

# Epiphan AV.io HD+™



# Thank you for choosing Epiphan Video!

At Epiphan Video, product function and quality are our top priority. We make every effort to make sure that our products exceed your expectations.

#### Product feedback

Your feedback is important! We regularly contact our customers to ensure our products meet your performance and reliability requirements. We strive to continually enhance our products to accommodate your needs. Please let us know how you think we can improve our products by emailing your suggestions to info@epiphan.com.

#### Specifications

Go to the Epiphan Video website to get the most recent product specifications and additional information about this product.

#### Warranty

All Epiphan Video products are provided with a 100% return to depot warranty for one year from the date of purchase.

### Technical support

Epiphan's products are backed by our professional support team. If you are having issues with your product, please gather details about your system and contact our team by:

- E-mailing support@epiphan.com
- Live chat via the link on our support site
- Phone toll free at 1-877-599-6581 or call +1 613-599-6581

Be sure to include as much information about your problem as possible, including:

- Problem description
- Details of the video or audio source (type, resolution, refresh rate, etc.)
- Product serial number
- Your operating system and version number

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User Guide Releases and features

# 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.

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User Guide Start here

## 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!

User Guide Product overview

# 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.

User Guide What's in the box?

## 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).

AV.io HD+ video grabber	<b>A</b> → Piphan video	Your video capture device!
HDMI connector cable (1 m / 3 ft)		Connects an HDMI source to your AV.io HD+'s native HDMI port.
USB 3.0 cable (1 m / 3 ft)		The USB 3.0 cable connects your AV.io HD+ video grabber with your computer's USB 3.0 or 2.0 port.

User Guide Hardware

## Hardware

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

Topics covered include:

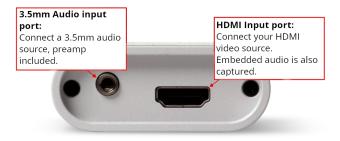
- Hardware diagrams
- Indicator LED details

## Hardware diagrams

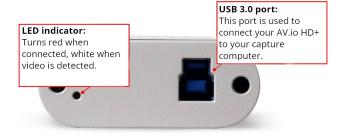
Your AV.io HD+ device includes inputs, an output, and an indicator light.

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:



User Guide Indicator LED details

### 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

User Guide Quick start

# Quick start

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

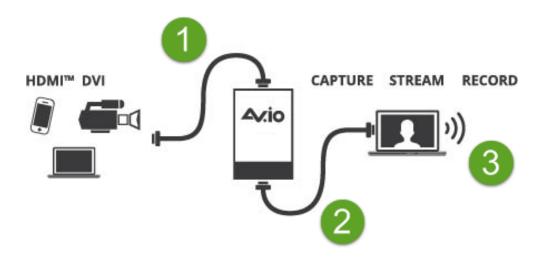
Before you begin the connection process, you will require:

- 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.

	T		
Connectors	HDMI USB standard B type		
Input	HDMI (or DVI-D) (audio compatible)HDMI (including audio)		
	3.5mm analog audio		
Audio Input	16-bit and 24-bit PCM encoded audio a	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)	320×240 640×480 720×576 800×600 960×540 1024×768 1280×800 1360×768 1440×900 1600×900	640×360 720×480 768×576 856×480 1024×576 1152×864 1280×960 1366×768 1440×900 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	<ul> <li>Any computer (laptop/desktop/other format) with:</li> <li>a compatible USB 3.0 host controller for SuperSpeed operation; or,</li> <li>a USB 2.0 host controller (will limit maximum frame rate and resolution support)</li> </ul>	
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	

User Guide Capture

# 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!

User Guide How it works

## 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.

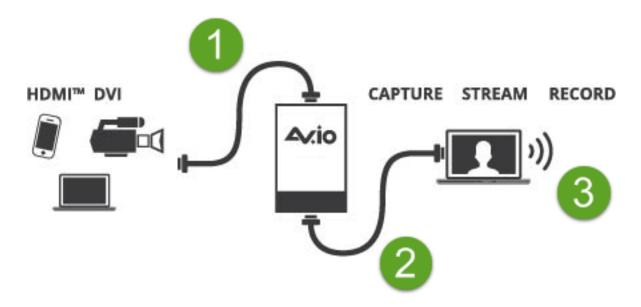
With the help of AV.io HD+, the content from your video source is automatically configured and captured on your computer through your selected application. If the application requests a frame size that is smaller or larger than your video source, AV.io HD+ automatically scales the video for you. For 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

