputs are video.



If the display panes overlay each other, select `Ctrl + F5` to clear the cache. This sometimes happens when you connect after adding or removing modules from the CORIOmatrix.



Choose video routing, audio routing, or both.

A



This does not just affect the view. It also affects what routing is applied when you select a cell. For example, in audio mode, any changes you make will only affect audio routing, not any video routing associated with the cell.

H

Video routing shows as a cell with a blue lozenge.

In this example, the video from camera 1 is playing on the main screen.

B

Outputs appear along the top. Give your output ports useful names.

You see a padlock icon if the output requires HDCP.

I

Audio routing shows as a colored lozenge. Yellow means the audio is in audio-follows-video mode. Purple means the audio is in breakaway mode.

In this example, the audio from the Blu-ray is playing from the rear speakers.

C

- Switch AV outputs to standby to save power. Does not apply to monitoring module or SDI outputs.
- Cut all displays to black.
- Refresh reloads the routing table with updated data from your CORIOmatrix. It does not change any settings.

J

Context-sensitive pane.

In this example, the pane shows presets. You can view, create, and delete presets here.

D

Choose whether to see changes you make on your displays in real time with Immediate mode, or to make changes and then send them to your displays when you select **Take** in Synchronized mode.

See Immediate and synchronized modes on page 29.

K

See the status of, and information about, the last action that CORIOmatrix UI performed.

Close the note to see the previous note.

E

Open Settings, or log out of CORIOmatrix UI.

L

In Synchronized mode, select **Take** to send your configuration to your outputs. You can also select **Revert** to revert to the routing configuration before you selected **Take**.

They are not relevant in Immediate mode.

See Immediate and synchronized modes on page 29.

F

If you have a Monitor card, you can select a montage of your displays instead of the routing table.

M

View the meanings of symbols and colors used in CORIOmatrix UI.

G

Inputs appear down the left-hand side, with a green bar indicating valid sources detected.

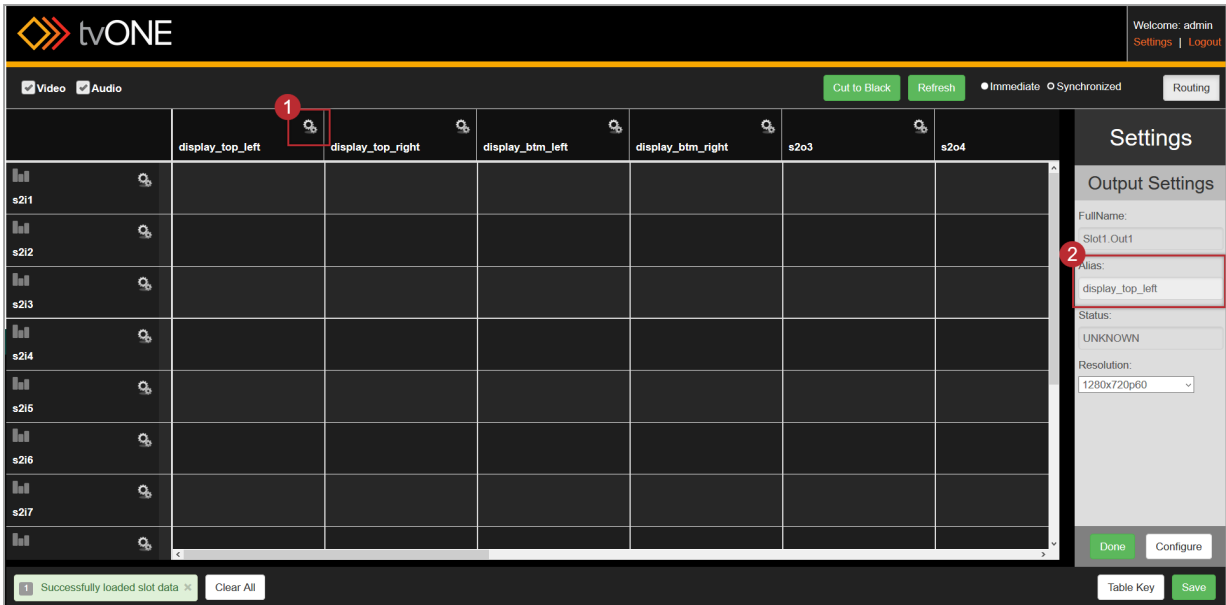
Give your input ports useful names.


N

Select to save your configuration.

Naming input and output ports

We recommend that you name your input and output ports. Use names that describe what is connected to the port. For example, you could use the name `display_top_left` for the port connected to the top left display of a 2x2 arrangement of displays.

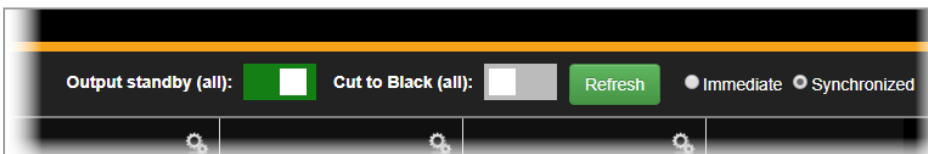


1. In CORIOmatrix UI, find the input or output port you want to name, and select .
2. Enter a useful name for the port.

Port names can be up to 19 characters, must start with a letter, and can contain letters, numbers, and underscores.

Output standby and cut to black


There are two options for remotely switching off the output displays.



Output standby

To save power, select Output standby to immediately switch all AV outputs to standby.

When this mode is active, the selector changes from gray to green and a standby icon is displayed on all outputs that are in standby mode. You can configure this for each output.

 Standby does not affect the optional monitoring module, SDI modules, or any monitors that do not sleep when the signal is turned off.

Cut to Black

Select Cut to Black to make all output devices display black.


When this mode is active, the selector changes from gray to green.

If you want to save power, use Standby instead.

Testing your installation

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

 Remember to save your settings before you log out or power down your CORIOmatrix.

Settings


To access settings for all input and output slots that have modules in them, select **Settings**. You see a tabbed window where you can configure and manage the settings of your input and output slots and view system, user, and network settings. You can also backup, restore, and reboot your CORIOmatrix.

To access settings for one specific slot, view the routing table and select  beside the slot's name. You see a Settings pane on the right.

In this section

Settings pane for inputs	16
Settings pane for outputs	18
Settings window - system tab	20
Settings window - slot status tab	20
Settings window - networking tab	22
Changing passwords	23
Backup to SD, restore to SD, and reboot	23

Settings pane for inputs

1. In the routing table, select an input slot from the list down the left side.
2. Select  beside the slot's name.
3. You see a Settings pane on the right. The module in the slot determines what fields and buttons you see.
4. Select **Configure** to see more fields. For example:

General Settings			
Name	s3i1	Full name	Slot3.In1
Status	INVALID	Card type	DVI_U
Input type	DVI/HDMI	HDMI found	Not_Found
Aspect ratio	4:3	HDCP protection	false
Color space	Auto	Measured resolution	
Source loss color	Blue	EDID filename	s3i1.edd
Brightness (-30 - 30)	0	Contrast (30 - 130) (%)	100
Overscan	0	H Phase	0
Monitor audio bars	On	Audio	false
HDCP enabled	Supported		

Audio Follow Video Setting (AFV)		
	Input	
	Source	Channel
AFVChoiceA	Slot3.In1	AudInA
AFVChoiceB	Slot3.In1	AudInB
AFVChoiceC	Slot3.In1	AudInC
AFVChoiceD	Slot3.In1	AudInD

General settings

CORIOmatrix detects modules and their capabilities. Which settings you see and can change depends on the capabilities of the module you selected.


Name	The name of the slot that is displayed in the CORIOmatrix UI. By default, this is a short version of the full slot name, for example, s2i1. However, we recommend you give your slots descriptive names. Select the name and enter a new one. For example, endoscope_1.	Full name	The long form default name of the slot. For example Slot2.In1. You can't edit this.
Status	The slot status: OK, UNKNOWN, or INVALID.	Card type	The type of card you can put in the selected slot. For example: DVI_U.
Aspect ratio	You can select a different aspect ratio.	HDMI found	Indicates whether the selected module supports HDMI
Color space	This defaults to Auto for color space mapping, but you can select other values, including Black, RGB, and YUV.	Measured resolution	Displays the resolution of the source, if it's video. If the resolution is blank or incorrect, you can change it using CORIOdiscover and then selecting Resolution Editor.
Source loss color	You can select a color that will be displayed if the signal from this input is lost.	EDID filename	Displays the input's EDID name. This is the default slot name with .edd appended. If you need to use other EDIDs, please contact customer support.

Brightness (-30 - 30)	You can adjust the brightness of your input to match output.	Contrast (30 - 130) (%)	You can adjust the contrast of your input to match output
Overscan	You can set the input crop values. The number you enter here is the number of pixels cropped from top and bottom. The left and right will be adjusted to maintain the aspect ratio.	H Phase	You can adjust the horizontal position of component analog input, measured in lines. Enter a value between -100 and 100.
Monitor audio bars	Whether to display audio bars beside the name of this audio module.	Audio	Displays true or false to indicate if audio is
HDCP enabled	Indicates whether the module is HDCP enabled.		

Audio Follow Video Setting (AFV)

For each audio channel, you can select a source slot and channel.

Settings pane for outputs

1. In the routing table, select an output slot from the list along the top.
2. Select  beside the slot's name.
3. You see a Settings pane on the right. The module in the slot determines what fields and buttons you see.
4. Select Configure to see more fields. For example:

Settings (Slot16.Out2) ×

General Settings

Name	s16o2	Full name	Slot16.Out2
Resolution	1280x720p60	Card type	HDBASET
Source switching	Fade through Black	HDMI found	Not_Found
Genlock source	NULL	Genlock enable	Off
Aspect ratio	4:3	Color space	Auto
Display type	Monitor	HDCP active	false
Analogue output type	RGBHV	HDCP downstream	HoldOn
Red gamma (0.30 - 2.30)	1	Monitor audio bars	On
Green gamma (0.30 - 2.30)	1	Audio	Off
Blue gamma (0.30 - 2.30)	1	Reach mode	Auto

CORIOmatrix detects modules and their capabilities. Which settings you see and can change depends on the capabilities of the module you selected.


Name	The name of the slot that is displayed in the CORIOmatrix UI. By default, this is a short version of the full slot name, for example, s16o2. However, we recommend you give your slots descriptive names. Select the name and enter a new one. For example, endoscope_1.	Full name	The long form default name of the slot. For example Slot16.Out2. You can't edit this.
Resolution	You can select a different resolution.	Card type	The type of card you can put in the selected slot. For example: HDBaseT.
Source switching	When you switch the output's source, the display fades through black. You can change this to Freeze and Cut by selecting from the dropdown.	HDMI found	Indicates whether the selected module supports HDMI.
Genlock source	Select the input slot that uses Genlock.	Genlock enable	Indicates whether Genlock is on or off.
Aspect ratio	You can select a different aspect ratio.	Color space	This defaults to Auto for color space mapping, but you can select other values, including Black, RGB, and YUV.
Display type	The type of output display, for example, Monitor, Projector, or Repeater.	HDCP active	Indicates whether HDCP is active.
Analogue output type	The type of analogue output, for example, RGBHV, RGBS, RGsB, or YUV.	HDCP downstream	<p>If HDCP enabled, select how repeater data is handled.</p> <ul style="list-style-type: none"> ■ HoldOn: the output is permanently HDCP enabled - if the display device is HDCP compliant. This is the default. ■ KeepOff: disables HDCP on the output. This means only non-HDCP compliant displays will work on the output. ■ FollowSources: HDCP for the output is on if supported by the source stream and the downstream device.
Red gamma (0.30 - 2.30)	You can change the value here for fine adjustment of red in the output image.	Monitor audio bars	Whether to display audio bars beside the name of this audio module.
Green gamma (0.30 - 2.30)	You can change the value here for fine adjustment of green in the output image.	Audio	The audio output for this module: Off, AFV, or Breakaway.

Blue gamma (0.30 - 2.30)

You can change the value here for fine adjustment of blue in the output image.

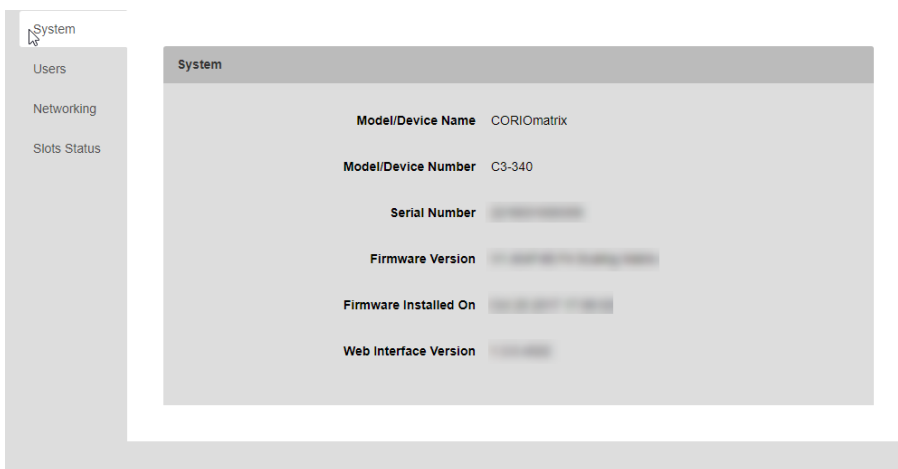
Reach mode

For HDBaseT modules, you can select Auto, LongReach, or Standard.

 Use with caution. This only works if the display device is in Auto mode.

Settings window - system tab

1. If you are looking at the routing table or monitor output, select Settings.
2. Select the System tab.
3. You see system details of your CORIOmatrix.



Settings window - slot status tab

1. If you are looking at the routing table or monitor output, select Settings.
2. Select Slot Status. You see lists of slots that contain modules. There are four groups: Inputs, Outputs, Audio Card Input, and Audio Card Output.

