# □□→□□ Direct Input Capture

**Direct Input Capture** refers to methods of capturing an analog video signal using a specialized capture card.

Capture devices can either connect to a computer for recording or live processing of the signal, or they can be standalone units with onboard recording capabilities.

Two main options here are to obtain a capture card that supports capturing an analog video signal, or converting your signal to HDMI somehow, and using a capture device with an HDMI input. Analog capture cards are decreasing in availability and software support, so converting your signal to HDMI before capturing is becoming a more popular option. This method also allows you to include an upscaler in your chain if desired. However, capturing the analog signal directly can be simpler and require less gear if you don't already have a way to convert your signal to HDMI.

⚠ ***A note about external links to products:*** *the links and models are provided as examples, but if you are purchasing equipment it is important to do your own research. Product links can be modified by sellers to show different products, inventory can run out, and prices can change, so we can't make any guarantees or rely on pointing everyone to purchase the same items. Be patient and know that finding the right equipment for your analog video setup often involves some trial and error.*

## Cheap Capture Cards

Small, generic capture cards can generally be obtained for under $20 USD. Generally, these cheaper USB2.0 devices convert your signal into a compressed h.264 stream. They usually show up the same as a webcam would on your computer and don't require any specialized drivers or software.

Here are some examples:

- Generic composite/s-video USB capture card (Amazon)
  - Captures Composite or S-video
  - Compressed format only
- UCEC composite/s-video USB capture card (Amazon)
  - Captures Composite or S-video
  - Compressed format only
- Generic HDMI USB capture card (Amazon)
  - Captures HDMI
  - Compressed format only

# Expensive Capture Cards

There are a number of different options when it comes to higher-end analog capture cards. Many of these will support multiple input formats, such as Composite, S-video, Component, and HDMI. Many of them also support high quality or uncompressed video, allowing you more control over the quality and specs of your captured files. However, these devices can vary in what connections to a computer they support (USB3.0, Thunderbolt), many require special drivers or software, and some do not support all operating systems. It is important to do as much research as possible, and often a good idea to purchase from seller with a decent return policy.

With that in mind, here are a few of the options out there:

## Blackmagic Intensity Shuttle

This model was a popular choice for a long time, but many people have noted that it was unreliable. Additionally, it is becoming **incompatible** with many newer computer models and operating systems. (At time of writing, plugging this device into my 2019 iMac running Sonoma causes it to crash and restart.)

- Deprecated
- Requires blackmagic software/drivers to be installed
- Supports Composite, Component, S-video, and HDMI input
- Options for USB3 or Thunderbolt editions
- NOT supported on M1 macs (Blackmagic says these devices are end-of-life and they will not be developing new drivers for them)

## Magewell USB Capture DVI Plus

At time of writing I have not tested this one, but theoretically it should be a good option for both analog and digital capture.

- Drivers available for Windows, Mac, Ubuntu, and CentOS
- Supports Composite, Component, S-video, and HDMI input (via breakout cables)
- Link

# Standalone Recorder Units

There are a number of different models of these available, both for analog and HDMI capture, but I have not personally used many of them. If you have a recommended model, get in touch, I would love to expand this wiki.

These types of devices can be helpful for documenting live performances, or capturing without the need for a computer. Some of them have a built-in screen so you can see what you are recording.

## AJA Ki Pro

The one that looks like this. Not to be confused with the newer product of the same name. Seems to be only available used at this point.

- Supports component (and some HD formats), but not composite, so if your signal is composite you will need to use a converter
- Records to SSD

There is also the AJA Ki Pro Rack with dual SSD slots. That unit does support composite as well as component (and some HD formats).

# PCIe Cards

For a more advanced computer capture option, you can get a PCIe card for a desktop computer. This is an advanced option for those looking to build a computer with video capture capabilities. Both Magewell and Blackmagic have a variety of models available.

# Software

We suggest using OBS for both recording and streaming video on your computer. It's open source, supported on most operating systems, and offers a lot of control over video quality and format. It can also be used to mix or combine multiple video feeds together, among lots of other advanced features.

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