

Epiphan AV.io HD+™



November, 2022

1.0

UGHDPLUS-01

Releases and features

This section outlines the features introduced with AV.io HD+ firmware releases.

Release 22.08.18

Enables the following in the Epiphan Capture Tool:

- Change the name of the AV.io HD+
- Allows setting of custom UVC modes

Release 22.06.17 features

Initial Release

Registering the device

Why should I register my AV.io HD+?

It will allow you to activate your product warranty, give you notifications of firmware and software updates, and enable you to get our free personalized customer support.

How to register

1. Go to epiphan.com/register
2. Provide the required information. Your six digit serial number is found on your device. A valid e-mail address is required for product registration.

Table of contents

Thank you for choosing Epiphan Video!	ii
Releases and features	iii
Registering the device	iv
Start here	1
Product overview	2
What's in the box?	3
Hardware	4
<i>Hardware diagrams</i>	4
<i>Indicator LED details</i>	5
Quick start	6
Technical specifications	7
<i>System requirements</i>	9
Capture	10
How it works	11
Set up your device for capture	12
Resolutions, aspect ratios, and capture rates	13
Automatic image scaling & audio resampling	14
Third-party applications	15
Configuration	16
Install the AV.io+ Config tool	17
Update firmware using the AV.io+ Config tool	18
Identifying the input resolution	21
Advanced configuration options	22
<i>Set the audio mode</i>	23
<i>Modify the EDID</i>	26
<i>Modify the transfer pipe</i>	29
<i>Change device name</i>	34
<i>Set a custom UVC mode</i>	36
Appendices	39
Troubleshooting	40
Limitations and known issues	41
Releases and features	42
Software license	43
Terms and conditions	52

Start here

Welcome and thank you for buying Epiphan Video's AV.io HD+!

This guide contains all the information necessary to successfully capture live video content without any configuration – simply connect the cables and you're ready to go!

We'll start off by telling you about the product; giving you an overview, discussing the technical specifications, and more. Then we'll cover capturing video; providing a functional overview of how the product works, as well as some information on common resolutions, and third-party capture applications. Finally, we'll finish with a more detailed look at configuration, including advanced configuration options.

Let's get started!

Product overview

To use AV.io HD+, there's no software to install; simply connect the cables and go. It works on Windows, Mac, and Linux and integrates seamlessly with your favorite third-party applications such as Teams, Zoom, OBS, Wirecast, vMix, VLC, and Quicktime.

What's in the box?

Your AV.io HD+ product contains everything you need to easily capture live video content with minimal setup. Your purchase includes the following:

Table 1 Description of included purchase contents (for identification only, color and appearance of individual cables/adapters may vary).

<p>AV.io HD+ video grabber</p>	 A green and white rectangular video grabber device. The top half is green with the 'AV.io HD+' logo in white. The bottom half is white with the 'epiphan video' logo in green.	<p>Your video capture device!</p>
<p>HDMI connector cable (1 m / 3 ft)</p>	 A black HDMI cable with a standard HDMI connector on one end and a custom AV.io connector on the other.	<p>Connects an HDMI source to your AV.io HD+'s native HDMI port.</p>
<p>USB 3.0 cable (1 m / 3 ft)</p>	 A blue USB 3.0 cable with a standard USB-A connector on one end and a custom AV.io connector on the other.	<p>The USB 3.0 cable connects your AV.io HD+ video grabber with your computer's USB 3.0 or 2.0 port.</p>

Hardware

This section describes the physical features of your AV.io HD+, including diagrams and hardware feature descriptions.

Topics covered include:

- [Hardware diagrams](#)
- [Indicator LED details](#)

Hardware diagrams

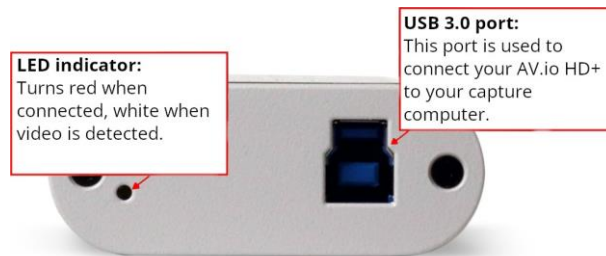
Your AV.io HD+ device includes inputs, an output, and an indicator light.

Input/output ports and indicator lights are identified and explained in the top and bottom view images below. Indicator light details are explained in the following section.

Top view:



Bottom view:



Indicator LED details

The color of the indicator LED depends on whether you are receiving power from the USB port and whether or not a video source is connected to the input port. If the USB is plugged into a PC and there is no video source connected to the input the LED will be solid red. Once an active video input is detected the LED will turn solid white.

From the operating system's UVC drivers, the application will receive the AV.io HD+ supported color space, resolution and frame rates. UVC stands for Universal Video Class and describes a type of USB device that uses standard drivers that come automatically installed on most operating systems.

LED color	USB/Input connection
Solid red	Power detected, no video input detected
Solid white	Power and active video input detected

Quick start

Setting up your AV.io HD+ device to capture live video and audio content couldn't be easier!

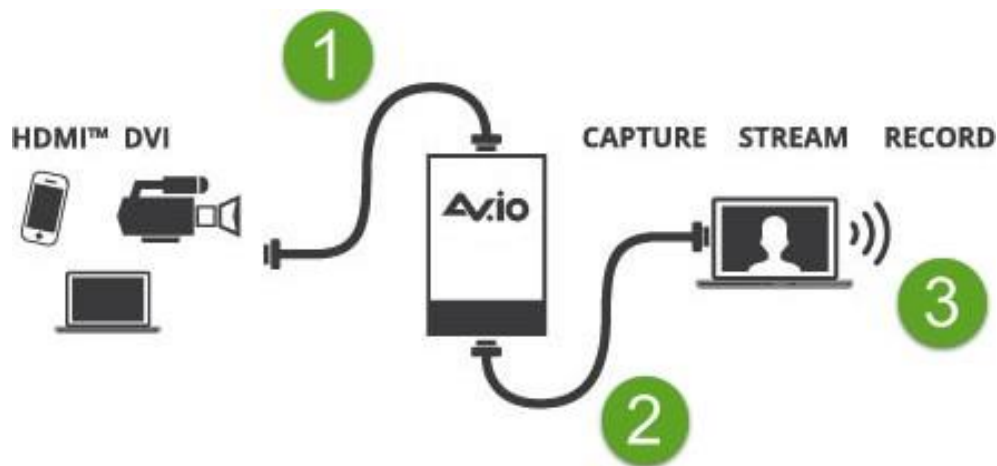
Before you begin the connection process, you will require:

- An HD video source (with or without audio)
- Your capture card device
- A capture desktop computer, laptop or notebook
- A USB cable (included with purchase) to connect your AV.io HD+ to your capture computer
- An HDMI cable (included with purchase) to connect your video source to your AV.io HD+.

Once you have these things ready to go, you can now begin the simple process of hooking up your AV.io HD+ so you can start capturing!

To connect your AV.io HD+ for capture:

1. Connect your AV.io HD+ device to your video source
2. Connect your AV.io HD+ device to your computer
3. (Optional) Connect your audio device to the 3.5 mm audio input.
4. Open your favorite third-party application, select AV.io HD+ from the list of available cameras and start capturing!



And that's it. No drivers to install and no extensive set-up. Just connect the cables and you're ready to go!

Technical specifications

Technical specifications for AV.io HD+ are included in the table below.

Connectors	HDMI USB standard B type																				
Input	HDMI (or DVI-D) (audio compatible)HDMI (including audio)																				
Audio Input	3.5mm analog audio 16-bit and 24-bit PCM encoded audio at 48 kHz																				
Audio (UAC) output	16-bit 48 kHz stereo audio																				
Capture latency	Near-zero latency, although certain third-party applications may contribute delay																				
HDCP Compliance	High-bandwidth digital content protection (HDCP) protected content cannot be captured																				
LED	LED indicates the status of AV.io HD+																				
OS support (32-bit and 64-bit)	Windows 10 and up Mac OS X 10.10 and up Linux distribution with kernel 3.5.0 or higher																				
USB support	USB 3.0 and 2.0																				
Input Resolution	Up to 1920×1200																				
Supported output resolutions (at 5 to 60 fps)	<table> <tr> <td>320×240</td> <td>640×360</td> </tr> <tr> <td>640×480</td> <td>720×480</td> </tr> <tr> <td>720×576</td> <td>768×576</td> </tr> <tr> <td>800×600</td> <td>856×480</td> </tr> <tr> <td>960×540</td> <td>1024×576</td> </tr> <tr> <td>1024×768</td> <td>1152×864</td> </tr> <tr> <td>1280×800</td> <td>1280×960</td> </tr> <tr> <td>1360×768</td> <td>1366×768</td> </tr> <tr> <td>1440×900</td> <td>1440×900</td> </tr> <tr> <td>1600×900</td> <td>1600×1200</td> </tr> </table>	320×240	640×360	640×480	720×480	720×576	768×576	800×600	856×480	960×540	1024×576	1024×768	1152×864	1280×800	1280×960	1360×768	1366×768	1440×900	1440×900	1600×900	1600×1200
320×240	640×360																				
640×480	720×480																				
720×576	768×576																				
800×600	856×480																				
960×540	1024×576																				
1024×768	1152×864																				
1280×800	1280×960																				
1360×768	1366×768																				
1440×900	1440×900																				
1600×900	1600×1200																				

	1680×1050 1920×1200	1920×1080
Dimensions	3.54" × 2.36" × 0.91" (90 mm × 60 mm × 23 mm)	

System requirements

System requirements are the barebones technical essentials your computer needs to work with AV.io HD+. System requirements to use AV.io HD+ include:

Video source	Any VESA-compatible HDMI (or DVI-D) source. Any VESA-compatible HDMI source.
Video capture workstation	Any computer (laptop/desktop/other format) with: <ul style="list-style-type: none">• a compatible USB 3.0 host controller for SuperSpeed operation; or,• a USB 2.0 host controller (will limit maximum frame rate and resolution support)
Video capture workstation operating system	Windows 10, and up Mac OS X 10.10 and up Linux distribution with kernel 3.5.0 or higher
Processor frequency	Minimum recommended value: 2.4 GHz
RAM	Minimum recommended value: 4 GB

Capture

Setting up your AV.io HD+ device to capture live video content couldn't be easier!

Before you begin the connection process, you will require:

- An HD video source (with or without audio)
- Your capture card device
- A capture desktop computer, laptop or notebook
- A USB cable (included with purchase) to connect to your AV.io HD+ to your capture computer
- An HDMI cable (included with purchase) to connect your video source to your AV.io HD+.

Once you have these things ready to go, you can now begin the simple process of hooking up your AV.io HD+ so you can start capturing!

How it works

Once you're ready to start capturing, you'll need either a built-in or third-party application to capture video and audio content with AV.io HD+.

The application communicates with AV.io HD+ and negotiates a **frame rate** (frequency at which frames in a video sequence are displayed) and **frame resolution** (size of a single video frame in pixels). A higher frame rate means smoother video capture while the frame resolution determines the aspect ratio of the video output as well as its dimensions and degree of definition.

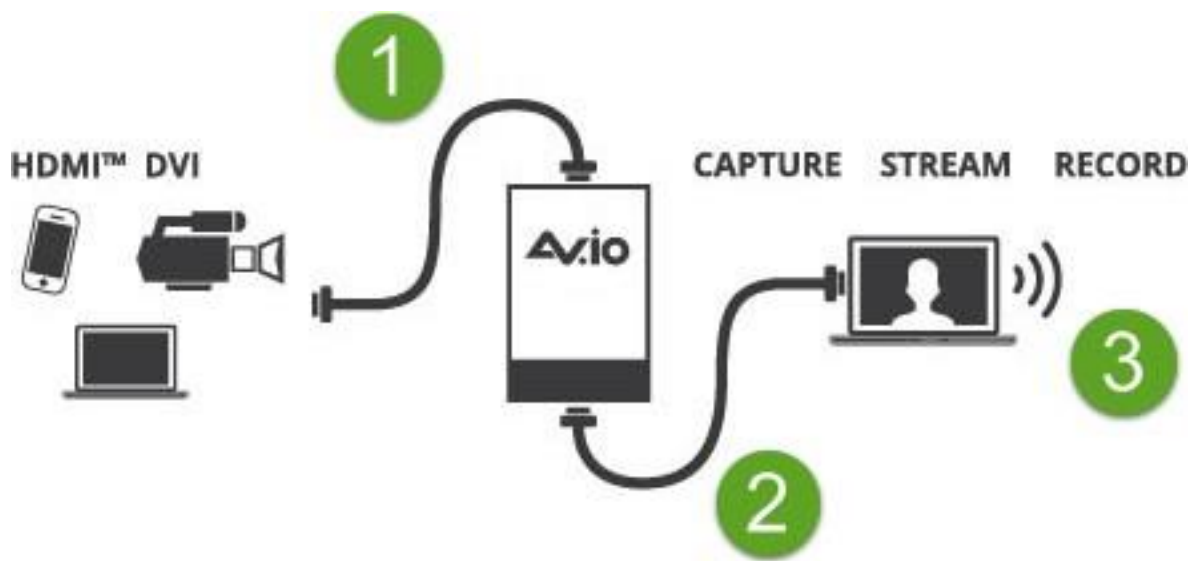
With the help of AV.io HD+, the content from your video source is automatically configured and captured on your computer through your selected application. If the application requests a frame size that is smaller or larger than your video source, AV.io HD+ automatically scales the video for you. For consistent and widely compatible output, audio is automatically resampled to 16-bit 48 kHz stereo audio.