Slots Status for Inputs							
Slot	Name	Status	Card Type	HDMI	HDCP	Measured Resolution	Type
Slot1.In1	Camera_Front	INVALID	DVI_U	Not_Found	false		DVI/HDMI
Slot1.In2	Camera_Rear	INVALID	DVI_U	Not_Found	false		DVI/HDMI
Slot2.In1	Blu_Ray_1	INVALID	DVI_U	Not_Found	false		DVI/HDMI
Slot2.In2	Blu_Ray_2	OK	DVI_U	Not_Found	false	720x480p59.94	DVI/HDMI
Slot3.In1	DVI_Test_Pattern	OK	DVI_U	Not_Found	false	1280x720p60	DVI/HDMI
Slot3.In2	Instructor_PC	OK	DVI_U	Found	false	1920x1200p60cvt-rb	DVI/HDMI
Slot4.In1	SDI_1	OK	SDI_3G	Not_Found		1920x1080p23.98	
Slot4.In2	SDI_2	OK	SDI_3G	Not_Found		1920x1080p23.98	

Slots Status for Outputs						
Slot	Name	Status	Card Type	HDMI	HDCP Active	Source Switching
Slot5.Out1	CAB1_DVI_4	UNKNOWN	DVI_U	Not_Found	false	Freeze and Cut
Slot5.Out2	CAB1_DVI_3	UNKNOWN	DVI_U	Not_Found	false	Fade through Black
Slot6.Out1	INSTRUCTOR_C4	UNKNOWN	DVI_U	Not_Found	false	Fade through Black
Slot6.Out2	INSTRUCTOR_C3	UNKNOWN	DVI_U	Not_Found	false	Fade through Black
Slot7.Out1	INS_SDI_1	UNKNOWN	SDI_3G	Not_Found		Fade through Black
Slot7.Out2	INS_SDI_2	UNKNOWN	SDI_3G	Not_Found		Fade through Black
Slot9.Out1	CAB1_DVI_5	UNKNOWN	DVI_U	Not_Found	false	Fade through Black
Slot9.Out2	CAB1_DVI_6	UNKNOWN	DVI_U	Not_Found	false	Fade through Black

Slot status for inputs

Slot	The long form default name of the slot. For example Slot1.In2. You can't edit this.
Name	The name of the slot that is displayed in the CORIOmatrix UI. By default, this is a short version of the full slot name, for example, s1i2. However, we recommend you give your slots descriptive names. Select the name and enter a new one. For example, endoscope_1.
Status	CORIOmatrix detects modules. It displays a status for each slot: OK, UNKNOWN, or INVALID.
Card Type	CORIOmatrix detects modules. It displays a card type for each slot. For example: DVI_U or SDI_3G.
HDMI	If the module supports HDMI, this is Found. Otherwise, it is Not_Found.
HDCP	If the module supports HDCP, this is true. Otherwise, it is false.
Measured Resolution	CORIOmatrix detects modules. When it can detect the resolution, it lists it. For example: 640x480p60.
Type	The type of connection, for example DVI/HDMI. You can select a different connection type from the dropdown.

Slot status for outputs

Slot	The long form default name of the slot. For example Slot14.Out2. You can't edit this.
Name	The name of the slot that is displayed in the CORIOmatrix UI. By default, this is a short version of the full slot name, for example, s14o2. However, we recommend you give your slots descriptive names. Select the name and enter a new one. For example, display_top_left for the port connected to the top left display of a 2x2 arrangement.
Status	CORIOmatrix detects modules. It displays a status for each slot: OK, UNKNOWN, or INVALID.

Card Type	CORIOmatrix detects modules. It displays a card type for each slot. For example: DVI_U or HDBASET.
HDMI	If the module supports HDMI, this is Found. Otherwise, it is Not_Found.
HDCP Active	If the module supports HDCP, this is true. Otherwise, it is false.
Source Switching	When you switch the output's source, the display fades through black. You can change this to Freeze and Cut by selecting from the dropdown.

Slot status for audio card input

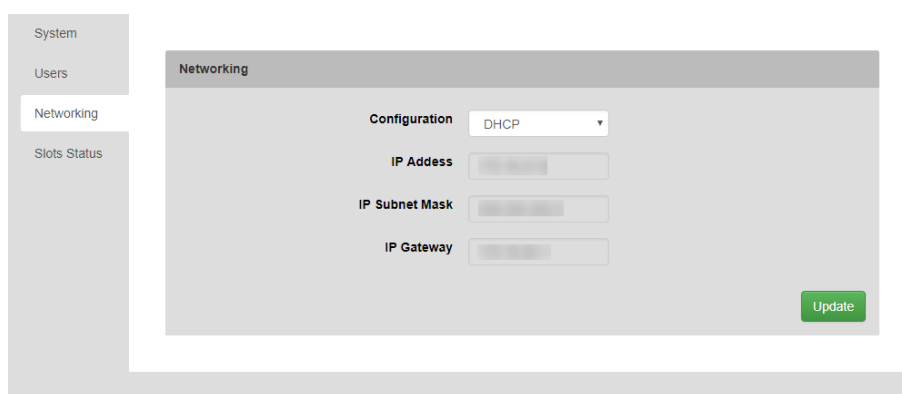
Slot	The long form default name of the slot. For example Slot9.In2. You can't edit this.
Name	The name of the slot that is displayed in the CORIOmatrix UI. By default, this a short version of the full slot name, for example, s9i2. However, we recommend you give your slots descriptive names. Select the name and enter a new one. For example, presenter_mic.
AudInA	The input audio channel.
Status	The audio card status.

Slot status for audio card output

Slot	The long form default name of the slot. For example Slot9.Out2. You can't edit this.
Name	The name of the slot that is displayed in the CORIOmatrix UI. By default, this a short version of the full slot name, for example, s9o2. However, we recommend you give your slots descriptive names. Select the name and enter a new one. For example, rear_speakers.
AudOutA	The output audio channel.
Status	The audio card status.

Settings window - networking tab

1. If you are looking at the routing table or monitor output, select Settings.
2. Select the Networkingtab.
3. You see IP details of your CORIOmatrix.



4. You can select Static or DHCP configuration. If using DHCP, the other fields are display-only.

Changing passwords

Administrators can change administrator and user passwords. Create and edit passwords in CORIOmatrix UI. Select **Settings > Users**.

The default password for administrators and users is `adminpw`.

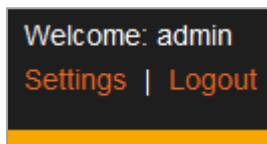
What's the difference between an administrator and a user?

Administrators can do all tasks, including setting up and editing video and audio routing, and accessing and changing settings.

Users can only load presets.

To change a password

1. Select **Settings > Users**.



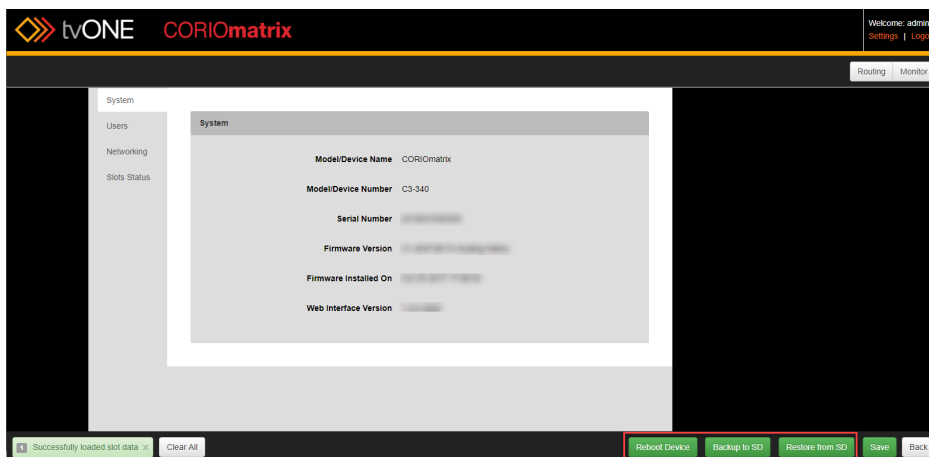
2. Find the administrator or user you want to change.
3. Enter the new password and confirm the new password.

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.

Backup to SD, restore to SD, and reboot

You can back up your CORIOmatrix settings to the integral SD card and restore from it.

You can also reboot directly from the UI.



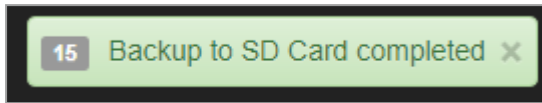
What settings are backed up and restored?

Most settings are saved to the SD card, including:

- Presets
- Configuration, including custom names
- Network settings
- Custom resolutions

Backup to SD

1. If you are looking at the routing table or monitor output, select Settings.
2. At the bottom of settings screen, select Backup to SD.
3. You see a progress bar, and then the notification area confirms the backup has finished:



Restore from SD

1. If you are looking at the routing table or monitor output, select Settings.
2. At the bottom of settings screen, select Restore from SD.
3. If you confirm the restore, you must log in again afterwards.

Reboot

1. If you are looking at the routing table or monitor output, select Settings.
2. At the bottom of settings screen, select Reboot Device.
3. Your CORIOmatrix immediately starts to reboot. When complete, you must log in again.

! If the browser times out, select Ctrl+F5 to manually refresh.

Use it

When your CORIOmatrix is set up and tested, you can explore more advanced routing options, save and manage presets, set up monitoring, create custom resolutions, and work with audio.

In this section

Routing	25
Routing overview	25
Slot names	26
Show/Hide video and audio slots	27
Configure routing connections	27
Color coding in routing table	28
Immediate and synchronized modes	29
Video routing	30
Audio routing	31
Presets	32
Creating presets	33
Editing presets	34
Loading a preset	34
Monitoring	34
Monitoring module	34
Auto monitor card - On	35
Edit and add views	35
Custom resolutions	38
Creating and editing custom resolutions from the UI	38
Creating and editing custom resolutions from command line	46

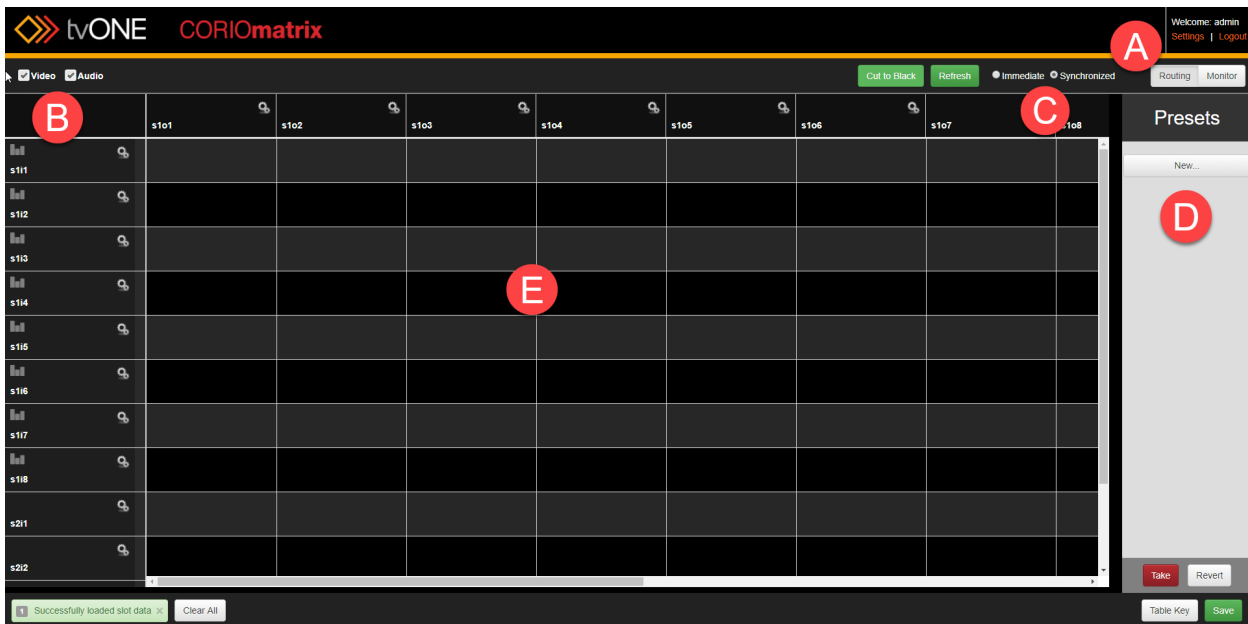
Routing

In this section

Routing overview	25
Slot names	26
Show/Hide video and audio slots	27
Configure routing connections	27
Color coding in routing table	28
Immediate and synchronized modes	29
Video routing	30
Audio routing	31

Routing overview

You set routing options on the Routing screen of the CORIOmatrix UI. To route an input to an output, you select the cell that is in the row of the correct input, and the column of the correct output.



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


A Switch between showing the Routing table in main workspace, as illustrated), the Monitor pane, if you have a monitor card, and Settings. The Settings option includes tabs for System information, Networking details, and Slots Status, and has buttons for rebooting the CORIOmatrix as well as backing up to and restoring from an SD card.

B Show/Hide Video and Audio slots. See Show/Hide video and audio slots on page 27.

Switch between Synchronized (default) and Immediate mode:

- C**
- In Synchronized mode, the routing table you set in the main workspace is only applied to the CORIOmatrix itself when you select Take.
 - In Immediate mode, the routing you set is applied to the CORIOmatrix immediately.

See Immediate and Synchronized modes on page 29.


D The Presets pane is shown by default, but when you Select  for a slot, that slot's Settings pane is displayed in its place.

E The routing matrix. You configure routing at the cross-points, in the cells where the inputs and outputs intersect. See Configure routing connections on page 27.

Slot names

Routing shows a table with inputs listed down the left-hand side, and outputs listed across the top. The default names are sequential slot numbers, an i for input or o for output, and a final number for the input or output on that card. For example, S2i1 is slot 2 input 1, and if the physical card in slot fifteen has two outputs, s15o2 is slot 15 output 2. Audio inputs are indicated by three bars above their name. Other inputs are video.

We recommend you give your slots descriptive names to indicate what they are connected to.

1. Select  to define a new name for a slot in the Settings pane.
2. Select the Alias field.

3. Enter a name. For example, Blu-ray for a port connected to a Blu-ray player. Names must be unique and start with a letter. They can contain letters, numbers, and underscores, and can be up to 19 characters long.
4. Select Done then Save.

Show/Hide video and audio slots

Many input cards support 4 stereo pairs of audio channels, including video cards. This is so there is sufficient bandwidth for all the audio data. It does not mean there are four separate tracks.

However, 4-input SDI and HDMI cards have two stereo pairs each, and audio-only cards have 8 stereo pairs of channels and so allow more complex audio routing.

You can choose to show just video routing, just audio routing, or both. To select the routing you see, select or clear Video and Audio in the top-left corner.

However, audio-only cards have 8 stereo pairs of channels and so allow more complex audio routing.

! This does not just affect the view. It also affects what routing is applied when you select a cell. For example, in audio mode, any changes you make will only affect audio routing, not any video routing associated with the cell.

Configure routing connections

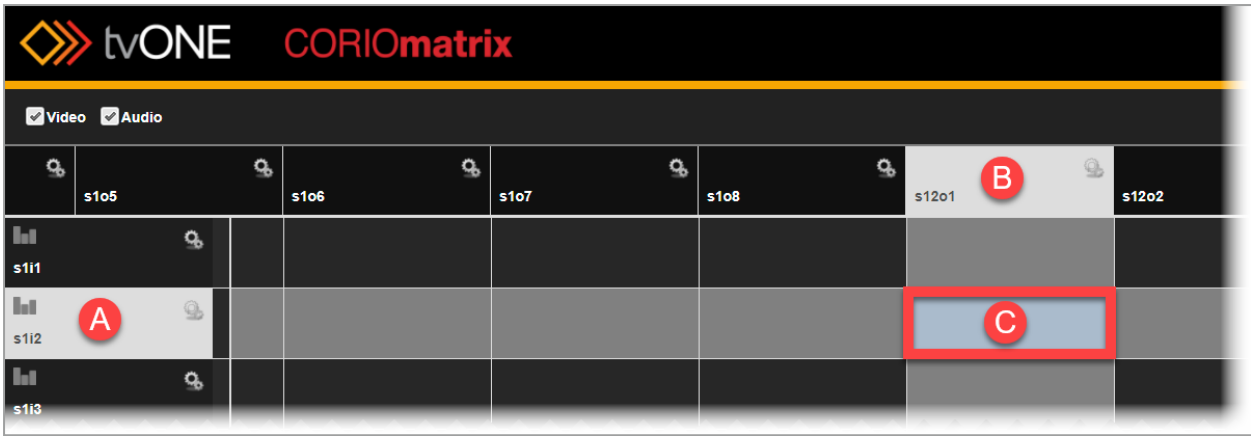
You configure routing in the CORIOmatrix interface by selecting cells that are the intersections of the inputs and outputs you want to connect. For example, the cards in the back of a CORIOmatrix may look like this:



A A DVI-Blu-ray player connected to a DVI-U input card in slot 1, input 2.

