

Blackmagic PYXIS 12K EF



\$5,495

Blackmagic PYXIS 12K EF is an advanced digital film camera with an incredibly versatile design that lets you build the perfect camera rig for your production. This new model features a 12,288 x 8040 full frame RGBW sensor with built in optical low pass filter, 16 stops of dynamic range, dual CFexpress media slots, all in a customizable body with flexible mounting options and side plates. Blackmagic PYXIS 12K EF features a fixed locking EF mount that works with Canon compatible photo and cine lenses.

Camera Features

Effective Sensor Size

35.64mm x 23.32mm (Large Format)

Pixel Pitch

2.9 microns

Lens Mount

Active, locking EF lens mount.

Lens Control

Iris and focus on supported lenses.

Dynamic Range

16 Stops.

Native ISO

800

Shooting Resolutions

12,288 x 8040 (12K 3:2 open gate)

12,288 x 6912 (12K 16:9)

12,288 x 6480 (12K 17:9)

12,288 x 5112 (12K 2.4:1)

9648 x 8040 (12K 6:5)

9408 x 6264 (9K 3:2)

8688 x 4896 (9K 16:9)

9312 x 4896 (9K 17:9)

9312 x 3864 (9K 2.4:1)

7680 x 6408 (9K 6:5)

8192 x 5360 (8K 3:2 open gate)

8192 x 4608 (8K 16:9)

8192 x 4320 (8K 17:9)

8192 x 3408 (8K 2.4:1)

6432 x 5360 (8K 6:5)

4096 x 2680 (4K 3:2 open gate)

4096 x 2304 (4K 16:9)

4096 x 2160 (4K 17:9)

4096 x 1704 (4K 2.4:1)

3216 x 2680 (4K 6:5)

Frame Rates

Project frame rates of 23.98, 24, 25, 29.97, 30, 50, 59.94 and 60 fps supported. Maximum sensor frame rate dependent on resolution selected.

High Frame Rates

12K (3:2 open gate) up to 40 fps

12K (16:9) up to 45 fps

12K (17:9) up to 50 fps

12K (2.4:1) up to 60 fps

12K (6:5) up to 40 fps

9K (3:2 Super 35) up to 50 fps

9K (16:9 Super 35) up to 65 fps

9K (17:9 Super 35) up to 65 fps

9K (2.4:1 Super 35) up to 80 fps

9K (6:5 Super 35) up to 50 fps

8K/4K (3:2 open gate) up to 72 fps

8K/4K (16:9) up to 84 fps

8K/4K (17:9) up to 90 fps

8K/4K (2.4:1) up to 112 fps

8K/4K (6:5) up to 72 fps

Focus

Auto focus available using compatible lenses.

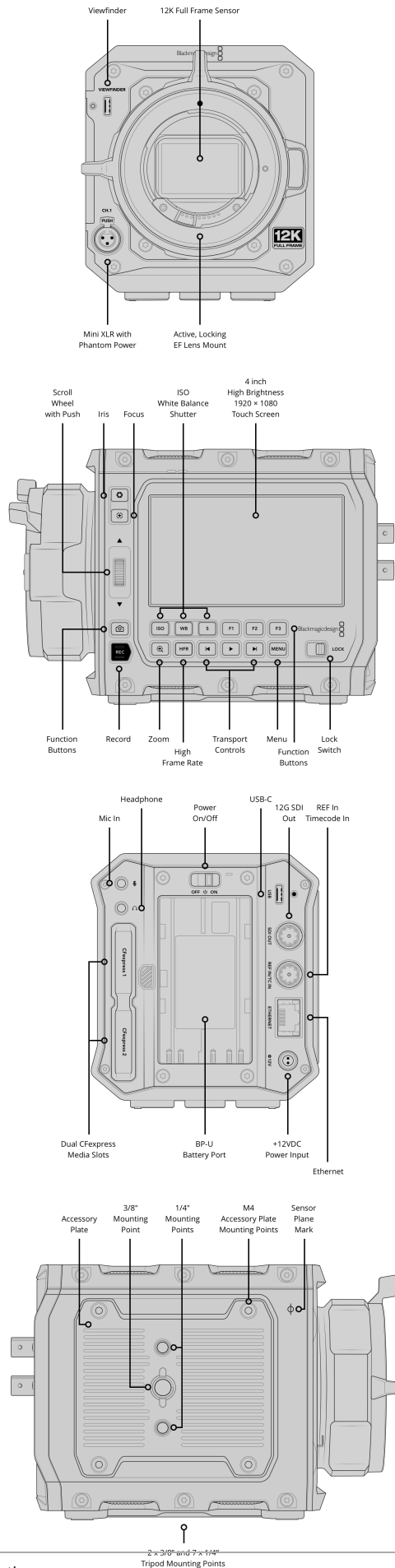
Iris Control

Iris wheel and touchscreen slider for manual iris adjustment on electronically controllable lenses, iris button for instant auto iris settings using compatible lenses.