No configuration required!

Set up your device for capture

To connect your AV.io HD+ for capture:

1. Connect your AV.io HD+ device to your video source, ideally directly to the source, but some video sources may require special adapters
2. Connect your AV.io HD+ device to your desktop computer, laptop, or notebook
3. Open your favorite third-party application, select AV.io HD+ from the list of available input sources, and start capturing!



And that's it! No drivers to install and no extensive set-up! Just connect the cables and you're ready to go!

Resolutions, aspect ratios, and capture rates

The **resolution** (also known as frame size or display mode) of a video signal, digital image, TV screen, computer monitor or other display device is a count of the number of pixels displayed horizontally and vertically. For example the resolution 1920×1080 (which is 1080p) creates an image that is 1920 pixels wide and 1080 pixels tall.

The **aspect ratio** of an image describes the proportional relationship between its pixel width and height. The resolution 1920×1080 (1080p) is quite a bit wider than it is tall. The ratio of its width to height is 16 to 9, represented as an aspect ratio 16:9.

AV.io HD+ outputs resolutions in commonly supported aspects ratios. The table below is a color-coded legend for interpreting the table of product resolutions below it:

Aspect Ratio	Common Use
4:3	Standard TV (NTSC/PAL) display and non-widescreen computer displays
16:9	Widescreen (HD) TV displays (1080p, 1080i, 720p etc.)
16:10 (8:5)	Widescreen computer displays
5:4	Sometimes used in larger format computer monitors

AV.io HD+ generates a list of the following possible resolutions for your capture application to select for output display:

640×360	848×480	1024×768	1280×1024	1920×1080
640×480	960×540	1280×720	1600×1200	1920×1200

Captured video content is output to your application at **between 5 and 60 frames per second** (your application chooses one of these frame rates) when captured over USB 3.0. This table is not an exhaustive list of all the resolutions your AV.io HD+ can output, just a list of common and tested resolutions.

Automatic image scaling & audio resampling



If your source content is larger or smaller than the frame size chosen by the application, AV.io HD+ automatically **scales your source** to match the desired frame size. No user configuration required!







AV.io HD+ also automatically performs **audio resampling**, meaning that no matter the bit depth or sampling frequency of audio through an HDMI audio source, AV.io HD+ automatically resamples your audio so that your application gets a consistent audio sample rate and bit depth, even if you change the video source.

Third-party applications

AV.io HD+ uses pre-installed drivers on your OS (called **UVC drivers** and **UAC drivers**) to communicate with third-party applications and capture content. Due to AV.io HD+'s use of UVC/UAC technology, there is no need for driver installation. Just like a webcam, your AV.io HD+ device is immediately recognized as a camera device and can be used to capture content via any UVC-compatible third-party application.

Third-party applications that work with AV.io HD+ include, but are not limited to the following list. Try your favorite capture application!

Zero-install applications (included with your OS)		
 Windows Camera app (with Windows 8.1, Windows 10, and up)		 QuickTime (with Mac OS X, and up)

Popular applications available for download		
 Microsoft Teams	 OBS	 VLC
 vMix	 Wirecast	 Zoom

Configuration

Your AV.io HD+ device is ready to use right out of the box; however, there is support for additional configuration should you need it.

Firmware updates and changes to default capture settings can be applied to your AV.io HD+ using Epiphan's AV.io+ Config tool. For settings to persist after power cycling, please allow 5 seconds before disconnecting or restarting the device.

You likely won't need to use the AV.io+ Config tool for more than firmware updates, but advanced settings can help you tweak the performance to get the most out of your AV.io HD+.

Advanced configuration options include:

- **Audio selector for audio inputs**
- **Select preferred EDID, or upload a custom EDID**
- **Modify Transfer Pipe**
- **Change the name of the device as it's seen by programs and operating system**
- **Set a custom UVC mode**

Detailed instructions on how to use AV.io+ Config include:

- [Install the AV.io+ Config tool](#)
- [Update firmware using the AV.io+ Config tool](#)
- [Identify input details using the AV.io+ Config tool](#)
- [Advanced configuration options](#)
- [Set a custom UVC mode](#)

Install the AV.io+ Config tool

Epiphan's AV.io+ Config tool is used for loading firmware updates on your AV.io HD+ and for advanced settings changes.



You may install AV.io+ Config on the same computer(s) where you use AV.io HD+, or only on one computer for configuration. All firmware updates and settings changes are saved to the device and work without any software installed on the computer. For settings to persist after power cycling, please allow 5 seconds before disconnecting or restarting device.

To install the AV.io+ Config tool, follow the directions below for your computer's operating system.

Windows

1. Download the AV.io+ Config package under the **Windows** heading on the AV.io HD+ Downloads page on Epiphan's web site.

<https://www.epiphan.com/support/avio-hd-plus-software-documentation/>

2. Extract all the files from the zip file (remember the location you're unzipping to).
3. Browse to the folder you unzipped to and open the AV.io+ Config tool by double-clicking on **EpiphanCaptureConfig.exe**. (Depending on your local security settings, you may need to right-click and choose to run the file as an administrator).
4. AV.io+ Config starts! If your AV.io HD+ is connected to the computer by USB, it should be detected.

Update firmware using the AV.io+ Config tool

When new firmware is available, you can load this firmware onto your AV.io HD+ using the AV.io+ Config tool and the steps below. If you [register your product](#) and agree to be notified of product updates, you'll receive an email when there is a firmware update available for download.

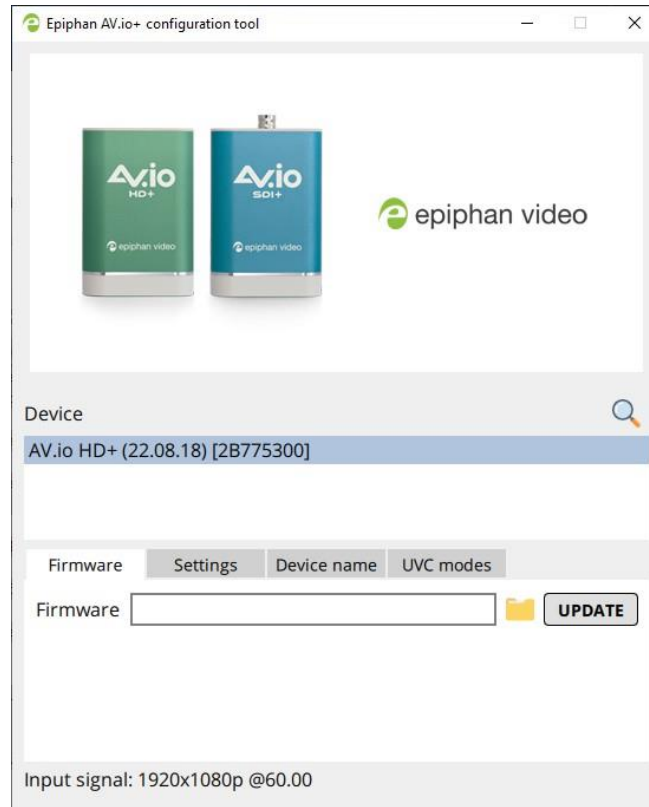


Attempting to update firmware while running virtual machines will result in firmware upgrade failure.

For updates to persist after power cycling, please allow 5 seconds before disconnecting or restarting device.

To update firmware using the AV.io+ Config tool:

1. If you haven't already done so, download and install the AV.io+ Config tool. See [Install the AV.io+ Config tool](#).
2. Download the firmware update file from the Epiphan website, as described in your firmware update notification email or discussion with your vendor.
3. Connect your AV.io HD+ device to your computer, laptop, or notebook.
4. Open the AV.io+ Config tool.



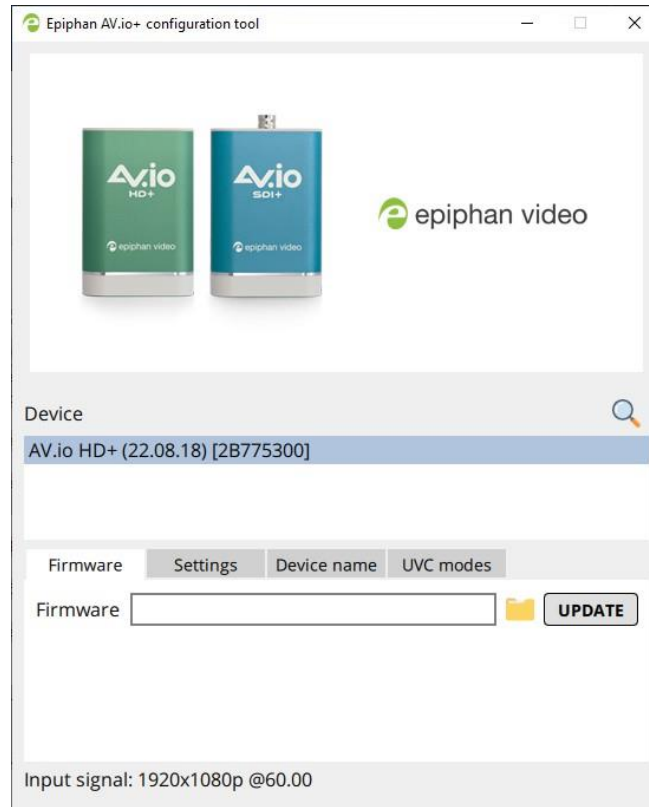
5. Select your AV.io HD+ device from the list under the Devices heading.



If your AV.io HD+ device is not displayed, press the Refresh icon to refresh the list of connected devices.



6. Using the diagram below, check the current firmware version of your AV.io HD+. You can see the current version of the firmware in parenthesis next to the name of your device in the Config Tool. If it is the same version as the new firmware you downloaded, there is no need to do the firmware update.
7. If it isn't already selected click the **Firmware** tab



8. Click the **folder icon** to navigate to the saved location of the firmware, and click **Update** to update your video grabber to the selected firmware; an update bar appears and displays the progress of the update.
 - Please note, there will be two files in the compressed firmware file, a .bit and .img, perform this step with both files.



Do not disconnect your AV.io HD+ at any point during the update process! Doing so may cause irrevocable errors and/or permanently damage the device.

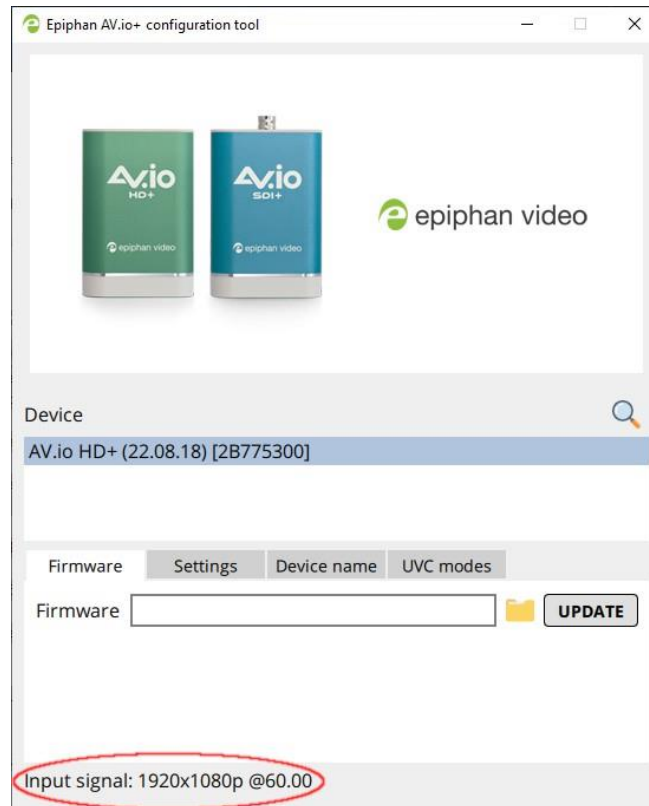
9. When the update is finished the progress bar turns green and displays “Update Completed” (Note: the firmware update will not automatically be reflected in the Devices list unless the **Refresh** icon is clicked). You may now safely disconnect your AV.io HD+ if needed.



