

Signal Distribution Devices

Adapters

Remember when you had to buy active DVI adapters for trash can Mac Pros to get more than 3 outputs? There was one time that I was in China and needed a dozen of them and... it was hard.

If something weird is happening on a Matrix, chances are that either you've configured it wrong, or your adapter from the video card (DP to HDMI, USB-C to HDMI etc) is "passive." In situations with managed EDID (say with a decimator or an RTX A Card or headless passthrough), the adapter type is irrelevant. Passive adapters also tend to not work with LED drivers (Brompton, Novastar). Most of the time, just pay the extra dough and buy an active adapter. [Like this one](#). Xcellon works!

Here's a mnemonic for you: If it's iVANKY it's Janky, if it's Xcellon, you're right on!

Warning that if a shop is preparing your rack for you, you need to specify this and keep your fingers crossed that they listen. Anker's USB-C to HDMI do not work with Matrixes. I have yet to test an adapter that is still available that still works, that said, the Pengo 8RDON-C01H01T1PE will work on an Apple Device and a matrix - it's sadly no longer for sale! Maybe our friends at SimplyNuc are building active adapters that are actually active... putting that on my to-do list.

AJA

HA5-4k

Works exactly the same as an FX4, but with less flexibility/expandability. 1x 4k60 split into 4 channels of 1080 in a 2x2 grid (essentially default mode of FX4). Highly recommended and a better price point. But no hardware sync! Who needs that anyway...

Blackmagic Design (BMD)

In general, I love BMD devices, but they can be finicky, particularly if you don't use them often. If you plug in a BMD device and it doesn't recognize, it's probably because the firmware on the device needs updating. If you install the latest version of Desktop Video, and it still doesn't recognize, you need to roll back to an older version of Desktop Video and then verify functionality and slowly update, with verification, until you get to the most recent version. To uninstall a new

version that doesn't work, first run the uninstaller, then delete the following BMD files in these two paths: /Macintosh HD/Library/Preferences/Blackmagic Design/DaVinci Resolve and /Macintosh HD/Users/me/Library/Preferences - you can read more about this technique [here](#). Worked great for me when my Monitor 3G wasn't recognizing.

Why my BMD Monitor and/or Recorder ins't working anymore when I plug it into my computer?

Welcome to Hell! You're going to need to find the latest functional driver by going through old versions of BMD's Desktop Video.

Why does this HDMI to SDI converter not recognize the input signal?

There are two different SDI standards: A and B.

Some projectors with native SDI use A (such as Epson's 25k), whereas, BMD (Blackmagic Design) uses B. In order to convert SDI type you can use: a DAC70 converter. A decimator will also solve this. **Jason Batcheller** says you can easily switch BMD from standard B to standard A. That USB port on the device can be connected to a computer and managed via BMD software - it will allow you to change standards/update firmware.

Also, level A and B standards can cause tearing on devices that receive both types. Just test the other type and the tearing should go away!

Design Mini Monitor / UltraStudio Monitor 3G

Love this thing, but it definitely reduces frame rate over native outputs (at least on M1 OS 12.5). It also has limited rez and hz options. No WUX. Technically an EDID ghost that doesn't consume a native output.

Datapth

FX4

The FX4 is an old standby for getting 4 channels out of a single 4k output. It also keeps those channels in-sync, so it's an easy way to get sync out of a machine that would otherwise struggle with 4x direct 1080 outputs, but can handle a single 4k out. These devices have tons of features, including:

- Custom layouts
- Display bezel math
- Daisy-chaining (I have no idea what this does)
- External Sync

- Network Control
- USB Control

There is a cross-platform “Wall Designer” app to change settings via USB2. It’s clunky. At some point, I’ll do a write up.

Matrox

DoubleHead2Go or TripleHead2Go

A device that works like an FX4 but is limited to a lower display quantity. The advantage with this is that it creates a display that otherwise wouldn’t exist: 5,760x1080. This is a TripleHead configured as 3x HD outputs. Otherwise, no bells and whistles. Haven’t used these in 10 years or so, but were great back in the day and probably still useful in select situations. Works on all systems.

MST Hubs

Oddly, MST hubs achieves the same ends as an FX4, but are way cheaper as they don’t have any bells or whistles. Initial testing (circa 2019) with these devices on P4000 cards has shown that these hubs can only be used with video cards that support them, and video cards must have a native displayport, as well. This means: doesn’t work with Mac.

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