



## **Blackmagic Design PYXIS 6K**

**ProdCode: BMDCPYXD60LFEF**

Advanced digital film camera - EF Mount

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### **Features**

- Advanced digital film camera
- With an incredibly versatile design that lets you build the perfect camera rig for your production
- Features a 6048 x 4032 full frame HDR sensor with built-in optical low pass filter, dual native ISO, dual CFexpress media slots, all in a customizable body with flexible mounting options and side plates
- Available in three different models with fixed L-Mount, PL or locking EF lens mounts

## **The World's Most Riggable Full Frame Digital Film Camera**

Introducing the next generation customizable cinema camera. Blackmagic PYXIS 6K is a high end digital film camera that produces precise skin tones and rich organic colours. It features an extremely versatile design that lets you build the perfect camera rig for your production. You get a full-frame 36 x 24mm 6K sensor with wide dynamic range with a built-in optical low pass filter that's been designed to perfectly match the sensor. Plus there are 3 models available in either EF, PL or L-Mount. You also get 2 x CFexpress media recorders and Ethernet for sharing media to Blackmagic Cloud. It even records both 12-bit Blackmagic RAW and extremely small H.264 proxy files at the same time.

### **Designed for Maximum Customizability**

With multiple mounting points and accessory side plates, it's easy to configure Blackmagic PYXIS into the camera you need it to be. PYXIS' compact body is made from precision CNC machined aerospace aluminium, which means it is lightweight yet very strong. You can easily mount it on a range of camera rigs such as cranes, gimbals or drones. In addition to the multiple 1/4" and 3/8" thread mounts on the top and bottom of the body, Blackmagic PYXIS has a range of side plates that further extend your ability to mount accessories such as handles, microphones or even SSDs. All this means you can build the perfect camera for the any production that's both rugged and reliable.

### **Get the "Hollywood Look" with Digital Film**

Blackmagic PYXIS has the professional features you need for feature film, television programming and documentaries, however, now this same quality can be used to create cinematic content for social media, YouTube videos and more. You get the same features found on high end digital film cameras, allowing capture of deeper colours, higher image detail and a wider dynamic range between the brightest highlights and deepest shadows. It's the reason why feature films look so amazing and now you can get the same high-end production values for any kind of work. Imagine shooting with large-format digital film on low budget independent films, TV commercials or even corporate video.

### **Large Format Cinematic Digital Film Sensor**

Blackmagic PYXIS features a massive full frame sensor with a native resolution of 6048 x 4032. That's almost three times larger than a Super 35 sensor and allows you

to shoot with a shallow depth of field or to use anamorphic lenses uncropped for a true cinematic look. Whether you're shooting in bright sunlight or in almost no light at all, the 13 stops of dynamic range with dual native ISO up to 25,600 provide stunning low noise images in all lighting conditions. Plus you can shoot up to 36 fps at full sensor resolution or 120 fps windowed. This amazing sensor combined with Blackmagic colour science means you get the same imaging technology as expensive digital cinema cameras.

## **Full Frame Flexibility**

The large full-frame sensor in Blackmagic PYXIS lets you work in a variety of film formats and aspect ratios without sacrificing quality. Using the full area of the sensor gives you a unique open gate 3:2 image which also lets you reframe your shots in post-production. The large sensor also lets you work in true 6:5 anamorphic without cropping, making widescreen cinematic images more detailed and in higher resolution than previously possible. You can even use the classic Super 35 sized window on the sensor to create an instant 'close up' version of your shot that fits seamlessly with open gate footage. All this lets you create distinctive cinematic content in the highest quality.

## **Three Great Models.**

With 3 models, you can choose between L-Mount, EF or PL lenses, making Blackmagic PYXIS compatible with the largest range of cinema and photographic lenses in the world. The L-Mount model works with the latest full frame lenses from Leica, Panasonic and Sigma but can also accommodate lens adapters, allowing you to use a wide variety of new and vintage lenses. The EF model lets you use high-quality photographic lenses you already own from DSLRs or even Blackmagic Pocket Cinema Cameras. Or the PL model lets you work with professional cinema lenses from Zeiss, ARRI, Cooke and more without needing an adapter. With Blackmagic PYXIS, you get a choice of lens mounts for unlimited creative choice.