When updating firmware on a Mac, the “Update Completed” text will not be displayed. The firmware upgrade is complete when the progress bar fills the width of the AV.io Config window and the window contents are no longer greyed out.

Identifying the input resolution

The AV.io Config tool can help you figure out exactly what information your video source is sending. Plug in the source and select your device. The UI detects information about the source and presents it at the bottom of the window.



The line tells you the exact resolution of the source (1920×1080p), and the frame rate the source is outputting (60 fps).

Advanced configuration options

The AV.io+ Config tool allows you to adjust several settings to make changes to your video capture experience if necessary. Most users won't need to use this utility for anything other than firmware updates, but advanced users may find these tweaks help them get the most out of their AV.io HD+.

These options include:

- **Select input for audio**
- **Select preferred EDID, or upload a custom EDID**
- **Modify Transfer Pipe**
- **Change the name of the device as it's seen by programs and operating system**
- **Set a custom UVC mode**

There are two key descriptors used in the process of video capture using a UVC-based device:

Extended Display Identification Data (EDID): The EDID describes to the video source, video player, or computer which standard video formats (resolutions, frame rates, etc.) are supported by the capture device as video input.

UVC Descriptor: The UVC descriptor describes to the capture host computer which formats are available at the capture device USB port.

Select input for audio

Your AV.io HD+ has a number of different audio input options, from ingesting audio from the main HDMI input, to utilizing audio from the 3.5mm jack, or combining them. You can read more about the different audio modes in the [Set the audio mode](#) section.

Select preferred EDID, or upload a custom EDID

Your AV.io HD+ has the ability to use a specific EDID from a list of preloaded files, or have a custom EDID file uploaded to it for use in specific applications. You can learn more in the [Modify the EDID](#) section of the guide.

Modify Transfer Pipe

Your AV.io HD+ can modify the transfer pipe to increase compatibility with certain systems. The default option is Bulk, but if needed can be switched to Isochronous mode, if, for example, the PC to which your AV.io HD+ is connected has lower performance or USB bandwidth availability. Please be aware that general performance may be lower in Isochronous mode. For more information check the [Modify the transfer pipe](#) section of the guide.

Change the name of the device as it's seen by programs and operating system

It's possible to change the device name of your AV.io HD+ so that both your operating system and applications will identify and use the name you designate. This can be very useful when using multiple AV.io+ devices at the same time. You can learn more in the [Change device name](#) section of the guide.

Set a custom UVC mode

You are able to set a custom UVC mode when using your AV.io HD+. What this means is that, using the AV.io+ Config tool, you can set a specific output resolution and frame rate so that applications are not able to request different values and must try to use the values that have been set. Learn more in the [Set a custom UVC mode](#) section of this guide.

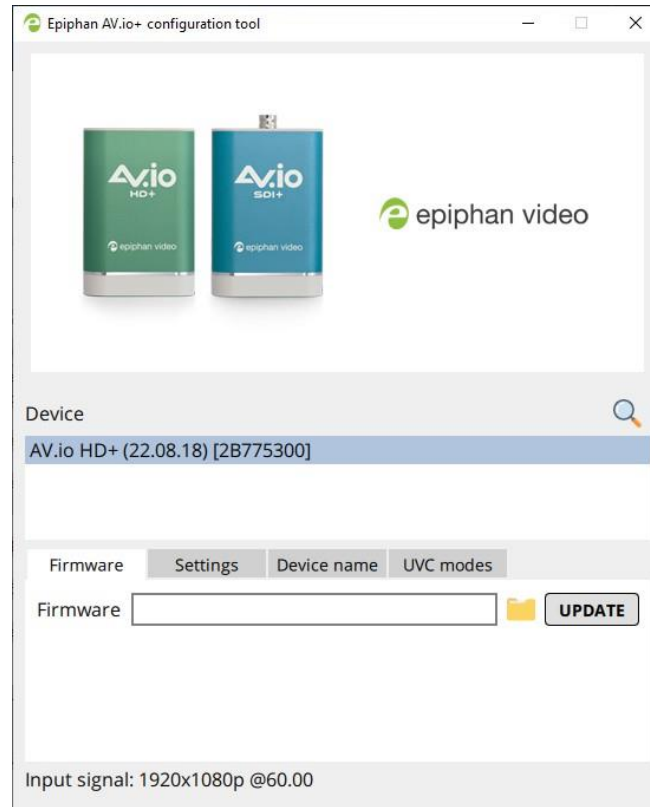
Now that you've learned what these configuration settings do, you may want to [Update firmware using the AV.io+ Config tool](#).

Set the audio mode

The AV.io+ Config tool gives users the ability to specify a specific mode for audio output. For settings to persist after power cycling, please allow 5 seconds before disconnecting or restarting device.

To set the audio mode with the AV.io+ Config tool:

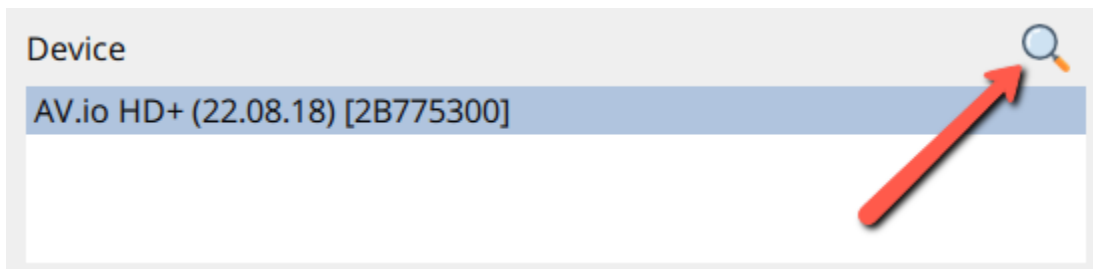
1. If needed, install the AV.io+ Config tool. For details specific to your OS, see [Install the AV.io+ Config tool](#).
2. Connect your AV.io HD+ device to your computer, laptop, or notebook.
3. Open the AV.io+ Config tool.



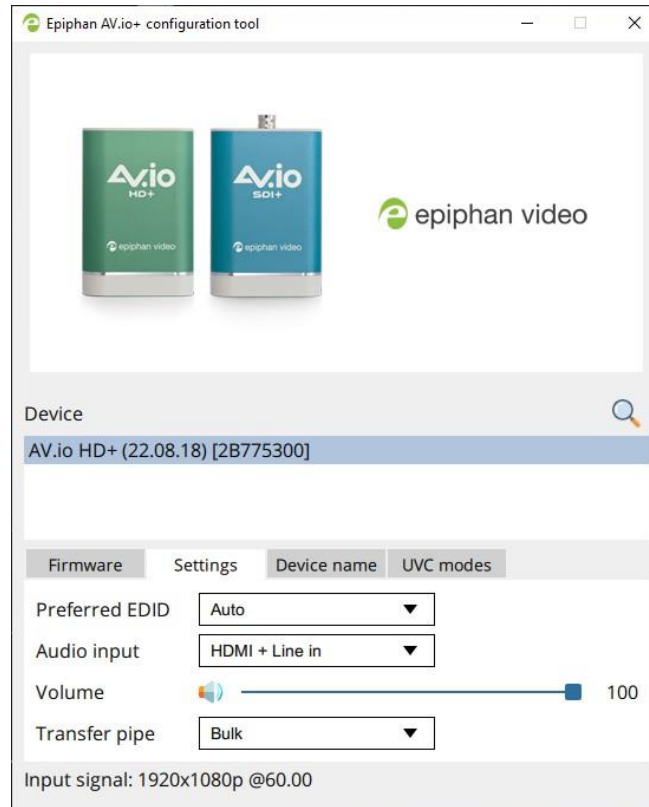
4. Select your AV.io HD+ device from the list under the Devices heading.



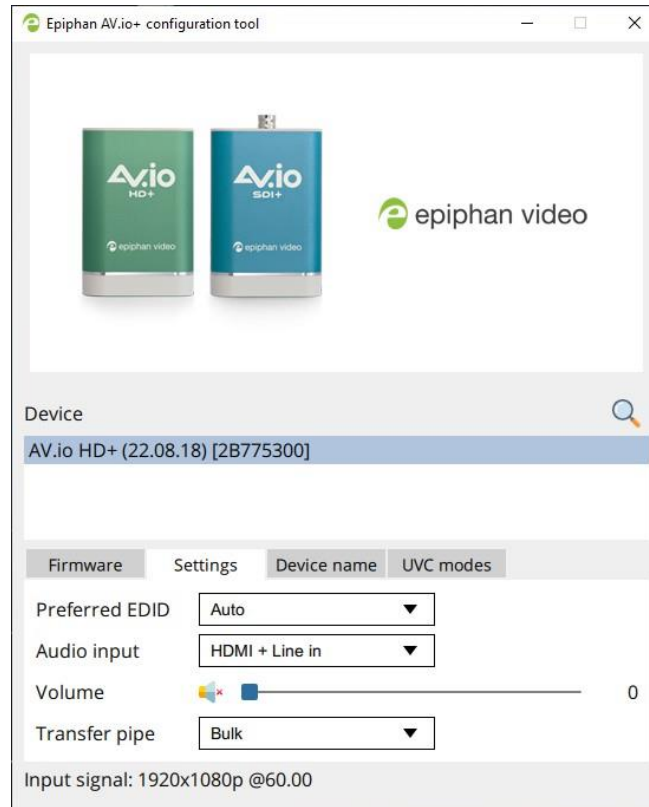
If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.



5. Click the **Settings** tab; the Settings page appears.



6. To change the Audio input, click on the drop down menu and select from HDMI, Mic In, Line In, HDMI + Line In, or HDMI + Mic In.
7. You can also adjust the volume of the input by moving the Volume slider to the left or right. Moving it all the way to the left will mute the audio source.

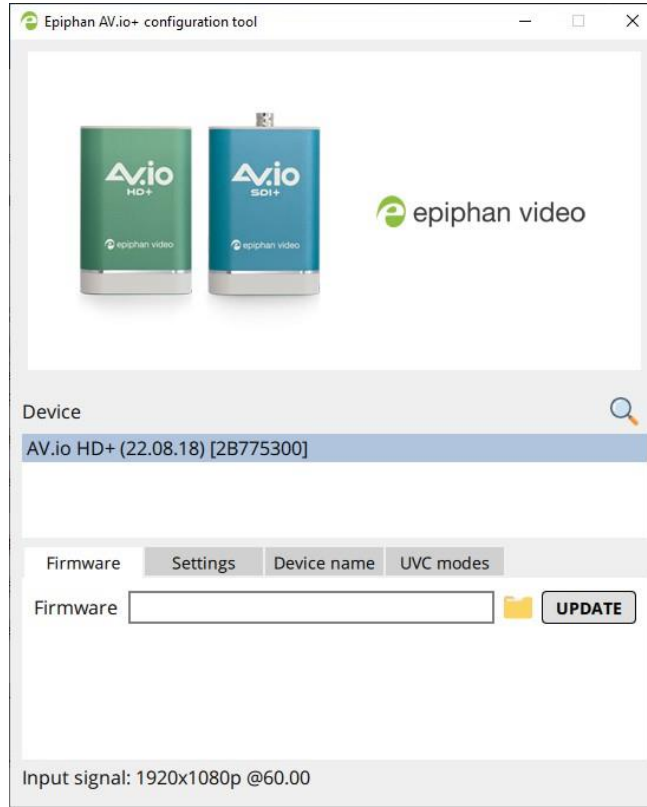


Modify the EDID

The AV.io+ Config tool gives users the ability to specify a specific EDID from a list of preloaded EDID files, or load a custom EDID file. For settings to persist after power cycling, please allow 5 seconds before disconnecting or restarting device.

To modify the EDID with the AV.io+ Config tool:

1. If needed, install the AV.io+ Config tool. For details specific to your OS, see [Install the AV.io+ Config tool](#).
2. Connect your AV.io HD+ device to your computer, laptop, or notebook.
3. Open the AV.io+ Config tool.



