



Blackmagic Design Studio Camera 4K Plus G2

ProdCode: BMDCINSTU4PDG2

Mini studio camera

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Features

- Mini studio camera
- Perfect camera for ATEM Mini and ATEM SDI
- The HDMI is incredibly powerful as it connects video to the ATEM Mini, while at the same time camera control, tally and the remote record trigger is sent to the camera using the same HDMI connection
- Features a cinematic 4K sensor up to 25,600 ISO
- MFT lens mount
- 12G-SDI and HDMI
- 3.5mm talkback
- 7" LCD with sunshade
- Colour corrector and recording to USB disks

Blackmagic Studio Cameras have the same features as large studio cameras, miniaturized into a single compact and portable design. Plus with digital film camera dynamic range and colour science, the cameras can handle extremely difficult lighting conditions while producing cinematic looking images. The sensor features an ISO up to 25,600 so you can create amazing images even in dimly lit venues. It even works under moonlight! Advanced features include talkback, tally, camera control, built in colour corrector, Blackmagic RAW recording to USB disks, live streaming and more! You can even add a focus and zoom demand for lens control.

Designed for Live Production

While Blackmagic Studio Camera is designed for live production, it's not limited to use with a live switcher. That's because it records Blackmagic RAW to USB disks, so it can be used in any situation where you use a tripod. The large 7" viewfinder makes it perfect for work such as chat shows, television production, broadcast news, sports, education, conference presentations and even weddings. The large bright display with side handles, touch screen and physical controls makes it easy to track shots while being comfortable to use for long periods of time. Because it's so lightweight, it's perfect when you're constantly changing locations and doing different kinds of work.

Revolutionary Studio Camera Design

Large broadcasters use expensive studio cameras that are extremely large, so they're not very portable. The distinctive Blackmagic Studio Camera has all the benefits of a large studio camera because it's a combination of camera and viewfinder all in a single compact design. It features a lightweight carbon fiber reinforced polycarbonate body with innovative technology in a miniaturized design. The camera is designed for live production so it's easy to track and frame shots with its large 7" viewfinder. The touchscreen has menus for camera settings, and there's knobs for brightness, contrast and focus peaking. Plus a tripod mount with mounting plate is included for fast setup.

Exceptional Low Light Performance

In advanced cameras, ISO is a measurement of the image sensor's sensitivity to light. This means the higher the ISO the more gain can be added so it's possible to shoot in natural light, or even at night. The Blackmagic Studio Camera features gain from -12dB (100 ISO) up to +36dB (25,600 ISO) so it's optimized to reduce grain and noise in images, while maintaining the full dynamic range of the sensor. The primary native ISO is 400, which is ideal for use under studio lighting. Then the secondary

high base ISO of 3200 is perfect when shooting in dimly lit environments. The gain can be set from the camera, or remotely from a switcher using the SDI or Ethernet remote camera control.

Get Cinematic Images in Live Production

Amazing sensors combined with Blackmagic generation 5 colour science give you the same imaging technology used in digital film cameras. That means you can now use cinematic images for live production. Plus, when combined with the built in DaVinci Resolve primary colour corrector you get much better images than simple broadcast cameras. The colour corrector can even be controlled from the switcher. With 13 stops of dynamic range, the camera has darker blacks and brighter whites, perfect for colour correction. Great for both HD and Ultra HD production, the 4K models feature a resolution of 3840 x 2160 and the 6K model has a resolution of 6144 x 3456. Plus, all models support 23.98 to 60 fps.

Affordable Photographic Lenses

With the popular EF or MFT lens mounts, Blackmagic Studio Cameras are compatible with a wide range of affordable photographic lenses. Photographic lenses are incredible quality because they're designed for use in high resolution photography. Plus, the active lens mount lets you adjust the lens remotely. To eliminate the need to reach around to adjust the lens manually, the optional focus and zoom demands let you adjust the lens from the tripod handles just like a large studio camera. This means you avoid camera shake when adjusting the lens so you can track shots and operate the camera without taking your hands off the tripod. It gives you the same feel as an expensive B4 broadcast lens.

Frame Shots with Large 7" Viewfinder

The large 7" high resolution screen will totally transform how you work with the camera because it's big enough to make framing shots much easier. The Pro models features an HDR display with extremely high brightness, perfect outdoors in sunlight. On screen overlays show status and record parameters, histogram, focus peaking indicators, levels, frame guides and more. You can even apply 3D LUTs for monitoring shots with the desired colour and look. The touchscreen also has menus and you can load and customize presets for different jobs. The included sun shade can be folded to protect the screen for transport plus it's compatible with sun shades from the Blackmagic Studio Viewfinder.

Physical and Touchscreen Controls

Blackmagic Studio Cameras feature physical buttons and knobs as well as controls

on the touchscreen. Knobs on the right side of the camera allow adjusting of the brightness, contrast and focus peaking. The focus peaking knob is incredibly useful as it lets you fine tune the detail highlight so you can get perfect focus as you zoom. The 3 function buttons on the left can have functions assigned to them, such as zebra, false colour, focus peaking, LUTs and more. Plus you can change the function assigned to each button in the menus. The touchscreen also includes a heads up display with the most important shooting information, as well as menus for all camera settings, LUTs and custom presets.

