

# Blackmagic URSA Broadcast G2

The new Blackmagic URSA Broadcast G2 is an incredibly powerful camera designed for both traditional and online broadcasters. The 3 cameras in 1 design allows it to work as a 4K production camera, a 4K studio camera or a 6K digital film camera! You can record to common SD cards, UHS-II cards, CFast 2.0 cards or external USB disks, using common file formats such as H.265, ProRes and Blackmagic RAW. You can even change the lens mount! No other broadcast camera is so flexible!

£2,979

# Camera Features

#### **Effective Sensor Size**

2/3 inch sensor size when using 4K B4 mount (Actual sensor size 23.10mm x 12.99mm)

#### Lens Mount

B4 2/3 inch installed Active EF mount also included

#### Lens Control

Electronic control via 12-pin broadcast connector. Control via EF mount pins when using URSA Mini Pro EF Mount with compatible EF lenses.

#### Lens Correction

In-camera correction of color fringing when using compatible broadcast lenses.

# Dynamic Range

13 Stops

**Dual Native ISO** 0dB and 18dB gain.

#### Sensitivity at 0dB Gain

f11 with 2160p59.94. f12 with 2160p50. at 2,000 lux with 89.9% reflectance. additional 1.1 stop light loss using 4K B4 mount.

#### Signal to Noise Ratio

64.62dB for 2160p Ultra HD scaled from 5.3K

#### **Built in ND Filters**

Four position ND filter wheel with clear, 2 stop, 4 stop and 6 stop ND filters.

#### Focus

Focus button triggers auto focus when using compatible lenses with focus servo. Touch and hold on LCD determines focus region and triggers auto focus.

#### Iris Control

Iris wheel and touchscreen slider for manual iris adjustment on electronically controllable lenses, iris button for instant auto iris settings on compatible lenses so no pixel is clipped in film mode. Scene average auto exposure in video and extended video mode.

# **Screen Dimensions**

4 inch

#### Screen Type

LCD capacitive touchscreen.

#### Controls

Touchscreen menus on 4 inch screen. Push buttons for other controls. 3 assignable shortcut keys and 2 assignable shortcut keys (VTR and RET) on compatible broadcast lenses.

#### **ProRes Shooting Resolutions and**

#### Frame Rates

3840 x 2160 (Ultra HD) up to 60 fps from Ultra HD window or scaled from 5.3K windowed sensor 3840 x 2160 (Ultra HD) up to 50 fps scaled from full sensor 1920 x 1080 (HD) up to 120 fps scaled from 2.7K windowed sensor 1920 x 1080 (HD) up to 60 fps scaled from Ultra HD or 5.3K windowed sensor 1920 x 1080 (HD) up to 50 fps scaled from full sensor

# H.265 Shooting Resolutions and Frame Rates

3840 x 2160 (Ultra HD) up to 60 fps from Ultra HD window or scaled from 5.3K windowed sensor 3840 x 2160 (Ultra HD) up to 50 fps scaled from full sensor

# H.264 Shooting Resolutions and Frame Rates

1920 x 1080 (HD) up to 60 fps scaled from Ultra HD or 5.3K windowed sensor 1920 x 1080 (HD) up to 50 fps scaled from full sensor

# Blackmagic RAW Shooting Resolutions and Frame Rates

6144 x 3456 (6K) up to 50 fps 6144 x 2560 (6K 2.4:1) up to 60 fps 5376 x 3024 (5.3K 16:9) up to 60 fps 3728 x 3104 (3.7K 6:5 anamorphic) up to 60 fps 3840 x 2160 (Ultra HD) up to 60 fps 1920 x 1080 (HD) up to 150 fps

#### Project Frame Rates

23.98, 24, 25, 29.97, 30, 50, 59.94 and 60 fps. Off-speed frame rates up to 60p in Ultra HD and up to 150p in HD.

#### Metadata Support

Automatically populated lens data from electronic B4 lenses. Automatic recording of camera settings and slate data such as project, scene number, take and special notes.

# Timecode Clock

Highly accurate timecode clock. Less than 1 frame drift every 8 hours.

# Connections

#### **SDI Video Inputs**

1

SDI Video Outputs

# SDI Monitor Outputs

1

# SDI Rates

1.5G, 3G, 6G, 12G.

#### **Analog Audio Inputs**

2 x XLR switchable between mic, line and AES digital audio. Phantom power support.

#### Analog Audio Outputs

1 x 3.5mm headphone jack, supports iPhone style headset for talkback.

#### **Reference Inputs**

Tri-Sync/Black Burst/Timecode.

