

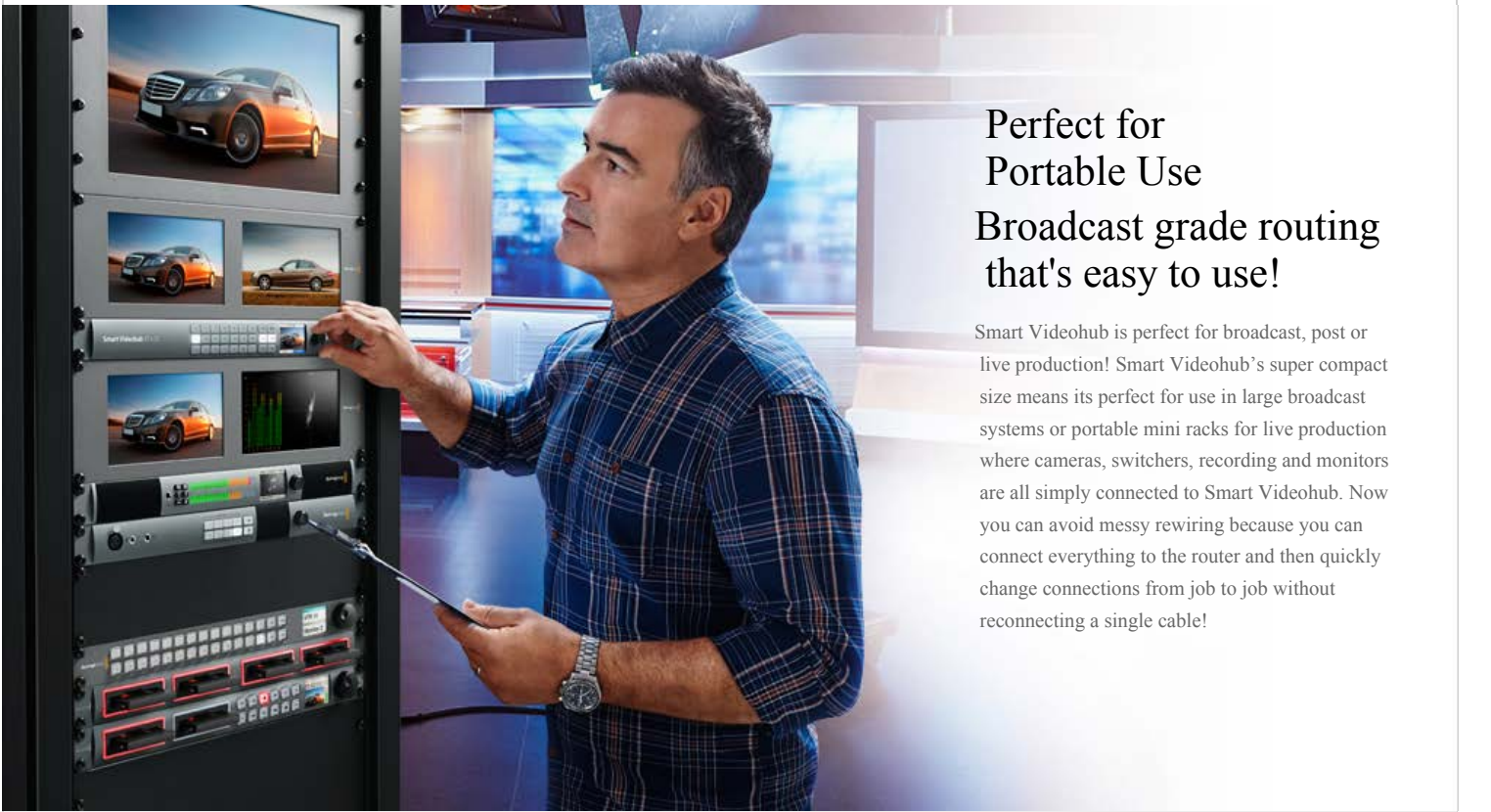
Smart Videohub

The world’s first SD, HD and Ultra HD mixed format routers!



Introducing the exciting new Smart Videohub, the world’s first Ultra HD mixed format routers with built in video monitoring and spin knob router control. Smart Videohub includes the latest 6G-SDI technology so you can simultaneously connect and route any combination of SD, HD and Ultra HD

video all on the same router at the same time! You also get revolutionary new visual routing that lets you see your router connections as video on the built in LCD as you scroll the knob to select your routing. Now you can route your video simply by looking at the video!



Perfect for Portable Use

Broadcast grade routing that's easy to use!

Smart Videohub is perfect for broadcast, post or live production! Smart Videohub’s super compact size means its perfect for use in large broadcast systems or portable mini racks for live production where cameras, switchers, recording and monitors are all simply connected to Smart Videohub. Now you can avoid messy rewiring because you can connect everything to the router and then quickly change connections from job to job without reconnecting a single cable!

Compact Design

Innovative control and monitoring in a compact design!



Smart Videohub's beautiful machined aluminum design features new innovative video monitoring control. Now you can visually route video because the built in monitor lets you see live video, crosspoint connection labels and TV formats displayed simultaneously. You can make selections with the spin knob or switch video with the dedicated button panel. Choose from two incredible models! The Smart Videohub 12 x 12 and 20 x 20 both feature the amazing new control panel, built in power supply, network control and advanced 6G-SDI connections in a compact single rack unit design. You can even configure all IP settings on the front of the unit without a computer!

Visual Routing

Route your video by looking at it!



Scan through video at lightning speed! Smart Videohub's super fast spin knob control lets you dial though your router cross points while displaying live video combined with custom on screen labels. Scroll order is arranged alphabetically so it’s easy to find the crosspoint you are looking for! The spin knob control combined with visual routing is the fastest way to route! Imagine scrolling through your connections while viewing them as live video on the LCD! On screen labels support unicode so they work in non Roman character sets such as Chinese, Japanese, Korean, Russian, German, French, Spanish and more. That means if you have labels in Japanese it will appear on the front panel in Japanese exactly the same as it appears on the software control panel on your computer.



Built in Video Monitoring!

Built in video, label and format monitoring!