## **Shoot Incredible High Dynamic Range (HDR) Images**

The distance between the lightest and the darkest parts of an image is called dynamic range and is measured in stops. Blackmagic PYXIS has an incredible 13 stops of dynamic range which means it preserves more detail in the lightest and darkest areas of an image than simple video cameras can. This allows you to set exposure for an indoor scene such as a cafe and still retain the details of bright outdoor light coming through a window. You also get more colours than the standard DCI-P3 colourspace used for feature films. Plus DaVinci Resolve Studio is included with the camera, so you get total creative freedom with full exposure adjustment and recovery controls when colour grading.

## **Dual Gain ISO for Exceptional Low Light Performance**

In digital film ISO is a measurement of the image sensor's sensitivity to light. This means the higher the ISO number the more sensitivity to light so it's possible to shoot using natural light even at night. Blackmagic PYXIS features dual native ISO up to 25,600, which means it's optimized to minimize grain or noise in images, while maintaining the full dynamic range of the sensor. The native ISO of 400 is ideal for scenes with on-set lighting. The secondary high base ISO of 3200 is perfect when shooting in dimly lit environments. The gain is set automatically as you adjust the ISO setting, so it's easy to capture great images when you don't have time to set up lights.

## **Multiple Resolutions and Frame Rates**

Blackmagic PYXIS can shoot in all standard resolutions and frame rates from HD up to DCI 4K and even 6K. You can even shoot stills at 24.6 megapixels. Blackmagic PYXIS will shoot up to 36 fps at 6048 x 4032 3:2 open gate or 60 fps at 6048 x 2520 2.4:1 and 60 fps at 4096 x 2160 4K DCI. For higher frame rates you can window the sensor and shoot up to 100 fps at 2112 x 1184 Super 16. You can even work in true anamorphic 6:5 at much higher resolutions than other cameras using anamorphic lenses in 4.8K 24 fps at 4832 x 4032. You can even shoot 120 fps in 1080HD. With Blackmagic PYXIS, you'll always be able to shoot the right resolution for the job.

## **Large 4? LCD Monitor**

The built-in LCD on Blackmagic PYXIS is more than just a simple status display. It's a 4? high-resolution HDR touchscreen that is also perfect for monitoring and reviewing shots on set. Its full HD resolution means you can frame and focus your shots without needing to carry around a bulky external monitor. You can even use the display as a focus assist station. Plus, as an HDR display, it has 1500 nits of brightness so you can always see your shot or change settings, even in bright sunlight. On screen overlays show status and record parameters, histograms, levels, frame guides and more. You can even quickly apply 3D LUTs for monitoring shots with the desired colour and look.

## **All Controls at your Fingertips**

Blackmagic PYXIS features a logical design that puts important functions such as ISO, WB and shutter at your fingertips with both touchscreen and physical controls. There's even a scroll wheel for making quick adjustments to settings. A row of 3 customizable function buttons means you don't have to go hunting through menus on a tiny screen to find a command. The Blackmagic PYXIS features easy to reach recording and still buttons that are placed exactly where you expect, including

function keys for high frame rate, focus, zoom, false colour and more. The controls can even be locked to avoid accidentally changing settings during a shot or when the camera is out of reach on a rig.

## **Side Plates for Flexible Mounting Options**

The innovative side plates expand the riggability of your camera even further. The standard plate included with Blackmagic PYXIS is made from the same aircraft grade aluminium as the camera body and features 2 1/4" thread mounts and one 3/8" thread mount, allowing you to add microphones, brackets or other accessories. Or you can attach the included SSD plate which offers a convenient location to securely attach a USB-C drive for recording or even a mobile phone for live streaming. The optional Rosette Plate gives you maximum flexibility with 5 1/4" thread mounts and 4 3/8" thread mounts for adding accessories, plus a rosette mounting point for attaching handgrips or extension arms.

