



# Encoder-100 Streaming Media Encoder

Quick Start Guide V1.20

QSG-ENCODER-100-V1.20 Feb 2019

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Thanks for buying this Encoder-100 from tvONE.

The Encoder-100 streaming media encoder allows you to stream high quality video and audio from a range of sources to the Dual stream input module of your CORIOmaster™, CORIOmaster mini™, or CORIOmaster micro™.

#### Features

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

## Recommendations

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

# About your Encoder-100

# Encoder-100 rear panel

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

# **Quick start**

It's easy to get started with the Encoder-100, but if you want more help

with any of these steps, select ? in CORIOgrapher<sup>M</sup> and search, or ask a question.

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 $\checkmark$ 

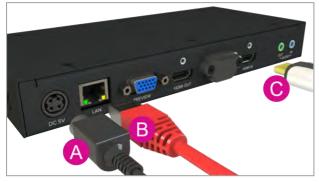
The Encoder-100 cannot encode HDCP encoded sources.

## Before you start

To use an Encoder-100, you must have a Dual stream input module installed in your CORIOmaster<sup>™</sup>, CORIOmaster mini<sup>™</sup>, or CORIOmaster micro<sup>™</sup>.

## Setting up the Encoder-100

Connect your cables.



- A. Connect the power supply to an electrical outlet.
- B. Connect an Ethernet cable to a DHCP-enabled network, or, connect an Ethernet cable directly to a DHCP-enabled PC.
- C. Connect an HDMI<sup>™</sup> cable to the video source that you wish to stream.

For example, you could connect a camera, an endoscope, or a media player.

- OPTIONAL: if you want to stream analog audio, or preview your audio, connect a 3.5 mm jack audio cable.
- OPTIONAL: if you want to see a preview of your stream, connect a VGA cable to PREVIEW, or an HDMI cable to HDMI OUT, and to a display.



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

## Configuring the Encoder-100 with CORIOgrapher

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

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



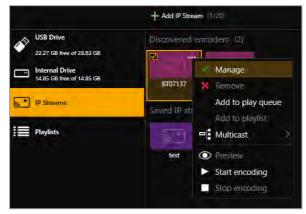
2. Set up a video wall that includes at least one window playing the Dual stream input module, and select Take.



3. Double-click the window you wish to play streaming media, and select (Media Player) Manage.

| м<br>• | EDIA_4K IN<br>Common |              |   |
|--------|----------------------|--------------|---|
|        | Alias                | Window1      |   |
|        | Input Slot           | PlayQueue1   | ~ |
|        | Input Name           | Slot5.In1    |   |
|        | Input Type           | MEDIA_4K IN  |   |
|        | Resolution           | 1920x1080p60 |   |
|        | HDCP                 | Off          |   |
|        | Media Player         | Manage       |   |

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



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

- If your Encoder-100 isn't displayed, select Find and enter the URL of your Encoder-100.
- If you can't find or connect to your Encoder-100, read troubleshooting advice on page 10.
- 5. Select System, and name your Encoder-100.

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

| Manage encoder | [My_Encoder1   | 00] - Encoding | ?     |
|----------------|----------------|----------------|-------|
| Status         | System:        |                |       |
| Capture        | Name           | My_Encoder100  |       |
|                | Serial number: | BT07159        |       |
| Encode         | Version:       | 1.05.03.007    |       |
| Stream         |                | Reboot         |       |
| Network        |                |                |       |
| System         |                |                |       |
|                |                |                |       |
|                |                |                | Close |

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

| Manage encoder | [My_Encoder100   | ] - En | co | ding  |    |     |    |     |   | ?     |
|----------------|------------------|--------|----|-------|----|-----|----|-----|---|-------|
| Status         | Network          |        |    |       |    |     |    |     |   |       |
| Capture        | Configuration:   | DHCP   |    |       | ~  |     |    |     |   |       |
|                | IP Address:      | 192    | ]. | 168   | ]. | 1   | ]. | 1   |   |       |
| Encode         | Subnet Mask:     | 255    | ]. | 255   | ]. | 255 | ]. | 0   |   |       |
| Stream         | Default Gateway: | 192    | ]. | 168   | ]. | 1   | ]. | 254 |   |       |
| Stream         | MAC Address:     | 74DAE  | A1 | 5DDCE |    |     |    |     |   |       |
| Network        |                  |        |    |       |    |     |    |     |   |       |
| System         |                  |        |    |       |    |     |    |     |   |       |
|                |                  |        |    |       |    |     | Ap | ply | L | Close |

- If you choose DHCP, the network assigns you an IP address.
- If you choose a static IP address, enter a value for your IP address, subnet mask, and gateway.

