

SmartView

Intelligent SDI monitoring with broadcast quality scopes!

When you need high quality SDI monitoring, SmartView monitors are the perfect solution! SmartView monitors are extremely thin and lightweight, so are perfect for both broadcast and portable use, and automatically switch between SD, HD and 3G-SDI video formats. There are 3 great models;

SmartView HD features a large 17" display, SmartView Duo has 2 independent 8" displays and SmartScope Duo 4K adds the flexibility of built in waveform monitoring that can be assigned to either of its 8" displays!



SmartView Duo

Perfect SDI Monitoring

SmartView monitors are the perfect choice to add SDI monitoring anywhere you need it. You can use them for broadcast, post production, on set monitoring, flyaway kits, broadcast trucks and more! When you're working with live production switchers you can build a video wall of camera

monitors in your control room and see all your sources. You can mix and match different SmartView models in a rack for a customized monitoring solution where you can view your images and choice of scope displays side by side!



Choose your Monitor! Monitoring anywhere you need it



SmartView HD SmartView Duo

There are 3 exciting SmartView models to choose from! SmartView HD has a large 17" LCD for full HD 1920 x 1080 resolution monitoring, so you can see every single pixel in your image. SmartView Duo features two independent 8" displays in a 3 RU design that's less than one inch deep. SmartScope Duo 4K adds independent waveform monitoring and you can

select between waveform, vectorscope, RGB parade, YUV parade, histogram and audio phase with audio level displays. Each SmartScope Duo 4K display is independent so can monitor any combination of scope or picture view!

Perfect Monitoring

SmartView monitors are ideal for high end broadcast monitoring because they feature high quality filtering and scaling, so you retain fine detail in the image. The fully digital design with high quality SDI inputs ensures precise color that's easy to manage across multiple displays. SmartView includes

ethernet so you can connect them to your network and centrally control all your monitors from a single computer using the SmartView software utility. SmartView also includes integrated tally that is fully compatible with many switchers or automation systems.



Accurate Waveform Monitoring!

When you need to analyze image quality more accurately than simply looking at the picture then use SmartScope Duo 4K's built in waveform monitoring! You can view two independent sources simultaneously and conveniently switch between monitoring or scope views whenever you need! Choose from waveform, vectorscope, RGB parade, YUV parade,

histogram and audio phase and level displays, and get broadcast accurate waveform monitoring that shows everything you need to know technically about your video and audio signals. SmartScope Duo 4K removes the need for separate expensive scopes!





Ultra Thin Design

SmartView monitors feature an elegant front panel that is designed to allow multiple SmartView HD, SmartView Duo and SmartScope Duo 4K models to be mounted next to each other to create a beautiful wall of monitors that share the same appearance and width! Lightweight and ultra thin, SmartView is perfect for broadcast trucks and fly away kits! When you need to mount SmartView in the extreme top or bottom of an equipment rack, the units can be rotated upside down and the images will automatically flip to provide the optimum viewing angle!



Greater SDI Compatibility SmartView supports SD, HD and 3G-SDI formats

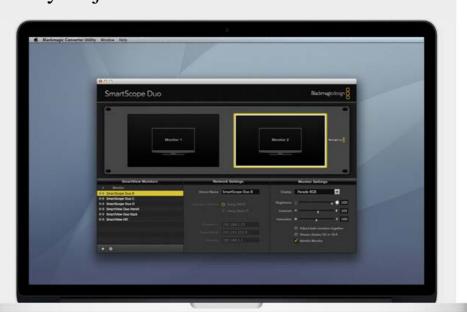


SmartView has been designed for broadcast as well as post production and includes support for multiple SDI video standards, including SD, HD and 3G-SDI formats. They support new advanced video standards used in post production including 1080 progressive HD rates and even 2K over 3G-SDI. All video formats can be connected and changed at any time, because SmartView will automatically switch in less than a second to the new format!