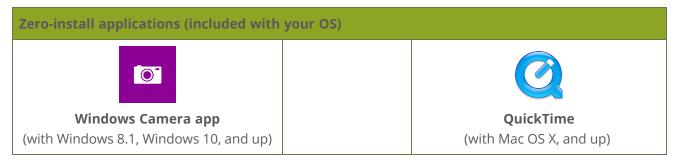
If your source content is larger or smaller than the frame size chosen by the application, AV.io HD+ automatically **scales your source** to match the desired frame size. No user configuration required!

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!



Popular applications available for download			
<b>ii</b>			
Microsoft Teams	OBS	VLC	
vMix	Wirecast	Zoom	

User Guide Configuration

# 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.

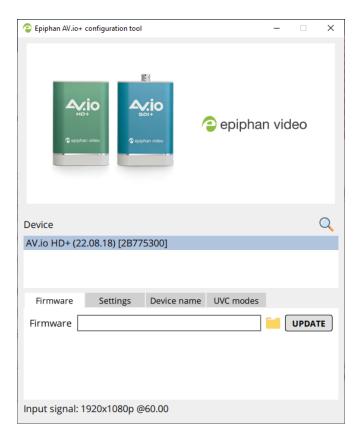


Attempting to update firmware while running virtual machines will result in firmware upgrade failure.

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:

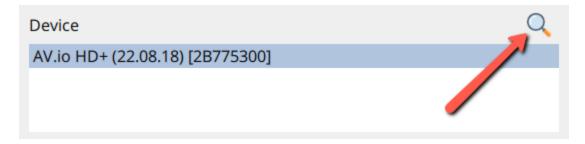
- 1. If you haven't already done so, download and install the AV.io+ Config tool. See Install the AV.io+ Config tool.
- 2. Download the firmware update file from the Epiphan website, as described in your firmware update notification email or discussion with your vendor.
- 3. Connect your AV.io HD+ device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



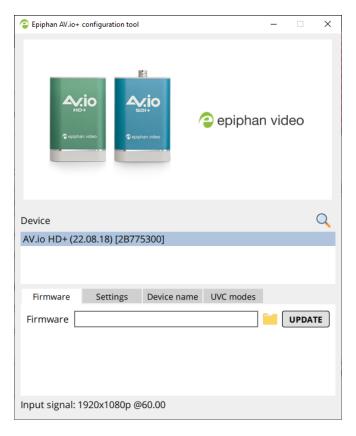
5. Select your AV.io HD+ device from the list under the Devices heading.



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.

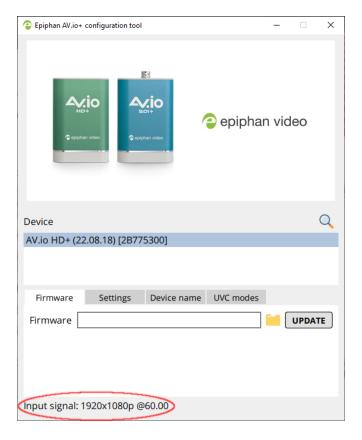
9. When the update is finished the progress bar turns green and displays "Update Completed" (Note: the firmware update will not automatically be reflected in the Devices list unless the **Refresh** icon is clicked). You may now safely disconnect your AV.io HD+ if needed.



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

User Guide Set the audio mode

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.

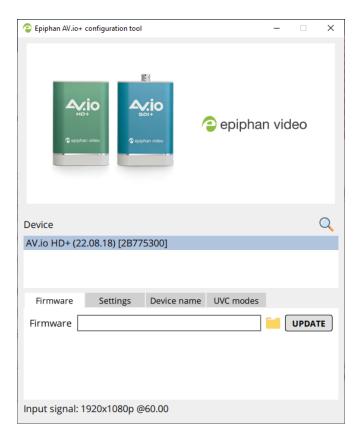
### Set the audio mode

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.