#### Lens Control

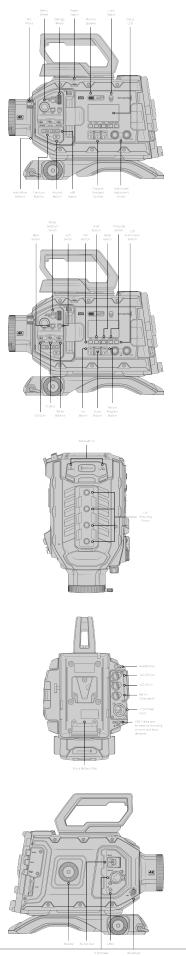
1 x 12-pin Hirose Broadcast Lens Connector

#### **Remote Control**

1 x 2.5mm LANC input for Rec Start/ Stop, plus Iris and Focus control using compatible lenses.

#### **Computer Interface**

1 x USB Type-C 3.1 Gen 2 with power delivery for external drive recording and connecting Blackmagic Focus and Zoom Demand. 1 x USB Type-C for software updates.



# Audio

# Microphone

Integrated stereo microphone.

**Built in Speaker** 1 x mono speaker.

# Standards

# SD Video Standards

None

# HD Video Standards

1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 1080i50, 1080i59.94, 1080i60

2 x CFast 2.0 card slots, 2 x SD

UHS-II card slots, 1 x USB-C 3.1 Gen 2

expansion port with power delivery

for recording to external media.

# Ultra HD Video Standards

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

# **SDI Compliance**

SMPTE 292M, SMPTE 424M, SMPTE 425M level A and B, SMPTE 2081-1, SMPTE 2081-10, SMPTE 2082-1 and SMPTE 2082-10

# SDI Audio Sampling

48 kHz and 24 bit

# Media

# Media

# Media Format

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

Please refer to either the Manual or the Information Note at www.blackmagicdesign.com/support for compatible media.

# Supported Codecs

# Codecs

Apple ProRes 422 HQ, Apple ProRes 422, H.265 SDI (10-bit 4:2:2), H.265 High (10-bit 4:2:0), H.265 Medium (10-bit 4:2:0), H.265 Low (10-bit 4:2:0), H.264 SDI (10-bit 4:2:2), H.264 High (8-bit 4:2:0), H.264 Medium (8-bit 4:2:0), H.264 Low (8-bit 4:2:0), 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 Quality Q0, Blackmagic RAW Constant Quality Q1, Blackmagic RAW Constant Quality Q3, Blackmagic RAW Constant Quality Q5

# Control

# **External Control**

Lens control of compatible lenses using Blackmagic Zoom Demand and Blackmagic Focus Demand, Blackmagic SDI Control Protocol, iPad control via Bluetooth, 1 x 2.5mm LANC for lens and record control.

# Color Corrector

# Color Corrector

DaVinci YRGB.

Talkback and Tally

# Talkback

SDI Channels 15/16 and iPhone headset.

**Live Tally Indicator** Tally on LCD, URSA Viewfinder and URSA Studio Viewfinder.

# Storage Features

# Storage Type

2 x CFast 2.0
2 x SD UHS-II cards
1 x high speed USB-C expansion port for external media.
2.5 inch SSD using optional URSA Mini Recorder

# Storage Rates

Storage rates based on 30 frames per second.

6144 x 3456 (6K) Blackmagic RAW 3:1 - 323 MB/s Blackmagic RAW 5:1 - 194 MB/s Blackmagic RAW 8:1 - 121 MB/s Blackmagic RAW 12:1 - 81 MB/s Blackmagic RAW Q0 - 242 to 483 MB/ S Blackmagic RAW Q1 - 162 to 387 MB/ S Blackmagic RAW Q3 - 108 to 277 MB/ S Blackmagic RAW Q5 - 65 to 162 MB/s 6144 x 2560 (6K 2.4:1) Blackmagic RAW 3:1 - 240 MB/s Blackmagic RAW 5:1 - 144 MB/s Blackmagic RAW 8:1 - 90 MB/s Blackmagic RAW 12:1 - 60 MB/s Blackmagic RAW Q0 - 180 to 359 MB/ S Blackmagic RAW Q1 - 120 to 287 MB/ s Blackmagic RAW Q3 - 80 to 205 MB/s Blackmagic RAW Q5 - 49 to 120 MB/s 5376 x 3024 (5.3K 16:9) Blackmagic RAW 3:1 - 248 MB/s Blackmagic RAW 5:1 - 149 MB/s Blackmagic RAW 8:1 - 94 MB/s Blackmagic RAW 12:1 - 63 MB/s Blackmagic RAW Q0 - 186 to 371 MB/ S Blackmagic RAW Q1 - 125 to 297 MB/ S Blackmagic RAW Q3 - 84 to 213 MB/s Blackmagic RAW Q5 - 51 to 125 MB/s 3728 x 3104 (3.7K 6:5 anamorphic) Blackmagic RAW 3:1 - 177 MB/s Blackmagic RAW 5:1 - 106 MB/s Blackmagic RAW 8:1 - 67 MB/s Blackmagic RAW 12:1 - 45 MB/s Blackmagic RAW Q0 - 133 to 265 MB/ S Blackmagic RAW Q1 - 89 to 212 MB/s Blackmagic RAW Q3 - 60 to 152 MB/s Blackmagic RAW Q5 - 36 to 89 MB/s