SmartView connects via ethernet and all monitors can be adjusted remotely from one location, making it easy to match monitors. The SmartView software utility for Mac OS X and Windows lets you make changes even with a laptop and copy settings from one monitor to another. The software includes an identify function so you can find the monitor you're adjusting even when you're working with lots of monitors! Because the adjustments are electronic, monitor color is stable over time. You can easily add new software updates for new video formats and waveform displays via USB.

Easy Adjustments



SmartView

Get rack monitoring in a design that places all the focus on your images! SmartView monitoring has been designed to eliminate buttons and knobs, so there is no clutter on the front panel which can make monitoring distracting. Imagine building a wall of monitors where all you see is clear bright screens and all your cameras and program feeds being displayed! SmartView monitoring is elegant in the simplicity of its design!

Compact Rack Design

Modern broadcast trucks and studios have less space than ever before and space costs money. SmartView monitors are super thin and are less than an inch thick! This means that when you're building a wall of camera monitors, you only need rack depth of a few inches to minimize space inside broadcast trucks and other tight situations. SmartView also features a lightweight, aluminum design that's perfect when installed into mobile racks and fly away kits because it's not heavy to lift. The slim design is practical, but also provides a stylish look when combined with additional SmartView monitors and equipment.





LCD Screens and RGB Tally



SmartView and SmartScope monitors feature super clear LCD screens with tally so it's the perfect solution for live broadcasts. Unlike a simple tally light, SmartView includes tally borders displayed in green, red or blue to signify preview, on air, or recording. This means during live production you

will always know when you are recording or on-air, or you can see which camera is cued up on your switcher's preview output. Tally is connected via an industry standard parallel pin connector on the rear panel so you get full compatibility with switchers or automation systems.

Reversible Design Optimize viewing angle

In busy production facilities such as television stations and post production houses, racks are often packed with video and audio equipment. This means you may need to install SmartView monitors in the extreme top or bottom of equipment racks. SmartView monitors are designed to compensate because the LCDs can be easily rotated for the optimum viewing angle. The SmartView monitor will automatically sense the rotation angle of the screen and flip the image to the correct rotation. You can even remove the front panel and rotate it 180 degrees if required!





Central Ethernet Control



Now you can control all your monitors from a single location and make sure all your monitors match each other for a consistent look and an accurate display of the image. Simply connect SmartView to your Ethernet network and use the included Mac and Windows SmartView Utility software to adjust all your monitors. The SmartView Utility uses the common networking software, Bonjour, to automatically find all the monitors installed on your network and display them in a list for you to select. You

can even plug direct into the monitor using USB to setup ethernet settings. You can save monitor settings, or copy settings from one monitor to another to make setup fast. When you're working with lots of monitors, SmartView Utility even includes an identify mode to help you find the monitor you want to adjust! All adjustments are set digitally which means SmartView monitors won't suffer from drift over time or during travel!

Complete Monitoring Solution

SmartView monitors can be mounted in any standard 19 inch rack system, making them a great choice for production studios, television facilities, color correction and editing suites. Light and compact, you can install SmartView monitors in a fly away kit along with ATEM live switchers and Blackmagic Audio Monitor for a complete mobile live production suite that you can take

on location anywhere in the world! Tally is included in SmartView monitors so you get red or green borders for on air and preview status indication on the monitor itself. SmartView is your complete video production monitoring solution!



Rack Mount Design

SmartView HD is 6 rack units high, while SmartView Duo and SmartScope Duo 4K are only 3 rack units high, all models are less than 1 inch deep and a standard 19" rack width, this means they are ideal for installation in equipment racks and monitor walls. All SmartView Monitors have a clean simple front panel so you can mount all models of SmartView together in a

rack for a clean 'wall of monitors' look. This is perfect for facilities that monitor numerous incoming and outgoing video feeds such as television stations and production houses. The narrow design means they are lightweight, so you can build fly away kits and broadcast trucks where both space and weight are limited.



Live Production Camera Monitor

Install your SmartView monitors in a fly away kit and take them with you on your live production shoot. With SmartView HD you can easily check your focus by watching your camera input on a large 17" true high definition display! Use multiple SmartScope Duo 4K units to monitor lots of camera inputs simultaneously! With tally included you can see what's on air and

which shot is cued on the preview output. You can even view the incoming program feeds input on one display and scopes on the other with the SmartScope Duo 4K model! Imagine having technical waveform monitoring right next to the image you are broadcasting, so you know the true quality of your incoming video feeds.