Now you can monitor all the live video connected to your Videohub. The built in LCD lets you see your video in virtually every TV format! That means you don't need a separate external monitor because its built into the front panel of the router itself! You can look at any source or destination and confirm the correct video inputs are being sent to the correct video outputs. Built in monitoring is perfect when space is tight, such as mini racks and broadcast trucks.



Loads of Connections Up to 20 advanced SDI connections!



Smart Videohub 20 x 20 fits up to a massive 40 6G-SDI connections in a compact one rack unit size! Featuring 6G-SDI inputs and outputs as well as Ethernet for remote control so you can also route via external control panels or from your Mac or PC computer. No other compact router packs more

connections in a self contained one rack unit design! For smaller work groups or fly away kits, the Smart Videohub 12 x 12 model gives you all the same advanced features with 12 inputs and 12 outputs.

Advanced 6G-SDI Technology The highest quality digital video in SD, HD and Ultra HD!

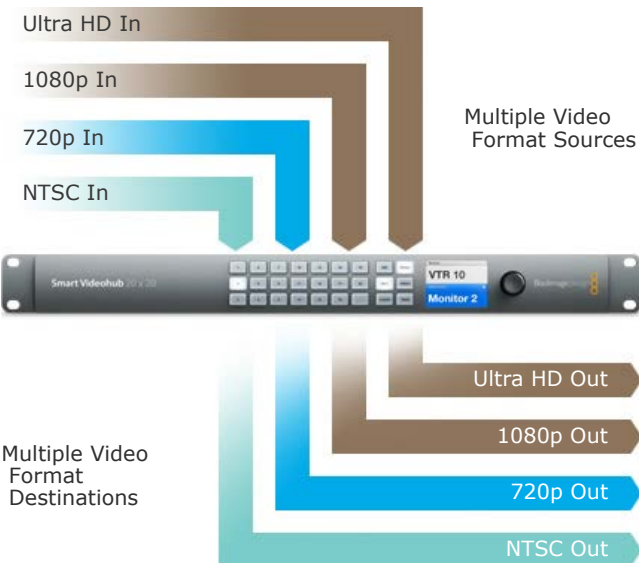
Smart Videohub features advanced 6G-SDI connections that allow high resolution Ultra HD video using a single SDI connection, while retaining full compatibility with all SD and HD-SDI equipment. You get the perfect quality of SDI video connections with the flexibility to work in any television format you like, as well as 4:2:2 or 4:4:4 color sampling. Even if you're not running in Ultra HD now, you can still work in SD or HD today and be ready for Ultra HD when you need it.

ULTRA HD
6G SDI



All Video Formats Simultaneously Different formats, frame rates and resolutions simultaneously!

Smart Video includes multi format technology so you can simultaneously connect SD, HD and Ultra HD equipment all on the same router at the same time. SDI products from Blackmagic Design will automatically detect the SDI video format when it changes and instantly switch standards. This means you can seamlessly work in NTSC and PAL SD, 720 and 1080 HD and even 2160 Ultra HD at any frame rate, all at the same time on the single router!

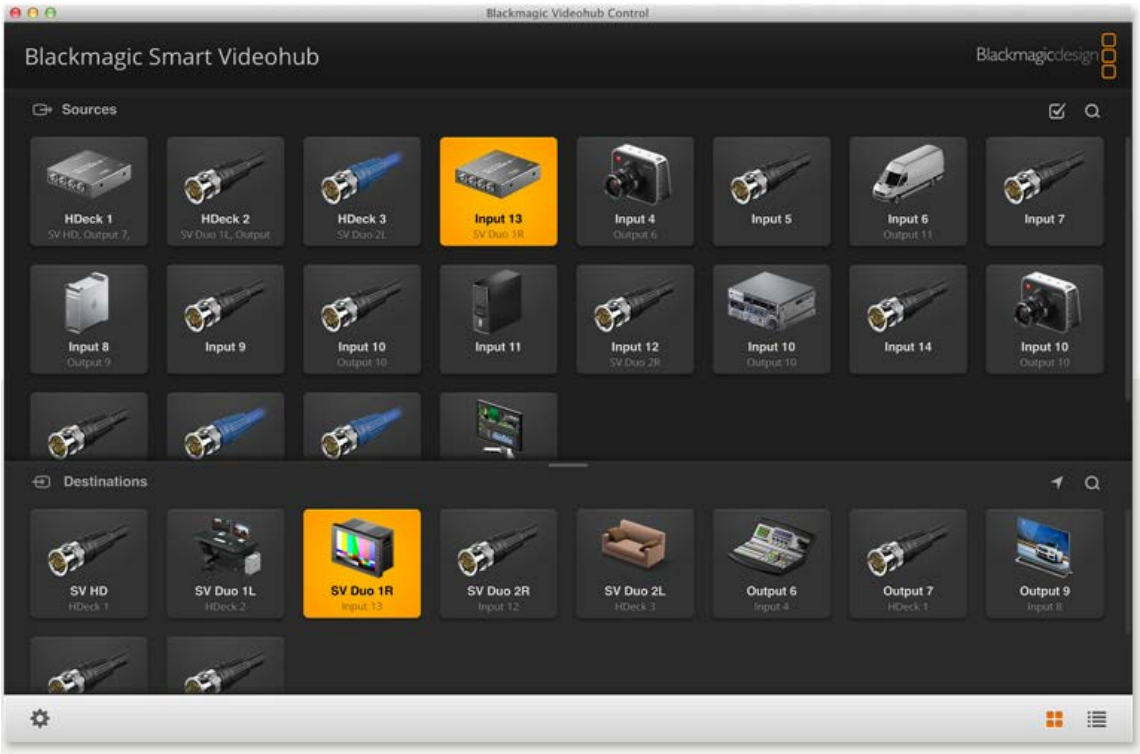


Ultra HD Quality, HD Compatibility! The broadcast industry's video standard of the future



Get amazing images that are so detailed it's like being there! With Ultra HD you get 4 times the resolution of regular 1080 HD video for a massive 3840 x 2160 frame size. The new Smart Videohub easily handles the enormous data rates of full resolution Ultra HD video as well as SD and HD video.

Ultra HD is the broadcast standard of the future and production of 4K content is accelerating! Smart Videohub's advanced 6G-SDI multi format connections are compatible with your existing SD-SDI and HD-SDI equipment as well as the latest Ultra HD gear.