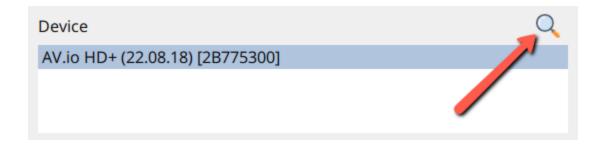
User Guide Set the audio mode



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

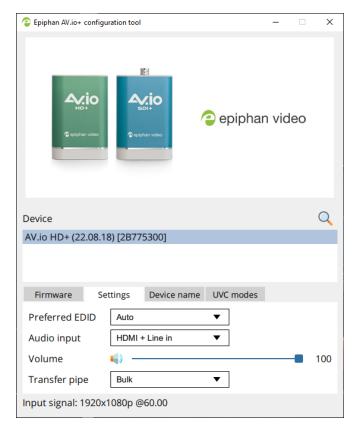


If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.



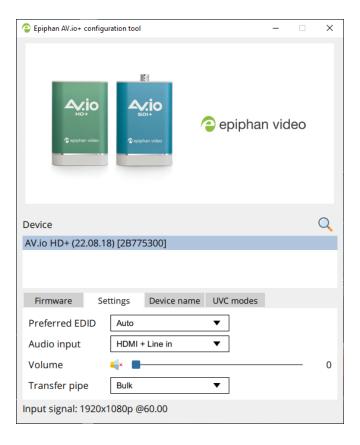
5. Click the **Settings** tab; the Settings page appears.

User Guide Set the audio mode



- 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.

User Guide Modify the EDID



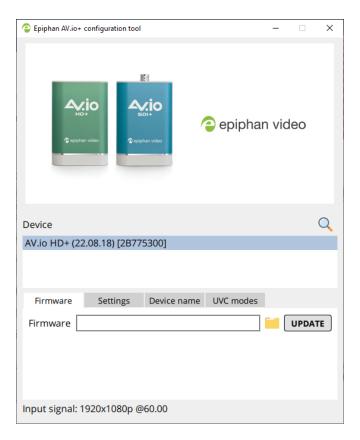
## Modify the EDID

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.

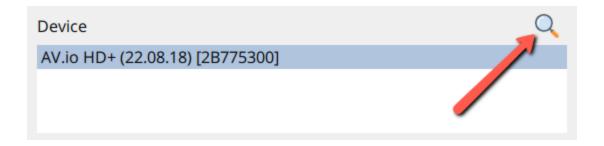
User Guide Modify the EDID



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

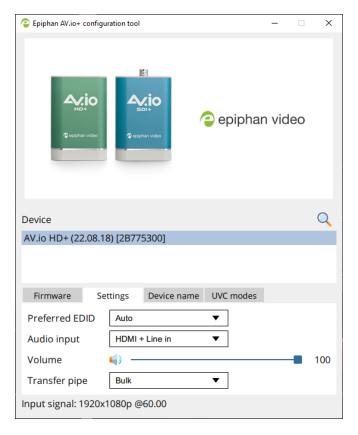


If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.

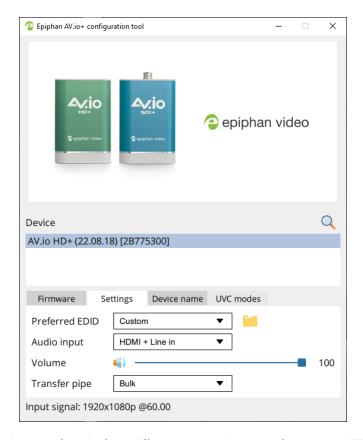


5. Click the **Settings** tab; the Settings page appears.

User Guide Modify the EDID



- 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.



