

Getting Started

Welcome to the incredible quality of uncompressed recording and playback with HyperDeck Studio! Your new HyperDeck Studio is quick and simple to use. Please follow these simple steps to start recording the highest quality uncompressed video!

How to Record

- Step 1.** Connect a power supply to HyperDeck Studio. You can use the universal power adapter supplied with HyperDeck Studio or power it off any DC power source, from 12V to 18V, allowing for portable battery packs and on set use.
- Step 2.** Format a certified SSD in the HFS+ format. See the "How to Prepare the SSD" section for details.
- Step 3.** Insert the HFS+ formatted SSD into either SSD slot of HyperDeck Studio. As it reads the disk, the SSD slot light will illuminate solid green. When the light goes off, HyperDeck Studio is ready to record. If the SSD has not been formatted correctly, or fails to work, the SSD slot light will illuminate solid red until the SSD is removed.
- Step 4.** Connect your video source to a video input. Press the INPUT button once, while the stop button is illuminated, to preview the video source on the LCD before recording. If you don't see the video you want, press the button again to switch between the HDMI and SDI inputs.
- Step 5.** Connect the video outputs of HyperDeck Studio to your HDMI or SDI monitor and other equipment. All outputs are active so you can use one or more outputs together.
- Step 6.** Press the record button to start recording to the SSD instantly. The SSD slot light will illuminate with a looping red light to indicate it is being used for recording.
- Step 7.** If the first SSD runs out of space before recording has finished, recording will automatically continue on the second SSD if present. Remove the first SSD and replace with an empty SSD for continued recording. If an SSD is running out of space, and a second SSD is not ready to record, the timecode in the LCD will become red and a 5 minute countdown will show the remaining recording time. Press the stop button to finish recording.

How to Playback

Playing back a clip is simple and instantaneous. The controls of HyperDeck Studio work just like a CD player so pressing next clip will skip to the start of the next clip and continue playing. Press previous clip once to go to the start of the current clip or press twice to skip back to the start of the previous clip. If you're recording, press the play button once for instant playback.

If you're reviewing a long clip and need to reverse or fast forward to a particular section, press the reverse or fast forward button to play through the clip at 2x speed. To go faster, press the reverse or fast forward button again and the speed will increase to 4x and then 8x. Once you've found the section you want to review, press play and playback will resume at normal speed.

Connecting the SSD to your Computer

If you only need to format an SSD or transfer clips, a USB to SATA dock will be adequate. An eSATA dock should be used for very fast clip transfers and editing clips directly off the SSD.

How to Prepare the SSD

SSD's used by HyperDeck Studio must be HFS+ formatted. Simply connect the SSD to your computer via an external dock or cable adapter and format it as you would a regular disk. Make sure you check there's nothing important on your SSD's as you will lose everything on it when you format it.

If you're using a Mac, the Disk Utility application included with Mac OS X will format a drive in the HFS+ format. If you're using a Windows PC, third party software such as MacDrive will allow you to create and read HFS+ formatted disks.

How to Access the Clips

HyperDeck Studio captures clips in QuickTime format – this requires QuickTime™ to be installed on your computer. QuickTime for Mac is built into Mac OS X™. QuickTime for Windows™ can be downloaded free from Apple's website.

Important Notes About SSD Speed

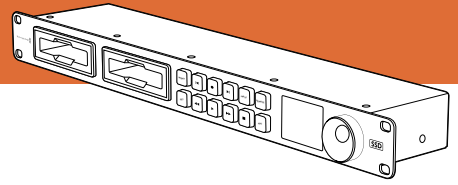
Some models of SSD can't save video data at the speed the manufacturer claims. This is due to the disk using hidden data compression to attain higher write speeds. This data compression can only save data at the manufacturer's claimed speed when storing data such as blank data or simple files. Video data includes video noise and pixels which are more random so compression will not help, therefore revealing the true speed of the disk.

Some SSD's can have up to 50% lower write speed than the manufacturer's claimed speed. So even though the disk specifications claim an SSD has speeds fast enough to handle video, in reality the disk isn't fast enough when used to store video data for real time capture. However, this mostly affects HD capture and often these disks can still be used for playback.