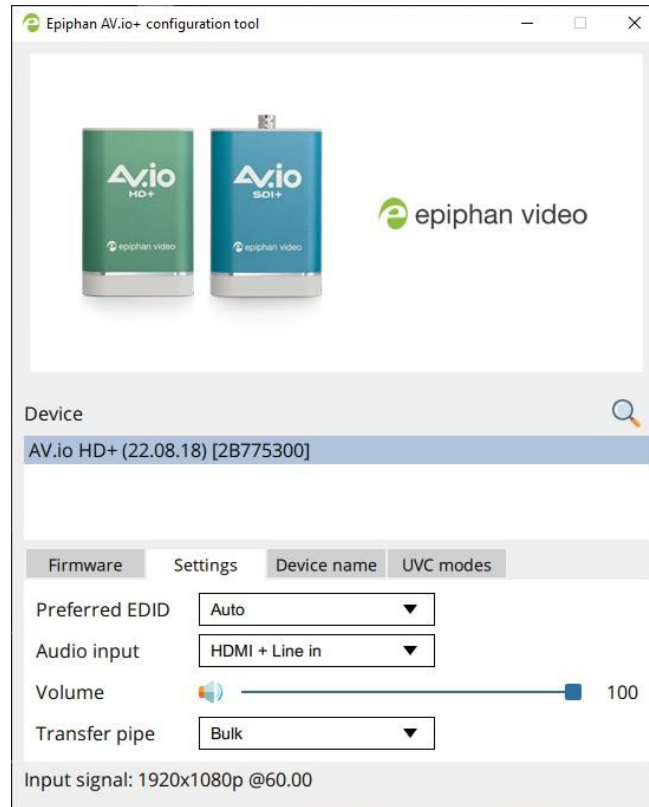
4. Select your AV.io HD+ device from the list under the Devices heading.



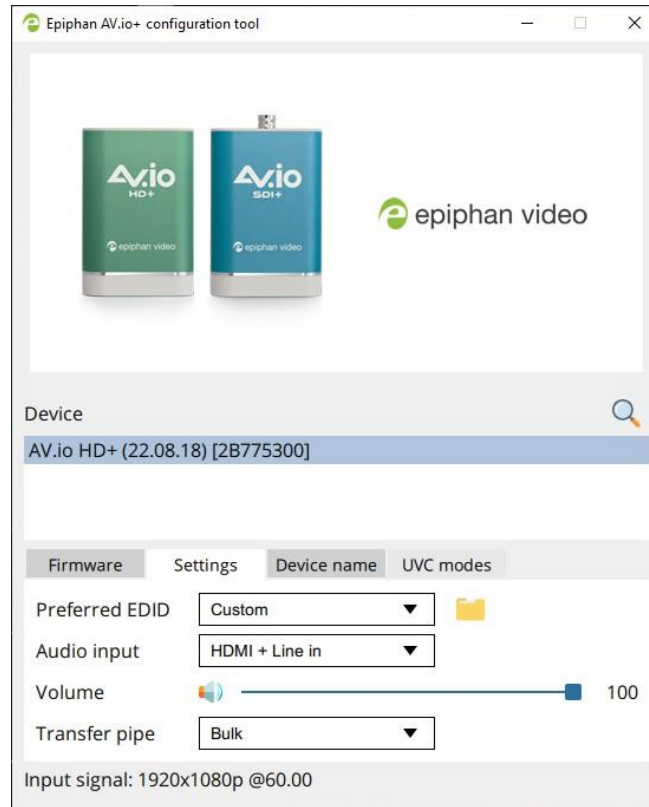
If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.



5. Click the **Settings** tab; the Settings page appears.



6. To select a preloaded EDID file, click on the Preferred EDID drop down and select one of the listed EDID files.
7. To load a custom EDID file select Custom from the Preferred EDID drop down, a small folder icon will appear to the right of the drop down.



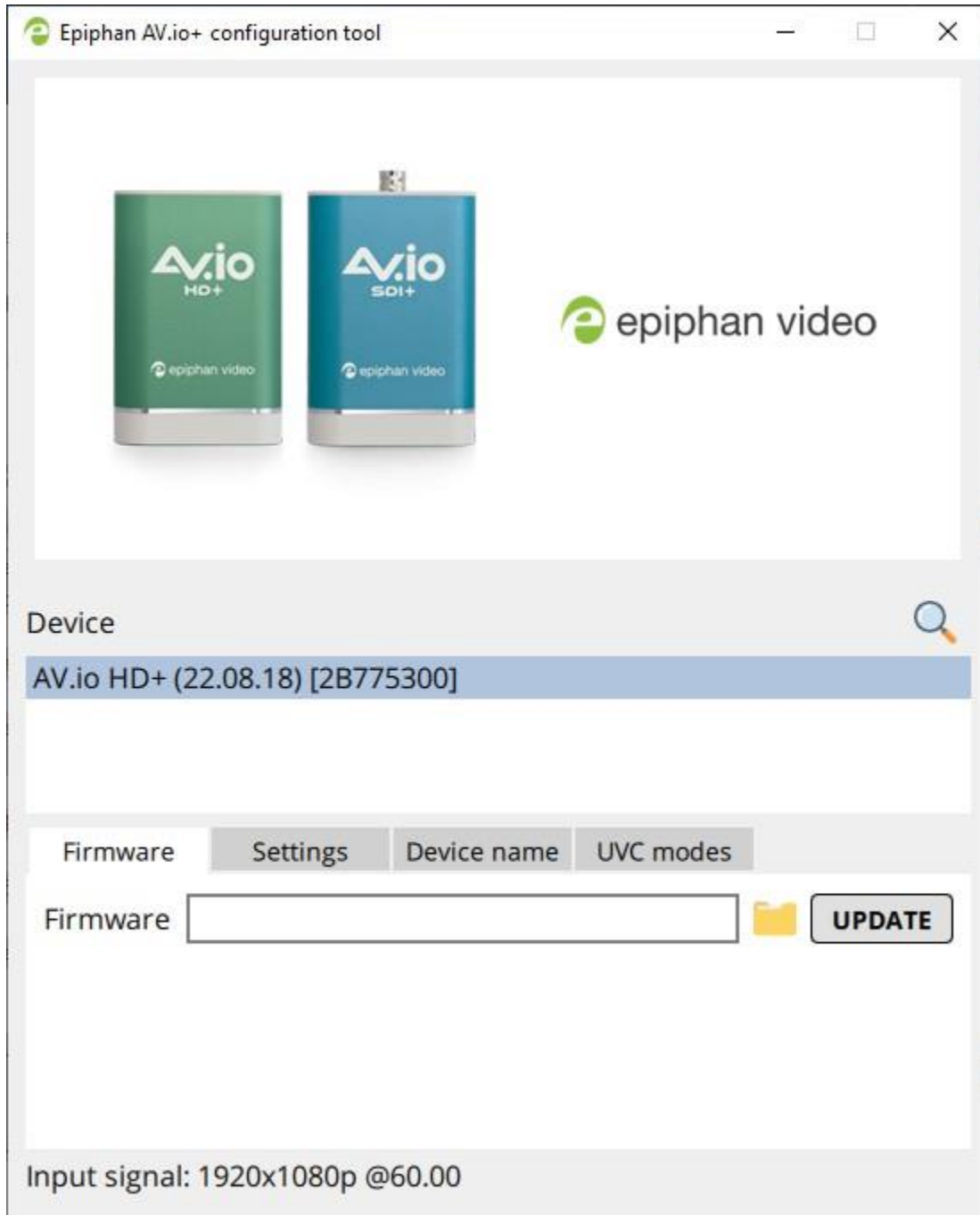
8. Click on the folder icon and a window will pop up; navigate to the custom EDID file you want to load and click Open.
9. Wait for the AV.io HD+ to process the change and you're done!

Modify the transfer pipe

The AV.io+ Config tool gives users the ability to increase compatibility with certain systems by modifying the transfer pipe. For settings to persist after power cycling, please allow 5 seconds before disconnecting or restarting device.

To modify the transfer pipe mode with the AV.io+ Config tool:

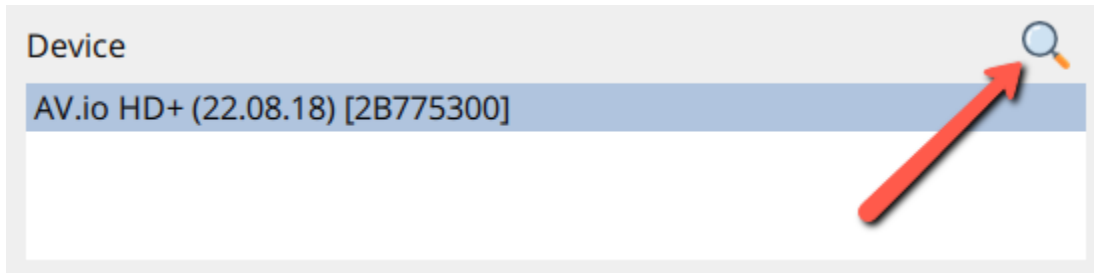
1. If needed, install the AV.io+ Config tool. For details specific to your OS, see [Install the AV.io+ Config tool](#).
2. Connect your AV.io HD+ device to your computer, laptop or notebook.
3. Open the AV.io+ Config tool.



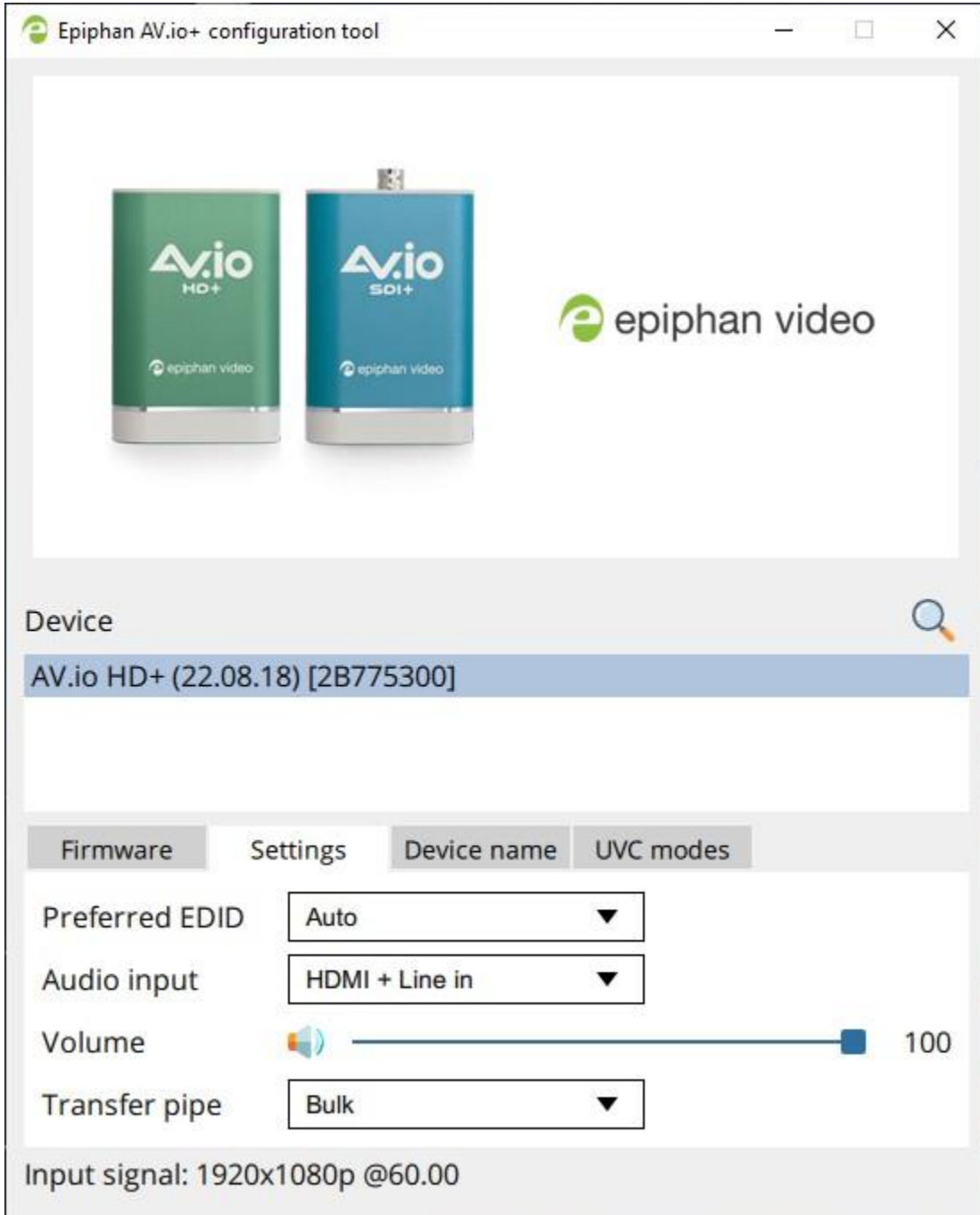
4. Select your AV.io HD+ device from the list under the Devices heading.