## **Post Production Friendly File Formats**

Blackmagic PYXIS records in Blackmagic RAW to preserve control of detail, exposure and colour during post-production. It also records HD H.264 proxies in real time making it easy to share media around the world in minutes. Blackmagic RAW is highly optimized, multi-threaded, works across multiple CPU cores and is also GPU accelerated to work with Apple Metal, CUDA and OpenCL. This means your images always maintain unprecedented resolution and quality for colour, keying, compositing, reframing, stabilization and tracking in HD, 4K or 6K. Media files work on all operating systems plus you can format media cards and disks in HFS+ for Mac and ExFAT for Windows.

## **Record to CFexpress Cards or External Disks**

The Blackmagic PYXIS features two built-in CFexpress card recorders, and a USB-C expansion port for recording direct to external flash media disks or an SSD. CFexpress media are more durable and faster than even older media so are perfect for recording full-resolution, 12-bit Blackmagic RAW files. Imagine capturing over an hour of full-resolution 6K images on a single 256GB CFexpress card. Plus, with dual CFexpress slots, you can keep recording because you can hot swap full cards without stopping. The very high speed of CFexpress cards makes them perfect for mounting on your computer and editing directly from them using the included DaVinci Resolve Studio software.

## **Blackmagic RAW**

The quality of RAW and the speed of video

Blackmagic RAW is a revolutionary new format designed to capture and preserve the quality of the sensor data from your camera. Blackmagic RAW eliminates quality problems so you get stunning images with incredible detail and colour throughout the production pipeline from camera to edit, colour and mastering. It also saves camera settings as metadata so you can set ISO, white balance and exposure in camera or override them later while editing, all without any loss of quality. Blackmagic RAW files are also small and fast to use making them easy to work with. Only Blackmagic RAW gives you the highest quality, smallest files and fastest performance.

- **Colour Temperature**

Setting the colour temperature tells the camera how to interpret white and other colours in an image. Instead of saving images with colour values baked in, Blackmagic RAW makes it possible for you to change the temperature in post-production with DaVinci Resolve Studio.

- **Contrast**

Adjusting contrast, or the tonal range of an image, can make different parts of the image stand out. While you should always try to get the best shot on set, Blackmagic RAW gives you the flexibility to adjust contrast without any loss of quality while you're editing and colour-correcting.

- **ISO**

Changing the ISO adjusts the camera's sensitivity to light. Properly exposed shots require the right combination of ISO, aperture and shutter speed. Depending on the lights and exposure settings, you may need to adjust ISO in post.

- **Tint**

Adjusting tint is another way you can affect the overall colour balance of an image. Unlike saturation or midpoint which can make reds redder or yellows more yellow, adjusting tint actually lets you push the colours in different directions.

- **Saturation**

Saturation is the strength or purity of a colour. More saturated colours are pure and less saturated colours have a percentage of gray in proportion to their hue. Adjusting saturation in Blackmagic RAW images can help make the colours visually pop or become muted.

- **Exposure**

In order for your images to look good, you need to make sure that it's not too bright (overexposed) or too dark (underexposed). With Blackmagic RAW, the exposure settings can be changed in post so you can save shots that were not properly exposed.

## **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.

## **Generation 5 Colour Science**

Featuring the same generation 5 colour science as the high end URSA Cine, the Blackmagic PYXIS delivers an even greater advancement in image quality with stunning, accurate skin tones and faithful colour in every shot. You get a new dynamic 12-bit gamma curve designed to capture more colour data in the highlights and shadows, for better looking images. The colour science also handles some of the complex Blackmagic RAW image processing, so colour and dynamic range data from the sensor is preserved via metadata which you can use in post-production. That means you get images that have a natural, film like response to colour adjustments in post with DaVinci Resolve.

## **Live Sync to Blackmagic Cloud and Editors**

Blackmagic PYXIS supports creating a small H.264 proxy file in addition to the camera's original media when recording. This means the small proxy file can upload to Blackmagic Cloud in seconds so your media is available back at the studio in real-time. The ability to transfer media directly into the DaVinci Resolve media bin as editors are working is revolutionary and has never before been possible. Any editor working anywhere in the world will get the shots. If you have multiple cameras, then the new multi-source feature in DaVinci Resolve's Cut page will show each camera angle in a multiview. Blackmagic Cloud is a revolution in global post-production workflows.