External Software Control

Control routing via network on Mac and Windows!



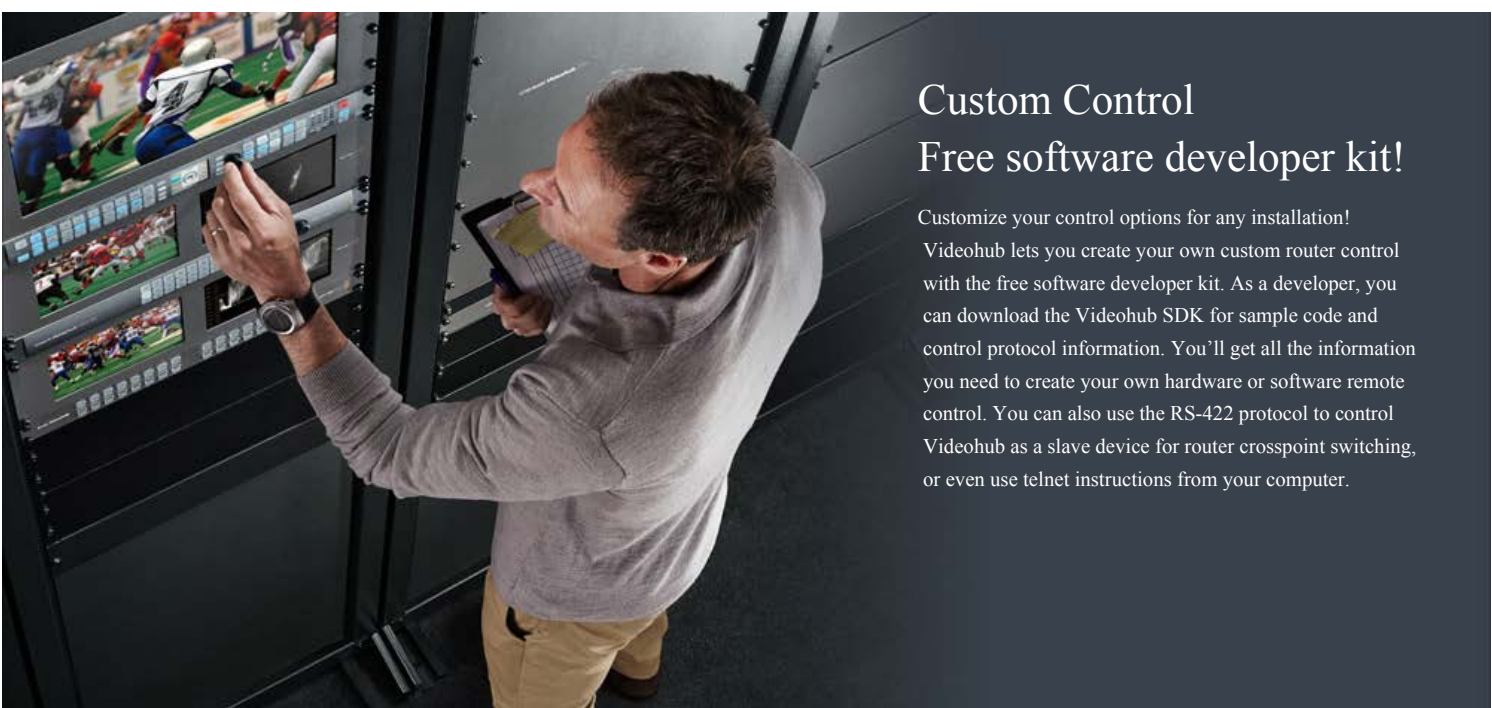
If you want to control your Smart Videohub anywhere then the included free Videohub software control for Mac and Windows is the perfect solution. Videohub control software has a great looking interface with amazing icon buttons. When used with new touchscreen PCs, you get a fantastic large screen XY control panel! You can even download the new software control panel for Apple iPad® that lets you use it as a fantastic, low cost touch screen router panel, it's free on the App Store!



Hardware Control Panels

Add incredible rack mount hardware control panels

For dedicated remote router panels, you can choose between Videohub Smart Control and Videohub Master Control. Both optional panels connect to your network via Ethernet and can control any Videohub model. Videohub Smart Control is ideal for direct cut bus style routing to monitors or decks, while Videohub Master Control gives you full spin knob control and direct label entry with an LCD display to see your router crosspoint labels. You get perfect integration and 24/7 broadcast reliability with Blackmagic Videohub remote panels!



Custom Control

Free software developer kit!

Customize your control options for any installation! Videohub lets you create your own custom router control with the free software developer kit. As a developer, you can download the Videohub SDK for sample code and control protocol information. You'll get all the information you need to create your own hardware or software remote control. You can also use the RS-422 protocol to control Videohub as a slave device for router crosspoint switching, or even use telnet instructions from your computer.

Share everything and change connections instantly!



Once you've used routing in your studio you'll never look back! Manual patching is messy and can be confusing. Using Smart Videohub for routing saves you time and lets you share resources by connecting everything in your studio at the highest possible quality, with simple and fast controls.

You get instant connections between all of your equipment, and can even send the same signal to multiple destinations at the same time! That would be impossible with a manual patch bay!



Connect Everything

SD, HD and Ultra HD!

Be ready for the latest Ultra HD equipment! Smart Videohub models feature advanced 6G-SDI connections for Ultra HD video that are also compatible with standard definition and high definition SDI equipment. That means you can connect virtually any device used in television production, even old standard definition tape machines that are over 20 years old! You can even convert analog equipment to SDI by connecting the popular Blackmagic Mini Converters to your Smart Videohub. That means even the oldest as well as the newest broadcast equipment can be connected everywhere in your facility, all on the same router at the same time!



Connect Your Workstations

Share broadcast displays and decks!

Perfect for broadcast creative departments, Smart Videohub lets multiple users share expensive equipment like broadcast decks or large presentation screens. You can use Smart Videohub in your editing or color grading suites to monitor your output, then switch to monitor the VTR when mastering out to tape. Smart Videohub makes it easy to share all your equipment from anywhere in your studio with the touch of a button!





Mobile Broadcast

Incredibly compact design!