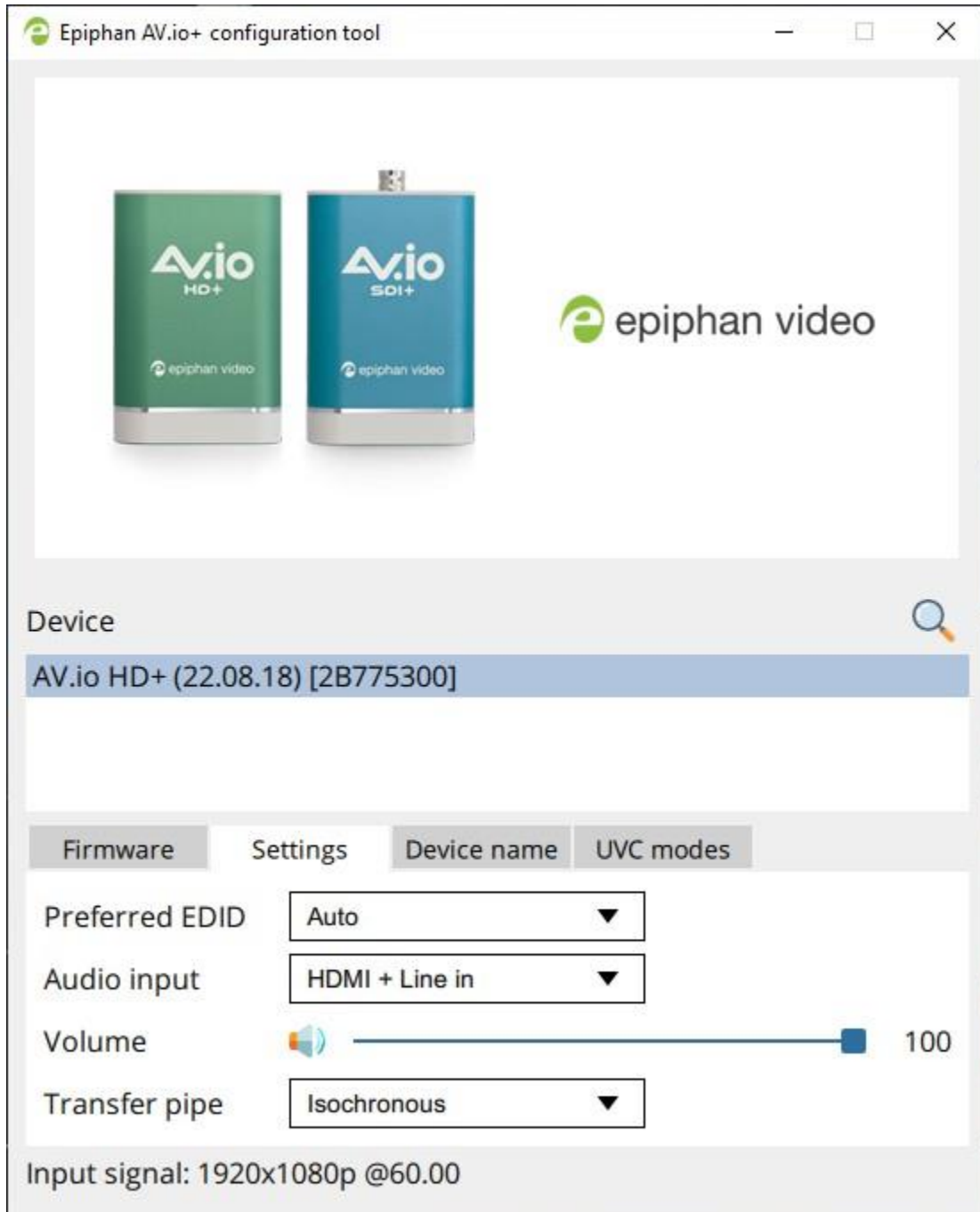
If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.



5. Click the **Settings** tab; the Settings page appears.



6. To modify the transfer pipe click the drop down next to **transfer pipe** and select either **Bulk** or **Isochronous**.



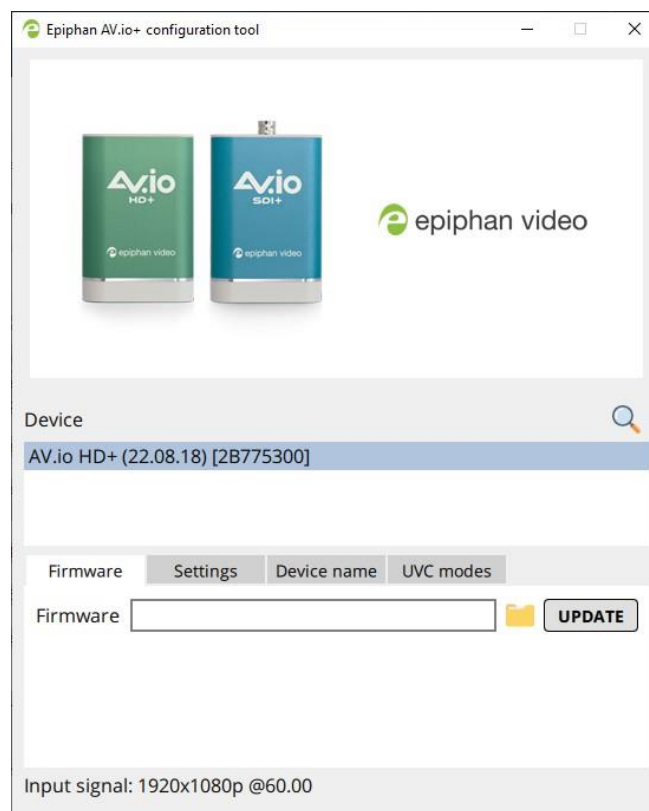
7. Wait for the AV.io HD+ to process the change and you're done!

Change device name

The AV.io+ Config tool gives users the ability to specify a custom device name. This is the name that will be shown in the Device Manager, as well as various third-party applications. For settings to persist after power cycling, please allow 5 seconds before disconnecting or restarting device.

To change the device name with the AV.io+ Config tool:

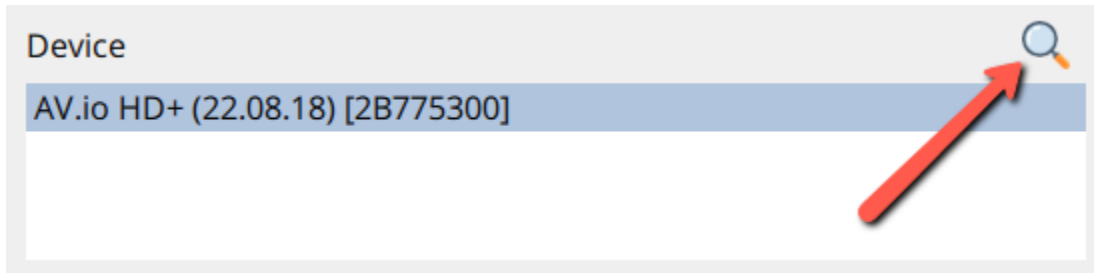
1. If needed, install the AV.io+ Config tool. For details specific to your OS, see [Install the AV.io+ Config tool](#).
2. Connect your AV.io HD+ device to your computer, laptop, or notebook.
3. Open the AV.io+ Config tool.



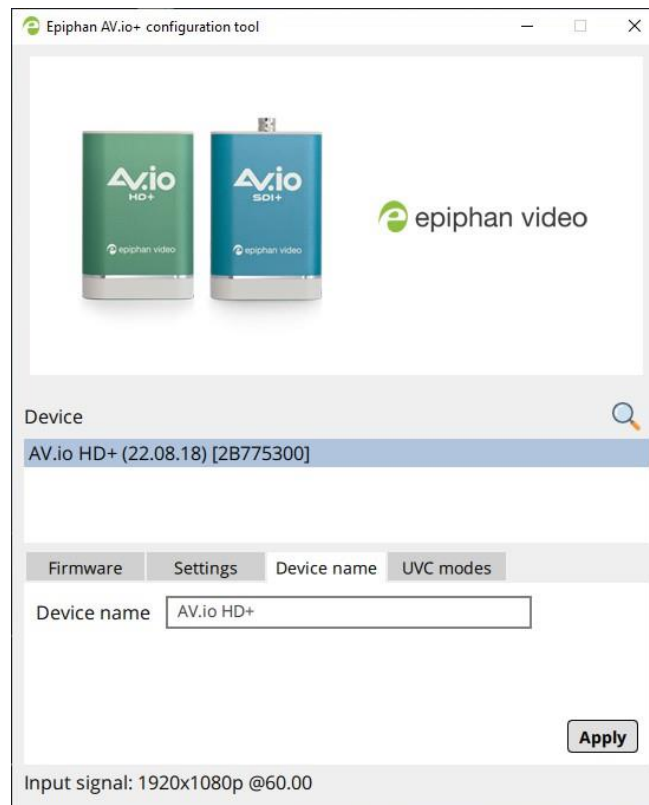
4. Select your AV.io HD+ device from the list under the Devices heading.



If your video grabber is not displayed, press the Scan icon to refresh the list of connected devices.



- Click the **Device name** tab; the Device name page appears.



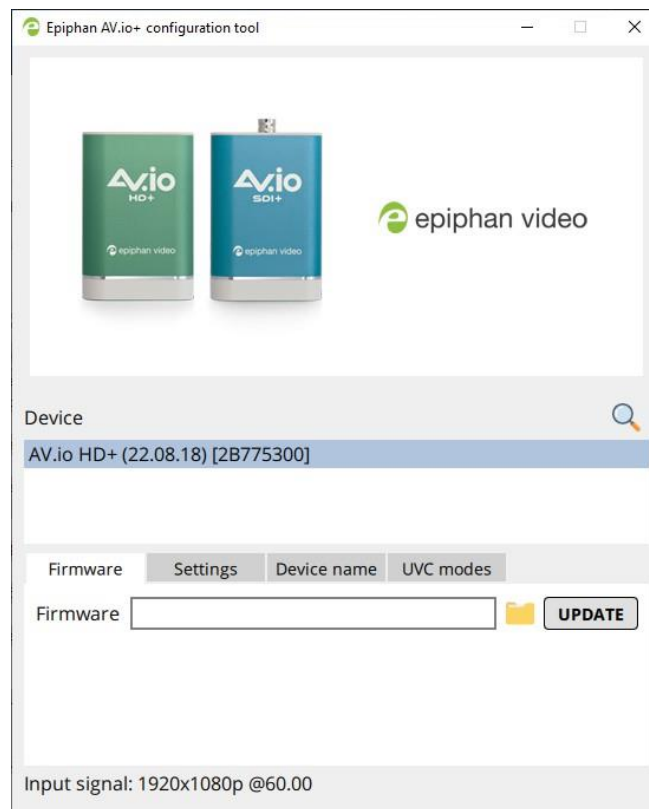
- To set a custom device name, click in the Device name box and type in your desired name; then click Apply.
- Navigate to the Device Manager in Windows and find the AV.io HD+ with its previous name listed under **Cameras**, and **Sound, video, and game controllers**.
- Right-click each entry and choose **Uninstall device**.
- Once the devices have been uninstalled unplug the AV.io HD+'s USB cable from the computer and then plug it back in.
- Then click the **Scan** icon in the AV.io+ Config utility to confirm the changes.

Set a custom UVC mode

The AV.io+ Config tool gives users the ability to specify a custom UVC mode for output. For settings to persist after power cycling, please allow 5 seconds before disconnecting or restarting device.

To set a custom UVC mode with the AV.io+ Config tool:

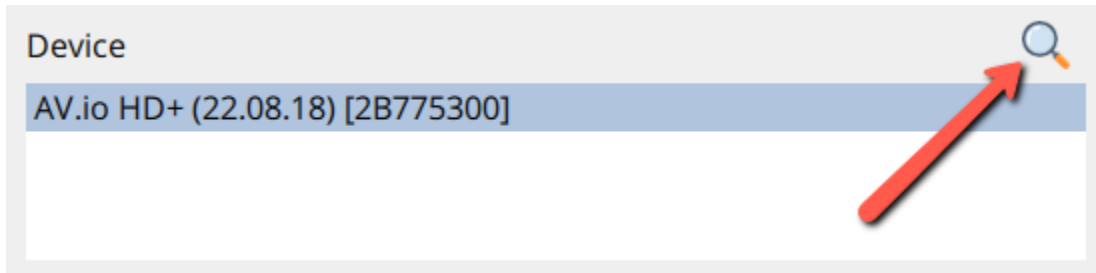
1. If needed, install the AV.io+ Config tool. For details specific to your OS, see [Install the AV.io+ Config tool](#).
2. Connect your AV.io HD+ device to your computer, laptop, or notebook.
3. Open the AV.io+ Config tool.