B A 720p display connected to a DVI-U output card in slot 12 output 1.

The corresponding routing table would look like this:



- A** Blu-ray player connected to slot 1, input 2.

- B** 720p display connected to slot 12 in output 1.

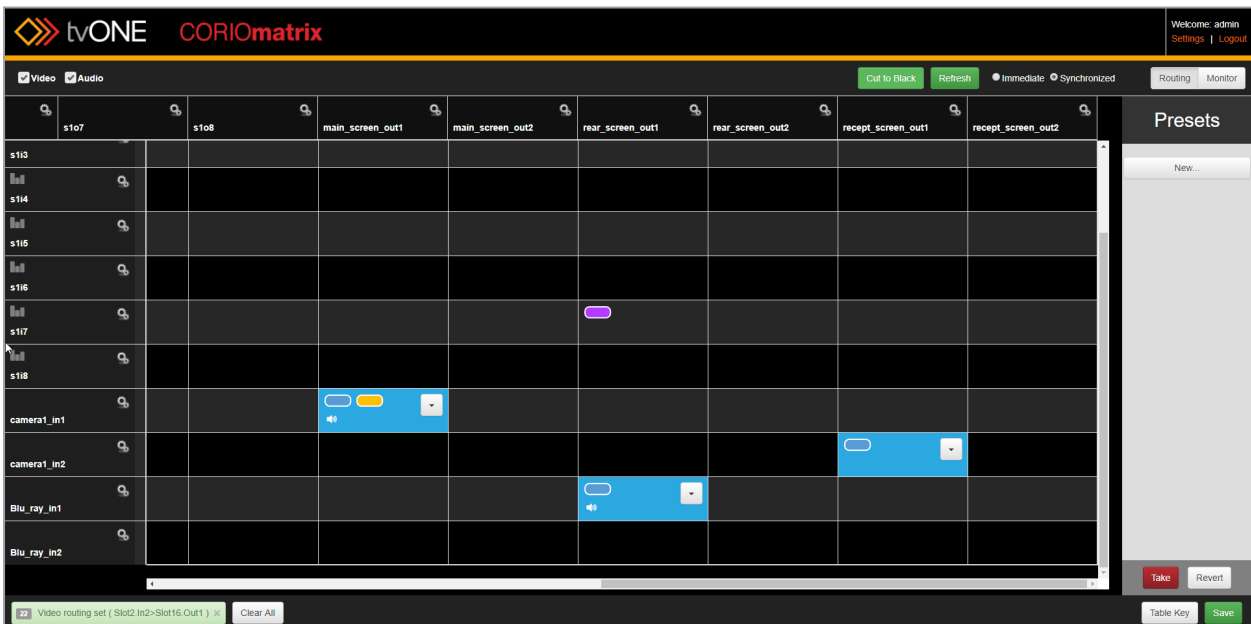
- C** The cell in the routing table to connect the Blu-ray player and 720p display.

Color coding in routing table







If you are in Synchronized mode, when you connect an input and output in the routing table, the cell turns blue until you apply the change to your CORIOmatrix. See Immediate and synchronized modes on page 29.

When you select a cell, the options available from the dropdown in the cell, and the color indicator in it, depend on what sorts of input and output are detected and configured.

- When you select a cell for a video input, it defaults to video routing and shows a blue lozenge.
- When you select a cell for audio input, it defaults to audio routing with purple or yellow lozenge.



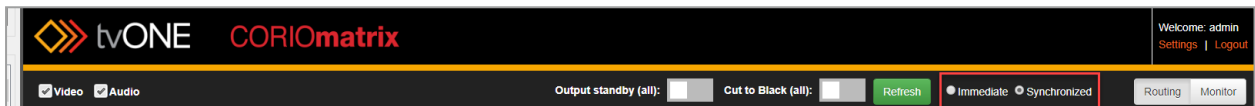
Select Table Key to see what the colors mean:

	Symbol	Description
Audio (AFV)		Single source
		Multi source
Audio (BreakAway)		Single source
		Multi source
Video		Video source
Audio		Audio routing On

Immediate and synchronized modes

The routing page works in either Immediate or Synchronized mode. Choose whether you want your routing changes to be applied in real time, or to set up multiple configurations, then apply them together.

Synchronized is the default, but you can select Immediate instead:



■ Immediate

Every routing configuration you set in the CORIOmatrix UI is immediately applied to the CORIOmatrix display modules.

There is no Revert option in this mode. However, you can Remove individual connections from the dropdown in the relevant cell.

■ Synchronized

You can configure routing for multiple modules without immediately affecting the CORIOmatrix display modules. When you change the routing in a cell, it turns blue until you apply the change.

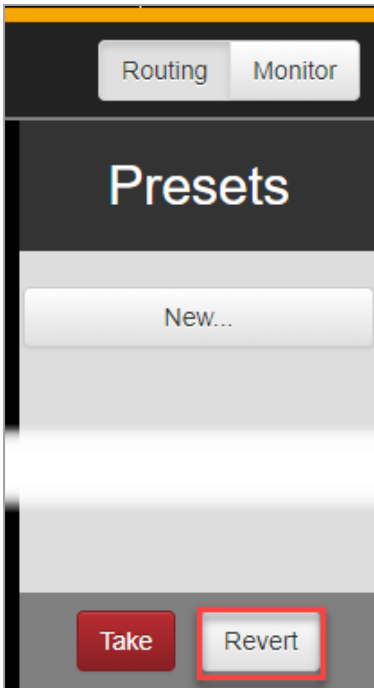
When you are ready to apply all the changes, select Take.



Make sure you select Take before you refresh or disconnect, otherwise you will lose any changes that you have not applied.

Revert

The Revert button is next to the Take button:



- In Immediate mode, Revert has no effect because each change is applied immediately.
- In Synchronized mode, select Revert to undo all changes that have not been applied by selecting Take. Queued commands are deleted and the routing table is refreshed to show the current live configuration.

Video routing

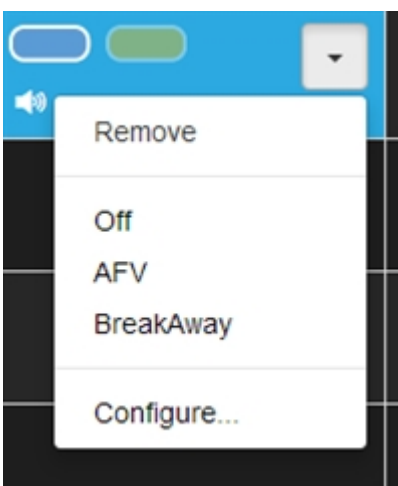
You configure audio and video connections on the Routing screen of the CORIOmatrix UI.

To route an input to an output, you select the cell that is at the intersection of the row of the input, and the column of the output.

For general principles and an illustrated example, see Routing overview on page 25.

Cell dropdown menu

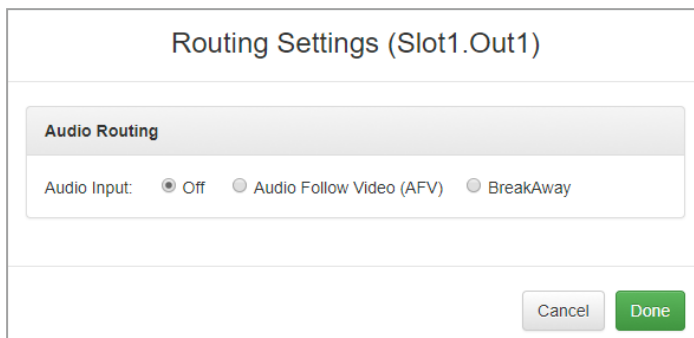
Each cell that connects an input and output has a dropdown menu. The options on that menu depend on the types of input and output, but always include Off, Remove and Configure:



- Select **Off** to disable audio settings. This will mean that no audio is routed.
- Select **Remove** to delete the connection between input and output in this cell.

If you are in Synchronized mode, you will be able to undo this by selecting **Revert**, but if you are in Immediate mode, there is no undo. See Immediate and synchronized modes on page 29.

- Select **Configure** to open the configuration dialog. Use this if you have video slots listed as well as audio ones, or want to use additional settings to change the slots:



In the configuration dialog, you can select the audio options. If you select **BreakAway**, you can change the audio slots. For the difference between Audio Follow Video and BreakAway, see Audio routing on page 31.

Audio routing

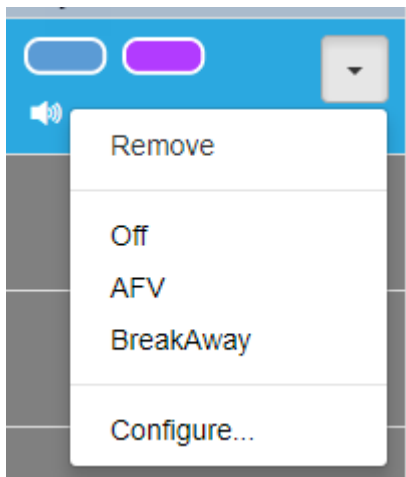
You configure audio and video connections on the **Routing** screen of the CORIOmatrix UI.

To route an input to an output, you select the cell that is at the intersection of the row of the input, and the column of the output.

For general principles and an illustrated example, see **Routing overview** on page 25.

Cell dropdown menu

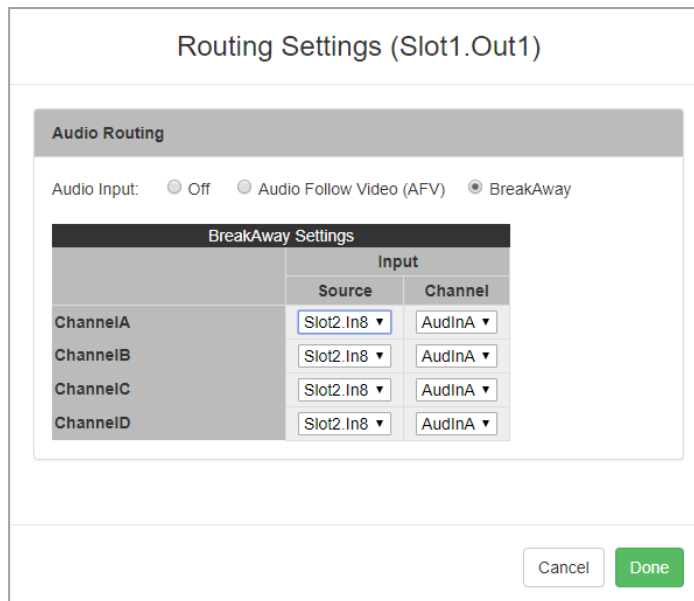
Each cell that connects an input and output has a dropdown menu. The options on that menu depend on the types of input and output, but always include **Off**, **Remove** and **Configure**:



- Select **Off** to disable audio settings. This will mean that no audio is routed.
- Select **Remove** to delete the connection between input and output in this cell.

If you are in Synchronized mode, you will be able to undo this by selecting **Revert**, but if you are in Immediate mode, there is no undo. See Immediate and synchronized modes on page 29.

- Select **Configure** to open the configuration dialog. Use this if you have video slots listed as well as audio ones, or want to use additional settings to change the slots:



AFV and BreakAway audio routing

There are two types of audio routing:

- **AFV** or Audio Follow Video

Audio is set by input: 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. If you change the video source, the audio source changes as well. Audio in AFV mode shows as a yellow lozenge in the routing table cell.

With AVF, the audio often comes from the initial source, but you can set the audio to come from another input. AFV audio sources are the default embedded source for any audio input, embedded or external. AFV audio channels are configured in the Input Settings or when you select *Configure* from the cell's dropdown menu.

- **BreakAway**

Audio is set by output: you define the audio source in relation to the output module, which could be a video 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 in the routing table cell.

Breakaway is the default for audio modules, which initially have the same source for video and audio input. To set audio to come from a different source, select *Configure* from the cell's dropdown menu.

Headphone jack

You can have a headphone jack on an audio module.

You can then select one of the eight audio output to listen to. You can also set the volume or mute it.

Presets

In this section

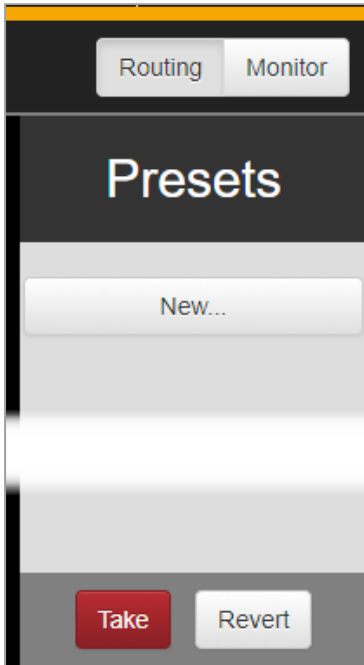
Creating presets	33
Editing presets	34
Loading a preset	34

Creating presets

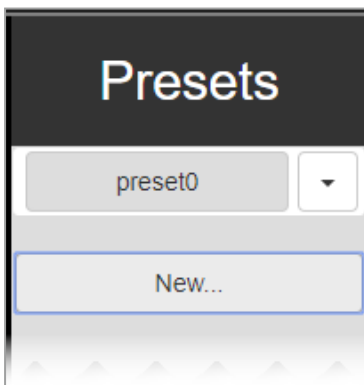
A preset stores information about a configuration, including video and audio routing, and transitions. You can save up to 50 presets and recall them later.

Create preset

1. Configure the routing that you want save.
2. If the pane on the right is showing Settings for a slot, select **Done** to display the Presets pane instead.



3. If you are in Synchronized mode, select **Take** to apply the routing settings to your CORIOmatrix.
4. Select **New...** to save the current configuration as a new preset.
5. If this is the first preset, preset0 will be added above. The numeric suffix increments for each subsequent preset.



6. Select the preset, then select the dropdown beside it, select **Rename**, type a descriptive name, and select **Save**.

Rename preset

We recommend you give your presets descriptive names.

1. Select the dropdown beside a preset.
2. Select **Rename** and enter a name. It must be unique, begin with a letter and use only alphanumeric characters and underscores.

Edit preset

1. Select a preset.
2. Change the routing configuration in the main workspace.
When you make the first change, the preset changes from green to grey in the list of presets.
3. Select **Take** to apply the changes to the CORIOmatrix.
4. To save changes to the preset, select the dropdown beside it, and then select **Save**.
The preset changes from grey back to green.