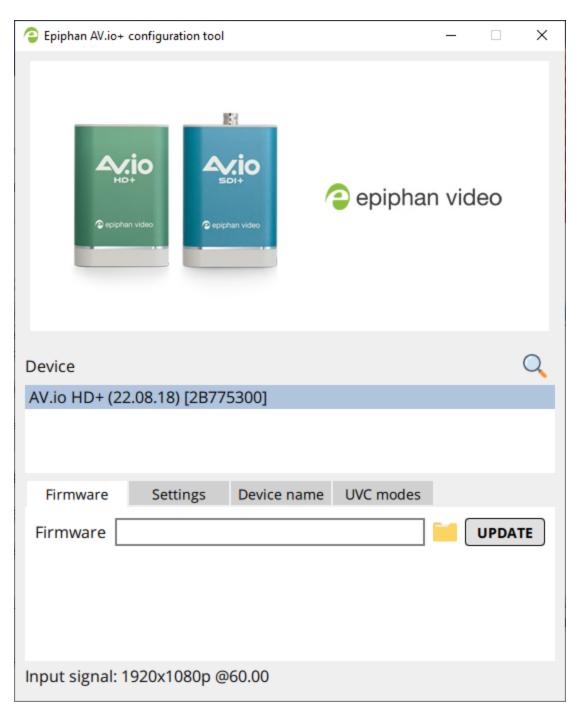
- 8. Click on the folder icon and a window will pop up; navigate to the custom EDID file you want to load and click Open.
- 9. Wait for the AV.io HD+ to process the change and you're done!

## 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:

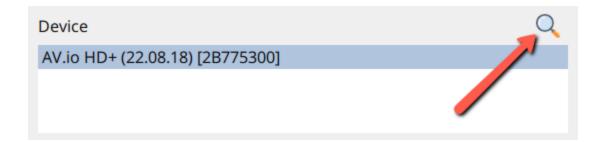
- 1. If needed, install the AV.io+ Config tool. For details specific to your OS, see Install the AV.io+ Config tool.
- 2. Connect your AV.io HD+ device to your computer, laptop or notebook.
- 3. Open the AV.io+ Config tool.



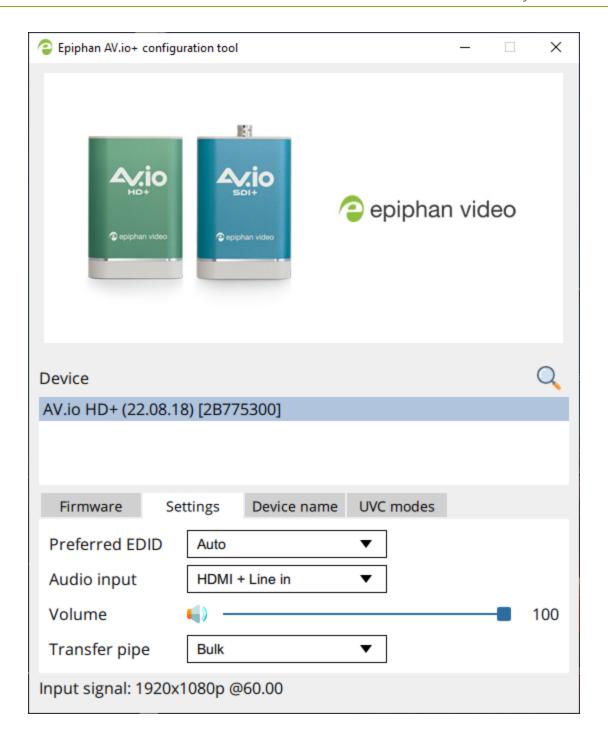
4. Select your AV.io HD+ device from the list under the Devices heading.



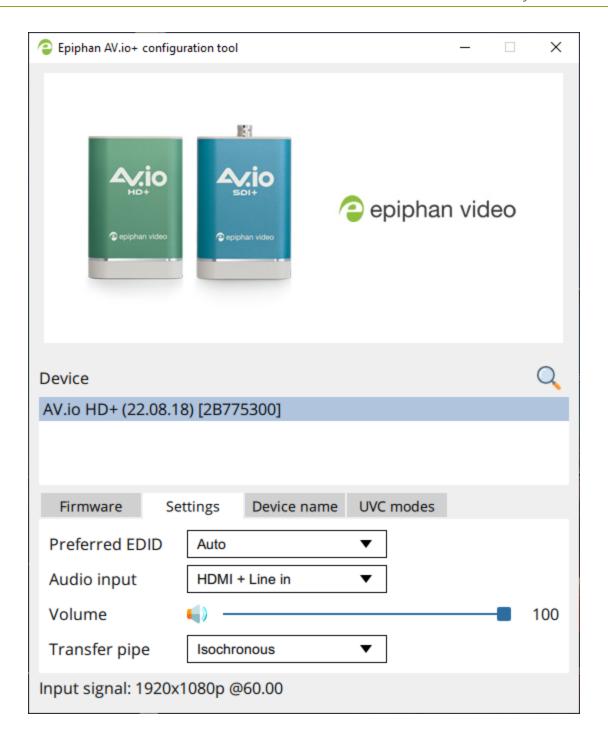
If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.