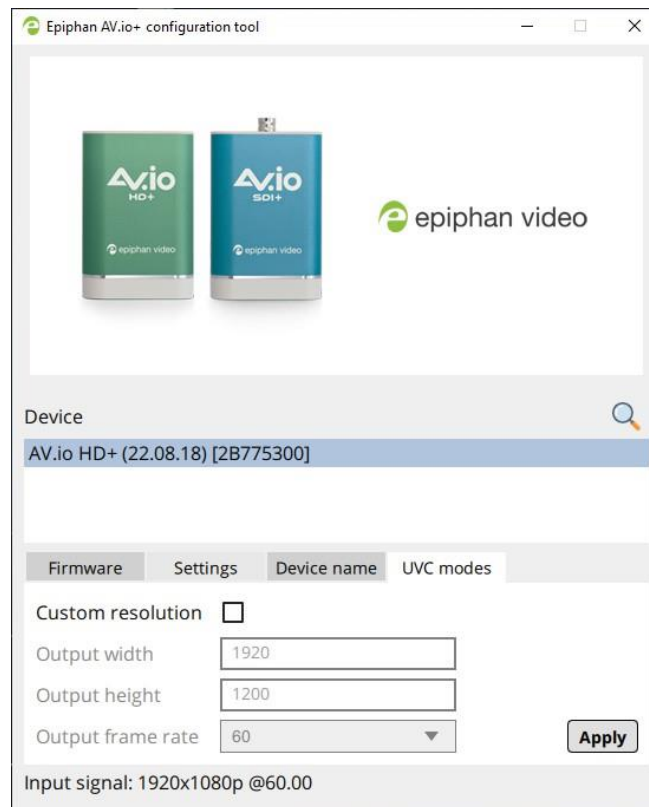
4. Select your AV.io HD+ device from the list under the Devices heading.



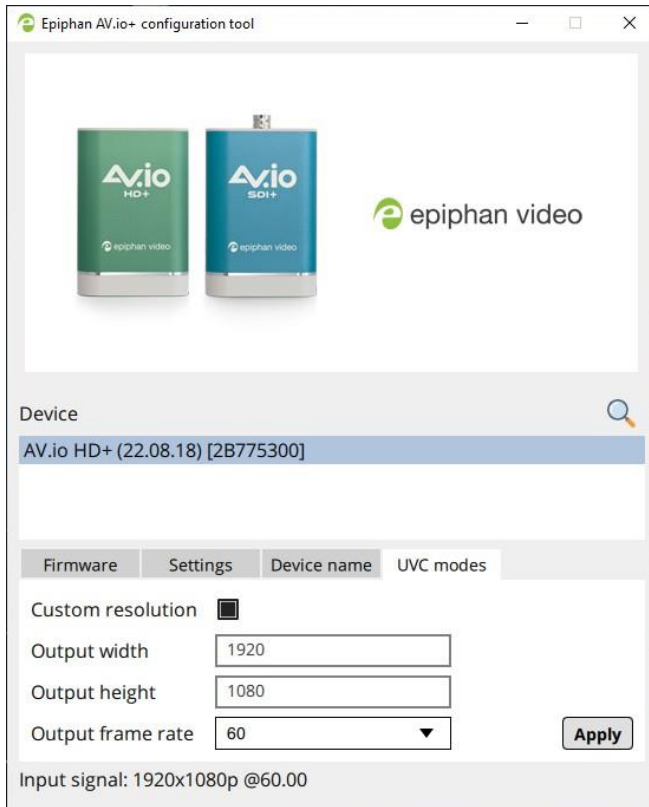
If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.



5. Click the **UVC modes** tab; the UVC modes page appears.



6. To create a custom resolution, click the check box for Custom resolution. The grayed-out area becomes open for changes.
7. Select the text box labeled **Output Width**, erase the number that is currently in the box, and type out the width of the custom resolution you wish to use. Then do the same for the resolution height in the text box labeled **Output Height**.
8. Select an Output frame rate from the drop down menu.



9. Click **Apply**; the custom resolution you defined will now be the only output resolution that you are allowed to select from the settings of the third-party application of your choice.

Appendices

The following appendices are included in this section:

- [Troubleshooting](#)
- [Limitations and known issues](#)
- [Releases and features](#)

Troubleshooting

Use the follow table for help if you are experiencing problems or unexpected behavior from your AV.io HD+.

Symptom(s)	Action(s) to resolve
Device not detected after interrupted firmware update	(Windows only) When in the config tool press F12 to enter firmware recovery mode, then select a firmware file and click update to forcibly reflash the capture card.
Applications cannot open the capture card when a custom UVC mode is set	Please make sure that the card is connected via USB 3.0 for all modes to be valid; only low frame rate modes are valid when connecting via USB 2.0

Limitations and known issues

This section includes known issues or limitations that affect functionality or usability. It also has ways that you can work around these limitations.

Affecting Asmedia USB 3.0 controller ASM3142

- There is an issue that presents as an audio problem when using this USB 3.0 controller
 - **Workaround:** Update the driver for the USB controller

Affecting systems with an AMD Ryzen 7 CPU

- There is an issue that presents as an audio problem when using older drivers
 - **Workaround:** Update the chipset drivers for your CPU.

Releases and features

This section outlines the features introduced with AV.io HD+ firmware releases.

Release 22.08.18

Enables the following in the Epiphan Capture Tool:

- Change the name of the AV.io HD+
- Allows setting of custom UVC modes

Release 22.06.17 features

Initial Release

Software license

ATTENTION: THE SOFTWARE AND DOCUMENTATION PROVIDED UNDER THIS AGREEMENT ARE BEING LICENSED TO YOU BY EPIPHAN SYSTEMS INC. ("LICENSOR") AND ARE NOT BEING SOLD. THIS AGREEMENT CONTAINS LIMITATIONS ON REPRESENTATIONS, WARRANTIES, CONDITIONS, REMEDIES, AND LIABILITIES THAT ARE APPLICABLE TO THE SOFTWARE AND DOCUMENTATION.

Epiphan Systems Inc.

Software License

IMPORTANT: BEFORE DOWNLOADING, INSTALLING, OR USING THE SOFTWARE AND DOCUMENTATION, PLEASE CAREFULLY READ THIS AGREEMENT WHICH CONTAINS THE TERMS AND CONDITIONS UNDER WHICH YOU ARE ACQUIRING A LICENSE TO USE THE SOFTWARE AND DOCUMENTATION. IF YOU DO NOT ACCEPT THE TERMS AND CONDITIONS OF THIS AGREEMENT PLEASE DO NOT DOWNLOAD, INSTALL, OR USE THE SOFTWARE AND DOCUMENTATION AND PROMPTLY RETURN OR DESTROY THE SOFTWARE AND DOCUMENTATION. IF YOU DOWNLOAD, INSTALL, OR USE THE SOFTWARE AND/OR DOCUMENTATION, YOU WILL HAVE ACCEPTED AND AGREED TO THESE TERMS AND CONDITIONS. THE SOFTWARE, HARDWARE AND DOCUMENTATION ARE ALSO PROTECTED BY COPYRIGHT LAWS AND INTERNATIONAL COPYRIGHT TREATIES, AS WELL AS OTHER INTELLECTUAL PROPERTY LAWS. IF YOU ARE AN AGENT OR EMPLOYEE OF AN ENTITY, YOU REPRESENT AND WARRANT THAT (I) THE INDIVIDUAL ACCEPTING THIS AGREEMENT IS DULY AUTHORIZED TO ACCEPT THIS AGREEMENT ON SUCH ENTITY'S BEHALF AND TO BIND SUCH ENTITY, AND (II) SUCH ENTITY HAS FULL POWER, CORPORATE OR OTHERWISE, TO ENTER INTO THIS AGREEMENT AND PERFORM ITS OBLIGATIONS UNDER THIS AGREEMENT.

1. Definitions: In this Agreement:

"Agreement" means this Epiphan Systems Inc. Software License;

"API" means an application programming interface;

"Documentation" means the technical publications delivered to You with the Software relating to the installation and operation of the Software and/or Hardware, such as reference, user, installation, and technical guides and release notes;

"Epiphan" means Epiphan Systems Inc.;

"Epiphan Hardware Product" means an Epiphan hardware product (including enclosure and mechanical parts, circuitry and electrical and electronic components contained therein) purchased by You, which is intended to be used in conjunction with the licensed Software and Documentation;

"License Key" means a series of computer-generated characters used for the purpose of controlling the operation of Epiphan Hardware Products and/or related Software;

"Software" means the Licensor binary and/or bytecode software and/or firmware programs that are (i) specified in Your Order or that are included with or in the Epiphan Hardware Products specified in Your Order, (ii) are made available to You for download after acceptance of this Agreement, (iii) are packaged with this Agreement, (iv) pre-installed on Epiphan Hardware Products, (v) embedded with this Agreement in their installer(s) and which are installed after acceptance of this Agreement, or (vi) embedded with this Agreement in their product documentation. Software also includes the related Documentation;

"You" or "Your" means the individual acquiring the Software license or any entity on whose behalf such individual is acting. In the case of an entity, "You" includes any entity that by majority voting interest controls, is controlled by, or is under common control with You; and

"Your Order" means (i) the web forms provided by Epiphan or its applicable reseller or distributor for ordering Epiphan Hardware Products and related Software licenses, or (ii) written documents executed by Epiphan, or one of its resellers or distributors, and You in respect to Your purchases of Epiphan Hardware Products and/or related Software licenses.

2. Grant of Software License: Subject to the terms and conditions of this Agreement, including payment of any applicable fees specified in Your Order, Licensor grants You a non-exclusive, non-transferable, non-sublicensable, internal license to use the number of copies of the Software specified in Your Order and to use the Software functions specified in Your Order solely for operation on the Epiphan Hardware Products for which such Software has been designed as specified in the Documentation for such Software. If the number of copies of Software is not specified in Your Order, then the number of copies shall be a reasonable number of copies. You acknowledge and agree that the ability to use certain Software functions is controlled by a Licensing Key and that You will not be able to use such functions unless You have paid the applicable fees charged by Epiphan for the right to use such functions and to receive a Licensing Key to enable such functions. For functions that are controlled by a Licensing String You shall only use that Licensing String with the copy of the Software for which it was issued and You shall not use that copy of the Licensing String with any other copies of the Software that You may have or make. All copies of the Software made by You shall include all trademarks, copyright notices, restricted rights legends, proprietary markings, and the like, exactly as they appear on the copy of the Software originally provided to You. No other rights in the Software or Documentation are granted to You.

3. Open Source Software: Binary, bytecode and source code versions of certain open source software packages may be embedded in or distributed with the Software ("Open Source Software"). If a separate license agreement for an item of open source software is: delivered to You with the Software; included in the download package for the Software; referenced in any material (including the Documentation) that is included in the download or distribution package for the Software; or listed at www.epiphan.com/opensource, then such open source software shall be Open Source Software and such separate license agreement shall govern Your use of that item or version of such open source software. The Open Source Software may include free software (i.e. software licensed under the GNU Lesser General Public License or other free software licenses) for which the applicable free software license may also require that the source code for such free software be made available to those receiving only executable versions of such free software. If the source code for any free software distributed with the Software is not provided with the Software, then upon request, within a three (3) year period from the original receipt of the binary or bytecode version of such Open Source Software from the Licensor, for a fee that shall not exceed the Licensor's costs associated with the shipping of the source code for such free software, the Licensor will provide a copy of the source code for such free software to You.

4. Restrictions: The terms set forth in this Section 4 are additional conditions to the licenses granted in Section 2. Your right to use the Software is conditional upon Your timely payment of the full amount of fees due for: (i) the Epiphan Hardware Product(s) on which You want to use the Software; (ii) all support agreements You have entered into with the Licensor or any of its distributors and/or resellers; and (iii) the licensed Software and Documentation.

You shall not reverse engineer, disassemble, reverse translate, decompile or in any other manner decode any Epiphan Hardware Product or Software except to the extent the Software is distributed with any Open Source Software that prohibits the imposition of such a restriction or to the extent the foregoing restriction is expressly prohibited by applicable law notwithstanding a contractual obligation to the contrary. You acknowledge and agree that no rights in respect to the source code of the Software are granted to You. You acknowledge and agree that the rights in respect to use of the Software and Documentation are granted only for use in conjunction with Epiphan Hardware Products. You shall not distribute, lease, rent, grant a security interest in, assign, or otherwise transfer the Software except as expressly provided in this Agreement. You shall not modify or create any derivative works of the Software or merge all or any part of the Software with another program. Notwithstanding the foregoing, You may call public APIs made available by Epiphan in the Software from applications developed by or on Your behalf provided that such applications do not embed any of the Software other than the minimum linkage materials required to call separately running instances of the Software. You shall not use the Software or make the Software available to any third parties as part of any service bureau, time sharing service, application service provider offering, software-as-a-

service offering or any other managed service offering. You shall not disclose any performance, benchmarking, or feature-related information about the Software. You further agree not to disclose, transfer or otherwise provide to any third party any portion of the Software, except as expressly permitted herein.