The amazing space saving design of Smart Videohub 20 x 20 fits all 40 SDI connections into 1RU, perfect for small studios or OB vans with limited rack space. You can connect your switcher, all of your cameras, decks, and monitoring equipment, and still have spare cross points for unexpected feeds on location. That means you can instantly change setups from job to job without recabling! No other router gives you more connections in a single rack unit design!



06:59

Supercharge Digital Signage!

Perfect for multi screen SD, HD, and Ultra HD distribution!

Whether you're feeding massive outdoor digital signs or distributing content to a series of HD displays, Smart Videohub can help you manage the distribution of video to all of your screens from one central location, or even over the internet! There's even a free developer SDK if you need to integrate Videohub into an existing digital signage installation. Smart Videohub makes it simple to control even the largest network of digital signs and screens!



Dubbing

Dub multiple formats without changing cables!

Now you can instantly connect decks to each other without having to pull cables or manually patch video. You can even route the video from one deck through a professional converter, like a Teranex, and out to any other deck for pristine format conversions. Videohub routing means you never need to pull cables or change connections again. Everything can be routed using the built in control panel, a remote panel, or software on your Mac, PC, or iPad!



ON AIR

Live Production

Expand your switcher with more inputs!

Sometimes you have more camera sources than your switcher has inputs. You can connect your cameras to a Videohub before routing them to the switcher to massively increase the available inputs for your live production. That means you can create a much larger live production switcher, or you can even use Videohub to connect two ATEM switchers together to create an even bigger switcher!



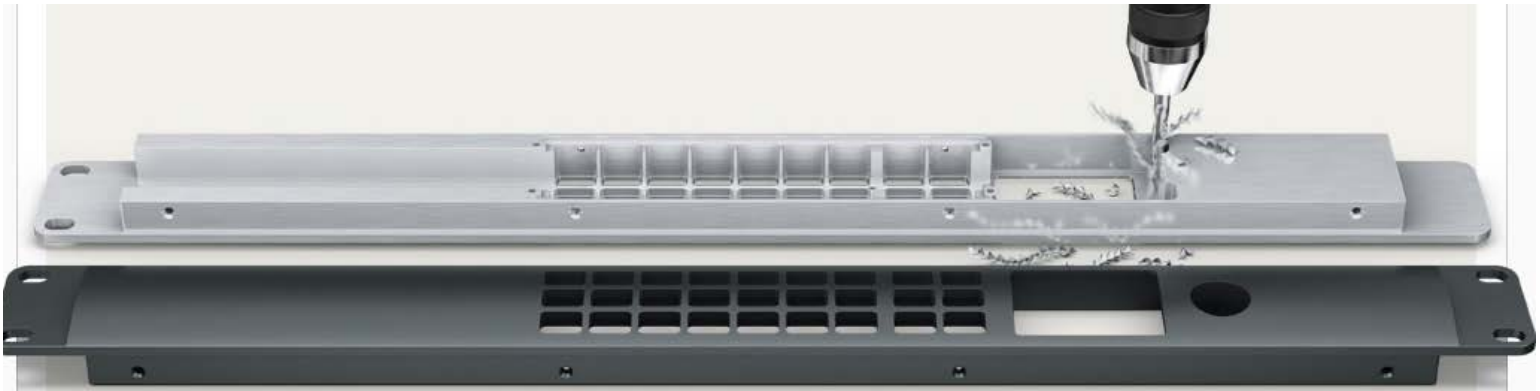
Elegant Design

Who said routers can't be sexy!



With a machined metal design and easy to use front panel, Smart Videohub's are also built for the most demanding 24/7 broadcast environments and feature a unique design that gives you advanced technology in an incredibly small size. Featuring revolutionary visual

routing combined with built in monitoring and front control panel, Smart Videohub gives you up to 40 6G-SDI connections, has a built in power supply, external reference, USB, remote and network control ports, all in a compact 1 RU design!



Machined Metal Design

Elegant and rugged aluminum front panel

The new Smart Videohub's feature an elegant front panel that is machined from a solid block of aluminum. It looks great in your studio and is also strong enough to withstand the bumps and shocks when installed in outside broadcast vehicles. The front panel includes illuminated push buttons, a full color video screen and a spin knob for visual routing control.

Front Panel Control

Find and select video sources quickly!

The front panel of the new Smart Videohub features illuminated buttons for source and destination selections as well as function controls. Smart Videohub lets you select any destination and immediately see its current routed source. The fastest way to select a new source is to directly press the input you want and use the dedicated "Take" button to confirm and make the switch. All buttons are softly backlit and illuminate fully when selected so they can be read in even the darkest equipment room. IP settings and router configuration can easily be set from the front panel.



Visual Routing

The innovative design of Smart Videohub combines front panel controls and built in monitoring to give you all new, revolutionary Visual Routing capabilities! Use the spin knob to quickly scroll through all of your SD, HD, and Ultra HD sources. It's the fastest and most accurate way route video! As you spin the knob, video is instantly displayed on the built in LCD, along with source labels, format, and frame rate information. Visual Routing lets you route video quickly and more confidently than ever before!



Professional Connections

24/7 broadcast reliability

Smart Videohub is a true broadcast grade routing switcher! It is designed for the most demanding broadcast and post production environments with advanced technology and professional connections. Featuring a built in universal power supply, industry standard Ethernet, USB and RS-422

control connections. You also get broadcast grade BNC connectors for the highest quality 6G-SDI digital video connections with built in re-clocking to guarantee the longest cable lengths!



International Power

Auto ranging power supply anywhere in the world

Smart Videohub can be installed in outside broadcast vans, machine rooms or broadcast studios anywhere in the world. The universal power supply uses a standard IEC connection and is auto ranging, so it will automatically accommodate the input voltage and frequency of your region. With flexible universal power support there's no need for an additional transformer or power converter, no matter where you are in the world!

Control

More control choices than any other router!



Control your Smart Videohub router from anywhere in your building. Route video from the front panel control, or select from a wide range of rack mountable hardware for remote control over ethernet. Broadcast designers, editors and colorists can even route video using the innovative Videohub

Software Control for their Mac or PC workstations, or wirelessly with an iPad. A software development kit is also available for integrators that want to build custom routing solutions.



Front Panel Control

Super fast Visual Routing!

Smart Videohub features unique Visual Routing which makes routing super fast and error free! You can quickly find the source or destination you are looking for at the push of a button, or by using the unique spin knob control to scroll through your video. Source video, format, and labels are displayed on the built in LCD screen, so you always know that you’re making the right choice. With the all new Smart Videohub it’s never been easier to make super fast and accurate routing decisions!

Videohub Remote Hardware Panels

No other router has more control options than Videohub!



Videohub Smart Control



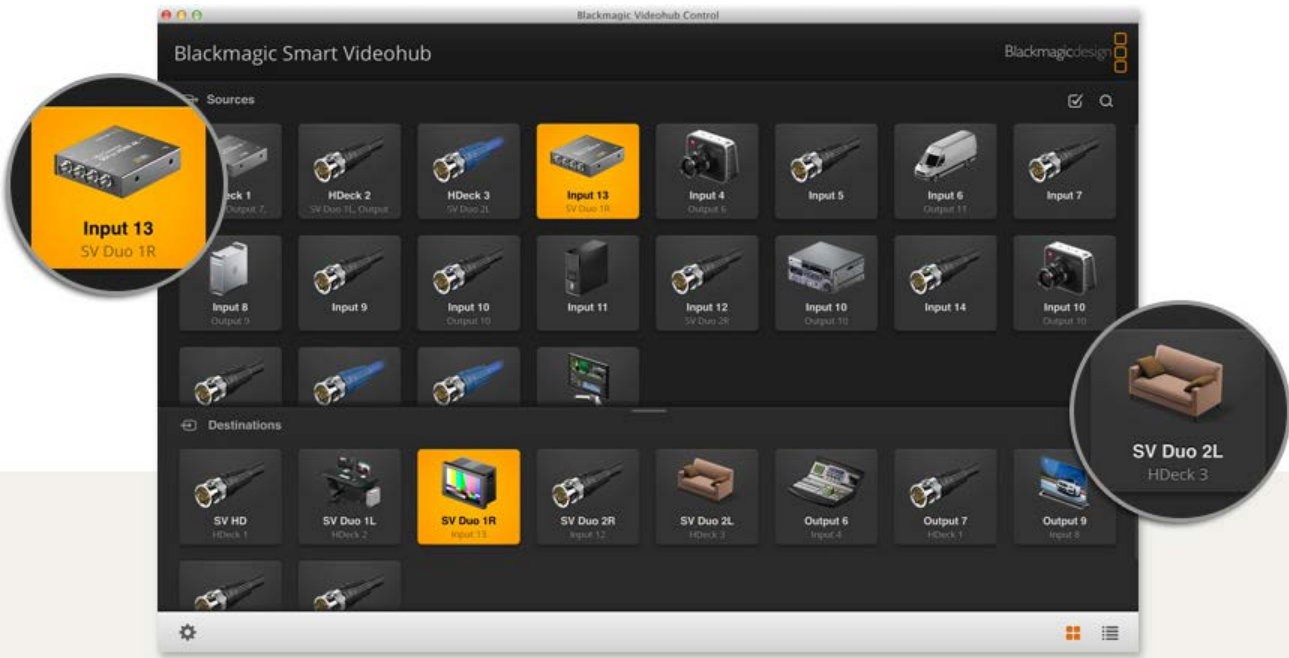
Videohub Master Control

Videohub Smart Control

Videohub Smart Control is a compact 1 RU panel that controls your Videohub over your existing ethernet network. It features 40 customizable buttons that can be set to any cross point so you can quickly switch video sources using fast, direct “cut-bus” style routing. Each panel can be setup for 1, 2, or more destinations, so you can control video routing to multiple decks and monitors from one panel!

Videohub Master Control

Ethernet hardware panel with spin knob control. The Videohub Master Control is a remote 1RU panel that gives you complete control over your entire router from anywhere in the studio. Simply connect Master Control to your ethernet network and you get full control of every crosspoint on your router. The front panel features programmable buttons, spin knob control and an elegant LCD for displaying source and destination labels. That means you can see and route all of your cross-points remotely, even on the biggest Videohub!



Software Control

Network router control from your desktop!

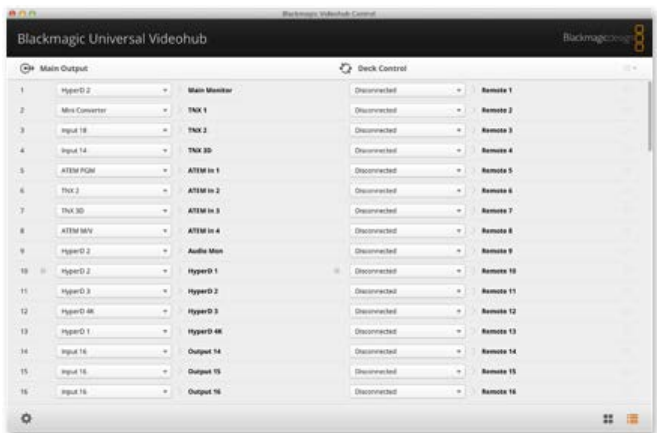


When you’re editing, grading, or doing broadcast design, the best place to control your router is right from your desktop! All Videohub models include free software that you can install on your Mac or Windows PC. The attractive, icon based router control software includes multiple views so you can choose the layout that’s best for your work.



Push Button View

Pushbutton View is the fastest and most intuitive way to control your router! It features large buttons with elegant icons that represent the most common post production equipment. That means you get a router control interface that looks just like your facility. Pushbutton View is ideally designed to work on touchscreen monitors and gives you the most fluid, computer based routing control you'll ever experience!