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

#### Static IP address

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

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

#### Risk of delayed signal

If your HDMI<sup>™</sup> video doesn't contain embedded audio, select None or Analog from Audio.

| Manage encoder                                                     | [My_Encoder100] - Encoding                                                                            | ? |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---|
| Manage encoder<br>Status<br>Capture<br>Encode<br>Stream<br>Network | [My_Encoder100] - Encoding<br>Capture<br>Video: 1920x1080p60<br>Audio: Analog   Sample rate: 48.0 kHz | ? |
| System                                                             |                                                                                                       |   |
|                                                                    |                                                                                                       |   |
|                                                                    | Apply Close                                                                                           |   |

8. Select Encode, and choose a profile.

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

| Manage encoder | [My_Encoder100]                                        | - Encoding                                                                   |                     | ? |
|----------------|--------------------------------------------------------|------------------------------------------------------------------------------|---------------------|---|
| Status         | Profile                                                |                                                                              |                     |   |
| Capture        |                                                        | <ul> <li>Higher qualit</li> <li>Balanced qua</li> <li>Lower bandw</li> </ul> | ality and bandwidth |   |
| Encode         |                                                        | © Custom                                                                     |                     |   |
| Stream         | Encoding                                               |                                                                              |                     |   |
| Network        | Specific video size:                                   | Use input frame                                                              | <b>v</b>            |   |
| System         | Target bitrate:<br>Audio bitrate:<br>Bitrate encoding: | 192 kbps                                                                     | и<br>И              |   |
|                |                                                        |                                                                              | Apply Close         |   |

9. Select Status > Start encoding.

| Manage encoder | [My_Encode | er100] - Encodin      | g                  |           | ? |
|----------------|------------|-----------------------|--------------------|-----------|---|
| Status         | Status     |                       |                    |           |   |
| Capture        | Status:    | Encoding              |                    |           |   |
| Encode         |            | Stop Encoding         |                    |           |   |
| Stream         | Address:   | rtsp://192.168.1.1:85 | 54/                |           |   |
| Network        | Statistics |                       |                    |           |   |
| Network        | Bitrate:   | 23.1 Mbps             | Average Bitrate:   | 17.4 Mbps |   |
| System         | Framerate: | 60 fps                | Average Framerate: | 61 fps    |   |
|                |            |                       |                    |           |   |
|                |            |                       |                    |           |   |
|                |            |                       |                    | Close     |   |

Read more about configuring encoders in CORIOgrapher Help.

## Playing streaming media

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



Read more about playing streaming media in CORIOgrapher Help.

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

#### What's the problem?

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

#### Why does this happen?

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

#### What to do

#### First try this

1. Restore the factory default settings of the Encoder-100.

Read about restoring factory default settings on page 1.

- 2. Change the network settings of the PC running CORIOgrapher so that it uses DHCP.
- 3. Check that the PC running CORIOgrapher and your Encoder-100 are on the same physical network.

#### Then try this

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

1. Put the Encoder-100 and the PC running CORIOgrapher on the same network temporarily, and configure the Encoder-100.

Configure the Encoder-100 with a static IP address.

Read about configuring your Encoder-100 on page 1.

- 2. Write down the IP address of the stream.
- 3. Return the Encoder-100 and the PC running CORIOgrapher to their original networks.
- 4. Manually add an IP stream with the IP address you wrote down in step **2**.

Read about manually adding streams on page 1.

### If that doesn't work

Check that your network settings are correct.

For more help, contact your network administrator.

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com , tech.europe@tvone.com or

tech.asia@tvone.com.

# **Regulatory compliance**

This product has been tested for compliance with appropriate FCC and CE rules and regulations. The power adapter and supply has been tested for compliance with appropriate UL, CUL, CE, PSE, GS, rules, regulations and/or guidelines. This product and its power adapter is RoHS compliant.

## **Contact us**

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