Some Epiphan Hardware Products and Software embed third-party APIs that integrate with third-party services ("Third-Party Services") to allow users of such Epiphan Hardware Products and Software to interact with such Third-Party Services for various capabilities offered by such Third-Party Services, such as, and without limitation, authentication, uploading and downloading of video content and other features made available by such Third-Party Services. If You access or use any Third-Party Service and/or related APIs using an Epiphan Hardware Product and/or the Software then You shall comply with all of the terms and conditions for such Third-Party Service and/or related APIs.

5. Disclaimer of Warranties: EXCEPT FOR ANY WARRANTIES THAT MAY BE PROVIDED IN ANY COMMERCIAL AGREEMENT EXECUTED BETWEEN YOU AND LICENSOR (OR BETWEEN YOU AND ONE OF LICENSOR'S RESELLERS OR DISTRIBUTORS), THE EPIPHAN HARDWARE PRODUCTS, SOFTWARE AND/OR DOCUMENTATION ARE PROVIDED "AS IS", WITHOUT ANY REPRESENTATIONS, CONDITIONS, AND/OR WARRANTIES OF ANY KIND. WITHOUT LIMITATION, LICENSOR AND ITS AFFILIATES AND ITS AND THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND DISTRIBUTORS DISCLAIM ANY AND ALL IMPLIED REPRESENTATIONS, CONDITIONS AND/OR WARRANTIES OF MERCHANTABILITY, MERCHANTABILITY, NON-INFRINGEMENT, DURABILITY, COMPATIBILITY, TITLE, SATISFACTORY QUALITY AND/OR FITNESS FOR A PARTICULAR PURPOSE WHETHER ARISING BY STATUTE, COURSE OF DEALING, USAGE OF TRADE OR OTHERWISE. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN ANY COMMERCIAL AGREEMENT EXECUTED BETWEEN YOU AND LICENSOR (OR BETWEEN YOU AND ONE OF LICENSOR'S RESELLERS OR DISTRIBUTORS), THE ENTIRE RISK OF THE USE OF THE EPIPHAN HARDWARE PRODUCTS, SOFTWARE AND/OR DOCUMENTATION SHALL BE BORNE BY YOU. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN ANY COMMERCIAL AGREEMENT EXECUTED BETWEEN YOU AND LICENSOR (OR BETWEEN YOU AND ONE OF LICENSOR'S RESELLERS OR DISTRIBUTORS), NEITHER LICENSOR NOR ANY OF ITS AFFILIATES NOR ANY OF ITS OR THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND/OR DISTRIBUTORS MAKE ANY REPRESENTATIONS OR PROVIDE ANY CONDITIONS AND/OR WARRANTIES ABOUT THE SUITABILITY OF THE EPIPHAN HARDWARE PRODUCTS, SOFTWARE, SERVICES AND/OR DOCUMENTATION. NEITHER LICENSOR NOR ANY OF ITS AFFILIATES NOR ANY OF ITS OR THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND/OR DISTRIBUTORS MAKE ANY REPRESENTATIONS OR PROVIDE ANY CONDITIONS AND/OR WARRANTIES WHATSOEVER ABOUT ANY INFORMATION AND/OR DATA THAT MAY BE PROCESSED BY OR MADE AVAILABLE USING ANY EPIPHAN HARDWARE PRODUCT AND/OR SOFTWARE OR ABOUT ANY THIRD-PARTY SERVICE THAT MAY BE ACCESSIBLE USING ANY EPIPHAN HARDWARE PRODUCT AND/OR SOFTWARE.

6. LIMITATION OF LIABILITY: NEITHER LICENSOR NOR ANY OF ITS AFFILIATES NOR ANY OF ITS OR THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND/OR DISTRIBUTORS SHALL HAVE ANY LIABILITY TO YOU OR ANY OTHER PERSON OR ENTITY FOR ANY DAMAGES ARISING FROM THIS AGREEMENT, RELATING TO THE HARDWARE, SOFTWARE OR DOCUMENTATION, OR RELATING TO ANY SERVICES PROVIDED TO YOU BY LICENSOR (INCLUDING ITS AFFILIATES AND THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND/OR DISTRIBUTORS) IN RELATION TO THE EPIPHAN HARDWARE PRODUCTS, SERVICES, SOFTWARE AND/OR DOCUMENTATION FOR ANY INDIRECT, RELIANCE, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF REVENUE OR PROFIT, LOSS OF OR DAMAGE TO DATA, BUSINESS INTERRUPTION, LOSS OF DATA, REPLACEMENT OR RECOVERY COSTS, OR OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER ARISING FROM CONTRACT, EQUITY, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR ANY OTHER THEORY OF LIABILITY, EVEN IF LICENSOR (INCLUDING ITS AFFILIATES AND THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND/OR DISTRIBUTORS) HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR THEY ARE FORESEEABLE. THE LIMITATIONS IN THIS SECTION SHALL APPLY WHETHER OR NOT THE ALLEGED BREACH OR DEFAULT IS A BREACH OF A FUNDAMENTAL CONDITION OR TERM OR FUNDAMENTAL BREACH. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THESE

LIMITATIONS MAY NOT APPLY TO YOU. IN NO EVENT SHALL THE TOTAL CUMULATIVE LIABILITY OF LICENSOR (INCLUDING ITS AFFILIATES AND ITS AND THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND DISTRIBUTORS) TO YOU OR ANY OTHER PERSON OR ENTITY FOR ANY DAMAGES ARISING FROM THIS AGREEMENT, RELATING TO THE EPIPHAN HARDWARE PRODUCTS, SOFTWARE, DOCUMENTATION AND/OR RELATING TO ANY SERVICES PROVIDED TO YOU BY LICENSOR (INCLUDING ITS AFFILIATES AND ITS AND THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND DISTRIBUTORS) IN RELATION TO THE EPIPHAN HARDWARE PRODUCTS, SOFTWARE AND/OR DOCUMENTATION, EXCEED THE LICENSE FEES PAID BY YOU FOR THE SOFTWARE.

NOTWITHSTANDING ANY OTHER PROVISION IN THIS AGREEMENT, NEITHER LICENSOR NOR ANY OF ITS AFFILIATES OR ITS OR THEIR LICENSORS, SUPPLIERS, SUBCONTRACTORS, RESELLERS AND/OR DISTRIBUTORS SHALL HAVE ANY LIABILITY TO YOU OR ANY OTHER PERSON OR ENTITY WHATSOEVER IN RESPECT TO ANY DIRECT, INDIRECT, RELIANCE, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF REVENUE OR PROFIT, LOSS OF OR DAMAGE TO DATA, BUSINESS INTERRUPTION, LOSS OF DATA, REPLACEMENT OR RECOVERY COSTS, OR OTHER COMMERCIAL OR ECONOMIC LOSS, ARISING FROM OR RELATING TO ANY INFORMATION AND/OR DATA THAT MAY BE PROCESSED BY OR MADE AVAILABLE USING ANY EPIPHAN HARDWARE PRODUCT AND/OR SOFTWARE OR ARISING FROM OR RELATING TO ANY THIRD-PARTY SERVICE THAT MAY BE ACCESSIBLE USING ANY EPIPHAN HARDWARE PRODUCT AND/OR SOFTWARE.

THE DISCLAIMER OF REPRESENTATIONS, WARRANTIES AND CONDITIONS AND LIMITATION OF LIABILITY CONSTITUTE AN ESSENTIAL PART OF THIS AGREEMENT. YOU ACKNOWLEDGE THAT, BUT FOR THE DISCLAIMER OF REPRESENTATIONS, WARRANTIES AND CONDITIONS AND LIMITATION OF LIABILITY, NEITHER LICENSOR NOR ANY OF ITS AFFILIATES OR ITS OR THEIR LICENSORS, SUPPLIERS, RESELLERS OR DISTRIBUTORS WOULD GRANT THE RIGHTS GRANTED IN THIS AGREEMENT.

7. Term and Termination: This Agreement shall continue for as long as You use the Software; however, it may be terminated sooner as provided in this Section 7. You may terminate this Agreement by destroying all copies of the Software and Documentation under Your control and providing certification of such destruction to Licensor or by returning the Software to Licensor. Licensor may terminate this Agreement immediately by providing You with written notice if: (a) You are in material breach of any provision of this Agreement, which breach, if capable of being cured, is not cured within thirty (30) days after Licensor gives You written notice thereof; or (b) You have committed a non-curable material breach of this Agreement. Upon termination You shall destroy all copies of the Software and Documentation. In addition to this Section, the Sections entitled Definitions, Disclaimer of Warranties, Limitation of Liability, Title, Indemnities, High-Risk Activities, Intellectual Property, and General shall continue in force even after any termination of this Agreement. No termination of this Agreement will entitle You to a refund of any amounts paid by You to Licensor or any reseller or distributor or affect any obligations You may have to pay any outstanding amounts owing to Licensor or any reseller or distributor. Upon any termination of this Agreement, Your license to the Software and Documentation will terminate and You shall destroy all copies of the Software and Documentation under Your control and certify such destruction to Licensor.

8. Support and Updates: This Agreement does not grant You the right to any updates or enhancements of the Software or the right to receive any technical support for the Software. Such updates and other technical support services, if available, may be purchased separately from Licensor or one of Licensor's resellers or distributors. Use of any updates or enhancements to the Software provided pursuant to any technical support You may procure from Licensor or one of Licensor's resellers or distributors shall be governed by the terms and conditions of this Agreement. Licensor reserves the right at any time not to release or to discontinue the release of any Software and to alter prices, features, specifications, capabilities, functions, licensing terms, release dates, general availability or other characteristics of the Software.

9. Title: All right, title, and interest (including all intellectual property rights) in, to, and under the Software (including all copies thereof) shall remain with Licensor and its licensors.

10. Indemnities: You shall indemnify, defend and hold Licensor, its affiliates, its and their licensors, suppliers, subcontractors, resellers and/or distributors and all of the directors, officers, employees of all of the foregoing (collectively the "Indemnified Parties") harmless from and against any damages, losses, liabilities, expenses, costs, claims, demands, actions, suits and/or proceedings incurred by the Indemnified Parties as a result of (i) Your use of the Epiphan Hardware Products, Software and/or Documentation, (ii) any use of the Epiphan Hardware Products, Software and/or Documentation on Your behalf, (iii) the use of the Epiphan Hardware Products, Software and/or Documentation by anyone to whom You give the Epiphan Hardware Products, Software and/or Documentation, and/or (iv) the use of the Epiphan Hardware Products, Software and/or Documentation on behalf of anyone to whom You give the Epiphan Hardware Products, Software and/or Documentation, including, without limitation, in all of the foregoing cases, any damages, losses, liabilities, expenses, costs, claims, demands, actions, suits and/or proceedings arising from or relating to any information and/or data that may be processed by or made available using any Epiphan Hardware Product and/or Software or arising from or relating to any Third-Party Service that may be accessible using any Epiphan Hardware Product and/or Software (collectively, each matter falling within any of the foregoing, a "Claim"), including, without limitation, indemnifying, defending and holding the Indemnified Parties harmless from and against any settlements agreed by You in connection with any Claims and/or any damages, costs or other amounts (including reasonable attorneys' fees) awarded to a third party against any of the Indemnified Parties by a court or tribunal of competent jurisdiction in respect to any Claim. If You do not defend in a timely manner against or resist a Claim after notice from Licensor, Licensor shall be entitled to investigate, defend, compromise, settle, or otherwise dispose of the Claim, and incur costs in connection therewith, at Your expense, in such manner as Licensor deems in its best interests until a reasonable time after You comply with its obligations under this Section 10. You shall not enter into a settlement of any Claim without the Licensor's written consent unless such settlement is solely for monetary payment by You and contains an express, complete, unconditional release of all of the Indemnified Parties and which does not impose any obligations or restrictions on any of the Indemnified Parties.

11. High-Risk Activities: The Software and Epiphan Hardware Products are not fault-tolerant and are not designed, manufactured or intended for use in or in conjunction with on-line control equipment in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation systems, air traffic control, or direct life support machines. Licensor, its licensors, suppliers, subcontractors, resellers and distributors specifically disclaim any express or implied representations, warranties and/or conditions for such uses.