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!

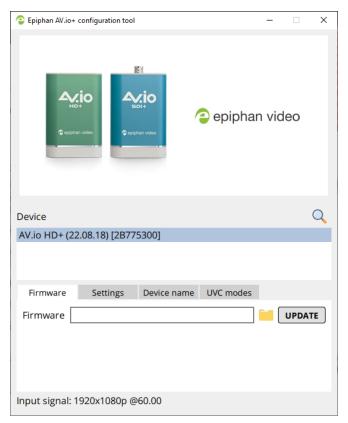
User Guide Change device name

## 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.

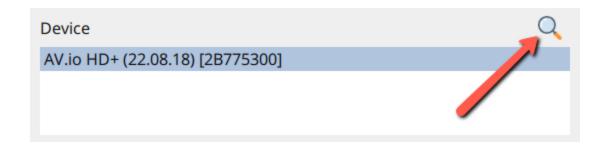


4. Select your AV.io HD+ device from the list under the Devices heading.



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

User Guide Change device name



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



- 6. To set a custom device name, click in the Device name box and type in your desired name; then click Apply.
- 7. 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**.
- 8. Right-click each entry and choose **Uninstall device**.
- 9. Once the devices have been uninstalled unplug the AV.io HD+'s USB cable from the computer and then plug it back in.
- 10. Then click the **Scan** icon in the AV.io+ Config utility to confirm the changes.

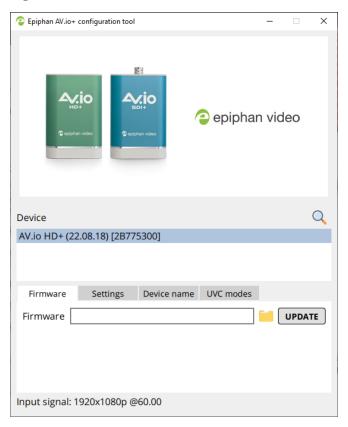
User Guide Set a custom UVC mode

### 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.

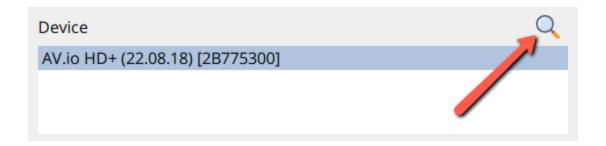


4. Select your AV.io HD+ device from the list under the Devices heading.

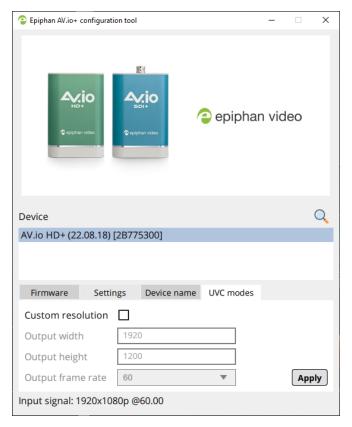


If your video grabber is not displayed, press the Refresh icon to refresh the list of connected devices.

User Guide Set a custom UVC mode

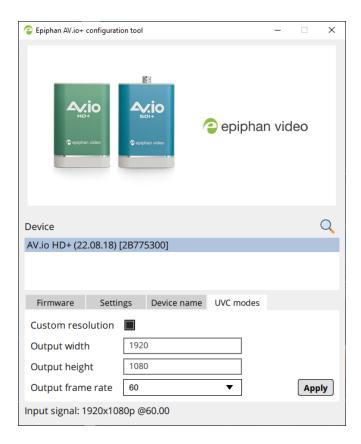


5. Click the **UVC modes** tab; the UVC modes page appears.



- 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.

User Guide Set a custom UVC mode



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.

User Guide Appendices

# **Appendices**

The following appendices are included in this section:

- Troubleshooting
- Limitations and known issues
- Releases and features

User Guide Troubleshooting

# 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.

User Guide Releases and features

# 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

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#### **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 **C** € 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



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