



Blackmagic Design Hyperdeck Studio 4K Pro

ProdCode: BMDHYPERDSTDG4P

Ultra HD broadcast deck with 12G-SDI

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Features

- Professional broadcast decks that record and playback using SD cards and SSD media
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- Compatible with Switchers, Disk Docks and Cameras
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Professional broadcast decks that record and playback using SD cards and SSD media

HyperDeck Studio lets you record broadcast quality video files directly onto SD cards and SSD media. The new redesigned HyperDeck Studios feature modern design with more codecs and quieter cooling. All models now support recording to H.264, Apple ProRes or DNxHD files with either PCM or AAC audio. Plus the 4K model adds support for H.265 files. When you've finished recording, media can be mounted on any computer to access the files using your favorite video software. For ISO recording, there's even built in timecode and reference generators for syncing multiple units. All of these powerful features make HyperDeck Studio perfect for broadcast, live production or multi screen digital signage.

Elegantly Designed Professional Broadcast Deck

The new HyperDeck Studio recorders have been totally redesigned with dozens of new features. The advanced models have new broadcast style front panel controls and more connections on the rear panel. The LCD screen supports both light and dark modes, plus the transport control buttons are stronger with a firm professional feel. The Pro models feature a machined metal search dial with increased mass and a soft rubber surface that feels nice to the touch. Plus the search dial features an active clutch, just like a traditional broadcast deck. With dual media slots, you can change cards without interrupting recording. The advanced models even include a front headphone connection and speaker.

4 Great HyperDeck Models

There are 4 different models of HyperDeck Studio, perfect for all types of work. The 3G-SDI based HD Mini model records and plays H.264, ProRes or DNxHD files onto SD cards, UHS-II cards or external USB disks in SD and HD formats up to 1080p60. The larger HD Plus model adds better transport controls, front panel headphone and speaker, 6G-SDI with fill and key out, SDI monitoring and records H.264 up to 1080p60 or ProRes and DNxHD up to 2160p30. The full rack HD Pro model is the same as the HD Plus model but adds 2 SSD slots and a machined metal search dial with clutch. The incredibly powerful 4K Pro model records H.264, H.265, ProRes or DNx in SD, HD and Ultra HD in standards up to 2160p60.

- **HyperDeck Studio HD Mini**
Miniaturized deck records H.264, ProRes or DNxHD files onto SD/UHS-II cards or external USB disks in SD/HD formats to 1080p60. Includes timecode

and reference generators, 3G-SDI in/out and HDMI out.

- **HyperDeck Studio HD Plus**

Includes features of the Mini model plus better transport controls, front panel headphone and speaker, 6G-SDI and fill and key out. Supports all codecs up to 1080p60 and ProRes and DNxHD to 2160p30.

- **HyperDeck Studio HD Pro**

Includes all the features of the Plus model, and adds 2 SSD slots as well as the 2 SD card slots. Also includes machined metal search dial with clutch, SDI monitor out and XLR timecode connections.

- **HyperDeck Studio 4K Pro**

This extremely powerful Ultra HD model records and plays H.264/5, ProRes and DNx files in all SD, HD and Ultra HD standards up to 2160p60. Records SD and HD in H.264 and Ultra HD in H.265.

Perfect for Live Production, Broadcast and Archive

Mastering Recorder

All models record to H.264, ProRes and DNx files, so are perfect for recording broadcast masters. You can even use PCM or AAC audio, plus the 4K model adds H.265 when recording to Ultra HD files. You get everything you need to send shows to broadcasters and for uploading to YouTube.

ISO Recording

All models feature timecode and reference generators, with outputs to loop to other HyperDecks. This means you can build a rack of HyperDeck Studios for ISO camera recording, allowing multi-cam editing after live events. You can even sync cameras to the SDI output and the SDI input has a frame sync.

Digital Signage

HyperDeck Studio is perfect for digital signage as all models have HDMI output for connecting to large screen TVs and projectors. The built in sync generator lets you combine multiple HyperDecks for large multiscreen video walls. There's even FTP for file upload and a protocol for remote control.

Broadcast Archive

HyperDeck Studio supports all SD and HD standards so it's ideal for archiving old television shows from broadcast decks such as Digital Betacam, Betacam SP, 1", U-matic and VHS. You can even record direct to H.264 to maximize storage. For analogue decks, just add a Mini Converter Analogue to SDI.

Bright Colour LCD Status Display

HyperDeck Studio features traditional deck style transport controls, including a search dial for jog, shuttle and scroll. The compact LCD shows timecode and transport information, plus a full colour thumbnail preview of the current clip in record or playback. It also displays information about each card's recording status, along with video format, frame rate information and audio levels, all on the same display. The LCD includes monitoring for video, plus audio level meters, selectable between technically accurate VU or PPM ballistics. The combination of familiar VTR style controls with the built in LCD screen makes HyperDeck Studio incredibly fast to use and very easy to learn.

Traditional Broadcast Deck Controls

HyperDeck Studio includes a traditional broadcast style control panel that's very fast to use. Simply press the record button and you instantly start recording the video input to a file. You can also change the record file format from the menu. There are transport control buttons for playback, rewind, fast forward, previous clip, next clip and more. The Pro models have a machined metal search dial that supports shuttle, jog and scroll so you can find clips fast. Any button pressed on the front panel is sent to the rear RS-422 remote output for looping control to multiple HyperDecks. The Plus and Pro models also include a front panel speaker and headphone socket for live audio monitoring.

Supports SD Cards, UHS-II Cards or SSDs

All HyperDeck Studio models support recording to common SD cards and UHS-II cards so you don't need expensive custom media. However the Pro models also add two SSD slots so you can use two different types of media. SD cards and SSDs are the perfect choice for broadcast media because they are small and very affordable. When using H.264, the files are so incredibly small you get very long recordings even on smaller low cost cards. Plus, you can even record to external USB disks. With H.265, you can record up to 58 hours in 2160p60 Ultra HD or up to 157 hours of H.264 recording in 1080p59.94 on a 1 TB card. That's over 6 days of recording in HD using a single 1 TB card.

Dual Media Slots For Non-Stop Recording

All HyperDeck Studio models feature dual media slots for non stop recording. When the recording card becomes full, recording automatically continues onto the next card. That's perfect when recording long live events because you can "hot swap" a full card for an empty card while recording continues in the other slot. Each slot has a status indicator to show which card is being used, either red for record or green for

playback. Plus all models now feature very long file recordings to a single file for easy file distribution. HyperDeck Studio is easily repairable with each card slot using an individual PCB assembly that can be replaced if it ever becomes worn out from heavy use.

Record to External USB-C Media Disks

If recording to other types of media is required, the USB-C expansion port lets you plug in an external flash disk for recording. USB-C flash disks have unlimited capacity because they can be physically larger than an SD card or SSD. Plus, it's even possible to record to a disk array you'll use for editing, so you don't need to waste time copying files before starting post production. Just move the disk over to a computer and instantly start editing. You can even add a Blackmagic MultiDock 10G that has 4 separate SSD media slots, so you can add compatibility with SSD media to the HyperDeck Studio Mini and Plus models. There are also menus for managing external disks on the built in LCD.

Popular ProRes, DNx, H.264 and H.265 Files

HyperDeck supports the most popular codecs in use today. All models include DNx and ProRes file formats. However all models also include H.264 in quality levels up to full 10 bit 4:2:2 when recording in NTSC, PAL, 720p, 1080p and true 1080i interlaced formats. While the 4K model adds H.265 when recording in Ultra HD. That means you get tight 60:1 to 285:1 compression ratios for very small files at full broadcast quality. Plus you can choose uncompressed PCM audio, or even AAC audio when uploading files to YouTube. All models support both ExFAT and HFS+ disk formats and long duration single file recordings. The Plus and Pro models even support ProRes 4444 allowing fill and key playback.

Advanced Broadcast Connections

Depending on the model HyperDeck Studio features a wide range of video and audio connections such as 3G-SDI, 6G-SDI or 12G-SDI. All models include HDMI for connecting to televisions and projectors. There's even a dedicated SDI monitoring output on the Pro and Plus models with on screen status. The Pro and Plus models include two SDI outputs so you can play ProRes 4444 files, allowing simultaneous fill and key output for keying in live production switchers. The internal timecode and reference generator connections can be looped to sync multiple units for ISO recording. The 4K model has 10G Ethernet for extremely fast network file copying. All models even include AC and locking DC power.

- **DC Power Input**

Broadcast style 4 pin 12V power connection.

- **Remote In/Out**
RS-422 deck control, loops to multiple decks.
- **Reference In/Out**
Built in sync generator for syncing decks.
- **HDMI In and Out**
Record and play to cameras, projectors and TVs.
- **AC Power Inputs**
Dual 100-240V AC power for full redundancy.
- **10G Ethernet**
Remote deck control and extremely file transfer.
- **USB-C**
Record to external disks or disk arrays.
- **SDI Monitor Out**
3G-SDI monitor output with graphic overlays.
- **Timecode In/Out**
Timecode connections from internal generator.
- **12G-SDI Video**
Supports all formats to 2160p60 in ProRes, DNx and H.264/5

Choose 3G-SDI, 6G-SDI or 12G-SDI Models

With multi-rate SDI, you get support for the most popular video standards. The SDI and HDMI connections will automatically switch video standards, so handle SD, HD and Ultra HD formats depending on the model. SD formats include NTSC and PAL. 720p HD standards include 720p50 and 720p59.94p. 1080i HD interlaced formats include 1080i50 and 1080i59.94. 1080p HD formats include 1080p23.98, 24, 25, 29.97, 30, 50, 59.94 and 60p. HyperDeck can even support 1080 PsF formats. On the 4K model, Ultra HD formats up to 2160p60 are supported. Plus the 4K model supports 2K and 4K DCI rates up to 30p. HyperDeck Studio also supports level A and level B when running HD video at 3G-SDI rates.

Fill and Key Outputs for Broadcast Animations

The HyperDeck Studio Plus and Pro models can play ProRes 4444 HD files to the 2 separate SDI fill and key outputs. That means you can use HyperDeck Studio as a graphics clip player for broadcast animation because the ProRes 4444 file's alpha channel will be automatically converted to the key SDI output for realtime keying in a live production switcher. Plus the HyperDeck Studio 4K Pro model adds fill and key playback in Ultra HD. Imagine running animated lower third titles and stingers with key channel outputs for incredibly clean multi layered titles. Plus, switchers such as Blackmagic Design ATEM models connect to HyperDeck Studio via Ethernet to trigger playback synced to transitions.

USB Webcam Output for Video Software

For compatibility with a wide range of computer software, HyperDeck Studio features webcam support using the USB connection. If you're not recording to an external USB disk, you can plug the HyperDeck USB connection directly into a computer to get live video into any video software. The computer is tricked into thinking the HyperDeck is a common webcam, but it's really a broadcast quality video source. That guarantees full compatibility with any video software and in full resolution 1080 HD quality.

HyperDeck Studio's USB webcam feature works with any video software including Zoom, Microsoft Teams and Skype, or get live streaming with Open Broadcaster, XSplit Broadcaster and more.

Advanced HDR Support and Monitoring 3D LUTs

You'll be ready for the latest feature film workflows with support for advanced HDR standards. All HDR status information is embedded into the SDI connections so downstream equipment can detect when HDR files are played. When recording, the SDI and HDMI inputs will also automatically detect HDR video standards and then tag the files with the correct HDR information. Static metadata PQ and HLG formats are handled according to the ST2084 standard. Plus the front panel LCD has a wider colour gamut for both Rec. 2020 and Rec. 709 colourspace. HyperDeck Studio Plus and Pro models even allow you to load a 3D LUT into the monitoring output to add looks or to convert film to video gamma.

Includes Professional Multi Channel SDI Audio

HyperDeck Studio includes professional multi channel SDI audio for recording up to 16 channels. When recording from the SDI input, you can select in the menu to record 2, 4, 8 or 16 channels of audio in real time. There's extra space on the SDI monitoring status overlay, which allows the audio meter display to show the number of channels you have enabled all at the same time, and the audio meters will show 2, 4, 8 or 16 channels simultaneously. The audio meters are designed to use the correct ballistics, and you can change between different VU and PPM meter displays in the LCD menu. HyperDeck Studio is more than just a video recorder, as it also has fantastic sound.

Incredibly Fast Network File Transfers

All HyperDeck models allow media files to be uploaded remotely, using simple FTP client software. With 10G Ethernet built into the HyperDeck Studio 4K Pro model, file transfers are so fast, they are faster than the SD card or SSD media disks. For remote deck control, all models use an easy to learn text based protocol, so you can use a simple terminal app like Telnet to test control commands. Simply log into the HyperDeck and then type "play" or "record" and it will execute the command. It's that

simple. If you combine the control protocol and file transfers with a HyperDeck connected to a large USB-C disk array, you get a fantastic broadcast server for ingest, media management and play out.

Traditional RS-422 Broadcast Deck Control

The most popular control connection used on broadcast decks since the early 1980s is the RS-422 protocol. Originally developed by Sony, RS-422 is used on almost all broadcast gear. HyperDeck Studio features wide protocol support so you can connect it direct to broadcast systems. It also supports extra commands for the Advanced Media Protocol for managing disk recorders. When designing RS-422 control solutions, you'll know you're connected to a HyperDeck Studio when you see the ID 0xF0E0 in 30/60p, 0xF1E0 in 25/50p or 0xF2E0 in 24p. The full set of support remote commands are included in the instruction manual and you can download this from the support page of our web site.

Built in Timecode and Sync Generators

With a timecode and sync generator built into all models, you can stack multiple units for digital signage or multi channel recording. Each HyperDeck has dedicated outputs for reference and timecode, direct from the internal sync and timecode generators. The generators "free run" unless reference or timecode is connected to the inputs, and then generators will automatically lock. This means you can loop from HyperDeck to HyperDeck to create perfectly timed array or recorders.

Includes the Power of Blackmagic OS

The innovative Blackmagic OS has been designed for high performance film and broadcast products and it manages all functions on HyperDeck Studio. Only Blackmagic OS provides instant power on, while including powerful features such as LCD with video, timecode and audio metering, monitoring with overlays, menus, fast networking, multi-disk media management, 3D LUTs plus localization. The on screen LCD menus include settings to customize your HyperDeck Studio, plus the menus now support both light and dark mode. Blackmagic OS provides world leading network performance and HyperDeck Studio 4K Pro can sustain data transfers at a massive 1.2 gigabytes per second on its 10G Ethernet connection.

Localized for 13 Popular Languages

HyperDeck Studio supports multiple languages so you don't need to learn a new language just to use it. You get support for English, Chinese, Japanese, Korean, Spanish, German, French, Russian, Italian, Portuguese, Turkish, Polish and Ukrainian languages. When initially powered on for the first time, HyperDeck Studio

will display a menu for selecting a language, plus you can always use the LCD menu to change the language at any time in the future. Once a language is selected, the LCD menus will change, plus the overlays on the SDI monitoring output will also change to the selected language. All this means HyperDeck Studio is perfect for doing work anywhere in the world.

Use All Video Software and Streaming Sites

HyperDeck Studio records files that are compatible with virtually all post production software. Plus if you record in H.264, you can upload files from HyperDeck Studio direct to streaming services such as YouTube, Facebook, Vimeo, Twitter and more. You can use popular editing software such as DaVinci Resolve, Apple Final Cut Pro, Adobe Premiere Pro or Avid Media Composer, because HyperDeck uses the same file formats used in post production. Even VFX software such as Fusion and Adobe After Effects work with the files. Because HyperDeck records to disks formatted on computers, you can simply mount the disk on any computer and start editing without needing to transcode or convert the files.

Built in Redundancy Keeps You On Air

Serious broadcasters need redundancy because it increases reliability. HyperDeck Studio includes redundant features to help ensure you stay on air. With dual media slots on all models, and the Pro models having 4 media slots, you can stay on air, even if one of the slots becomes damaged. Plus with the HyperDeck Studio HD Mini model you get 3 totally independent recorders in a single rack unit, while the HyperDeck Studio HD Plus model allows 2 independent recorders in a single rack unit. All HyperDeck models include both AC and a locking DC power connection, so you use the DC connection with an external battery pack for redundant power.

Designed for Both Portable or Rack Mount Use

When you need a portable broadcast solution, the HyperDeck Studio HD Mini model includes most features miniaturized into an elegant 5 inch wide compact design that's only one third of a rack unit wide. That means you can fit 3 recorders in a single rack unit. Just use the optional Teranex Mini Rack Shelf and you can mount the 3 units side by side, then bolt it into a standard equipment rack. Or you can combine HyperDeck Studio Mini with other modules, such as a Teranex Mini Analogue to SDI 12G to convert the input from analogue to SDI, all in the same rack which is perfect for archive work. HyperDeck Studio HD Mini looks great when it's not rack mounted and simply used by itself on a desktop.

Compatible with Switchers, Disk Docks and Cameras

There's a wide range of Blackmagic Design products you can use with HyperDeck including switchers, cameras and streaming solutions. As the Mini and Plus models don't include SSD slots, you can add a Blackmagic MultiDock 10G to use regular SSDs, allowing compatibility with media from other HyperDeck models. HyperDeck Studio will manage all the disks for you and automatically record to disks in the MultiDock. You can even use the MultiDock with the HyperDeck Studio Pro models just to add extra SSDs for longer recording times. HyperDeck Studio is also a perfect mastering recorder when used with ATEM switchers, a clip player with fill and key, or looped on switcher inputs for ISO recording.

In the box:

- Hyperdeck Studio 4K Pro