Screen Dimensions 4" 1920 x 1080. Screen Brightness 1500 nits Screen Type LCD capacitive touchscreen.	Metadata Support Automatically populated lens data from electronic L-Mount lenses. Automatic recording of camera settings, motion sensor data plus slate data such as project, scene number, take and special notes. A 3D LUT can also be embedded in metadata of Blackmagic RAW files.	Controls Touchscreen menus on 4 inch screen. Push buttons for other controls. 3 assignable shortcut keys. Timecode Clock Highly accurate timecode clock. Less than 1 frame drift every 8 hours.
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Connections

Total Video Inputs None Total Video Outputs 1 x 12G-SDI up to 2160p60 1 x Viewfinder USB-C with power, data, video and locking connector.	Analog Audio Inputs 1 x mini XLR analog audio in, switchable between mic with phantom power support and line level (up to +14dBu). 1 x 3.5mm Stereo Input. Analog Audio Outputs 1 x 3.5mm headphone jack. Reference Inputs Tri-Sync/Black Burst and Timecode.	Computer Interface USB Type-C for external drive recording, PTP camera control and software updates. Ethernet 1 x 10Gb/s RJ-45 connector supporting 10/100/1000/10G BASE-T.
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Standards

HD Video Standards

1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p30, 1080p50,
1080p59.94, 1080p60

Ultra HD Video Standards

2160p23.98, 2160p24, 2160p25,
2160p29.97, 2160p30, 2160p50,
2160p59.94, 2160p60

SDI Compliance

SMPTE 424M, SMPTE 425M level A
and B, SMPTE 2081-1,
SMPTE 2081-10, SMPTE 2082-1
and SMPTE 2082-10.

SDI Audio Sampling

Television standard sample rate of 48
kHz and 24-bit.

Audio

Microphone

Integrated stereo microphone.

Built in Speaker

1 x mono speaker.

Media

Media

2 x CFexpress Type B card slot, 1 x 10
Gbps USB-C port for external media
for Blackmagic RAW and H.264
Proxy Recording.

Media Format

Can format media to ExFAT
(Windows/Mac) or HFS+ (Mac)
file systems.

Supported Codecs

Codecs

Blackmagic RAW Constant Bitrate 3:1
Blackmagic RAW Constant Bitrate 5:1
Blackmagic RAW Constant Bitrate 8:1
Blackmagic RAW Constant Bitrate
12:1
Blackmagic RAW Constant Bitrate
18:1
Blackmagic RAW Constant Quality Q0
Blackmagic RAW Constant Quality Q1
Blackmagic RAW Constant Quality Q3
Blackmagic RAW Constant Quality Q5
H.264 Proxy in 1920 x 1080, 8-bit
4:2:0

Control

External Control

Blackmagic Zoom Demand and Blackmagic Focus Demand for controlling your camera and lens from tripod handles.

iPad control, Bluetooth control, USB PTP camera control. External control of some camera settings, focus, iris and zoom with compatible lenses. Camera Control REST API over Ethernet.

Cloud Synchronization



Blackmagic Cloud

[Learn More](#)

Network Management

NTP

Network time protocol support allows you to sync the time on your camera, whenever connected to a network with any NTP server of your choice.

Web Media Manager

Using a browser connected over Ethernet, web media manager allows you to access, browse, download and delete files from any drive connected to the camera.

FTP

Download files from any drive attached to your camera using FTP.

SMB

File sharing using SMB

Storage Features

Storage Type

2 x CFexpress Type B

1 x high speed USB-C expansion port for external media.

Recording Modes

Standard record mode.

Pre record mode with assignable pre record duration:

5 sec, 10 sec, 20 sec, 30 sec, 1 min, 2 min, 5 min, 10 min.

Storage Rates

Storage rates based on 24 frames per second.