3840 x 2160 (Ultra HD) Apple ProRes 422 HQ - 110 MB/s Apple ProRes 422 - 73.6 MB/s H.265 SDI - 12.3 MB/s H.265 High - 10.8 MB/s H.265 Medium - 7.8 MB/s H.265 Low - 3.2 MB/s Blackmagic RAW 3:1 - 127 MB/s Blackmagic RAW 5:1 - 77 MB/s Blackmagic RAW 8:1 - 48 MB/s Blackmagic RAW 12:1 - 32 MB/s Blackmagic RAW Q0 - 96 to 190 MB/s Blackmagic RAW Q1 - 64 to 153 MB/s Blackmagic RAW Q3 - 43 to 109 MB/s Blackmagic RAW Q5 - 26 to 64 MB/s 1920 x 1080 Apple ProRes 422 HQ - 27.5 MB/s Apple ProRes 422 - 18.4 MB/s H.264 SDI - 7.0 MB/s H.264 High - 5.6 MB/s H.264 Medium - 3.2 MB/s H.264 Low - 1.8 MB/s Blackmagic RAW 3:1 - 19 MB/s Blackmagic RAW 5:1 - 12 MB/s Blackmagic RAW 8:1 - 7.8 MB/s Blackmagic RAW 12:1 - 5.2 MB/s Blackmagic RAW Q0 - 23 to 47 MB/s Blackmagic RAW Q1 - 16 to 37 MB/s Blackmagic RAW Q3 - 10 to 27 MB/s Blackmagic RAW Q5 - 6 to 16 MB/s

Constant Quality storage rates quoted are indicative only. Actual storage rates are entirely dependent on image subject matter.

## **Recording Formats**

Apple ProRes 3840 x 2160 and 1920 x 1080 with film, video or extended video dynamic range or custom 3D LUT. H.265 3840 x 2160 with film, video or extended video dynamic range or custom 3D LUT. H.264 1920 x 1080 with film, video or extended video dynamic range or custom 3D LUT. Blackmagic RAW Q0, Q1, Q3, Q5, 3:1, 5:1, 8:1 and 12:1 at 6144 x 3456, 6144 x 2560, 5376 x 3024, 3728 x 3104, 3840 x 2160, 1920 x 1080 recorded in non-linear 12 bit with film dynamic range and extended video, video or custom 3D LUT embedded in metadata.

# 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

# **Operating Systems**



Mac 10.15 Catalina, Mac 11.1 Big Sur or later.



Windows 10, 64-bit.

# **Power Requirements**

#### **Power Supply**

1 x External 12V DC 100W power supply with 100 - 240V AC 50/60Hz IEC C14 input.

#### **External Power Input**

1 x 4-pin XLR port for external mains power supply or battery use. 1 x 12-pin Molex connector under rear battery plate.

# Power Output

- +12V 4-pin XLR regulated output on side of camera
- +12V D-Tap regulated output on VLock battery plate

## Power

Rear camera mount compatible with industry standard V-mount or gold mount battery plates.

# Accessories

# **Optional Accessories**

Blackmagic URSA Viewfinder Blackmagic URSA Studio Viewfinder Blackmagic Camera Fiber Converter Blackmagic Studio Fiber Converter Blackmagic URSA Mini Pro PL Mount Blackmagic URSA Mini Pro F Mount Blackmagic URSA Mini Mic Mount Blackmagic URSA Mini Recorder Blackmagic URSA Gold Battery Plate

# 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 URSA Broadcast G2 4K B4 lens mount installed B4 turret dust cap EF Mount with dust cap VLock Battery Plate installed URSA 12V 100W power supply URSA Mini Shoulder Pad URSA Mini top handle & rubber stopper Viewfinder mounting plate 2 x 1/4 inch baseplate screws 2 x long 1/4 inch top handle screws 2 x short 1/4 inch top handle screws 8 x EF Mount screws 4 x VLock plate spare screws Welcome wallet with QR code for camera software download DaVinci Resolve Studio wallet DaVinci Resolve Studio activation key

# Warranty

12 Month Limited Manufacturer's Warranty.

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