Fly Away Kit

Take your SmartView monitors anywhere in the world by mounting them in portable fly away kits! The ultra thin rack mount design means you can install your SmartView monitors above one another with plenty of space behind for switcher chassis and other equipment. This means you can use both sides of your fly away equipment rack! Portable racks can trap heat

when lots of equipment is closely installed, but air flow and space between equipment is maximized with SmartView monitors because of the super thin design! SmartView is the true light weight solution for portable video monitoring in any shooting environment and is the monitor you can lift without breaking your back!



Broadcast Trucks

In mobile broadcast truck, you need every inch of space and you need minimal heat so you need a monitoring solution that is lightweight, uses minimal power and has a slim profile. Imagine having all your video sources displayed on large 8" or 17" LCD screens so you can see camera detail and quality. Now you can build a truly portable live broadcast monitoring solution that's compact enough to fit inside a broadcast truck or even a more

compact broadcast van! In mobile broadcast trucks, you need every inch of space and minimal heat, so SmartView monitors are the ideal solution.

Install SmartScope Duo 4K and you can display both picture and scopes at the same time so you can watch your camera input on one screen and monitor the scopes on the other!



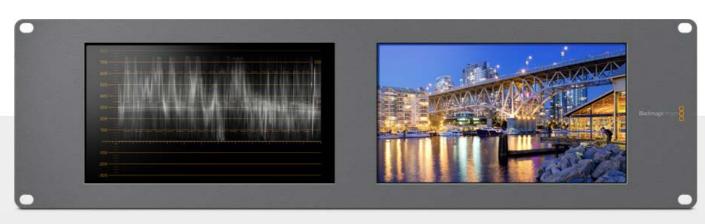
Technical Monitoring

SmartScope Duo 4K is ideal for checking your video for illegal colors and levels because you get six different broadcast accurate waveform displays in the one unit. You can choose from waveform, vectorscope, RGB parade, YUV parade, histogram and audio phase/level scopes depending on the type

of technical parameters you need to observe and measure. All scopes are rendered beautifully on two crystal clear 8" LCD screens. You can use any combination of scopes needed, and technical monitoring can even be set up as the traditional waveform and vectorscope display!

SmartView with Scopes Broadcast Accurate Waveform Monitoring

The SmartScope Duo 4K model includes built in waveform monitoring when you need to analyze image quality more accurately than simply looking at the picture! You get seven of the most popular scopes most widely used in broadcast and post production facilities. Scope displays include waveform, vectorscope, RGB parade, YUV parade, histogram, audio phase and level scopes, and of course you can simply select to view the video itself! Now you don't have to guess what your video and audio levels are, you can monitor them with precision using SmartScope Duo 4K!



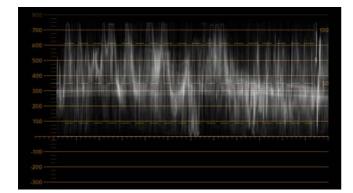
Waveform | Vectorscope | Parade | Audio | Histogram

Select Picture



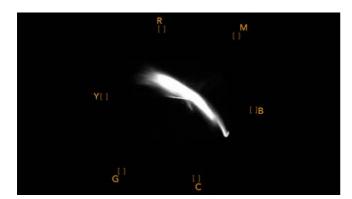
Select Picture

SmartScope Duo 4K gives you the choice to select a scope display or regular video on each of the 8 inch LCD displays. You can even monitor video on one LCD while running a scope such as waveform, histogram or audio on the other screen. This is a powerful combination because you can see the video you're monitoring alongside a real time scope measurement, all on the same SmartScope Duo 4K! You can always rely on SmartScope Duo 4K to give you broadcast accurate monitoring, ensuring your video production has perfect video and audio levels at all times!



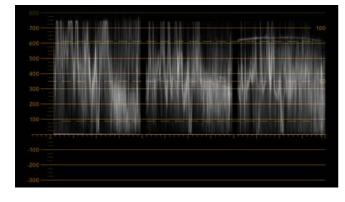
Waveform

Waveform display is perfect for adjusting video levels or matching black background levels when keying! Waveform Display features a luminance waveform of the black and white levels in your video signal. It's perfect for setting the output levels on your broadcast decks and generally monitoring the levels of your production while you edit. Waveform display is a vital tool for color grading and a valuable reference for unifying background levels when keying.



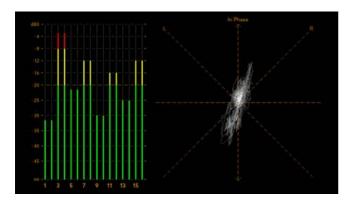
Vectorscope

A vectorscope is the only way to measure colors in video accurately! If you're color correcting video, vectorscope shows when color has been removed or nulled out for accurate white balance. When you need to apply a tint, vectorscope lets you see exactly how much tint you're adding and what color it is. Sometimes monitors cannot be trusted, but with vectorscope you'll always know the exact colors you're working with! You can also easily align hue on decks using a vectorscope!



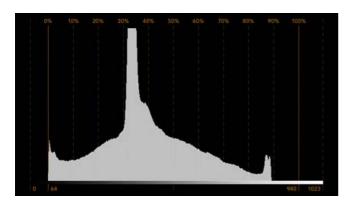
Parade Display

The real time RGB parade waveform view is the ideal scope for accurate color correction. You can see the color balance in 'blacks', 'mids' and 'whites', making it easy to balance colors for perfect looking images. RGB Parade lets you check for illegal colors because any video that drops below the black line, or above the 100% line, is an illegal RGB color! Vectorscope view cannot show illegal video levels, because vectorscope only plots colors and not the luminance component of video. However the RGB parade plots your video as R, G and B and so is the perfect way to keep track of illegal video levels! You can also select YUV parade display which shows the YUV component video as its transmitted down the SDI cable and is perfect for broadcast engineering analysis of SDI signals.



Audio View

Monitor your audio levels with 16 channels of audio metering for viewing every channel in the SDI video connection! The audio scope also includes a stereo phase meter that can be selected to different SDI audio pairs. The stereo phase meter plots left and right audio as an XY scope display so you know exactly what your audio is at all times. It's easy to see audio problems such as clipping, and out of phase audio can be seen as a left or right leaning display. If you don't get a vertical oriented waveform then you know your audio channel balance is out! No audio problem can hide from audio scope display!



Histogram

Clipping levels on a live shoot results in loss of detail, which can cause huge problems when you try to adjust 'blacks' or 'whites' in post production. Histogram view lets you see where the pixels are in your video, and how they are distributed from black to white. You can see if your video is clipping and adjust the camera iris and ISO settings to keep all black and white detail in the image. This means you have the full contrast range of video for easy color correction during post production. Histogram will transform your shoots because you can see exactly what you're recording and the colorist who works on your job will benefit from the availability of the full contrast range of the camera!

Software Update

You can download software updates to your SmartView monitor to add new features in the future. You can also download new software to the SmartScope Duo 4K model so you can add new types of scopes as they become available. Programmable internal software means you can get new features, compatibility with new hardware and support for new formats in the future. When downloading updates of the SmartView Utility, it will automatically detect the software of your hardware and then ask you to update if necessary. The software update is then downloaded for you and is simple to perform!



SmartView

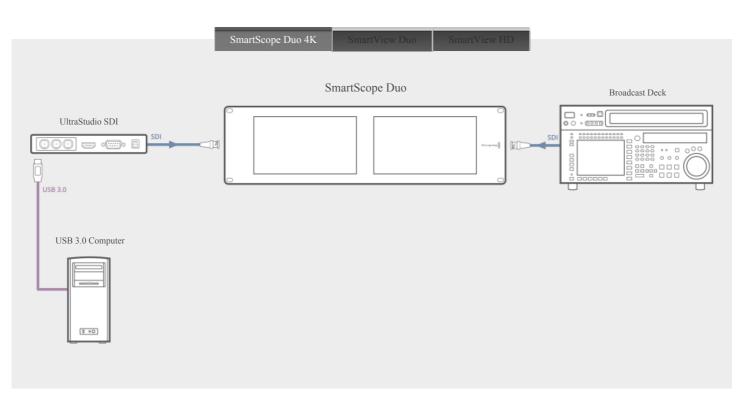
SmartView is perfectly designed for building a video wall of monitors showing all your video sources such as live production switchers, video servers, routers and cameras! Being incredibly thin it's perfect for portable setups where you need to save space. You can install SmartView monitors in fly away kits, broadcast trucks, equipment racks, edit desks or anywhere you need good quality video monitoring or scopes. SmartView's low profile and low power design is an ideal solution for broadcast trucks where equipment is tightly packed and heat can be a problem. SmartView monitoring doesn't suffer from this problem and you have more space available!



Connecting to Decks and Servers

SmartView is ideal for use with broadcast decks or video servers, simply mount them in a rack and connect via SDI to see what the deck or server is playing or recording. With multiple servers all playing back at the same time, SmartView helps you keep track of what's going on and to ensure each server is working correctly. Many broadcast decks include video level adjustments and you often need to accurately set up these adjustments to ensure your video levels are correct. SmartScope Duo 4K is perfect for this situation because you can install it above the deck, set it to waveform and vector display, and then you can adjust deck outputs in the traditional way!





Learn more about - UltraStudio USB 3.0

Connecting to Routers

The best solution for monitoring every device in your facility is to connect a SmartView HD and a SmartScope Duo 4K to one of the outputs of your router, and then switch various sources into the monitors to see any source you choose! SmartView HD will give you full resolution monitoring from all your sources and in any video standard you route in. SmartScope Duo 4K is the perfect companion to SmartView HD because it can be set up to show waveform and vector display, so you get a full HD monitor as well as full choice of scopes of your video signals. SmartScope Duo 4K can also be used on its own with one screen to monitor video input and the other for audio scope, pair this with Blackmagic Audio Monitor and keep track of not only video but also the audio levels in the SDI output of the router from any source.



Universal Videohub 72

SmartScope Duo 4K

SmartView Duo

SmartScope Duo

SmartScope Duo

Connecting to Live Production Switchers

SmartView monitors are the ideal choice for ATEM production switchers to monitor program, preview or multiview output. SmartScope Duo 4K is a perfect for program monitoring on a live production switchers where one of the screens can be audio scope, and the other set to waveform to monitor video levels. You can see at all times what your video and audio levels are, and be sure downstream program feeds won't have quality problems. If

you're working with CCU's and adjusting camera color and balance on live production switchers, then simply loop the camera SDI feed via a SmartScope Duo 4K and you can set to RGB Parade and Vectorscope on each screen, so you can see your color balance and video levels as you adjust each camera!

Learn more about ATEM >

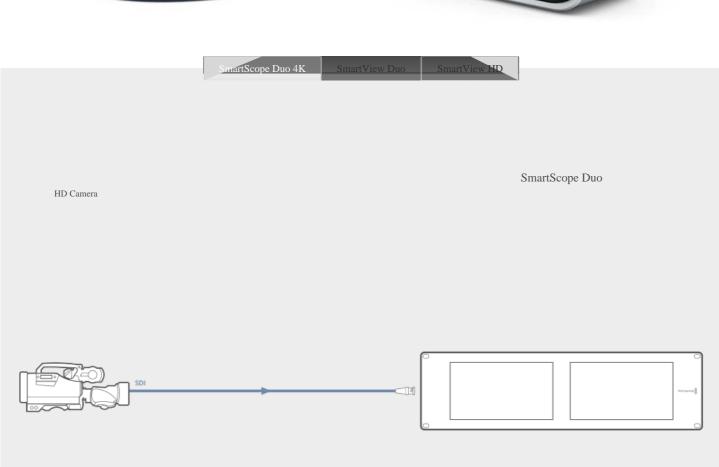


Connecting to Cameras

SmartView HD and SmartView Duo make fantastic on set monitors and can easily be mounted in fly away kits for a total monitoring solution on set. An even better solution is to use SmartScope Duo 4K on set. You simply plug your camera into the SmartScope and you can then use Histogram and Picture view to see all your camera settings. SmartScope and SmartView

monitors are so easy to install because they work with SDI connections and they switch video standards instantly between all SD and HD video formats including both progressive and interlaced modes. This means whatever format you are recording on your camera, you can monitor it!