12K - 12,288 x 8040

Blackmagic RAW 3:1 - 1,194 MB/s

Blackmagic RAW 8:1 - 448 MB/s

Blackmagic RAW 12:1 - 299 MB/s

Blackmagic RAW 18:1 - 199 MB/s

Blackmagic RAW Q0 - 398 to 1,433 MB/s

Blackmagic RAW Q1 - 326 to 796 MB/s

Blackmagic RAW Q3 - 179 to 448 MB/s

Blackmagic RAW Q5 - 120 to 358 MB/s

9K - 9408 x 6264

Blackmagic RAW 3:1 - 714 MB/s

Blackmagic RAW 8:1 - 268 MB/s

Blackmagic RAW 12:1 - 179 MB/s

Blackmagic RAW 18:1 - 119 MB/s

Blackmagic RAW Q0 - 238 to 857 MB/s

Blackmagic RAW Q1 - 195 to 476 MB/s

Blackmagic RAW Q3 - 107 to 268 MB/s

Blackmagic RAW Q5 - 72 to 214 MB/s

8K - 8192 x 5360

Blackmagic RAW 3:1 - 533 MB/s

Blackmagic RAW 5:1 - 320 MB/s

Blackmagic RAW 8:1 - 200 MB/s

Blackmagic RAW 12:1 - 133 MB/s

Blackmagic RAW Q0 - 320 to 639 MB/s

Blackmagic RAW Q1 - 228 to 533 MB/s

Blackmagic RAW Q3 - 133 to 400 MB/s

Blackmagic RAW Q5 - 100 to 266 MB/s

4K - 4096 x 2680

Blackmagic RAW 3:1 - 135 MB/s

Blackmagic RAW 4:1 - 101 MB/s

Blackmagic RAW 5:1 - 81 MB/s

Blackmagic RAW 6:1 - 68 MB/s

Blackmagic RAW Q0 - 202 to 336 MB/s

Blackmagic RAW Q1 - 135 to 311 MB/s

Blackmagic RAW Q3 - 101 to 238 MB/s

Blackmagic RAW Q5 - 81 to 202 MB/s

Recording Formats

Blackmagic RAW 3:1, 8:1, 12:1, 18:1, Q0, Q1, Q3 and Q5 at full sensor width or height resolutions:

12,288 x 8,040, 12,288 x 6,912, 12,288 x 6,480, 12,288 x 5,112 and 9,648 x 8,040

with film, extended video or video dynamic range or custom 3D LUT embedded in metadata plus simultaneous recording of H.264 1920 x 1080 Proxies.

Blackmagic RAW 3:1, 8:1, 12:1, 18:1, Q0, Q1, Q3 and Q5 at Super 35 windowed sensor resolutions: 9,408 x 6,264, 8,688 x 4,896, 9,312 x 4,896, 9,312 x 3,864 and 7,680 x 6,408

with film, extended video or video dynamic range or custom 3D LUT embedded in metadata plus simultaneous recording of H.264 1920 x 1080 Proxies.

Blackmagic RAW 3:1, 5:1, 8:1, 12:1, Q0, Q1, Q3 and Q5 at full sensor width or height scaled to: 8,192 x 5,360, 8,192 x 4,608, 8,192 x 4,320, 8,192 x 3,408 and 6,432 x 5,360

with film, extended video or video dynamic range or custom 3D LUT embedded in metadata plus simultaneous recording of H.264 1920 x 1080 Proxies.

Blackmagic RAW 3:1, 4:1, 5:1, 6:1, Q0, Q1, Q3 and Q5 at full sensor width or height scaled to: 4,096 x 2,680, 4,096 x 2,304, 4,096 x 2,160, 4,096 x 1,704 and 3,216 x 2,680

with film, extended video or video dynamic range or custom 3D LUT embedded in metadata plus simultaneous recording of H.264 1920 x 1080 Proxies.

Constant Quality storage rates quoted are indicative only.

Actual storage rates are entirely dependent on image subject matter.

Software

Software Included

- Blackmagic OS
 - DaVinci Resolve Studio for Mac and Windows including activation key
 - Blackmagic Camera Setup
 - Blackmagic RAW Player
 - Blackmagic RAW QuickLook Plugin
 - Blackmagic RAW SDK
 - Blackmagic RAW Speed Test
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Operating Systems



Mac 14.0 Sonoma,
Mac 15.0 Sequoia or later.



Windows 10 and 11.

Power Requirements

Power Supply

1 x External 18V DC 90
W power supply.

External Power Input

1 x 2-pin Lemo compatible locking
connector.

Battery Type

BP-U series.

Power

12V - 18V

Accessories

Optional Accessories

- Blackmagic URSA Cine Handle
- Blackmagic URSA Cine EVF
- Blackmagic PYXIS Rosette Plate
- Blackmagic PYXIS Monitor
- Blackmagic PYXIS Monitor Kit
- Blackmagic PYXIS Monitor EVF Kit

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

- Blackmagic PYXIS 12K EF
 - Lens turret dust cap
 - PYXIS Standard Plate
 - PYXIS SSD Plate
 - 90W power supply with locking connector and international adapters
 - Welcome booklet
 - DaVinci Resolve Studio activation key
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Warranty

Product Warranty

1 Year Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller