Blackmagic Design Videohub Mini 8x4 12G

ProdCode: BMDVHUBM12G0804

8x4 12G zero latency video router

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Features

- Video Router
- Eliminates Complex Cable Mess
- Front Panel Includes Router Control and Video Patching
- Advanced 12G-SDI for SD, HD and Ultra HD Routing
- Each Video Output Has Its Own Clean Switch
- Features Full SDI Re?Clocking
- Includes Front Panel Emergency Patch Connections
- USB Webcam Output for Computer Video
- Get Router Control on Mac, Windows and iPad
- Includes Videohub Setup Utility
- Custom Router Control with the Developer SDK
- Flexible and Redundant Power

The Blackmagic Videohub Mini routers are the perfect solution for adding extra inputs to your SDI equipment. They are available in 3 models, including a ? rack width 4x2 model, a ½ rack width 6x2 model, and a ? rack width 8x4 model. All connections are 12G-SDI, so they work in SD, HD and Ultra HD video standards. They also have a new type of clean switch that's selected on the video outputs, not locked into the inputs. This means you can route a specific source with clean switch to one output while switching the same source as a direct feed to other outputs! The front panel features video routing buttons, but it also has emergency 12G-SDI video connections and a USB webcam video output.

Eliminates Complex Cable Mess

Blackmagic Videohub Mini routers are designed for adding extra inputs to all types of SDI broadcast equipment. They are designed to be small, so they take up very little space in mobile racks, where space is limited. You can add extra inputs to ATEM switchers, or add input selection to streaming encoders and HyperDeck recorders. You can also use it to add extra inputs to video monitors. Routers are fantastic because you can make changes to connections without frantically patching cables in the middle of a job. If you have an urgent customer need or emergency, you can connect gear to the SDI connections on the front panel. That means you can handle the unexpected without rewiring your rack.

3 Great Ultra HD Models

Blackmagic Videohub Mini 4x2 12G

Tiny SD, HD and Ultra HD video router has 4 x 12G-SDI inputs with a loop output for each input as well as 2 dedicated 12G-SDI outputs. It includes a front panel router control panel that also has an emergency 12G-SDI input and USB-C webcam video out.

Blackmagic Videohub Mini 6x2 12G

This model is ½ rack width and features 6 x 12G-SDI inputs with loop out, 2 x 12G-SDI outputs and reference for locking clean switch outputs. The front panel has router control as well as a 12G-SDI input, 12G-SDI output and USB-C webcam connections.

Blackmagic Videohub Mini 8x4 12G

The largest model is ? rack width and features 8 x 12G-SDI inputs with loop outputs,

4 x 12G-SDI outputs and reference input for the clean switch. The front panel has router control plus a 12G-SDI input, 12G-SDI output and USB-C webcam connections.

Front Panel Includes Router Control and Video Patching

The front panel design of the Blackmagic Videohub Mini has been designed for fast cut-bus style switching with dedicated buttons for outputs and inputs. To route a video connection, simply select the destination button and then press the source button. That provides all the routing control you need, even though the routers are designed to fit into small, portable racks. The front panel also has 12G-SDI video connections for patching in external gear, and the front panel input connection will override the highest rear input connection when video is connected. The front panel also has a USB webcam output so you can connect a computer for recording, video scopes or streaming software.

- **Video Connections**
  If you urgently need to plug in external gear, you can use the front panel connections. All models have 12G-SDI in, and the 6x2 and 8x4 models also have 12G-SDI out. There is also a USB-C webcam out.
- **Input Buttons**
  All models are equipped with high-quality input selection buttons that trigger instantaneous switching of the source to the selected outputs when they are pressed.
- **Output Buttons**
  The output button selects the desired output, then this output will be the one changed when you press the input buttons. To route, press the output button first, then select the input button.

Advanced 12G-SDI for SD, HD and Ultra HD Routing

All models of Blackmagic Videohub Mini feature advanced 12G-SDI connections which are multi rate so they support any SD, HD and Ultra HD video format up to 2160p60. That means you can connect any SD, HD-SDI, 3G-SDI, 6G-SDI and 12G-SDI equipment. Plus Blackmagic Videohub Mini also supports routing any video standard on the same router at the same time. 12G-SDI gives you high frame rate Ultra HD via a single BNC connection that also works with all your regular HD equipment, so you can seamlessly switch different video inputs and the SDI output standard will change automatically. With 12G-SDI you get a future proof technology that connects to the equipment you have now and in the future.

Each Video Output Has Its Own Clean Switch

All models of the Blackmagic Videohub Mini feature a "clean switch" function that ensures stable video transitions when switching between sources. However, the clean switch feature is unique because it's set on each output, not on the inputs. This is important because the re-sync processors needed for clean switch can add or remove video frames from the video. So this means you could set a HyperDeck recorder to a non-clean switch direct feed because you don't want extra frames inserted, while a monitor or streaming encoder router output could use the clean switch, ensuring seamless source changes. The clean switch will lock sources to input 1 or the reference input on the 6x2 and 8x4 models.

Features Full SDI Re?Clocking

All models of Blackmagic Videohub Mini feature built-in SDI re?clocking on every 12G-SDI input. SDI re-clocking regenerates the video signal to ensure optimal video quality and prevent SDI data errors. This is extremely important because longer video cables degrade the signal. Expensive premium "digital" cables can provide some assistance, but they are still unable to completely eliminate signal integrity loss caused by the increasing length of cables. By re-clocking all the SDI devices in your studio, all your equipment will receive a regenerated signal with enhanced jitter performance. That means you get longer cable lengths and the absence of video dropouts.

Includes Front Panel Emergency Patch Connections

Blackmagic Videohub Mini features incredibly useful 12G-SDI patch connectors on the front panel for direct video access. This means you don't have to fumble around in the back of a rack with cables, so you won't accidentally unplug something crucial. That's great when you need to add external extra gear in an emergency. Or you have an unexpected client need. All models have a front panel 12G-SDI input that overrides the highest rear video input when connected. The 6x2 and 8x4 models also feature a front panel 12G-SDI output that's the same video as the highest output number. Using the highest inputs and outputs is preferred as they are the least likely used connections on any video router.

USB Webcam Output for Computer Video

You can live stream directly from the router's front panel because the front USB-C connection functions as an HD webcam video source. You can plug into a computer and work with any video software. The software is tricked into thinking the router is a common webcam, but it's really an SDI video source. You get full compatibility with any video software in full resolution 1080HD quality. If your video source is Ultra HD, then it will be down converted to HD for the webcam output. You can route live SDI video into common video software like Zoom, Microsoft Teams or Skype for broadcast

quality presentations. Or use streaming software such as Open Broadcaster, XSplit Broadcaster and more.

Add External Hardware Control Panels

All Blackmagic Videohub routers can be remotely controlled, which is vital in large broadcast studios where the equipment connected to the router is located in different areas of the building. There are 2 different types of hardware panels available. The Videohub Master Control Pro is similar to the front panel and has a spin knob, LCD and shortcut buttons. While the Videohub Smart Control Pro model features all buttons and is generally programmed so the panel controls a single router output with each button programmed to a router input. Then you can just cut along the panel buttons to change the router output instantly. It works best when you install a smart panel below each video monitor.

Get Router Control on Mac, Windows and iPad

If you need to remotely control a Blackmagic Videohub Mini, then Videohub Software Control is an ideal solution because it's free to download. Videohub Software Control is compatible with both Mac and Windows, allowing you to run it on the computers you already use for creative work. The software has large, easy-to-press icon style buttons. Each button can be customized to either a router input or a router output, and you can also assign each button a custom icon to aid visual identification. The big buttons are great for use on a touchscreen PC, where the software becomes a large screen XY control panel. You can even download a version of the software for the Apple iPad.

Includes Videohub Setup Utility

Since the Videohub Mini has front panel routing buttons, you don't require any setup before using it. However, if you want to remotely control the router, you can use the free Blackmagic Videohub Utility to customize the input and output labels. This enables the use of external control panels. Blackmagic Videohub Setup is incredibly useful as it provides access to all advanced router features. Use the software to create remote labels for front panel buttons, update router software, set Ethernet settings and configure external hardware panels. You can download the software free of charge from our website. It supports both Mac and Windows operating systems and connects via Ethernet or USB.

Videohub Features Better Image Quality

- **Supports Multiple Formats**
  When you need to work on global events, then you need to stay updated with

the latest technology and television standards. Videohub gives you support for all 525 NTSC, 625 PAL, 720p, 1080i, 1080p, 2K, 4K and all Ultra HD video standards. Plus you can connect multiple video standards simultaneously.

- **Embedded Audio for Audio and Video**
  The SDI standard includes up to 64 channels of embedded audio with the 12G-SDI video signal. The advantage of embedded audio is that it all connects with a single BNC cable, and all audio remains perfectly synchronized to the video. Plus all modern SDI equipment supports embedded SDI audio.
- **Deeper Bit Depth and Colour Precision**
  Videohub is designed to support the highest quality video. 10-bit is the most commonly used standard as colours can be represented more accurately than 8-bit video. You can route 4:2:2 8-bit or 10-bit video in any standard, and it even works with 4:4:4 12-bit SDI up to 2160p30 for feature film.

Localized for 13 Popular Languages

Blackmagic Videohub routers support internal labels in Unicode, so when you use external software control you can customize the labels to the language you prefer. Plus, the software utility for router settings has been localized to English, Chinese, Japanese, Korean, Spanish, German, French, Russian, Italian, Portuguese, Turkish, Polish and Ukrainian. However, independent of the language you have set on your local computer, the labels are completely independent and are always Unicode, so you could even customize the labels to be a mix of multiple languages if required. Multiple languages means you can work anywhere in the world and with any local crew.

Custom Router Control with the Developer SDK

All Videohub models come with a free software development kit, making it simple for developers and system integrators to add protocol support and quickly integrate into broadcast automation systems. Plus all Videohub routers use a simple text based protocol that’s easy to learn. It simplifies creating custom control solutions for various computer platforms and embedded hardware like Raspberry Pi and Arduino. The protocol can even be used with a Telnet app so you can experiment with controlling the router before you start coding. The protocol is the same one used for the Videohub Software Control, which is well-tested and includes all the features required for complex control applications.

Flexible and Redundant Power

The Blackmagic Videohub Mini routers include a built in AC power supply. This lets you plug into any regular wall outlet with a standard IEC power cable. The international power supply operates automatically between 100 and 240 volts AC,

ensuring that you can continue using your equipment while traveling across different regions globally. Although the Blackmagic Videohub Mini supports AC power, it also features a 12V DC power connection. This dual power option allows for redundancy and can be used when you do critical work that requires the router to stay operating in case of a PSU fault or power outage.