## **Three Post Production Workflows**

### **1. Record to Internal Storage**

You can record to the internal media or an external USB-C flash disk. This will allow you to browse the clips and let the camera sync your media files to other users globally.

### **2. Select and Upload Clips**

If you're offline, then later when you have internet access you can browse media and manually select which clips you want to upload to Blackmagic Cloud.

### **3. Record into DaVinci Resolve**

Log into Blackmagic Cloud and select a DaVinci Resolve project before recording. After each individual recording the media will automatically upload and sync to all DaVinci users on that project.

### **Connect 5G or 4G Phones for Mobile Data**

When uploading to Blackmagic Cloud, you can use an Apple or Android phone to get a connection to the internet via mobile data. Simply connect the phone to the USB-C port and Blackmagic PYXIS will configure for mobile data. Plus it works with the latest high-speed 5G phones, as well as 4G phones. You can also connect via wired Ethernet using the camera's Ethernet port. This lets you get your media out as you shoot so post-production teams anywhere in the world can start work in real time. Plus on set grading can be done in a grading suite and synced back to DaVinci on set. It's a truly global post-production solution that works with Blackmagic Cloud to create amazing teams of creative people.

### **Works with URSA Cine Viewfinder and Accessories**

Blackmagic PYXIS supports the optional Blackmagic URSA Cine EVF to make outdoor and handheld shooting accurate and easy. You get an integrated high-quality 1920 x 1080 colour OLED display with a built-in proximity sensor, 4 element glass diopter for incredible accuracy with a wide focus adjustment. A built-in digital focus chart ensures you get the perfect viewfinder focus setup. You can also view critical status information such as frame guides. The URSA Cine EVF is extremely easy to connect as it simply mounts to the included extension arm and connects to the camera using a single USB-C cable. The viewfinder can be positioned in multiple ways and comes with 2 different types of eyecups.

### **Professional Connections for Custom Rigs**

Blackmagic PYXIS features a wide range of connections for audio, monitoring, power and more. The camera includes a 12G-SDI out for monitoring with support for HDR and Ultra HD output. That means you can connect an SDI display for on set monitoring of images, with or without overlays that show critical information and camera status. SDI allows for much longer cable runs than HDMI making it easier to reach monitors that are further away on set. There's also a mini XLR connection with 48-volt phantom power for microphones, a 3.5 mm video camera style microphone input, timecode in, reference input, headphone connection and a locking DC power connector.

### **Built-in Microphones and Professional Audio Inputs**

With professional, high fidelity audio recording built in you'll never have to carry around a separate sound recorder again. Blackmagic PYXIS features a mini XLR input with 48 volts of phantom power for connecting professional microphones such as lapel mics and booms. The built-in mics have an extremely low noise floor and are shock and wind-resistant, capturing great sound and are ideal for recording guide tracks on location. There's also a 3.5mm audio input for connecting video camera microphones, along with a built-in speaker for playback and a 3.5mm headphone jack. These audio connections allow you to record separate audio tracks using microphones, without an external mixer.

## **Load Custom 3D LUTs to Recreate Film Looks**

Digital film cameras shoot logarithmic colourspace to preserve the dynamic range, which is great for later post-production, however when these files are viewed on a monitor they can look flat and washed out. 3D LUTs solve this problem because they allow you to apply a "look" to the monitor so you get an idea of how the finished images will look when editing. LUTs can be applied temporarily for monitoring only, or they can be recorded into the Blackmagic RAW files for use in post-production. The Blackmagic PYXIS works with industry standard 17 and 33 point 3D LUT files, or you can work with the built-in LUTs such as Extended Video, Film to Video, Film to Rec.2020 and more.

## **USB-C for External Disks and Ethernet Control**

The Blackmagic PYXIS features an innovative and high-speed USB-C Expansion Port that operates at up to 5 Gb/s. USB-C is available on most new computers and even provides power. That means you can connect external accessories such as flash drives and high-capacity SSDs for significantly longer recording times. Best of all, when shooting is complete you can simply move the external disk to your computer and start editing and colour correction from the same disk straight away, eliminating file copying. You can also use the camera's built-in Ethernet port to control your camera over a network via secure and easy-to-use REST APIs. You can even copy files off the camera via the network.