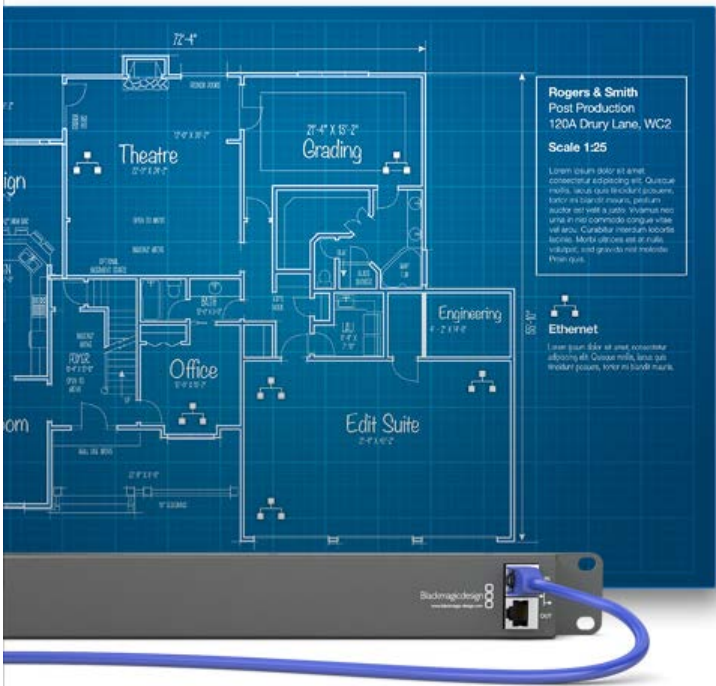
Personal Router Views

With Personal Router View you can see every connection in a single window, or create a personal set to see only the equipment you want. This means you get a much smaller interface window that won't get in the way of other software, such as editing or design tools. There is also a special Router Control View that lets system administrators label and manage all of the connections in your facility. Personal Router View gives you the flexibility to focus on just the connections you need!

iPad® Control

Get portable router control anywhere in your facility!

Available free from the App Store, the Videohub Pushbutton View looks stunning on your Apple iPad. That means you can use an iPad over your wireless network to change routing from any room in your studio, all without using dedicated panels or computers!



Connect via Ethernet

Add network control panels quickly!

Videohub Smart Control and Videohub Master Control panels use standard Ethernet networking. That means you can plug into the existing computer network. Both control panels feature (PoE) power over Ethernet so if used with an Ethernet switch that includes PoE support, no external power supply is required. Videohub hardware control panels also include loop through Ethernet, perfect for looping dozens of control panels so you save hundreds on Ethernet cabling!



ETHERNET

Easy to install

Multiple connection options for easy setup and control

19" RACK

Standard Design

Installing Smart Videohub is simple and easy! Designed to fit perfectly in standard 19" equipment racks, the videohub built in control panel not only switches video, it also lets you set the network IP address in the settings menu. That means you can customize crosspoint labels and control routing via your IP network over Ethernet or even using WiFi! Or you can quickly set up Videohub by connecting USB directly to your computer! With a router set up this simple, you can set up your studio in minutes!



Custom SDK

Customize your Videohub controls!

Videohub includes a free software development kit so any developer or system integrator can easily add protocol support for integration into other routing infrastructures. The SDK supports industry standard C++ and includes software libraries, sample code, and documentation. Using the Videohub SDK you can create customized software or hardware remote control solutions with unique interfaces.



FREE SDK

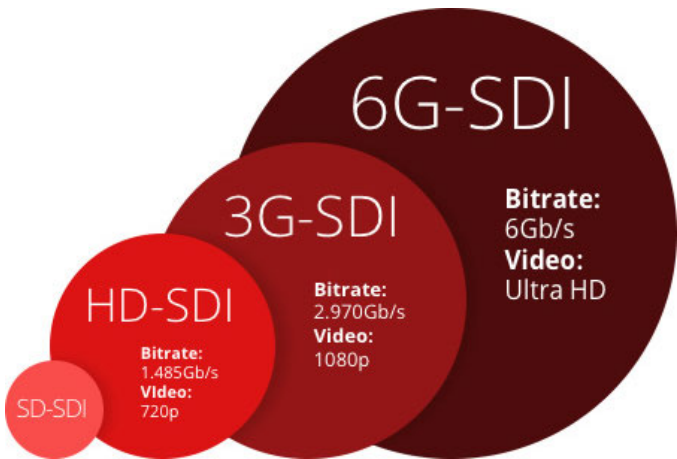


Advanced Technology



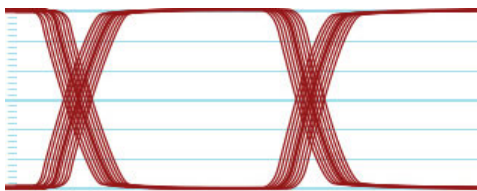
Multiple Formats

You need to be able to work with the growing number of worldwide television standards, and Smart Videohub has been designed to work with virtually all of them! You get support for 525 and 625 SD, 720 and 1080 HD, and the new 4K Ultra HD standard. Different video formats and frame rates can all be routed on the same Smart Videohub simultaneously, allowing you to work in virtually every format for compatibility with almost every broadcast standard!

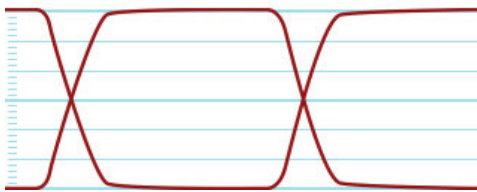


6G-SDI

SDI is an amazingly robust and flexible video standard! No other way of connecting video is as reliable as SDI because there is no computer based IP settings or complicated software involved. SDI is simple and is a pipeline of pixels pouring down the cable at high speed! Simply connect and you get pictures! SDI includes video, audio, timecode and metadata all embedded in a single cable. Because of its reliability, SDI is ideal for live production, post and broadcast. SDI is scaleable and multi rate, so you can switch formats and frame rates using the same physical single cable connection. The latest 6G-SDI technology is compatible with Ultra HD, but still switches speed to work with older SD and HD-SDI equipment.



SDI signals with jitter degradation



Clean, reclocked SDI signals

SDI Reclocking

Videohub includes built in SDI reclocking on every 6G-SDI input. SDI reclocking regenerates the video signal for maximum video quality. This is extremely important because longer video cables degrade the signal. Expensive premium "digital" cables can help a little, but still cannot eliminate signal integrity loss due to cable lengths getting longer. With SDI reclocking you get a regenerated and clean signal out to all of the SDI devices in your studio. That means longer cable lengths, and no glitches in your video.