SmartView Duo

SmartScope Duo 4K

Technical Specifications

Description

SmartScope Duo 4K looks like a SmartView Duo but adds independent waveform monitoring so you can select between waveform, vectorscope, RGB parade, YUV parade, histogram and audio phase level displays. Each monitor is independent so can display any combination of scope or picture view!

Price \$995

Connections

SDI Video Input

6G-SDI switchable.

Automatically switches between SD, HD and 6G-SDI. Reclocked loop through output.

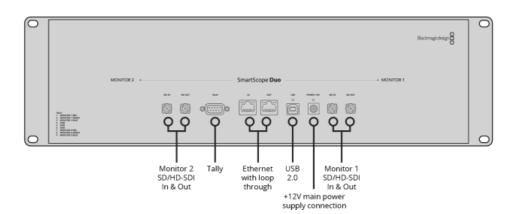
SDI Video Output $1\ x\ 10$ bit loop through SD, HD and SDI Audio Input 16 channel embedded in SD and HD. SDI Audio Output

16 channel embedded in SD and HD.

Multi Rate Support

Standard definition SDI, high definition SDI and 6G-SDI.

Tally 9-pin D connector



Standards

SD Format Support

625/25 PAL and 525/29.97 NTSC.

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

2K Format Support

2048x1080p/23.98, 2048x1080p/24, 2048x1080p/25, 2048x1080PsF/23.98, $2048x1080PsF/24,\,2048x1080PsF/25,\,$ 2048x1556PsF/23.98, 2048x1556PsF/24, 2048x1556PsF/25

4K Format Support

3840x2160p25, 3840x2160p29.97, 3840x2160p30

3840x2160p23.98, 3840x2160p24,

SDI Compliance SMPTE 259M, SMPTE 292M, SMPTE

296M, SMPTE 372M and SMPTE 425M.

Audio Sampling Television sample rate of 48KHz

Video Sampling 4:2:2 and 4:4:4

Color Precision

8-bit

Color Space

YUV and RGB

USB 2.0 for software updates and Ethernet for configuration

Colorspace Conversion Hardware based real time

Computer Interface

Scopes

Luminance Waveform, Vectorscope, RGB Parade, YUV Parade, Histogram, Audio phase and level.

Software

Software Included

Configuration utility for MAC and Windows.

Internal Software Upgrade

Via included firmware updater software.

Physical Installation

Operating Systems



Mac OS X 10.7 Lion or later, and Mac OS X 10.8 Mountain Lion or later.

WindowsTM 7 and 8

Power

Power Supply 12V universal power supply included with

international socket adapters for all

Power Consumption

Operational Voltage Range

Physical Specifications





Environmental Specifications

Operating Temperature 0° to 40° C (32° to 104° F) Storage Temperature -20° to 45° C (-4° to 113° F) Relative Humidity 0% to 90% non-condensing

What's Included

SmartScope Duo 4K Power Supply

Software CD

Warranty

12 Months Limited Manufacturer's Warranty

Smart View

SmartView Duo Dual 8 inch 3 RU SDI/HD-SDI/3G SDI monitoring with central software control.

\$495

SmartView HD

Large 17 inch full HD 6RU SDI/HD-SDI/3G SDI monitoring with central software control.

\$895

 $SmartScope\ Duo\ 4K$ Dual 8" 3 RU SDI/HD-SDI/3G-SDI/6G-SDI monitoring with built in scopes for technical waveform monitoring.

\$995