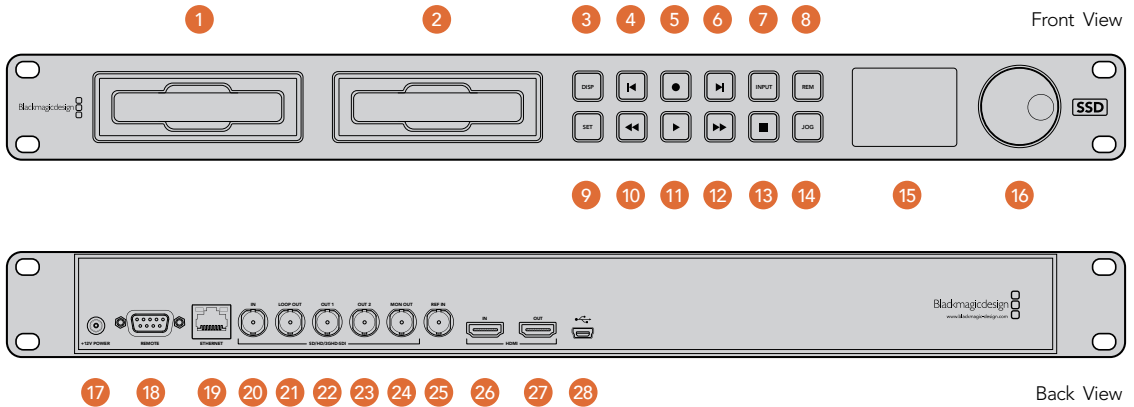
Download the free Blackmagic Disk Speed Test to accurately measure whether your SSD will be able to handle uncompressed video capture and playback. Blackmagic Disk Speed Test uses data to simulate the storage of video so you get results similar to what you'll see when capturing video to a disk. During our testing, we have found newer, larger models of SSD and larger capacity SSD's are generally faster.

SSD's certified for use with HyperDeck Studio include the OCZ 240GB Vertex 3, Crucial 256GB C300, Kingston 64GB SSDNow V+ and Kingston 128GB SSDNow V+. Check the tech notes on the Blackmagic Design web site for more information. More disk brands will be listed as they are certified.

HyperDeck Studio



Connections and Control



SSD Slots

1. SSD slot 1
2. SSD slot 2

Buttons and Controls

3. **DISP**
This button isn't currently used but will soon be enabled by a software update.
4. **Previous Clip**
Press once to go to the start of the current clip or press twice to skip back to the start of the previous clip.
5. **Record**
Recording commences the instant you press the record button, even if you're playing back a clip, so you'll never miss a good take that's happening. If the button flashes red, the SSD is too slow and is dropping frames. To switch from one SSD to the other while recording, press the record button for 1 second.
6. **Next Clip**
Press to skip to the next clip.
7. **INPUT**
While the stop button is illuminated, press the INPUT button once to display the incoming video on the LCD. If you don't see the video you want, press the button again to switch between the HDMI and SDI inputs.
8. **REM**
Push REM to enable RS-422 remote control.
9. **SET**
This button isn't currently used but will soon be enabled by a software update.

10. **Reverse**
Press once to play in reverse at normal speed. Press again to reverse at 2x, 4x and 8x speeds.
11. **Play**
Press once to play through all clips or press again to loop the current clip.
12. **Fast Forward**
Press once to play at 2x speed or press again to play at 4x and 8x speeds.
13. **Stop**
Stop works in all modes.
14. **JOG**
Press once to use the jog wheel to scroll through video or press again to set the jog wheel to shuttle mode.
15. **LCD**
The color LCD displays video format, timecode, audio meters, video preview, transport controls and the active SSD.
16. **Jog/Shuttle Wheel**
Use with the JOG button to jog or shuttle forwards and backwards.

Connectors

17. **+12V POWER**
You can use the universal power adapter supplied with HyperDeck Studio or power it off any DC power source, from 12V to 18V, allowing for portable battery packs and on set use.
18. **REMOTE**
RS-422 remote control.
19. **ETHERNET**
This port isn't currently used but will soon be enabled by a software update.

20. **SD/HD-SDI IN**
You can connect your SD/HD-SDI video sources, such as cameras, routers, capture cards, switcher outputs or decks to this input.
21. **SD/HD-SDI LOOP OUT**
This output is relocked from the video input and can be connected to other devices such as a monitor or a second HyperDeck for redundant recording.
22. **SD/HD-SDI OUT 1**
Connect this output to monitors, routers, production switchers, decks or other recording devices.
23. **SD/HD-SDI OUT 2**
Connect this output to monitors, routers, production switchers, decks or other recording devices.
24. **SD/HD-SDI MON OUT**
SD/HD-SDI output for monitoring.
25. **REF IN**
This input accepts blackburst and tri-level sync signals from a sync generator.
26. **HDMI IN**
You can connect your HDMI video sources to this input – such as a camera, games console or the output of an ATEM switcher.
27. **HDMI OUT**
Connect an HDMI display or TV to this output to monitor your video while recording or playing back clips. You can also connect this output to the HDMI input of capture cards, production switchers and other recording devices.
28. **USB**
Use the USB port for software configuration and updates.