12. U.S. Government End-Users: The Software and Documentation are each a "commercial item" as that term is defined at FAR 2.101, consisting of "commercial computer software" and "commercial computer software documentation" as such terms are defined in FAR 12.212, and are provided to the U.S. Government only as commercial end items. Government end users acquire the rights set out in this Agreement for the Software, Epiphan Hardware Products and Documentation consistent with: (i) for acquisition by or on behalf of civilian agencies, the terms set forth in FAR 12.212; or (ii) for acquisition by or on behalf of units of the Department of Defense, the terms set forth in DFARS 227.7202. Use of the Epiphan Hardware Products, Software and Documentation is further restricted by the terms and conditions of this Agreement and the applicable commercial purchase agreement for the Epiphan Hardware Products. For the purposes of any applicable government use, the Epiphan Hardware Products, Software and Documentation were developed exclusively at private expense, and are trade secrets of Epiphan Systems Inc. for the purpose of any Freedom of Information legislation or any other disclosure statute, regulation or provision.

13. Export Restrictions: The Epiphan Hardware Products, Software, Documentation and related information are subject to export and import restrictions. By downloading, installing, or using the Software, Epiphan Hardware Products, Documentation and/or related information, You are representing and warranting that You are not located in, are not under the control of, and are not a national or resident of any country to which the export of the Epiphan Hardware Products, Software, Documentation and/or related information would be prohibited by the laws and/or regulations of Canada or the United States. You are also representing and warranting that You are not an individual to whom the export of the Epiphan Hardware Products, Software, Documentation or related information would be prohibited by the laws and/or regulations of Canada or the United States. You shall comply with the export laws and

regulations of Canada and the United States that are applicable to the Epiphan Hardware Products, Software, Documentation and related information and You shall also comply with any local laws and/or regulations in Your jurisdiction that may impact Your right to export, import, or use the Epiphan Hardware Products, Software, Documentation or related information, and You represent and warrant that You have complied with any such applicable laws and/or regulations. The Epiphan Hardware Products, Software, Documentation and related information shall not be used for any purposes prohibited by export laws and/or regulations, including, without limitation, nuclear, chemical, or biological weapons proliferation. You shall be responsible for procuring all required permissions for any subsequent export, import, or use of the Epiphan Hardware Products, Software, Documentation or related information.

14. Intellectual Property: Epiphan, Epiphan Systems and Epiphan Video are tradenames, trademarks or registered trademarks of Epiphan Systems Inc. in certain countries. All Licensor product names and logos are trademarks or registered trademarks of Epiphan Systems Inc. in certain countries. All other company and product names and logos are trademarks or registered trademarks of their respective owners in certain countries. You shall not disclose, transfer or otherwise provide to any third party any portion of the Software, except as expressly permitted in this Agreement.

15. General: This Agreement is the entire agreement between You and Licensor in respect to the Software, superseding any other agreements or discussions, oral or written. The terms and conditions of this Agreement shall prevail over any pre-printed terms on any quotes, orders, purchase orders, or purchase order acknowledgements, and shall prevail over any other communications between the parties in relation to the Software. You may not assign this Agreement whether voluntarily, by operation of law, or otherwise without Licensor's prior written consent. Licensor may assign this Agreement at any time without notice. The failure of a party to claim a breach of any term of this Agreement shall not constitute a waiver of such breach or the right of such party to enforce any subsequent breach of such term. If any provision of this Agreement is held to be unenforceable or illegal, such decision shall not affect the validity or enforceability of such provisions under other circumstances or the remaining provisions of this Agreement and such remaining provisions shall be reformed only to the extent necessary to make them enforceable under such circumstances. This Agreement shall be governed by the laws of the Province of Ontario and the laws of Canada applicable therein. No choice or conflict of laws rules of any jurisdiction shall apply to this Agreement. You shall only be entitled to bring any action or proceeding arising out of or relating to this Agreement, the Epiphan Hardware Products, Software, Documentation or any services provided in respect to the Epiphan Hardware Products, Software and/or Documentation in a court in Ottawa, Ontario, Canada, and You consent to the jurisdiction of such courts for any such action or proceeding. You waive all rights that You may have or that may hereafter arise to contest the jurisdiction of such courts for any action or proceeding brought by You. You hereby waive any right You may have to request a jury trial with respect to any action brought by You in connection with this Agreement, the Epiphan Hardware Products or Software or any services provided in respect to the Epiphan Hardware Products or Software. The application of the United Nations Convention on Contracts for the International Sale of Goods to this Agreement is expressly excluded.

Environmental Information

The equipment that you bought has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment. In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems. Those systems will reuse or recycle most of the materials of your end life equipment in a sound way. The crossed-out wheeled bin symbol invites you to use those systems. If you need more information about collection, reuse and recycling systems, please contact your local or regional waste administration. You can also contact us for more information on the environmental performance of our products.

Important Safety Warnings

WARNING: This product has no user-serviceable parts and the battery used in this device is not replaceable. Do not attempt to disassemble. Return the device for service.

CAUTION, RISK OF ELECTRIC SHOCK: This device may have multiple AC power cords installed. All power sources shall be disconnected before servicing to avoid shock hazard.

ATTENTION: Cet appareil ne contient aucun composant pouvant être entretenu ou réparé par l'utilisateur. En cas de panne, retourner l'appareil pour réparation.

ATTENTION, RISQUE DE CHOC ÉLECTRIQUE: Cet appareil peut être équipé de multiples cordons d'alimentation en courant alternatif. Pour placer cet appareil hors tension, débrancher tous les cordons d'alimentation sans exception.

FCC Compliance Statement

47 CFR Section 2.1077 Compliance Information

Unique identifier: AV.io HD+

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation.

Responsible party (US contact):

Epiphan Video
459 Hamilton Avenue, Suite 301
Palo Alto, CA
94301, USA

www.Epiphan.com

FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Innovation, Science and Economic Development Canada:


This device complies with ICES-003 of the ISED rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme ISED NBM-003 pour les appareils radio agréés. Son fonctionnement est sujet aux deux conditions suivantes:

- (1) le dispositif ne doit pas produire de brouillage préjudiciable, et
- (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

CE Compliance Statement

Marking by the symbol  indicates compliance of this device with the applicable directives of the European Community and meets or exceeds the following technical standards:

Directive 2014/30/EU – Electromagnetic Compatibility

Directive 2011/65/EU – RoHS, restriction of the use of certain hazardous substances in electrical and electronic equipment



Other Jurisdictional Issues

Epiphan makes no representation that its products or information in this document or its web site are appropriate or available for use in your jurisdiction. Those who choose to access the Epiphan web site or use Epiphan products do so on their own initiative and are responsible for compliance with local laws, if and to the extent local laws are applicable

Submissions to Epiphan and Affiliated Servers

Any information, including but not limited to remarks, suggestions, ideas, graphics, or other submissions, communicated to Epiphan through their Epiphan web site is the exclusive property of Epiphan. Epiphan is entitled to use any information submitted for any purpose, without restriction (except as stated in Epiphan's Privacy Statement) or compensation to the person sending the submission. The user acknowledges the originality of any submission communicated to Epiphan and accepts responsibility for its accuracy, appropriateness, and legality.

Third Parties and Links to Third-Party Web Sites

Mention of non-Epiphan Systems Inc. products or services on their website, or this document site is for informational purposes and does not constitute an endorsement or recommendation.

This document may contain links to non-Epiphan web sites. These links are provided to you as a convenience, and Epiphan is not responsible for the content of any linked web site. Any outside web site accessed from the Epiphan web site is independent from Epiphan, and Epiphan has no control over the content of that web site. In addition, a link to any non-Epiphan web site does not imply that Epiphan endorses or accepts any responsibility for the content or use of such a web site.

In no event shall any reference to any third party or third party product or service be construed as an approval or endorsement by Epiphan of that third party or of any product or service provided by a third party.

Miscellaneous

It is the user's responsibility to ascertain whether any information downloaded from the Epiphan web site or other websites is free of viruses, worms, trojan horses, or other items of a potentially destructive nature.

Enforcement of Terms and Conditions

These Terms and Conditions for use of this document and the associated Epiphan Product are governed and interpreted pursuant to the laws of the province of Ontario, Canada, notwithstanding any principles of conflicts of law.

All disputes arising out of or relating to these Terms and Conditions shall be finally resolved by arbitration conducted in the English language in Ottawa, Ontario, Canada under the commercial arbitration rules of Canada. The parties shall appoint as sole arbitrator a retired judge who presided in the province of Ontario. The parties shall bear equally the cost of the arbitration (except that the prevailing party shall be entitled to an award of reasonable attorneys' fees incurred in connection with the arbitration in such an amount as may be determined by the arbitrator). All decisions of the arbitrator shall be final and binding on both parties and enforceable in any court of competent jurisdiction. Notwithstanding this, application may be made to any court for a judicial acceptance of the award or order of enforcement. Notwithstanding the foregoing, Epiphan shall be entitled to seek injunctive relief, security, or other equitable remedies from any court of competent jurisdiction.

If any part of these terms is unlawful, void, or unenforceable, that part will be deemed severable and will not affect the validity and enforceability of the remaining provisions. Epiphan may, at its sole discretion and without notice, revise these terms at any time by updating this posting.

Copyright © 2022 Epiphan Systems Inc.

All Rights Reserved.

Terms and conditions

This document, the Epiphan web site, and the information contained therein, including but not limited to the text, videos, and images as well as Epiphan System Inc.'s trademarks, trade names, and logos are the property of Epiphan Systems Inc. and its affiliates and licensors, and are protected from unauthorized copying and dissemination by Canadian copyright law, United States copyright law, trademark law, international conventions, and other intellectual property laws.

Epiphan, Epiphan Video, Epiphan Systems, Epiphan Systems Inc., and Epiphan logos are trademarks or registered trademarks of Epiphan Systems Inc., in certain countries. All Epiphan product names and logos are trademarks or registered trademarks of Epiphan. All other company and product names and logos may be trademarks or registered trademarks of their respective owners in certain countries. For additional terms and conditions, refer to sections at the end of document.

Copyright © 2022 Epiphan Systems Inc. All Rights Reserved.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET OR PRODUCT INSTALLATION SOFTWARE PACKAGE THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSES OR LIMITED WARRANTY, CONTACT YOUR EPIPHAN REPRESENTATIVE FOR A COPY.

PRODUCT DESCRIPTIONS AND SPECIFICATIONS REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. EPIPHAN PERIODICALLY ADDS OR UPDATES THE INFORMATION AND DOCUMENTS ON ITS WEB SITE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION AND RECOMMENDATIONS ARE BELIEVED TO BE ACCURATE AT TIME OF WRITING BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

LIMITATION OF LIABILITY

UNDER NO CIRCUMSTANCES SHALL EPIPHAN BE LIABLE FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL, EXEMPLARY OR OTHER INDIRECT DAMAGES THAT RESULT FROM THE USE OF, OR THE INABILITY TO USE, THIS PRODUCT OR THE INFORMATION CONTAINED IN THIS DOCUMENT OR PROVIDED ON EPIPHAN'S WEB SITE, EVEN IF EPIPHAN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL EPIPHAN'S TOTAL LIABILITY TO YOU FOR ALL DAMAGES, LOSSES, AND CAUSES OF ACTION RESULTING FROM YOUR USE OF THIS PRODUCT, WHETHER IN CONTRACT, TORT (INCLUDING, BUT NOT LIMITED TO, NEGLIGENCE) OR OTHERWISE, EXCEED THE AMOUNTS YOU PAID TO EPIPHAN DURING THE MOST RECENT THREE-MONTH PERIOD IN CONNECTION WITH AMOUNTS WHICH YOU PAID FOR USING THIS PRODUCT.

INFORMATION AND DOCUMENTS, INCLUDING PRODUCT SPECIFICATIONS, PROVIDED IN THIS DOCUMENT OR THE EPIPHAN WEB SITE ARE PROVIDED "AS IS". SPECIFICALLY, BUT NOT WITHOUT LIMITATION, EPIPHAN DOES NOT WARRANT THAT: (i) THE INFORMATION IS CORRECT, ACCURATE, RELIABLE OR COMPLETE; (ii) THE FUNCTIONS CONTAINED ON THE EPIPHAN WEB SITE WILL BE UNINTERRUPTED OR ERROR-FREE; (iii) DEFECTS WILL BE CORRECTED, OR (iv) THIS WEB SITE OR THE SERVER(S) THAT MAKES IT AVAILABLE ARE FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS. EPIPHAN SPECIFICALLY DISCLAIMS ALL REPRESENTATIONS, WARRANTIES, AND CONDITIONS, EITHER EXPRESS, IMPLIED, STATUTORY, BY USAGE OF TRADE OR OTHERWISE INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, TITLE, SATISFACTORY QUALITY OR FITNESS FOR A PARTICULAR PURPOSE.