Editing presets

Rename preset

We recommend you give your presets descriptive names.

1. Select the dropdown beside a preset.
2. Select **Rename** and enter a name. It must be unique, begin with a letter and use only alphanumeric characters and underscores.

Edit preset

1. Select a preset.
2. Change the routing configuration in the main workspace.
When you make the first change, the preset changes from green to grey in the list of presets.
3. Select **Take** to apply the changes to the CORIOmatrix.
4. To save changes to the preset, select the dropdown beside it, and then select **Save**.
The preset changes from grey back to green.

Delete preset

To delete a preset, select the dropdown beside its name and then select **Delete** .

Loading a preset

1. To switch from the current configuration to a preset, select it from the list of presets.
2. The preset takes effect immediately, regardless of whether you are in **Immediate** or **Synchronized** mode.

Monitoring

In this section

Monitoring module	34
Auto monitor card - On	35
Edit and add views	35

Monitoring module

CORIOmatrix has an optional monitoring module which can be installed in any available slot on a CORIOmatrix mini or any slot that is not in the top row of a CORIOmatrix. Read more about modules on page 9.

If your CORIOmatrix has a monitor module, you see a **Monitor** option in the top right corner of the Routing page. Select this to see all input and output modules on a single screen in the CORIOmatrix UI. This means you do not need an external multiviewer with distribution amplifier.

Each cell shows the content passing through an input or output module, identified by the slot names.

You cannot change the routing here, but you can change how you see the result of the routing combinations.

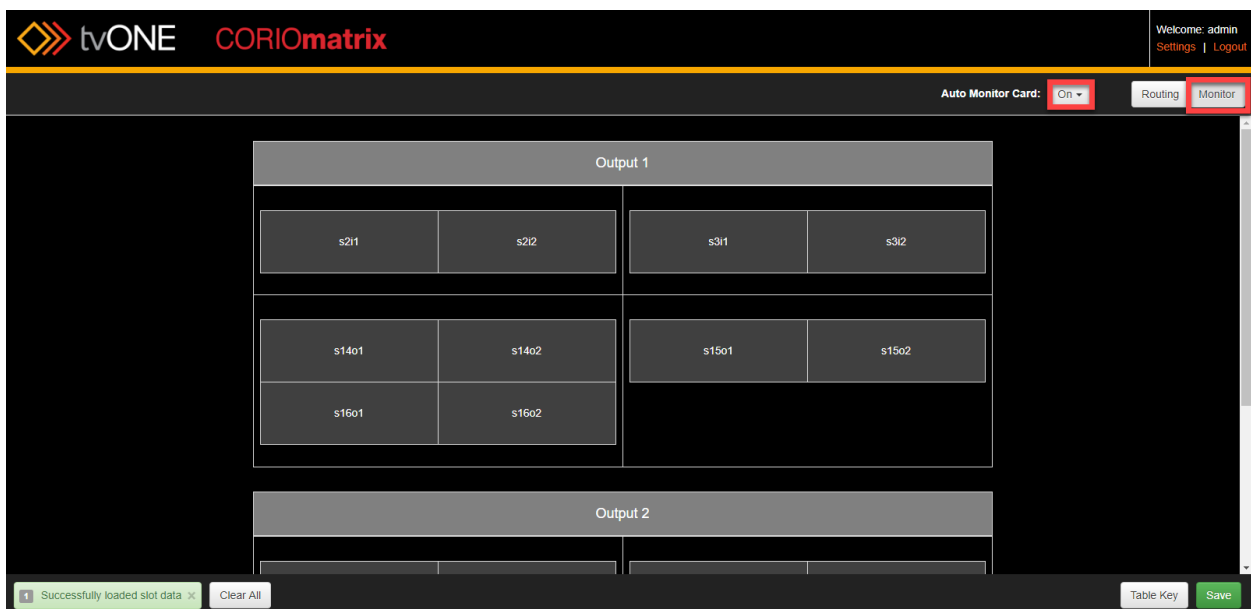
Auto monitor card - On

On the Monitor page of the CORIOmatrix UI, select **Auto Monitor Card** to **On** to quickly see what content is passing through input and output modules, without having to configure the position of each on the Monitor page.

You see all detected input and output modules, listed sequentially. Each grey cell shows the video passing through the input or output module. If there is audio, you see three grey bars at the top left of the cell.



If you have already configured monitoring layouts with **Auto Monitor Card Off**, and you then select **On**, when you next select **Off**, the layout will be the default, not the one you saved.



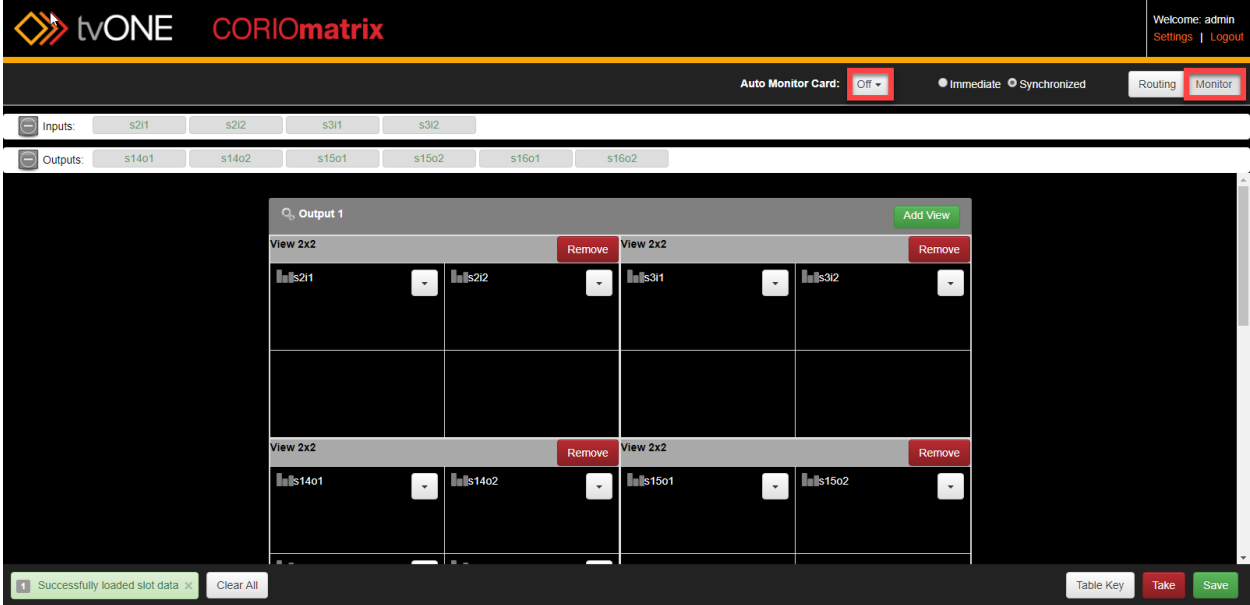
Two output layouts are listed because the monitor module has two output connectors. They have the same configuration on this Monitor page.

Edit and add views

When you select **Monitor**, **Auto Monitor Card** is **Off**. In this mode, you can edit and add views of the content passing through input and output modules.

You see a default layout, with all detected modules listed sequentially, in two regions of the page:

- Two rows along the top list the names in green text, indicating the inputs and outputs listed in the layout below. If you remove one from the layout, its name changes to black text.
- In the output layout below, cells are grouped in views of 2x2. Each cell shows the video passing through. If there is audio, you see three grey bars at the top left of the cell.



Edit resolution

To change the resolution of the monitor output, select  next to Output 1 or Output 2 to open the Settings pane. You can select a different resolution for one or both outputs from a dropdown:

The screenshot shows a mobile application settings screen. At the top is a dark header with the word "Settings" in white. Below this, there are two sections for configuring outputs. Each section has a title, a "FullName:" label with a text input field, an "Alias:" label with a text input field, and a "Resolution:" label with a dropdown menu. At the bottom of the screen is a green button labeled "Done".

Settings

Output 1

FullName:
Slot13.Out1

Alias:
s13o1

Resolution:
1280x720p60 ▼

Output 2

FullName:
Slot13.Out2

Alias:
s13o2

Resolution:
1280x720p60 ▼

Done

Edit view

A view is a group of cells: 2x2, 4x4, 4x2, or 8x8. You can rearrange the views in several ways.

- Select a module that is not currently in a view. Its name will be in black text. Drag it from the list in the row along the top into an empty cell in the output layout.
- Select and drag a module from one cell to an empty cell.
- Select and drag a view to the position of another, which will overwrite it. Modules that were in the overwritten view are then available to add to an empty cell.

Edit cell

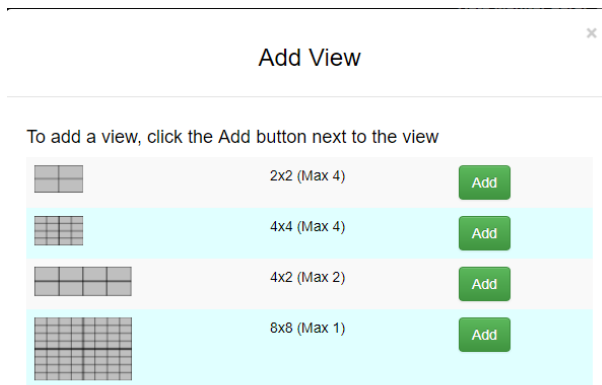
Each cell that links to a module has a dropdown:

- Select *Remove* to clear the cell. The module is now available to be linked to another cell, so its name changes to black text in the row along the top of the page.
- Select *AudioBars* to switch between displaying and not displaying audio bars.

Add view

1. Make sure the modules you want to add are not already in the Output 1 display. If they are available, select *Remove* for views or individual cells.

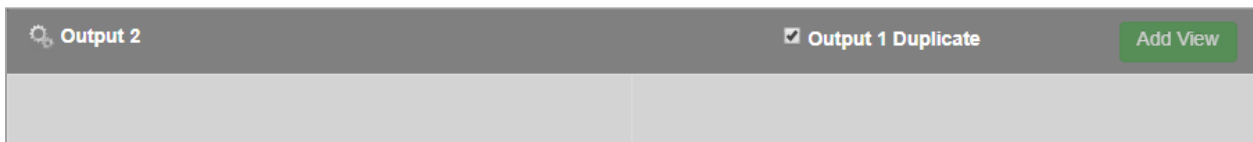
- Select Add View.
- Select the number and layout of cells for the view. The numbers in brackets are the maximum number of that view that you can include in the output layout.



- Populate the view by selecting and dragging available modules from the row along the top. They are the ones with names in black text.
- Select Take and then Save.

Duplicate output

A second output layout is listed below the first because the monitor module has two output connectors. However, it does not contain any views.



If you deselect Output 1 Duplicate, the Add View button is enabled. You can then add views, as for Output 1. However, each module can be displayed only once on the Monitor page. If a module is currently shown in Output 1, you must remove it from there before you can add it to Output 2.

Synchronized and Immediate

You can choose whether changes you make on the Monitor page are Immediate or Synchronized. This works in a similar way to the Routing page, but is separate: you can have one in Immediate and the other Synchronized.

- Synchronized: the layout you configure takes effect when you select Take and Save.
- Immediate: each change you make to the layout takes effect immediately.

Custom resolutions

In this section

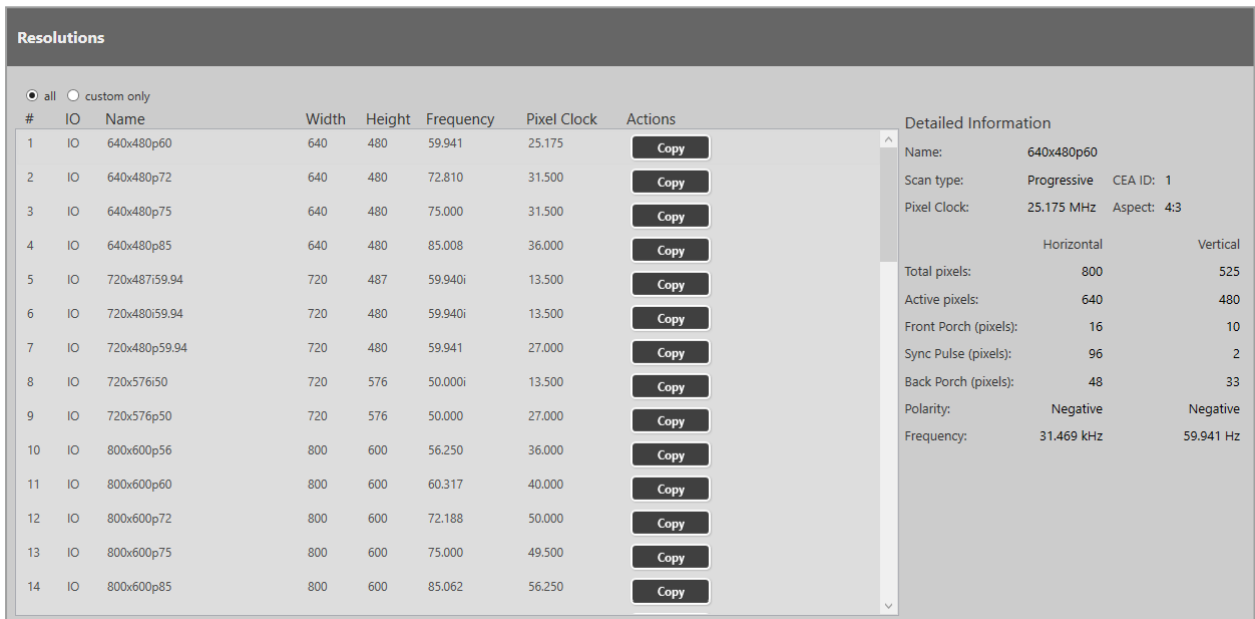
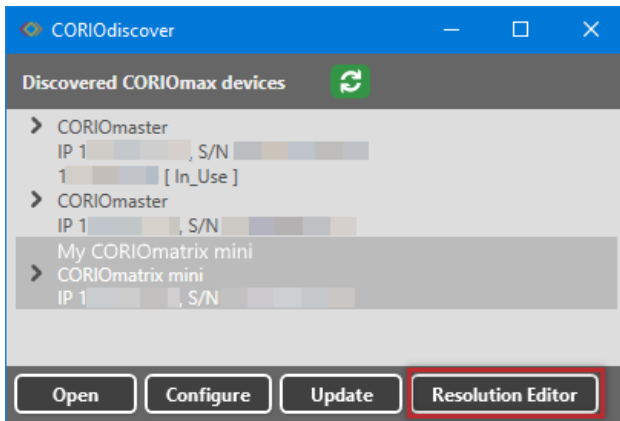
Creating and editing custom resolutions from the UI	38
Creating and editing custom resolutions from command line	46

Creating and editing custom resolutions from the UI

You can use CORIOdiscover to create and save up to 10 custom resolutions to use on your 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.

In this subsection

About custom resolutions	39
Custom resolution options	41
Creating and editing custom resolutions	43
Creating a custom resolution from a video standard	44
Copying and editing a standard resolution	45
Deleting a custom resolution	46

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 ✕	
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 Enter a useful name for your resolution.