Built-in Tally for On Air Status

Blackmagic Studio Cameras feature a very large tally light that illuminates red for on air, green for preview and orange for ISO recording. The tally light also includes clip on transparent camera numbers, so it's easy for talent to see camera numbers from up to 20 feet away. The Blackmagic Studio Cameras support the SDI tally standard used on all ATEM live production switchers and the HDMI tally used on ATEM Mini switchers. This means that a director can cut between cameras and the tally information will be sent back to the cameras via the SDI program return feed, lighting up the tally light on the camera whenever it's on air. SDI tally eliminates complex wiring so job setup is faster.

Communicate with the Director via Talkback

Unlike consumer cameras, Blackmagic Studio Cameras have SDI connections that include talkback so the switcher operator can communicate with cameras during live events. That means the director can talk to the camera operators to guide shot selection, eliminating the problem where all cameras could have the same shot at the same time. All models support 3.5mm headsets that are designed for smartphones, while the Pro models support standard 5 pin XLR broadcast headsets. Talkback uses audio channels 15 and 16 in the SDI connection between the camera and the switcher, and in the program return from the switcher to the camera. This means any embedded SDI audio device can work with talkback.

Powerful Broadcast Connections

Blackmagic Studio cameras have lots of connections for connecting to both consumer and broadcast equipment. All models feature HDMI and 12G-SDI with talkback, tally, camera control and record trigger, perfect for ATEM Mini or ATEM SDI switchers. You also get headphone and mic connections, and 2 USB-C expansion ports. The advanced Blackmagic Studio Camera Pro models are designed for broadcast workflows so have 10GBASE-T Ethernet and balanced XLR audio inputs. The 10G Ethernet allows all video, tally, talkback and camera power via a single connection so setup is much faster. That's just like a SMPTE fiber workflow, but

using standard Category 6A copper Ethernet cable so it's much lower cost.

Four Ways to Connect

Blackmagic Studio Cameras can be connected in lots of different ways. All models feature HDMI so are perfect for HDMI switchers such as ATEM Mini. The HDMI supports video, tally, control and record trigger for a broadcast style workflow using a single HDMI cable. They also have 12G-SDI so you can connect to SDI based switchers such as the ATEM Constellation. There's a 12G-SDI connection for camera video, and one for program return. The program return also includes tally, talkback and remote camera control. Blackmagic Studio Camera Pro models can also use 10G Ethernet to get camera video, program return, tally, talkback, camera control and even power using a regular Cat6A Ethernet cable.

- **Connect via HDMI**

Using the HDMI output, you can connect to switchers such as ATEM Mini. Plus the HDMI connection supports sending tally, colour corrector control and record trigger back to the camera from the switcher.

- **Connect via SDI**

Use the SDI output and the SDI program return for 2 way talkback between the camera and any SDI ATEM switcher. Tally and control is also sent to the camera via the SDI program return.

- **Connect via Ethernet**

The 10G Ethernet connection allows all signals and camera power using a single Cat 6A copper Ethernet cable. That includes the camera video, program return, tally, talkback, camera control and more.

- **Connect via USB Disk**

You can even shoot without a switcher as the large screen makes the camera fantastic for shooting while recording to Blackmagic RAW on a USB flash disk. The big screen makes framing shots very easy.

Get Low Cost Camera Control via SDI

All Blackmagic Design ATEM switchers can control cameras via a protocol embedded into the camera's SDI video connections. Setup is easy because all ATEM switchers broadcast control commands from the switcher's SDI program output to the camera via the SDI program input. The switcher can perform colour correction, tally and lens control and these are sent to all cameras. All you need to do is select the correct camera number and it all works. Even ATEM Mini switchers can control Blackmagic Studio Cameras because the HDMI output to the switcher has return data communication that can send control information back to the camera. All this means the camera operator is free to focus on framing shots.

Low Cost SMPTE Fiber Style Workflow

The Blackmagic Studio Camera 4K Pro G2 and 6K Pro models support connecting cameras via a single Ethernet cable. It's so simple, just plug in and you're ready. Traditional broadcast studio cameras use SMPTE fiber to communicate and power cameras, however SMPTE fiber is very expensive. Blackmagic Studio Camera Pro models have 10G Ethernet as an alternative to SMPTE fiber so it's much lower cost. The Ethernet includes all camera video, program return feeds, tally, talkback, camera control and also power. The Blackmagic Studio Converter handles all video conversions at the switcher end plus adds power to the Ethernet cable. That means you don't need to connect power to the camera.

USB Expansion Port for Accessories

The Blackmagic Studio Camera features a high speed USB-C expansion port that allows you to record to external disks, control the camera via a network or connect to a wide range of accessories. Plug in an external USB flash disk and the camera can record high quality 12-bit Blackmagic RAW files for later editing and colour correction. That means you can just move the disk to a computer to work, and you don't need to waste time copying files. Or add a USB-C to Ethernet adapter to control your camera over a network via easy to use REST APIs. You can even copy files off the camera via the network. Plus plug in optional focus and zoom demands to allow full lens control, just like a large studio camera.

Incredible Blackmagic RAW Quality

Blackmagic RAW is a revolutionary new format designed to capture and preserve the quality of the sensor data from your camera. Some file formats such as H.264 are highly compressed, so add noise and artifacts, causing sensor detail to be lost forever. Blackmagic RAW eliminates this problem so you get stunning images with incredible detail and rich colour throughout the whole post production pipeline. Blackmagic RAW also saves camera settings as metadata so you can change ISO, white balance and exposure later in DaVinci Resolve. Plus the files are small and fast, so editing responsiveness is incredible. Only Blackmagic RAW gives you the highest quality, smallest files and fastest performance.

Includes Built-in Microphones

Blackmagic Studio Cameras include built in microphones so you get sound included in the design making setup much faster. Plus the built in microphones are shock and wind resistant, so you get great sound even in tough conditions. With each microphone placed at the edges of the screen, you get the advantage of the studio camera design for better stereo separation than what is possible on a regular video

camera. There's also a 3.5mm audio input for connecting video camera microphones as well as a 3.5mm headphone jack. On the Blackmagic Studio Camera Pro model you get professional XLR audio inputs and a built in speaker for listening to the program return audio.

Monitor Program Video

The Blackmagic Studio Camera lets you view program video from the switcher at the press of a button. Simply press the camera's PGM button and the viewfinder will switch from the camera display to the program return feed from the switcher. Plus the built in speaker lets you monitor the switcher audio. Program return is a fantastic feature as sometimes on large live shows, camera operators can be left waiting a long time for their camera to be used, so program return lets them watch the show while they wait. This means even if the camera operator is a large distance away from the switcher, they can still keep up with what's happening and remain alert.

Powered by Blackmagic OS

With the advanced Blackmagic OS, you get an intuitive and user friendly camera operating system based on the latest technology. Blackmagic OS is a true modern operating system where all camera features run independently for smoother control, plus the camera powers on virtually instantly. It features the same controls and menus as other Blackmagic Design cameras so you can move between cameras on set easily. The interface uses simple tap and swipe gestures to adjust settings, add metadata and view recording status. You also get full control over advanced camera features such as on screen focus and exposure tools, 3D LUTs, HDR, metadata entry, timecode, Blackmagic RAW settings and more.

Supports 3D LUTs for Film Looks

When Blackmagic RAW files use logarithmic film gamma to preserve the camera dynamic range, 3D LUTs can be used to convert the images on the viewfinder display from looking flat and washed out. 3D LUTs solve this problem because they convert the image just before it's displayed on the LCD. This allows the film gamma images being recorded to be converted to nicer looking images on the LCD. 3D LUTs are also saved into the Blackmagic RAW files so they can be used in later post production, but they are never burned into the Blackmagic RAW image data, so you always have the option to disable them. This means the 3D LUT is transported in the Blackmagic RAW file, but only used when you enable it.

Localized in 13 Popular Languages

The Blackmagic Studio Cameras are designed to be used worldwide so they support

13 popular languages. When setting up your camera, you can choose to work in English, German, French, Spanish, Polish, Portuguese, Italian, Russian, Turkish, Ukrainian, Chinese, Japanese or Korean. It's easy to switch to another language simply by going into the menu settings. When switching between languages, all the on screen overlays, heads up display, and setup menus will be displayed in the selected language and you can change languages any time you like.

Powers From DC or 10G Ethernet

Blackmagic Studio Cameras have lots of different power options. All models have a common 12V DC locking power connector so the cable won't be accidentally pulled out. Plus, the camera includes a power supply with 5 different AC socket adapters for different countries. However if you're using a single Ethernet cable to connect to the Blackmagic Studio Camera Pro models, then the whole camera and its accessories can be powered from the Ethernet connection. The Blackmagic Studio Converter has a large power supply that adds PoE power to the Ethernet cable so you don't need any power connection to the camera. That's a great solution when there's no power available where the cameras are placed.

Focus and Zoom Demands

The optional zoom and focus demands can be added to turn affordable photography lenses into amazing broadcast lenses. The focus and zoom demands have USB-C connections so they work with all Blackmagic Studio Camera models. Each zoom and focus demand has 2 USB-C ports, so you can daisy chain them then connect to the camera with a single USB connection. The design has an incredibly precise feel and so you get very fine lens control, and you can frame and adjust the lens without taking your hands off the tripod handles. The buttons can be customized so you can assign different camera functions to them. Plus, hardware is included for mounting the focus and zoom demand onto tripod handles.

In the box:

- Blackmagic Studio Camera 4K Plus G2
- Blackmagic Studio Camera Sun Shade
- Tripod Mount compatible with 15mm lightweight rails
- Turret Dust Cap
- External 12V DC power supply with locking connector and international socket adapters for most countries.