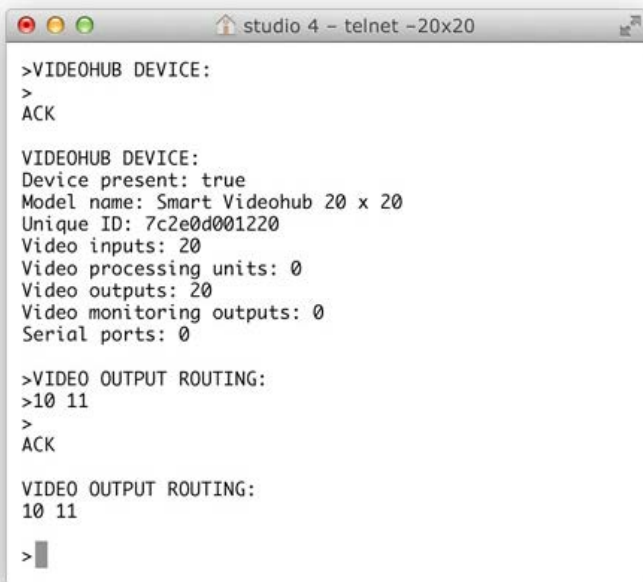
Ethernet control

Ethernet is one of the most common computer networking standards and is used to provide connectivity in virtually every facility worldwide. The Smart Videohub can be controlled with remote hardware panels or via software over standard ethernet networks. All Videohub hardware control panels include industry standard Ethernet connections, making it easy to install them throughout your facility. Broadcast designers, editors, and colorists using Mac or PC workstations can use the free Videohub Control Software to instantly switch and route the signals they need over ethernet!



SDK

You get a free SDK to create customizable control of your Videohub! The Software Developer Kit gives you the ability to connect Videohub to automated broadcast systems or create your own custom controls. Available for both Mac OSX and Windows operating systems, developers get detailed control protocol, libraries, sample code, documentation and more! The SDK gives you the tools you need to customize the integration of any Videohub model.





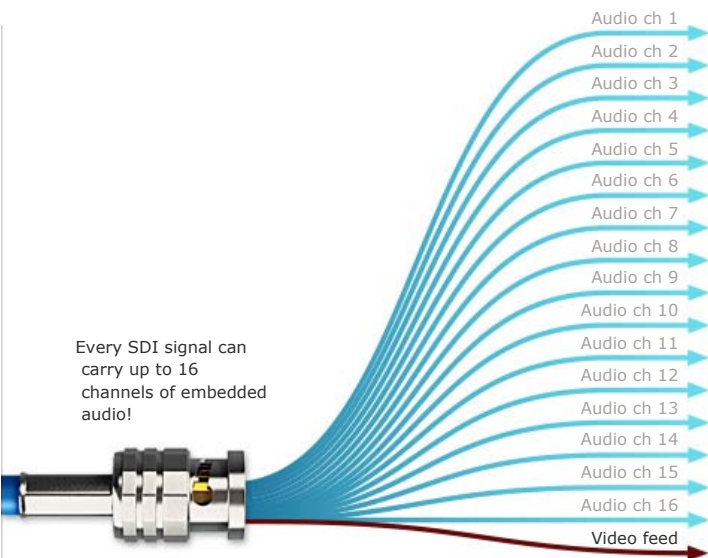
\$295

Mini Converter SDI to Analog 4K
Convert SDI in SD, HD or UltraHD to
analog video with down converter and
audio.

Analog Equipment

Easily convert Analog to SDI

It’s easy to connect analog equipment to your 6G-SDI Videohub using Blackmagic Analog to SDI Mini Converters. The converter’s SDI output, complete with embedded audio, will connect directly to your router. The Teranex 2D is great for converting analog to SDI, with the added benefit of high quality up conversions and standards conversions, so you can even add standard definition video to your HD infrastructure.



Audio

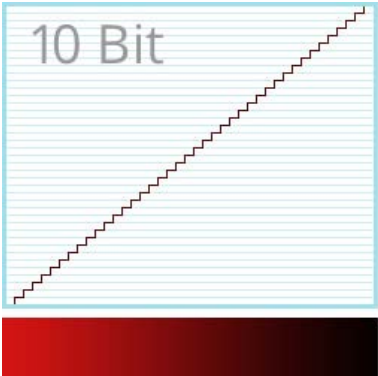
Audio and video on one cable!

The SDI standard includes 16 channels of embedded audio with your video signal. That means you get up to 16 mono or 8 stereo channels perfectly synchronized with your video. If you need to route audio to analog equipment, it can easily be de-embedded from the SDI signal using Mini Converters. The advantage of SDI embedded audio means that you can route or directly patch synchronized audio and video on a single cable!

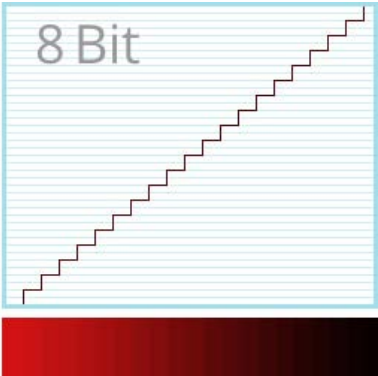
Bit Depth and Color Precision

Route video at the highest bit depth

Videohub is designed to support the highest quality video. That means you can route 4:2:2, 4:4:4, and 8, 10, or 12 bit video in any standard. 10 bit is the most commonly used standard now as colors can be represented much more accurately than 8 bit video. 10 bit processing prevents color banding which occurs with 8 bit video when the steps between shade gradations become too apparent and appear like bars of color instead of a smooth gradient. Smart Videohub also works with the latest 12 bit video video signals for even higher quality, so you get a future proof design!



10 Bit Color Depth Smooth color gradient.



8 Bit Color Depth Visible steps in gradient.



Unsynced Video Feed



Synced Video Feed

Genlock

Routing for live studio broadcast!

For applications that require Genlock, like broadcast and live production, you can connect your video reference signal to Videohub for clean vertical interval switching. All Smart Videohubs can also operate without Genlock in facilities that don’t require vertical interval switching.