General naming rules

Note: it is possible to create more than one custom resolution with the same name. Check the list of custom resolutions available from Resolutions.

Names:

- Can be 1–23 characters long.
- May only contain valid, printable ASCII characters.
- Must not contain spaces.

Best practice naming rules

For best results, use the name format below:

`[width]x[height][scantype][rate][optional]`

Where:

- `[width]` and `[height]` are values in pixels
- `X` is the letter x
- `[scantype]` is i or p
- `[rate]` is the frame rate, and can contain a decimal point
- `[optional]` is any additional, optional, text

Scan type

Choose between progressive and interlaced scanning.

Option	Notes									
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 40.</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>									
Back Porch	<p>The back porch is the gap between the end of the sync pulse and the start of the active video, in pixels.</p> <p>Enter a number of pixels between 1 and 2000 to set the horizontal back porch.</p> <p>Enter a number of pixels between 1 and 100 to set the vertical back porch.</p>									
Polarity	<p>The sync pulse separates the video fields into positive and negative polarity.</p> <p>Choose between positive and negative.</p>									
Frequency	<p>You only need to enter values here if the specification for your source or display specification does not include a value for pixel clock.</p> <p>Enter a value in kHz to set the horizontal frequency, and a value in Hz to set the vertical frequency.</p>									

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 ▾ ▾

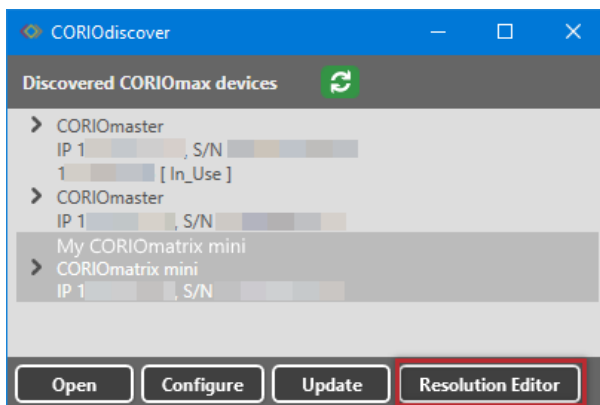
Desired Frame Rate: 60 ▾ ▾

Scan type: Progressive ▾

Option	Notes
Version	Enter the version number of the VESA CVT standard you want to use.
Factor	<p>The factor converts from an exact frame rate into an NTSC-compatible vertical frequency. Choose between 1000 and 1001.</p> <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. <p>For example, select 1001 if your desired frame rate is 60, but you need a vertical frequency of 59.94.</p>
Desired Active pixels	<p>Enter a number of pixels to set the width and height of the displayed area.</p> <p>The highest resolution we support is 1920x1200p60, with reduced blanking. See the VESA standard for other CVT standard resolutions.</p>
Desired Frame Rate	Enter a frame rate in Hz.

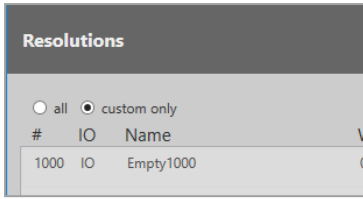
Creating and editing custom resolutions

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

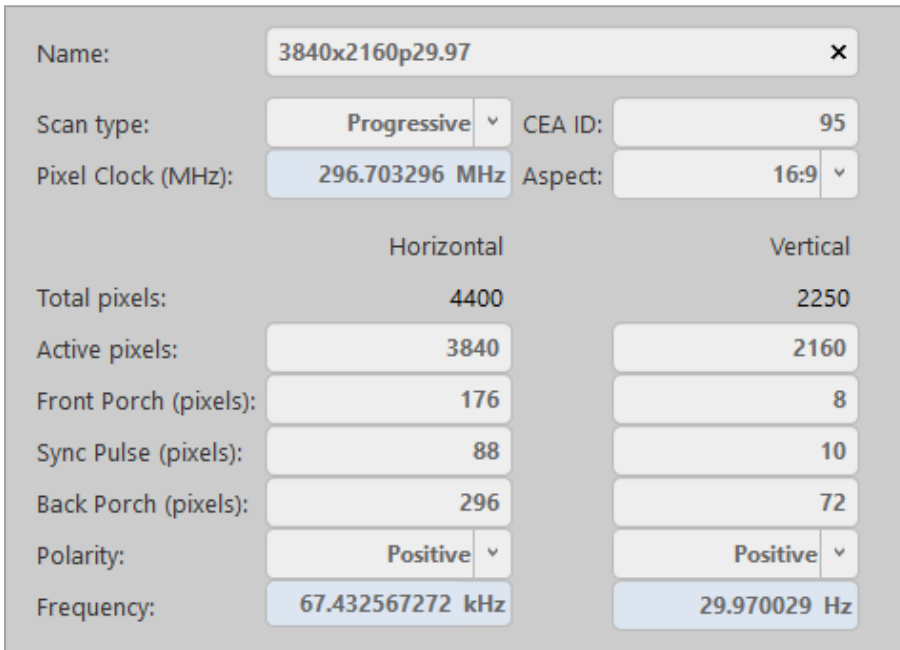


2. Enter your administrator username and password.
The default username is admin, and the default password is adminpw.

3. Select custom only.



4. Find an empty custom slot, or choose a custom resolution to edit, and then select Edit.
5. Enter a useful name for your custom resolution.
6. Enter values for any other options as needed.

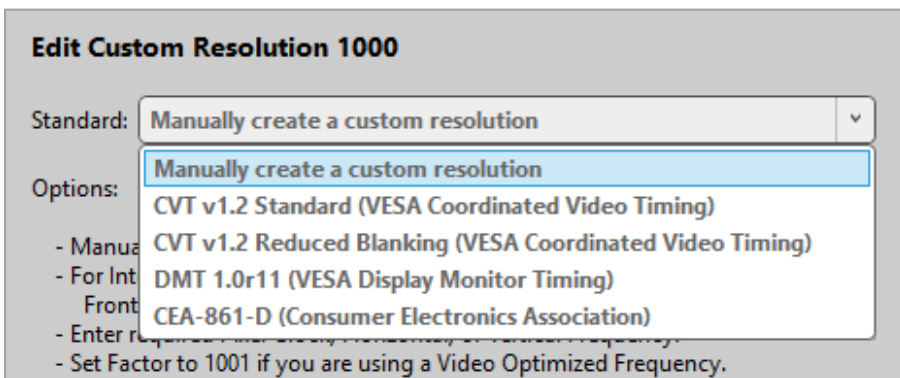


Read about rules for names and other options on page 41.

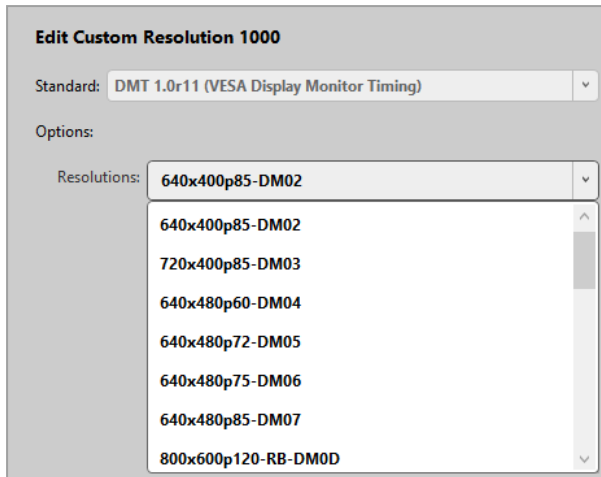
Creating a custom resolution from a video standard

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.



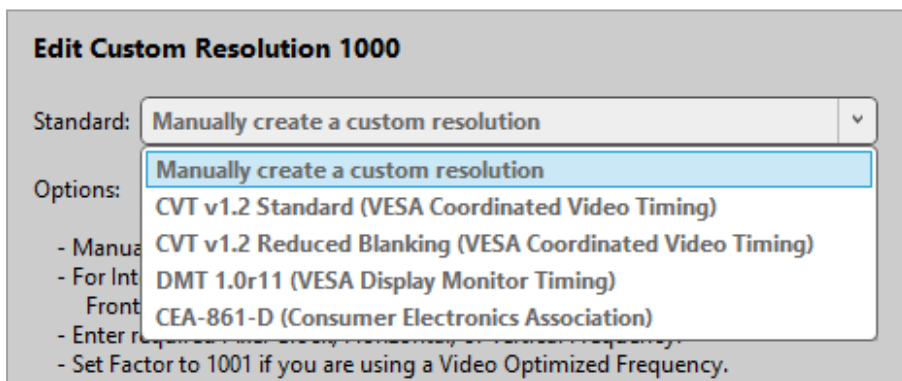
3. Select a resolution from the list.



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 41.

Copying and editing a standard resolution

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

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

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



2. Edit your new custom resolution.

For full instructions, see Creating custom resolutions on page 43.

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.

Creating and editing custom resolutions from command line

You can use external controllers to create and save up to 10 custom resolutions to use on your 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.

Once you have configured a custom resolution, enter `System.SaveAllSettings()` to save your changes.

In this subsection

About custom resolutions	47
Listing resolutions from command line	48
Name	49
Aspect	51
Framelock	51
Pixel Clock	51
Scan type	52
Active pixels	52
Front Porch	52
Sync Pulse	53
Back Porch	53
Polarity	53
CEA ID	54
Origin	54
List available resolutions for a slot	54
List available resolutions for a slot by index	55
View information about a specific resolution	55
View current resolution of an output	56
Assign a resolution to an output	56
View the resolution of a specific input	56

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.

Listing resolutions from command line

You can view settings for built-in resolutions, and view and edit settings for custom resolutions. Custom resolutions are numbered from Resolution1000 to Resolution1009.

Description	List the attributes of this resolution.
Command	<code>Resources.Resolutions.Resolution1</code>

Examples for a built in resolution

```
Resources.Resolutions.Resolution1
Resources.Resolutions.Resolution1.Name = 640x480p60
Resources.Resolutions.Resolution1.Aspect = 4:3
Resources.Resolutions.Resolution1.CanFramelock = No
Resources.Resolutions.Resolution1.PixelClock = 25175000
Resources.Resolutions.Resolution1.ScanType = p
Resources.Resolutions.Resolution1.HActive = 640
Resources.Resolutions.Resolution1.HFrontPorch = 16
Resources.Resolutions.Resolution1.HSyncPulse = 96
Resources.Resolutions.Resolution1.HBackPorch = 48
Resources.Resolutions.Resolution1.VActive = 480
Resources.Resolutions.Resolution1.VFrontPorch = 10
Resources.Resolutions.Resolution1.VSyncPulse = 2
Resources.Resolutions.Resolution1.VBackPorch = 33
Resources.Resolutions.Resolution1.HSyncPolarity = N
Resources.Resolutions.Resolution1.VSyncPolarity = N
Resources.Resolutions.Resolution1.CEAID = 1
Resources.Resolutions.Resolution1.Origin = tvONE
!Done Resources.Resolutions.Resolution1
```

Examples for a custom resolution

```
Resources.Resolutions.Resolution1000
Resources.Resolutions.Resolution1000.Name = MyResolution
Resources.Resolutions.Resolution1000.Aspect = 4:3
Resources.Resolutions.Resolution1000.PixelClock = 111750000
Resources.Resolutions.Resolution1000.ScanType = p
Resources.Resolutions.Resolution1000.HActive = 1920
Resources.Resolutions.Resolution1000.HFrontPorch = 96
Resources.Resolutions.Resolution1000.HSyncPulse = 192
Resources.Resolutions.Resolution1000.HBackPorch = 288
Resources.Resolutions.Resolution1000.VActive = 720
```

```

Resources.Resolutions.Resolution1000.VFrontPorch = 3
Resources.Resolutions.Resolution1000.VSyncPulse = 10
Resources.Resolutions.Resolution1000.VBackPorch = 15
Resources.Resolutions.Resolution1000.HSyncPolarity = N
Resources.Resolutions.Resolution1000.VSyncPolarity = P
Resources.Resolutions.Resolution1000.CEAID = 0
Resources.Resolutions.Resolution1000.Origin = Example
!Done Resources.Resolutions.Resolution1000

```

Changing resolution options from command line

Name

Description	Change the name for this resolution.
Command	<code>Resources.Resolutions.Resolution1000.Name</code>

Example

```

Resources.Resolutions.Resolution1000.Name = NewCustomResolution
!Done Resources.Resolutions.Resolution1000.Name = NewCustomResolution

```

Naming rules

Note: it is possible to create more than one custom resolution with the same name. Check the list of custom resolutions available from `Resolutions`.

Names:

- Can be 1–23 characters long.
- May only contain valid, printable ASCII characters.
- Must not contain spaces.

Best practice naming rules

For best results, use the name format below:

```
[width]x[height][scantype][rate][optional]
```

Where:

- `[width]` and `[height]` are values in pixels
- `X` is the letter `x`
- `[scantype]` is `i` or `p`
- `[rate]` is the frame rate, and can contain a decimal point
- `[optional]` is any additional, optional, text

Default

The default Name is the string `EmptyNNNN` where `NNNN` is the number of the custom resolution. Note that `Resolution1000` is `Empty1000`, `Resolution1001` is `Empty1001`, `Resolution1009` is `Empty1009` and so forth.

```
Resources.Resolutions.Resolution1000.Name  
Resources.Resolutions.Resolution1000.Name = Empty1000  
!Done Resources.Resolutions.Resolution1000.Name
```

Aspect

If you are creating a custom resolution for a CORIOmatrix or CORIOmatrix mini, use an aspect ratio from the table below.

16:9	16:10	16:6
4:3	5:3	64:27
5:4	1:1	256:135

The default aspect ratio is 4:3.

Description	Set the aspect ratio for this custom resolution in the form width:height.
Command	<code>Resources.Resolutions.Resolution1000.Aspect</code>

Example

```
Resources.Resolutions.Resolution1000.Aspect = 16:6
!Done Resources.Resolutions.Resolution1000.Aspect = 16:6
```

FrameLock

Description	Read only. Tells you if can use a custom resolution with frameLock. If the command returns <i>yes</i> , the custom resolution is compatible with frameLock.
Command	<code>Resources.Resolutions.Resolution1Resolution1000.CanFrameLock</code>

Example

```
Resources.Resolutions.Resolution1000.CanFrameLock
Resources.Resolutions.Resolution1000.CanFrameLock = No
!Done Resources.Resolutions.Resolution1000.CanFrameLock
```

Pixel Clock

The valid range for the pixel clock is 13.5 MHz to 162 MHz, except for 4K resolutions. As the value in pixels is a function of resolution (including frame rate), the minimum and maximum value in pixel clock varies with the resolution. The maximum pixel clock at 1600x1200p60 is 162 MHz.

Supported values for pixel clocks for HDMI output cards, and supporting 4K 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

Description	Set the speed of the pixel clock in pixels per second.
Command	<code>Resources.Resolutions.Resolution1000.PixelClock</code>

Example

```
Resources.Resolutions.Resolution1000.PixelClock = 148500000
!Done Resources.Resolutions.Resolution1000.PixelClock = 148500000
```

Calculating pixel clock

To calculate a value for pixel clock, use this formula:

```
[pixel clock] = [horizontal total pixels] x [vertical total pixels] x [frame rate]
```

Where:

Pixel clock = frames/second

Frame rate = frames/second

For example, for 1920x1080 p60, horizontal total pixels=2200, vertical total pixels=1125, and frame rate=60. This gives pixel clock = 2200 x 1125 x 60 = 148500000

Scan type

The default scan type is progressive.

Description	Set the scan type to p for progressive scanning, or i for interlaced scanning.
Command	<code>Resources.Resolutions.Resolution1000.ScanType</code>

Example

```
Resources.Resolutions.Resolution1000.ScanType = i
!Done Resources.Resolutions.Resolution1000.ScanType = i
```

Active pixels

Enter a number of pixels between 64 and 3840 to set the width of the visible image.

Enter a number of pixels between 64 and 2528 to set the height of the visible image.

Description	Set the horizontal or vertical active pixels.
Command	<code>Resources.Resolutions.Resolution1000.HActive</code> <code>Resources.Resolutions.Resolution1000.VActive</code>

Example

```
Resources.Resolutions.Resolution1000.HActive = 1024
!Done Resources.Resolutions.Resolution1000.HActive = 1024
```

Front Porch

The front porch is the gap between the end of the active video and the start of the sync pulse, in pixels.

Enter a number of pixels between 1 and 2000 to set the horizontal and vertical front porch.

Description	Set the horizontal or vertical front porch, in pixels.
Command	<code>Resources.Resolutions.Resolution1000.HFrontPorch</code> <code>Resources.Resolutions.Resolution1000.VFrontPorch</code>

Example

```
Resources.Resolutions.Resolution1000.HFrontPorch = 96
!Done Resources.Resolutions.Resolution1000.HFrontPorch = 96
```

Sync Pulse

The sync pulse identifies the start of each row or frame of video.

Enter a number of pixels between 8 and 500 to set the horizontal sync pulse.

Enter a number of pixels between 10 and 100 to set the vertical sync pulse.

Description Set the horizontal or vertical sync pulse in pixels.

Command	<code>Resources.Resolutions.Resolution1000.HSyncPulse</code> <code>Resources.Resolutions.Resolution1000.VSyncPulse</code>
---------	--

Example

```
Resources.Resolutions.Resolution1000.HSyncPulse = 8
!Done Resources.Resolutions.Resolution1000.HSyncPulse = 8
```

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.

Description Set the horizontal or vertical back porch in pixels.

Command	<code>Resources.Resolutions.HBackPorch</code> <code>Resources.Resolutions.VBackPorch</code>
---------	--

Example

```
Resources.Resolutions.Resolution1000.HBackPorch = 288
!Done Resources.Resolutions.Resolution1000.HBackPorch = 288
```

Polarity

The sync pulse separates the video fields into positive and negative polarity.

Choose between positive and negative.

Description Set the horizontal or vertical sync polarity to P for positive, or N for negative.

Command	<code>Resources.Resolutions.HSyncPolarity</code> <code>Resources.Resolutions.VSyncPolarity</code>
---------	--

Example

```
Resources.Resolutions.Resolution1000.HSyncPolarity = N
!Done Resources.Resolutions.Resolution1000.HSyncPolarity = N
```

CEA ID

Only enter a value when you define a custom resolution that complies with the CEA-861-D profile for that value.

The CEA identifier information option (CEA ID) does not affect the custom resolution. It is there for providing information on the resolution to any connected equipment.

If you enter a value for CEA ID and your custom resolution does not conform to the CEA format for that value, you might not see an image on your display.

Description	Set the CEA ID.
Command	<code>Resources.Resolutions.CEAID</code>
	<pre>Resources.Resolutions.Resolution1000.CEAID = 0 !Done Resources.Resolutions.Resolution1000.CEAID = 0</pre>

Origin

You can enter an optional string to describe the origin of the custom resolution.

Naming rules

The origin string must:

- Be no more than 19 characters
- Contain only valid printable ASCII characters
- Contain no spaces

Description	Enter an optional string to describe the origin of the custom resolution.
Command	<code>Resources.Resolutions.Resolution1000.Origin</code>

Example

```
Resources.Resolutions.Resolution1000.Origin = From_CVT
!Done Resources.Resolutions.Resolution1000.Origin = From_CVT
```

List available resolutions for a slot

Use this command for both input and output modules.

Description	List all the available resolutions for a specific slot.
Command	<code>Slots.Slot1.Module_Resolutions()</code>

Example

```
Slots.Slot16.Module_Resolutions()
640x480p60;4:3;
640x480p72;4:3;
...
1920x1200p50cvt-rb;16:10;
1920x1200p60cvt-rb;16:10;
MyResolution;16:6
!Done Slots.Slot16.Module_Resolutions()
```

List available resolutions for a slot by index

Use this command for output modules only.

If you need more information about a specific resolution, see "View information about a specific resolution" below on page 55.

Description	List the index ID of all the available resolutions for a specific slot.
Command	<code>Slots.Slot16.Resolutions</code>

Example

```
Slots.Slot16.Resolutions
Slots.Slot16.Resolutions.Resolution1 = <...>
Slots.Slot16.Resolutions.Resolution2 = <...>
...
Slots.Slot16.Resolutions.Resolution71 = <...>
Slots.Slot16.Resolutions.Resolution72 = <...>
Slots.Slot16.Resolutions.Resolution1000 = <...>
Slots.Slot16.Resolutions.Resolution1001 = <...>
...
Slots.Slot16.Resolutions.Resolution1009 = <...>
!Done Slots.Slot16.Resolutions
```

View information about a specific resolution

Use this command for output modules only.

Use this command to get more information about a resolution you identified on a slot using the List available resolutions for a slot by index command.

Description	Lists information about a resolution with a specific index ID. Information includes: <ul style="list-style-type: none">■ Name■ Aspect■ Can Framelock
Command	<code>Slots.Slot16.Resolutions.Resolution71</code>

Example

```
Slots.Slot16.Resolutions.Resolution71
Slots.Slot16.Resolutions.Resolution71.Name = 640x480p60
Slots.Slot16.Resolutions.Resolution71.Aspect = 4:3
Slots.Slot16.Resolutions.Resolution71.CanFramelock = No
!Done Slots.Slot16.Resolutions.Resolution71
```

View current resolution of an output

Use this command for output modules only.

Description	Returns the resolution currently set for an output.
Command	<code>Slots.Slot16.Out1.Resolution</code>

Example

```
Slots.Slot16.out1.Resolution
Slots.Slot16.out1.Resolution = NewCustomResolution
!Done Slots.Slot16.out1.Resolution
```

Assign a resolution to an output

Description	Select which resolution an output uses, by name.
Command	<code>Slots.Slot16.Out1.Resolution = 1280x720p60</code>

Example

```
Slots.Slot16.out1.Resolution = 1280x720p60
Slots.Slot16.out1.Resolution = 1280x720p60
!Done Slots.Slot16.out1.Resolution = 1280x720p60
```

View the resolution of a specific input

Input resolutions are read-only, and are set by the source.

You can use either of these commands with the same result.

Description	Returns the current resolution on an input.
Command	<code>Slots.Slot1.In1.Set_Resolution</code> <code>Slots.Slot1.In1.Measured_Resolution</code>

Example

```
Slots.Slot1.In1.Set_Resolution
Slots.Slot1.In1.Set_Resolution = NewCustomResolution
!Done Slots.Slot1.In1.Set_Resolution
```

or

```
Slots.Slot1.In1.Measured_Resolution
Slots.Slot1.In1.Measured_Resolution = NewCustomResolution
!Done Slots.Slot1.In1.Measured_Resolution
```

Troubleshooting and FAQs

This section contains frequently asked questions and advice on troubleshooting problems with your CORIOmatrix. 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.

In this section

Minimum PC or mac specification and supported browsers	57
Updating the CORIOmatrix™ firmware	57
CORIOdiscover can't see my CORIOmatrix™	58
The CORIOmatrix™ UI looks wrong	59
I can't reconnect to my CORIOmatrix™ after restoring	60
A slot name turned blank	60
I got a security alert when I logged in to CORIOmatrix™ UI	61
My display goes blank when I change resolution	61
There's no output from my monitoring module	61

Minimum PC or mac specification and supported browsers

PC or mac specification

The minimum requirements for running CORIOmatrix are:

- » PC running Windows® 7, Windows® 10, or mac running macOS 10.13 "High Sierra"

If you use CORIOdiscover to connect to CORIOmatrix, you also need:

- » Windows® .NET 4.6
- » 600 MB of disc space during installation
- » Approximately 50 MB of disc space after installation



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

Supported browsers

CORIOmatrix supports the following desktop browsers:

- » Firefox 56.0.2 on Windows PC
- » Edge 40.15063.674.0 on Windows 10 PC
- » IE 11.674.150363.0 on Windows PC
- » Chrome 62.0.3202.75 on Windows PC
- » Safari 11.0.1 on macOS

Updating the CORIOmatrix™ firmware

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

You update the firmware of your CORIOmatrix on the Update Device window of the CORIOdiscover software.

Before you start

To install the latest CORIOmatrix firmware, you need CORIOdiscover V1.4 or above. V1.4 of CORIOdiscover is available from the CORIOmatrix page at tvone.com/firmware-updates.

Checking your firmware version and downloading new firmware

CORIOdiscover warns you if you try to install firmware that is older or the same as your existing firmware.

1. Check for newer firmware at tvone.com/firmware-updates.

Select your device from the list and compare the firmware version to your own.

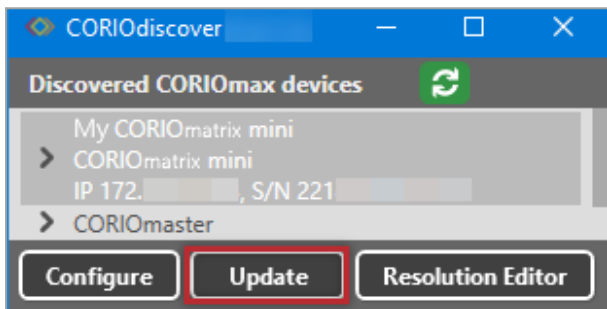
- If you have a CORIOmatrix, select CORIOmatrix C3-340.
- If you have a CORIOmatrix mini, select CORIOmatrix mini C3-310.

2. If your firmware is out of date, download the zipped DAT file.

You don't need to extract the DAT file.

Updating the firmware

1. In CORIOdiscover, select .

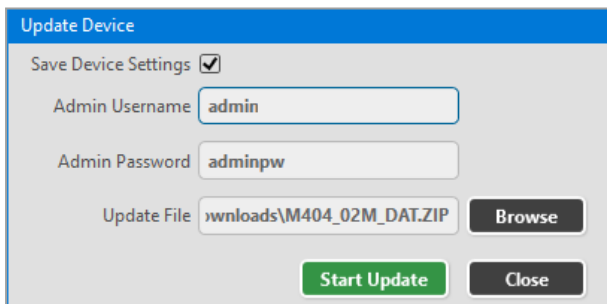


2. Select your CORIOmatrix from the list and select Update.

3. To save your CORIOmatrix settings, select Save Device Settings.

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

4. Enter your administrator login details.



5. Browse to the zipped DAT file that you downloaded.

6. Select Start Update.

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

CORIOdiscover can't see my CORIOmatrix™

What's the problem?

When I tried to find my CORIOmatrix, I could not see it in the list of devices, even after selecting refresh.

Why does this happen?

There might be a lot of devices listed, so you're having trouble identifying yours.

Your CORIOmatrix 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

1. If you've got a long list of CORIOmatrix devices with similar names, write down the list or take a screenshot.
2. Power down your CORIOmatrix.
3. After a few seconds, your CORIOmatrix should show as offline.

Then try this

If your CORIOmatrix definitely isn't on CORIOdiscover's list of devices, check your hardware.

If your CORIOmatrix still isn't in the list, use its IP address to log into it directly.

To check your hardware

1. Check the cables are properly connected to your CORIOmatrix.
2. Power down your CORIOmatrix and then power it up again.
3. Check that your CORIOmatrix is powered on and that the LED lights on the back are illuminated and green.

To log in with an IP address

1. Connect your computer directly to your CORIOmatrix with an RS-232 serial connector and HyperTerminal application.
2. Log in with the user name of `admin` and password of `adminpw`.
3. Type `System.Comms.Ethernet.DHCP.Enabled = Off` to disable DHCP.
4. 6. Type `System.Comms.Ethernet` to see the static IP address.
5. Type that IP address into a browser to log in to your CORIOmatrix.

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 CORIOmatrix a specific IP address.

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 CORIOmatrix™ UI looks wrong

What's the problem?

The UI doesn't match the examples in the user guide. For example, some of the UI panes overlap.

Why does this happen?

If you have previously seen the UI correctly, this is most likely to happen after you add or remove modules from your CORIOmatrix.

If this is the first time you've used CORIOmatrix, it may be that you are trying to use a device or browser that is not compatible with CORIOmatrix. See Minimum specification and supported browsers on page 57.



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

What to do

First try this

Log out of the CORIOmatrix UI and log in again.

Then try this

Press Ctrl+F5 to refresh the screen and clear the cache.

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 reconnect to my CORIOmatrix™ after restoring

What's the problem?

When I tried to restore settings from the SD card, my CORIOmatrix did not restart and I saw a message saying it couldn't connect to the IP address.

Why does this happen?

This can happen if your CORIOmatrix has switched from using the previous DHCP IP address to a static one.

What to do

Type the DHCP IP address your CORIOmatrix into the address bar of your browser. You should then be able to connect as expected to your CORIOmatrix, which will have its restored settings.

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.

A slot name turned blank

What's the problem?

I renamed a slot and saved it, but now another slot name is blank.

Why does this happen?

Slot names must be unique. If you give a slot a name that is already used for another slot, when you save the new name, the other slot's name will be blank.

What to do

Rename both slots, being careful to choose unique names.

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 got a security alert when I logged in to CORIOmatrix™ UI

What's the problem?

When I tried to log in to the CORIOmatrix UI, I saw a Windows Security alert, requesting my user name and password for the server.

Why does this happen?

You have probably saved the wrong login details in your browser.

What to do

Log in with the correct username and password.

If you are using a secure computer, you can choose to let the browser save the login details.

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.

My display goes blank when I change resolution

What's the problem?

When I change an output resolution, the display goes blank for a short time.

Why does this happen?

This is normal behavior, while the Framelock adjusts.

If you still have a problem

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.

There's no output from my monitoring module

What's the problem?

My CORIOmatrix has a monitoring module installed but when I select the Monitor button at the top right of the Routing screen, I can't see any output in the CORIOmatrix UI.



If you have a monitoring module but can't see the Monitor button on the CORIOmatrix UI, the module is either faulty or not properly installed. Contact your distributor, and if they can't help, contact tvONE support at tech.usa@tvone.com or tech.europe@tvone.com.

Why does this happen?

Either the connections are loose or the output settings are incorrect.

What to do

First try this

Check if the signal is going out: make sure your cable and power connections to the display are secure.

Then try this

You may need to change the output settings to be compatible with the display.

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.

More

In this section

Regulatory compliance	63
Safety information	63
Intellectual property	74
Liability statement	75
Limited warranty	76
Contact us	76

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.

Safety information



This is general safety information.



This information is about a risk of laser radiation.



This information is about a risk of electric shock.



Notice. This information is about a risk of damage to your equipment or data.



Caution. This information is about a minor risk to your health.



Warning. This information is about a major risk to your health.

Important Safety Instructions



WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To ensure the best from this product, please read this manual carefully.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- This unit must be connected to a mains socket outlet with the supplied cable.
- The AC wall outlet should be installed near to the unit and be easily accessible.
- Only use attachments / accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified servicing personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The AC power cord or adapter furnished with the unit should conform to the type in use in your country. Please compare the plug on your cord or adapter with the power socket where the unit will be installed.
- If you did not receive the correct plug, DO NOT attempt to modify it. Instead, immediately contact your distributor or contact tvONE at the sales office nearest to your geographic location and request the proper plug.

Consigne Importante De Securite



AVERTISSEMENT: Pour réduire tout risque d'incendie ou de choc électrique, n'exposez pas cet appareil à la pluie ou à une humidité.

Pour obtenir les meilleures performances avec ce produit, nous vous demandons de lire soigneusement ce manuel.

- Lisez ces consignes
- Conservez ces consignes
- Respectez tous les avertissements
- Respectez toutes les consignes
- N'utilisez pas cet appareil à proximité d'eau
- Nettoyez-le en utilisant uniquement un chiffon sec
- Ne bloquez pas les ouvertures de ventilation. Installez cet appareil en respectant les consignes du constructeur.
- Ne procédez pas à une installation à proximité de sources de chaleur, quelles qu'elles soient, (radiateurs, registres calorifiques, fours, etc.) ou d'autres appareils (dont des amplificateurs) qui produisent de la chaleur.
- Protégez le cordon électrique pour éviter que l'on ne marche dessus ou qu'on ne le coince, en particulier au niveau des prises mâles ou des prises murales et au niveau de l'appareil
- Il faut brancher l'appareil sur une prise du secteur disposant d'une mise à la terre.
- La prise murale de courant doit être installée près de l'unité et aisément accessible.
- Utilisez uniquement les fixations et accessoires spécifiés par le fabricant
- Débranchez cet appareil durant les orages électriques ou pendant les périodes prolongées d'inactivité
- Confiez toutes les interventions d'entretien à un personnel qualifié spécialisé dans l'entretien. Une intervention d'entretien s'avère nécessaire lorsque cet appareil a été endommagé, d'une façon ou d'une autre, par exemple lorsque le cordon d'alimentation électrique ou sa prise est endommagé, lorsqu'il y a eu un épanchement de liquide ou lorsque des objets sont tombés sur cet appareil, voire même lorsque cet appareil a été exposé à de la pluie ou une humidité, ne fonctionne pas normalement ou est tombé.
- Le câble d'alimentation secteur ou l'adaptateur remis avec cet appareil doit être conforme au type employé dans votre pays. Veuillez comparer la prise de votre cordon électrique ou de votre adaptateur à la prise murale de l'emplacement où doit être installé votre appareil.
- Si vous n'avez pas reçu la bonne prise, **N'ESSAYEZ PAS** de la modifier. Vous devez au contraire immédiatement contacter votre revendeur ou le bureau de vente tvONE le plus proche de chez vous pour demander la bonne prise.

Wichtige Sicherheitsanweisungen



WARNUNG: Setzen Sie das Gerät weder Regen noch Feuchtigkeit aus, um die Gefahr eines Brandes oder elektrischen Schlags zu minimieren.

Lesen Sie diese Bedienungsanleitung sorgfältig, um zu gewährleisten, dass Sie den optimalen Nutzen aus diesem Produkt ziehen.

- Lesen Sie diese Anweisungen.
- Bewahren Sie diese Anweisungen auf.
- Beachten Sie alle Warnhinweise.
- Befolgen Sie alle Anweisungen.
- Verwenden Sie dieses Gerät nicht in der Nähe von Wasser.
- Verwenden Sie zur Reinigung nur ein trockenes Tuch.
- Blockieren Sie keine Lüftungsöffnungen. Installieren Sie das Gerät nach den Anweisungen des Herstellers.
- Stellen Sie das Gerät nicht in der Nähe von Wärmequellen wie etwa Heizkörpern, Heizklappen, Öfen oder anderen Wärme erzeugenden Geräten (einschließlich Verstärkern) auf.
- Schützen Sie das Netzkabel, so dass niemand auf das Netzkabel treten kann oder es insbesondere an Steckern, Steckdosen und an der Stelle, an der das Netzkabel aus dem Gerät geführt wird, nicht eingeklemmt werden kann.
- Das Gerät muss mit dem mitgelieferten Kabel direkt an das Hauptnetz angeschlossen werden.
- Die verwendete Steckdose sollte nahe dem Gerät und einfach erreichbar sein.
- Verwenden Sie nur Zusatzgeräte/Zubehör, die/das der Hersteller angibt.
- Ziehen Sie den Netzstecker dieses Geräts bei Gewittern und auch dann ab, wenn es über einen längeren Zeitraum nicht betrieben wird.
- Lassen Sie Reparaturen nur von qualifiziertem Wartungspersonal durchführen. Reparaturen sind erforderlich, wenn das Gerät in irgendeiner Form beschädigt wurde, beispielsweise das Netzkabel oder der Stecker beschädigt wurde, Flüssigkeit auf dem Gerät verschüttet wurde oder Objekte in das Gerät gefallen sind, das Gerät Regen oder Feuchtigkeit ausgesetzt wurde, nicht normal arbeitet oder fallen gelassen wurde. Das mitgelieferte Netzkabel oder der mitgelieferte Adapter müssen dem in Ihrem Land verwendeten Typ entsprechen. Vergleichen Sie den Netzstecker oder Adapter mit der Netzsteckdose, an die das Gerät angeschlossen wird.
- Falls Sie nicht den richtigen Stecker erhalten haben, versuchen Sie NICHT, ihn zu ändern. Setzen Sie sich stattdessen mit Ihrem Fachhändler oder der Verkaufsniederlassung von tvONE in Verbindung, die sich am nächsten an Ihrem Wohnort befindet, und fordern Sie den richtigen Stecker an.

Instrucciones Importantes De Seguridad



ADVERTENCIA: Para reducir el riesgo de incendio o electrocución, no exponga el aparato a la lluvia ni la humedad.

Para garantizar el máximo rendimiento de este producto, lea cuidadosamente este manual.

- Lea estas instrucciones
- Guarde estas instrucciones
- Respete todas las advertencias
- Siga todas las instrucciones
- No use este aparato cerca del agua
- Límpielo sólo con un paño seco
- No bloquee ninguna abertura de ventilación. Instálelo de acuerdo con las instrucciones del fabricante
- No lo instale cerca de fuentes de calor como radiadores, salidas de aire caliente, estufas u otros aparatos (incluyendo amplificadores) que produzcan calor.
- Proteja el cable de alimentación para que no se pueda pisar ni pellizcar, especialmente junto a las clavijas, tomas de corriente, y en el punto de salida de las mismas en el aparato.
- Esta unidad debe conectarse a una toma de corriente con el cable suministrado.
- La toma de corriente debe estar instalada cerca de la unidad y ser fácilmente accesible.
- Use sólo accesorios / elementos especificados por el fabricante
- Desenchufe el aparato durante las tormentas eléctricas o si no va a usarlo durante un largo período de tiempo.
- Consulte con personal cualificado cualquier tipo de servicio. Se necesitará servicio cuando el aparato haya sufrido daños de cualquier tipo, como daños en el cable de alimentación o en las clavijas, haya entrado líquido o se hayan caído objetos dentro del aparato, haya estado expuesto a la lluvia o humedad, no funcione normalmente o se haya caído. El cable de alimentación de C.A o el adaptador suministrado con la unidad debe ser conforme al tipo usado en su país. Compare la clavija en su cable o adaptador con la toma de corriente donde vaya a instalar la unidad.
- Si no ha recibido la clavija correcta, **NO** intente modificarla. Póngase inmediatamente en contacto con su distribuidor o con tvONE en la oficina de ventas más cercana a su localización geográfica y solicite la clavija adecuada.

Importantes instruções de segurança



AVISO: Para reduzir o risco de incêndio ou choque eléctrico, não exponha este aparelho à chuva ou humidade.

Para garantir o melhor deste produto, leia este manual cuidadosamente.

- Leia estas instruções.
- Guarde estas instruções.
- Respeite todos os avisos.
- Siga todas as instruções.
- Não utilize este aparelho perto de água.
- Limpe apenas com um pano seco.
- Não bloqueie as aberturas de ventilação. Instale de acordo com as instruções do fabricante.
- Não instale perto de fontes de calor como radiadores, aquecedores, fogões ou outros aparelhos (incluindo amplificadores) que produzam calor.
- Proteja o cabo de alimentação para que não seja pisado ou apertado, especialmente nas fichas, receptáculos e no ponto em que saem do aparelho.
- Esta unidade deve ser ligada a uma tomada com o cabo fornecido.
- A tomada de AC deve ser instalada perto da unidade e ser facilmente acessível.
- Utilize apenas acessórios especificados pelo fabricante.
- Desligue este aparelho durante tormenta com relâmpagos ou quando não for utilizado durante longos períodos de tempo.
- Consultar todas as reparações a pessoal de manutenção qualificado. A manutenção é necessária, em seguida, o aparelho foi danificado de qualquer forma, como o cabo de alimentação ou plugue está danificado, líquido foi derramado ou objetos caíram no aparelho, o aparelho foi exposto à chuva ou umidade, não funciona normalmente, Ou tiver sido descartado.
- O cabo de alimentação de AC ou o adaptador fornecido com a unidade devem estar em conformidade com o tipo em uso no seu país. Compare o plugue do cabo ou adaptador com a tomada onde a unidade será instalada.
- Se você não recebeu o plugue correto, **NÃO** tente modificá-lo. Em vez disso, entre em contato imediatamente com o revendedor ou entre em contato com tvONE no escritório de vendas mais próximo de sua localização geográfica e solicite o plugue apropriado.

Belangrijke Veiligheidsinstructie



WAARSCHUWING: Om het risico op brand of een elektrische schok te verkleinen, dient u dit apparaat niet bloot te stellen aan regen of vocht.

Om dit product optimaal te kunnen gebruiken, dient u deze handleiding aandacht te lezen.

- Lees deze instructies
- Bewaar deze instructies
- Let op alle waarschuwingen
- Volg alle instructies
- Gebruik dit apparaat niet in de nabijheid van water
- Reinig het apparaat alleen met een droge doek
- Blokkeer geen ventilatieopeningen. Installeer het apparaat volgens de instructies van de fabrikant
- Plaats het apparaat niet in de nabijheid van warmtebronnen zoals radiatoren, kachels, warmtesensoren zoals thermometers, of andere apparaten (waaronder versterkers) die warmte afgeven.
- Bescherm de netspanningkabel zodanig dat er niet op kan worden gelopen en dat er geen kink in kan komen, vooral bij de stekker, pinnen, en bij de aansluiting op het apparaat.
- Dit apparaat moet worden aangesloten op een stopcontact met de meegeleverde kabel.
- Het stopcontact moet worden geïnstalleerd in de buurt van het toestel en zijn gemakkelijk toegankelijk.
- Gebruik alleen de accessoires en onderdelen die door de fabrikant worden aanbevolen
- Haal de stekker van dit apparaat bij onweer uit het stopcontact. Doe dit ook wanneer het apparaat lange tijd niet wordt gebruikt.
- Laat alle onderhoud over aan gekwalificeerd personeel. Onderhoud is vereist wanneer het apparaat op enigerlei wijze is beschadigd, bijvoorbeeld in het geval van een beschadigd netsnoer of een beschadigde stekker, wanneer er vloeistof op het apparaat is gemorst, of wanneer er een voorwerp in het apparaat is gevallen, wanneer het apparaat is blootgesteld aan regen of vocht, niet normaal functioneert, of is gevallen.
- Het type wisselspanningkabel of adapter dat met deze eenheid is geleverd, dient overeen te komen met wat in uw land wordt gebruikt. Vergelijk de stekker van de kabel of adapter met het stopcontact waarop de eenheid wordt aangesloten.
- Als u niet de juiste stekker hebt ontvangen, breng dan zelf GEEN wijzigingen aan. Neem in plaats daarvan direct contact op met uw dealer of met de afdeling verkoop van tvONE die zich het dichtst bij u in de buurt bevindt en vraag om de juiste stekker.

Viktiga Säkerhetsanvisningar



VARNING: Med tanke på risken för brand och elchock får enheten inte utsättas för regn eller fukt.

För att få ut det bästa av din produkt bör du läsa denna bruksanvisning noggrant.

- Läs dessa anvisningar
- Spara dessa anvisningar
- Rätta dig efter alla varningar
- Följ alla instruktioner
- Använd inte enheten nära vatten
- Rengör enheten endast med torr trasa
- Blockera inte ventilationsöppningarna. Installera enheten enligt tillverkarens anvisningar
- Placera inte enheten nära värmekällor, som värmeelement, varmluftsintag, spisar eller annan utrustning (inklusive förstärkare) som producerar värme.
- Skydda nätsladden så att man inte kan trampa på den eller klämma den, särskilt intill stickkontakten, vid grenuttag och där den kommer ut från enheten.
- Denna enhet måste anslutas till ett uttag med den medföljande kabeln.
- AC vägguttaget ska installeras i närheten av enheten och vara lättillgänglig.
- Använd bara anslutningar och tillbehör som specificeras av tillverkaren.
- Dra ur nätsladden före åskväder eller när enheten inte ska användas en längre tid.
- Överlåt all service åt kvalificerad servicepersonal. Service krävs när enheten är skadad på något sätt, t.ex. om nätsladden eller stickkontakten har skadats, om vätska eller främmande föremål har kommit in i enheten, om enheten har utsatts för regn eller fukt, om den inte fungerar normalt eller om den har tappats i golvet.
- Den medföljande nätsladden eller adaptorn måste vara av den typ som används i ditt land. Jämför stickkontakten på nätsladden eller adaptor med eluttaget där enheten ska installeras.
- Om du inte fick rätt stickkontakt **FÅR DU INTE** försöka anpassa den. Kontakta i stället omedelbart butiken eller tvONEs närmaste försäljningsställe och be att få rätt stickkontakt.

Viktige Sikkerhetsanvisninger



ADVARSEL: For å redusere faren for brann eller elektrisk støt, må apparatet ikke utsettes for regn eller fuktighet.

For at du skal få mest mulig ut av dette produktet, ber vi deg lese denne håndboken nøye.

- Les disse anvisningene.
- Ta vare på disse anvisningene.
- Vær oppmerksom på alle anvisningene.
- Følg alle anvisningene.
- Ikke bruk dette apparatet i nærheten av vann.
- Må bare rengjøres med en tørr klut.
- Ikke blokker ventilasjonsåpningene. Må installeres i overensstemmelse med produsentens anvisninger.
- Må ikke installeres i nærheten av varmekilder som radiatorer, varmeapparater, komfyrer eller andre apparater (også forsterkere) som produserer varme.
- Beskytt ledningen mot å bli tråkket på eller klemt, spesielt ved støpselet, stikkkontakten og punktet hvor den kommer ut av apparatet.
- Denne enheten må være koblet til en stikkontakt med den medfølgende kabelen.
- Den stikkontakten bør installeres i nærheten av enheten og være lett tilgjengelig
- Ikke bruk andre typer tilbehør enn det som er angitt av produsenten.
- Koble apparatet fra strømforsyningen i tordenvær eller når det ikke skal brukes over en lengre periode.
- Overlat all service til kvalifisert servicepersonell. Apparatet trenger service hvis det på en eller annen måte har fått en skade, for eksempel at ledningen eller støpselet er ødelagt, det er blitt sølt væske på eller gjenstander har falt inn i apparatet, apparatet har vært utsatt for regn eller fuktighet, ikke fungerer som det skal eller har falt i gulvet. Strømledningen (vekselstrøm) eller adapteren som følger med enheten må tilsvare den typen som brukes i landet der du bor. Sammenlign støpselet på ledningen eller adapteren med stikkontakten der hvor enheten skal installeres.
- Hvis du har fått feil støpsel, må du IKKE forsøke å modifisere det. I stedet må du straks kontakte forhandleren eller nærmeste salgskontor for tvONE og be om riktig type støpsel.

Tärkeitä Turvallisuusohjeita



VAROITUS: Älä altista tätä laitetta sateelle tai kosteudelle tulipalon tai sähköiskun vaaran vähentämiseksi.

Lue tämä opaskirja huolellisesti, jotta saat parhaan hyödyn tästä tuotteesta.

- Ilue nämä ohjeet
- Säilytä nämä ohjeet
- Ota kaikki varoitukset huomioon
- Noudata kaikkia ohjeita
- Älä käytä tätä laitetta veden lähellä
- Puhdista vain kuivalla kankaalla
- Älä tuki ilma-aukkoja. Asenna laite valmistajan ohjeiden mukaisesti.
- Älä asenna laitetta lähelle lämpölähteitä, kuten esim. lämpöpatteria, lämmitintä, uunia tai muita lämpöä tuottavia laitteita (vahvistimet mukaan lukien).
- Varmista, että verkkojohdon yli ei kävellä eikä se jää puristuksiin etenkin pistokeja liitinkohdista sekä laitteesta ulostulevista kohdista.
- Tämä laite on kytkettävä pistorasiaan, jossamukana kaapelilla.
- Pistorasiaan tulee asentaa lähelle laitetta, ja helposti saatavilla.
- Käytä vain valmistajan määrittämiä lisälaitteita/lisävarusteita.
- Kytke laite irti verkkovirrasta ukkosmyrskyn aikana tai silloin, kun sitä ei käytetä pitkään aikaan.
- Jätä kaikki huoltotoimenpiteet pätevän huoltohenkilöstön suorittavaksi. Laite on toimitettava huoltoon, jos se on vahingoittunut jotenkin, kuten esim. verkkojohto tai pistoke on vioittunut, laitteeseen on joutunut nestettä tai laitteen päälle on pudonnut esineitä, laite on altistunut sateelle tai kosteudelle, laite ei toimi normaalisti tai se on pudonnut. Laitteen mukana tulevan verkkojohdon tai sovittimen tulee olla yhdenmukainen maassa jo käytössä olevien kanssa. Tarkasta, että verkkojohdon pistoke tai sovitin sopii asennuspaikassa olevaan pistorasiaan.
- Jos laitteen pistoke on väärä, ÄLÄ yritä muunnella sitä. Ota heti yhteys jälleen myyjään tai lähimpään tvONE -myyntikonttoriin ja pyydä oikeaa pistoketta.

Istruzioni di sicurezza



ATTENZIONE: Per ridurre il rischio di incendio o scossa elettrica, non esporre questo apparecchio alla pioggia o all'umidità.

Per garantire il meglio da questo prodotto, si prega di leggere attentamente questo manuale.

- Leggere le istruzioni.
- Conservare le presenti istruzioni.
- Rispettare tutte le avvertenze.
- Osservare tutte le istruzioni.
- Non usare questo apparecchio in prossimità dell'acqua.
- Pulire esclusivamente con un panno asciutto.
- Non bloccare le fessure di ventilazione. Installazione seguendo le istruzioni del fabbricante.
- Non installare vicino a fonti di calore come radiatori, termosifoni, stufe o altri dispositivi (inclusi amplificatori) che producono calore
- Assicurarsi che il cavo di alimentazione non sia schiacciato o calpestato soprattutto in prossimità delle spine, gli prese e gli punto in cui fuoriescono dall'apparecchio.
- L'unità deve essere collegata a una presa di rete elettrica mediante il cavo fornito.
- La presa CA a muro deve essere installata vicino all'unità e deve essere facilmente accessibile.
- Utilizzare solo gli attacchi / accessori specificate dal fabbricante.
- Scollegare l'apparecchio durante temporali con fulmini o quando non viene utilizzato per periodi lunghi di tempo.
- Consultare tutti gli questioni a servizio con il personale di manutenzione qualificato. L'assistenza è necessaria quindi l'apparecchio è stato in qualche modo danneggiato, ad esempio se il cavo di alimentazione o della spina, rovesciamento di liquidi, o se gli oggetti sono caduti all'interno dell'unità, se l'apparecchio è stato esposto alla pioggia o all'umidità, se non funziona normalmente, o se è stato fatto cadere.
- Il cavo di alimentazione CA o l'adattatore fornito con l'unità devono rispettare con il tipo in uso nel proprio paese. Si prega di confrontare la spina sul vostro cavo o l'adattatore con la presa di alimentazione in cui l'apparecchio sarà utilizzato.
- Se non avete ricevuto la spina adeguata, **NON** tentare di modificarla. Invece, rivolgersi immediatamente al rivenditore o contattare tvONE presso l'ufficio commerciale più vicino alla vostra localizzazione geografica e richiedere la spina adeguata.

Инструкции по технике безопасности



ВНИМАНИЕ: Для уменьшения опасности возгорания или поражения электрическим током не подвергайте данное устройство воздействию дождя или влаги.

Для максимально эффективного использования данного изделия, внимательно прочтите данное руководство.

- Прочитайте эти инструкции.
- Сохраняйте эти инструкции.
- Относитесь внимательно ко всем предупреждениям.
- Следуйте всем инструкциям.
- Не используйте данное устройство вблизи воды.
- Очистку производите только сухой тканью.
- Не перекрывайте вентиляционные отверстия. Производите установку в соответствии с инструкциями производителя.
- Не устанавливайте устройство вблизи источников тепла, таких как: радиаторы, обогреватели, электроплиты и другое оборудование (в том числе усилители), выделяющее тепло.
- Прокладывайте сетевой шнур так, чтобы не него не наступали и его не могли пережать, особенно в местах рядом с вилкой, электрической розеткой или в местах выхода сетевого шнура из корпуса устройства.
- Данное устройство разрешается подключать к электрической розетке только с помощью шнура, поставляемого в комплекте.
- Настенная электрическая розетка должна быть установлена вблизи от устройства и быть легко доступной.
- Используйте только приспособления и аксессуары, указанные производителем.
- Отключайте данное устройство от сети во время грозы или в случаях, если вы не собираетесь пользоваться им длительное время.
- Все работы по техническому обслуживанию должны выполняться квалифицированным техническим персоналом. При любой неисправности устройства (в результате повреждения сетевого шнура или вилки, попадания жидкости или посторонних предметов в корпус, воздействия дождя или влаги на устройство, ненормальной работы или падения устройства) требуется квалифицированный ремонт.
- Сетевой шнур или адаптер, которые поставляются в комплекте с устройством, должны соответствовать типу, используемому в вашей стране. Сопоставьте вилку вашего сетевого шнура или адаптера с электрической розеткой в месте планируемой установки устройства.
- Если вы не получили вилку правильного типа, НЕ пытайтесь модифицировать ее. Вместо этого незамедлительно обратитесь к вашему дилеру или в одно из ближайших к вам торговых представительств и попросите предоставить вилку правильного типа.

Intellectual property

Some IC chips in this product include confidential and/or trade secret property. Therefore, you may not copy, modify, adapt, translate, distribute, reverse engineer, reverse assemble or decompile the contents thereof.



Certaines puces à circuits imprimés de ce produit contiennent des données confidentielles et (ou) des secrets professionnels. Par conséquent, vous ne pouvez pas recopier, modifier, adapter, traduire ou distribuer son contenu ou procéder à une ingénierie inverse ou à une décompilation de ce contenu.



Einige IC-Chips in diesem Produkt enthalten vertrauliche Informationen und/oder Geschäftsgeheimnisse. Aus diesem Grund dürfen Sie deren Inhalt nicht kopieren, ändern, anpassen, übersetzen, verteilen zurückentwickeln oder dekompilieren.



Algunos chips con circuitos integrados presentes en este producto incluyen propiedad confidencial y/o secreta del sector. Por lo tanto, usted no puede copiar, modificar, adaptar, traducir, distribuir, diseñar a la inversa, montar a la inversa o descompilar el contenido de los mismos.



Alguns chips IC neste produto incluem propriedade de segredo confidencial e / ou comercial. Portanto, você não pode copiar, modificar, adaptar, traduzir, distribuir, fazer engenharia reversa, reverter ou descompilar o conteúdo.



In bepaalde IC-chips in dit product zijn vertrouwelijke informatie en/of geheime handelseigendommen opgenomen. Het is u daarom niet toegestaan om de inhoud ervan te kopiëren, wijzigen, aanpassen, vertalen, verspreiden, te onderwerpen aan reverse engineering, reverse assembling, of te decompileren.



Vissa IC-chip i denna produkt innehåller konfidentiellt material och/eller företagshemligheter. Du får därför inte kopiera, modifiera, anpassa, översätta eller distribuera innehållet eller använda reverse engineering, assemblering eller dekompileering på det.



Noen av IC-brikkene i dette produktet inneholder fortrolig informasjon og/eller fabrikkhemmeligheter. Du må derfor ikke kopiere, endre, tilpasse, oversette, 15distribuere, rekonstruere kildekodene til eller dekompile noe av dette innholdet.



Jotkut tässä tuotteessa olevat IC-sirut sisältävät luottamuksellista ja/tai liikesalaisuusomaisuutta. Sen tähden sisältöä ei saa kopioida, muokata, käntää, jakaa, takaisinmallintaa, mallintaa symbolisella konekielellä tai käntää takaisin.



Alcuni chip IC in questo prodotto includono proprietà riservate e/o segreti commerciali. Di conseguenza, non è possibile di copiare, modificare, adattare, tradurre, distribuire, decodificare, ricompilare o decompilare il suo contenuto.



Некоторые интегральные микросхемы данного изделия содержат конфиденциальную информацию, являющуюся собственностью, и/или информацию, составляющую коммерческую тайну. В связи с этим вы не имеете права копировать, модифицировать, адаптировать, переводить, распространять, производить анализ технологии, осуществлять вскрытие технологии или обратное проектирование его содержимого.

Liability statement

This product is intended for professional use. This product is not intended for use in a medical environment and does not have the required certifications for such use. Similarly, use aboard any aircraft or spacecraft while in flight, or as an adjunct to any surface, airborne, or marine navigation system, or any offshore marine activity, including control of any watercraft, or any use similar to those specifically herein mentioned, is prohibited. Use in the aforementioned circumstances would require additional testing and certification.

You have not become the owner of any software - you have merely purchased the right to use the software. You may make one copy of the software for your own use. Other copies will be deemed a breach of copyright.

No warranty is made, either expressed or implied, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. In no event shall the supplier or manufacturer of this product be liable for errors found within, or be liable for any direct, indirect or consequential damages or loss in connection with the purchase or use of this hardware, software, or manual. The sole and exclusive liability to the supplier and manufacturer regardless of the form of action shall not exceed the replacement cost of the materials described herein.

tvONE™ reserves the right to revise any of its hardware and software products, following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.

By using this equipment, you have indicated that you have agreed to the terms listed above. If you do not wish to agree, or the above terms are contrary to your conditions of purchase, you may return the equipment, unused, to your supplier.

All third party trademarks and copyrights are recognized. The tvONE logo, Magenta™ logo, CORIO™ word and the CORIO™ logo are registered trademarks of tvONE. HDBaseT™ and the HDBaseT Alliance logo are trademarks of the HDBaseT Alliance. All other trademarks are the property of their respective holders.

Limited warranty

tvONE™ warrants the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a fixed term from the date of purchase. The warranty term for specific product lines is defined below.

1. tvONE branded products based on tvONE's CORIO™ technology are warranted for a period of five years from the date of purchase. This includes products with the model number prefix of C2, 1T-C2, C3, CX, A2, or S2.
2. tvONE products, other than those based on tvONE's CORIO™ technology mentioned above, or ONERack™ products, mentioned below, are warranted for a period of three years from the date of purchase. This includes products with the model number prefix of 1T, with the exception of 1T-C2.
3. Magenta™ branded products are warranted for a period of three years from the date of purchase.
4. ONERack™ branded products are warranted for a period of one year from the date of purchase.
5. LCD Monitors are warranted for a period of three years from the date of purchase, with the exception of the LCD panels integrated into the monitors that are supplied by third parties. LCD panels are limited to the term and conditions of the warranty offered by the respective LCD panel manufacturer. Such specific LCD panel warranties are available upon request to tvONE.

Should a product, in tvONE's opinion, prove defective within this warranty period, tvONE, at its discretion, will repair or replace this product without charge. Any defective parts replaced become the property of tvONE. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

If repairs are necessary under this warranty policy, the original purchaser must obtain a Return Authorization Number from tvONE and return the product to a location designated by tvONE, freight prepaid. After repairs are complete, the product will be returned, freight prepaid.

LIMITATIONS - All products sold are "as is". The above Limited Warranty is in lieu of all other warranties for this product, expressed or implied, and is strictly limited to the stated number of years from the date of purchase. tvONE assumes no liability to distributors, resellers or end-users or any third parties for any loss of use, revenue, or profit.

tvONE makes no other representation of warranty as to fitness for the purpose or merchantability or otherwise in respect of any of the products sold. The liability of tvONE with respect to any defective products will be limited to the repair or replacement of such products. In no event shall tvONE be responsible or liable for any damage arising from the use of such defective products whether such damages be direct, indirect, consequential or otherwise, and whether such damages are incurred by the reseller, end-user or any third party.

Contact us

www.tvone.com

info@tvone.com

tvONE NCSA

North, Central, and South America

📍 621 Wilmer Avenue, Cincinnati, Ohio 45226 USA

☎ Tel +1-859-282-7303

Fax +1-859-282-8225

✉ Sales: sales@tvone.com

Support: tech.usa@tvone.com

tvONE EMEA

Europe, Middle East, Africa, and Asia Pacific

📍 Unit V Continental Approach, Westwood Industrial Estate, Margate, Kent, CT9 4JG, UK

☎ Tel +44-1843-873311

✉ Sales: sales.europe@tvone.com

Support: 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.