## **Built In SRT and RTMP Live Streaming**

Now you can live stream from film sets. Blackmagic PYXIS features a built hardware streaming engine that supports RTMP and SRT streaming to YouTube, Facebook, X and more. For internet access, you have two options, one to connect via Ethernet or you can connect a 4G or 5G phone for mobile data. As the streaming is built into the camera, you can see the stream status and data rate in the viewfinder and the LCD. If you want to create a wireless link back to the studio, then you can stream to a Blackmagic ATEM Streaming Bridge, which is an H.264 decoder that converts the

video stream back to video. Now the whole post-production team can keep an eye on the shoot, live, while it's happening.

## **Get Multi Camera Shoots in Perfect Sync**

Professional cameras include professional features and you also get a timecode input, allowing shooting with more than one camera while keeping perfect sync. Simply plug in an external timecode generator to the BNC timecode input and the camera will automatically detect timecode and lock the internal generator. Now each camera can start and stop recording and all the shots from all cameras will have the same matched timecode. Imagine shooting a music festival with multiple roving cameras. Best of all, DaVinci Resolve will automatically find and sync the shots from all cameras so you don't need to waste time sorting through thousands of shots.

## **Shoot Still Frames up to 24.6 Megapixels**

In addition to shooting video, Blackmagic PYXIS can also capture high-resolution stills. Simply press the dedicated stills button to record 24.6 megapixel images. Still images are saved as Blackmagic RAW, so you get a very high image quality, which is perfect for making high-resolution professional prints or for later editing in DaVinci Resolve. Capturing still images is great for keeping track of continuity between shots or for sharing images to get approval from clients that are not on set.

## **Localized in 13 Popular Languages**

Blackmagic PYXIS is designed to be used worldwide and supports 13 different languages. When setting up your camera, you can choose to work in English, German, French, Spanish, Portuguese, Italian, Polish, Russian, Ukrainian, Turkish, Chinese, Japanese or Korean. It's easy to switch to another language so you can share your camera with other crew when traveling to locations worldwide. When you switch languages, all on-screen overlays, setup menus and monitoring information will be displayed in the selected language.

## **Wireless Bluetooth Camera Remote Control**

If you're positioning the camera on the end of a boom, or in another hard to reach location, you can get full control via Bluetooth from up to 30 feet away. You can download the Blackmagic Camera Control app for your iPad or use third-party apps such as Bluetooth+ or tRigger on your iOS and Android devices. There's even a free developer SDK with sample code available from the Blackmagic Design developer website, so you can create your own remote camera control and digital slate solutions. Imagine building an app that can jam sync timecode and trigger all cameras to record at the same time. The possibilities are endless.

## **Power from Batteries or 12V DC**

Blackmagic PYXIS uses high-capacity BP-U series batteries. These popular batteries come in a variety of capacities and are commonly available around the world. The highest capacity BP-U series battery lets you shoot for over 3 hours on a single charge. Plus there are a wide range of battery adapters and charger plates available from third parties so never have a flat battery. When using DC power, a locking connector is used so you won't have to worry about losing power during a shoot, perfect for when your camera is out of reach on a mount or jib. You also get a set of international socket adapters for worldwide use.

## **Includes DaVinci Resolve Studio**

Blackmagic PYXIS includes a full version of DaVinci Resolve Studio, which is the same software used in Hollywood for creating high-end feature films, episodic television shows, commercials and more. DaVinci Resolve features the new cut page with intelligent editing tools and innovative new features designed to help you quickly find the footage you want, edit it together and output it fast. In addition to the new cut page, you also get DaVinci's legendary professional editing, advanced colour correction, audio post and visual effects tools, all in a single software application. Now you can use the the same high end software that professional editors and colourists use.

### **In the box:**

- Blackmagic PYXIS 6K
- Lens turret dust cap
- PYXIS Standard Plate
- PYXIS SSD Plate
- 60W power supply with locking connector and international adapters
- Welcome booklet
- DaVinci Resolve Studio activation key