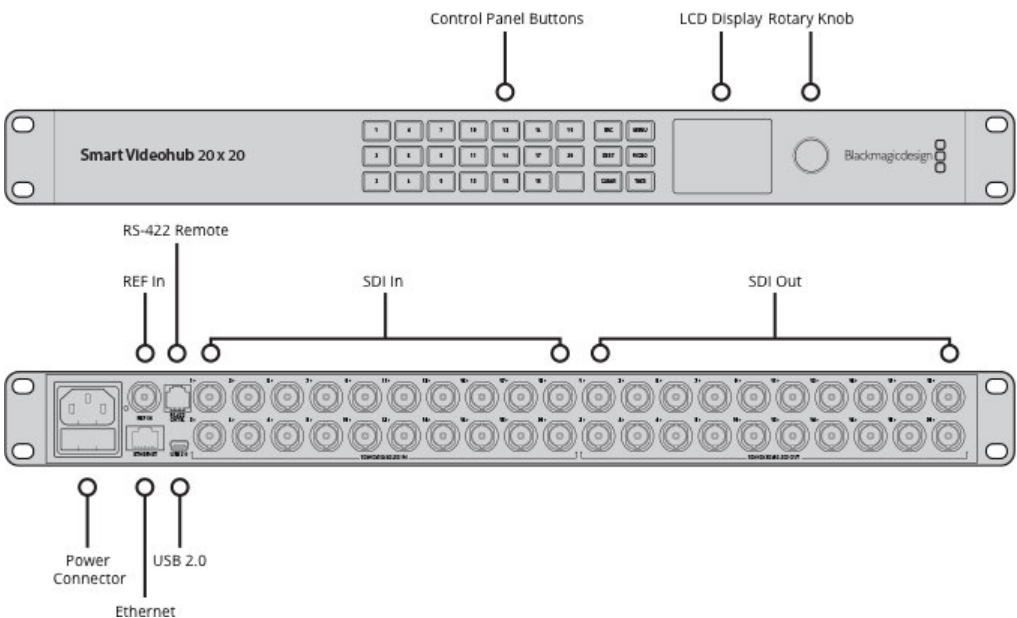


Smart Videohub 20 x 20

Technical Specifications

Description	Smart Videohub 20 x 20 is a larger advanced Ultra HD mixed format router with built in control panel and monitoring. Ideal for larger workgroups and mobile broadcasting, it includes advanced 6G-SDI connections so you can simultaneously connect and route any combination of SD, HD and Ultra HD video all on the same router at the same time. You also get revolutionary new visual routing with the unique spin knob control, push button panel and the built in LCD screen. Also includes Ethernet for remote control and a fully customizable software development kit for Mac and Windows.	Price \$1,995
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Connections	<div>SDI Video Input 20 x 10 bit SD-SDI, HD-SDI and 6G-SDI.</div> <div>SDI Video Output 20 x 10 bit SD-SDI, HD-SDI and 6G-SDI.</div> <div>Reference Input Blackburst and TriSync for SD, HD and 4K.</div> <div>Muti Rate Support Auto detection of SD, HD or 6G-SDI. Simultaneous routing of 4K, HD, SD video and DVB-ASI.</div>	<div>Updates USB 2.0 high speed (480Mb/s) interface or via Ethernet.</div> <div>Router Control 21 buttons for local control of Videohub. 6 buttons and scroll wheel for control of LCD display or RJ45 Ethernet.</div> <div>Router Configuration Via front panel LCD or use either RJ45 Ethernet or USB 2.0 for setting IP address only.</div>	<div>RS-422 Router Control 1 x input for controlling router crosspoint switching.</div> <div>Reclocking On all SDI outputs, auto switching between standard definition, high definition or 6G-SDI video.</div>
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Standards	<div>SD Format Support 625/25 PAL, 525/29.97 NTSC and 525/23.98 NTSC.</div> <div>HD Format Support 720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60.</div> <div>2K Format Support 2048x1080p23.98, 2048x1080p24, 2048x1080p25, 2048x1080PsF23.98, 2048x1080PsF24, 2048x1080PsF25.</div> <div>4K Format Support 3840x2160p23.98, 3840x2160p24, 3840x2160p25, 3840x2160p29.97, 3840x2160p30, 4096x2160p24.</div>	<div>SDI Compliance SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 310M, SMPTE 425M-A, SMPTE 425M-B, ITU-R BT.656 and ITU-R BT.601.</div> <div>SDI Video rates SDI video inputs are switchable between standard definition, high definition and 4K. SDI switches between 270 Mb/s standard definition SDI, 1.5 Gb/s HD-SDI, 3G-SDI and 6G-SDI.</div> <div>SDI Video Sampling 4:2:2 and 4:4:4</div> <div>SDI Audio Sampling Television standard sample rate of 48kHz and 24 bit.</div>	<div>SDI Color Precision 4:2:2 and 4:4:4 10 bit.</div> <div>SDI Color Space YUV or RGB.</div> <div>SDI Auto Switching Automatically selects between SD-SDI, HD-SDI, 6G-SDI and DVB-ASI on each input so that each input can be running a different television standard.</div> <div>SDI Metadata Support Video payload identification ancillary data as per SMPTE 352M.</div>
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Software	<div>Software Control Router control included free for Windows™ and Mac OS X™.</div> <div>Internal Software Upgrade Via included updater application.</div>
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Displays	<div>Displays Built-in LCD for video and menu settings.</div>
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Physical Installation	<div>Physical Installation 1 rack unit size. Less than 6 inches deep.</div>
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Power Requirements	<div>Power Fail Protection Router connections preserved and restored instantly at power on.</div> <div>Power Supply IEC power cable required. 90 - 240V AC input.</div>
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Physical Specifications	<div><div>19 in</div><div>1.73 in</div><div>6.30 in</div><div>4.40 lb</div></div>
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Environmental Specifications	<div>Operating Temperature 0° to 40° C (32° to 104° F)</div> <div>Storage Temperature -20° to 45° C (-4° to 113° F)</div> <div>Relative Humidity 0% to 90% non-condensing</div>
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What's Included	<div>Smart Videohub 20 x 20 Software CD</div>
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Warranty	<div>12 month Limited Manufacturer's Warranty.</div>
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Next ▶

Smart Videohub Routers



Smart Videohub 12 x 12
Advanced 12 x 12 multi format SD, HD and Ultra HD SDI router with built in video monitoring, spin knob control, 6G-SDI technology.



Smart Videohub 20 x 20
Advanced 20 x 20 multi format SD, HD and Ultra HD SDI router with built in video monitoring, spin knob control, 6G-SDI technology.