

Blackmagic URSA Broadcast

Blackmagicdesign





Camera shown with Fujinon HD lens, Blackmagic URSA Viewfinder, URSA Mini Mic Mount, Blackmagic URSA Mini Shoulder Kit, Blackmagic URSA VLock Battery Plate, shotgun mic, XLR cable and battery. These extra items shown are not included.



Blackmagic URSA Broadcast

Now you can afford to upgrade to a professional Ultra HD broadcast camera for the same price as a DSLR camera, even if you're working in HD with existing HD lenses!

Introducing URSA Broadcast, the world's most affordable and most flexible professional broadcast camera. URSA Broadcast is two cameras in one, an incredible field camera for ENG and programming work, as well as a professional studio camera! URSA Broadcast is perfect for traditional broadcasters because it uses the lenses and batteries you already own, and it also eliminates weird media cards and file formats found on

traditional cameras. It records onto regular SD cards and uses the same common file formats found on broadcast media management systems and most NLE software. Plus URSA Broadcast is perfect for web broadcasters because it works with both older after market HD lenses and inexpensive photo lenses. No other broadcast camera is more flexible and more affordable!

DNx145

AVID DNx

DNx220

AVID DNx

ProRes

Apple ProRes

RAW

Lossless Raw

XC

HD Recorders

XC II

UHS-II 4K Recorders

CFast

12G SDI

XLR Audio Connections

Two full size XLR connections with 48V phantom power and high quality, low noise pre amps.

Mounting Points

Nine standard 1/4" mounting points and side rosette for customizing your camera.

Multi Function Dial

Dial and buttons for adjusting headphones, monitors or iris.

Professional Microphones

Highly directional stereo microphones with built in wind suppression.

Precision ND Filters

Built in neutral density filters that cut light to 1/4, 1/16th, 1/64th of the intensity.

Interchangeable Lens Mount

B4 lens mount for broadcast lenses. Can also be changed to EF, PL or F by purchasing optional lens mounts separately.

ISO/Gain, Shutter and White Balance

Instantly change critical lens and camera settings while shooting.

Auto White Balance

White balance button for automatically setting custom white balance from a white/grey card.



Ultra
HD Lens

HD
Lens



Broadcast B4 Lens Mount

Use your existing high quality HD lenses or new Ultra HD lenses!

The broadcast B4 lens mount on URSA Broadcast features high performance cinema quality optics with spherical aberration correction specifically designed to match the camera's sensor. The 2/3 inch mount lets you use existing HD lenses or Ultra HD lenses. Many high quality HD lenses can be used at resolutions well beyond HD, all the way up to 2.5K or 3K. Because B4 lenses are par-focal and have a very wide depth of field, the image stays in focus as you zoom in and out, so you don't need to chase focus as you shoot. That lets you work much faster because you don't need to change lenses or refocus between close up, medium and wide shots, which is perfect when you're following the action in fast paced sport! You also get full electronic B4 lens control so you can adjust the focus, iris and zoom using the camera's controls, or remotely from an ATEM switcher using the SDI camera control protocol.



Power Switch

Mechanical power switch with a second redundant power control inside the fold out screen.

External Speaker

Speaker with switch for monitoring channels 1/2 or 3/4, positioned at ear level.

Button Locks

Locks external control buttons to avoid accidental changes.

High Visibility Status Display

See critical shooting information and status, even in bright direct sunlight.

Still Button

Take a still shot to get photos using the camera's colorimetry.

Audio Gain Controls

Knobs for quickly adjusting record audio gain on channels 1 or 2 while recording.

Lens and Transport Control

Auto focus and iris control buttons for electronic lenses, along with VTR style playback controls.

High Frame Rate Button

Instantly enable high frame rate mode so you can catch unexpected action in slow motion!

Record Button

Perfectly positioned record start/stop button.

Two Cameras in One

Switch instantly between live work or field shooting!

URSA Broadcast is two cameras in one! The compact design, familiar controls and broadcast camera features are ideal for ENG style shooting and vital for working quickly when you're trying to capture breaking news. Whether you're in the studio or out in the field, URSA Broadcast will give you incredible image quality, accurate skin tones and vibrant colors that are far superior to cameras costing ten times more. The key is URSA Broadcast's new extended video mode that produces pictures you don't need to color grade so you can shoot, edit and get stories on air faster than ever before. URSA Broadcast is also the first camera that finally lets AV and web broadcasters afford a true professional broadcast solution that's dramatically better than DSLRs!

Standard Media and File Formats

Work faster by eliminating expensive media and video transcodes!

URSA Broadcast is the first professional broadcast camera designed to work with standard media cards and file formats that are compatible with virtually all broadcast systems and editing software. URSA Broadcast records onto inexpensive standard SD cards, UHS-II cards and CFast cards, and records 1080i or 2160p video into standard .mov files, with .mxf to be added in future updates. URSA Broadcast records using DNx145, DNx220X or ProRes so the files will work with your existing broadcast systems and workflows. You also get a B4 lens mount that works with your existing lenses, or you can swap it for optional EF, F and PL lenses so you can use standard photographic lenses. If you're building a complete broadcast camera chain, the optional URSA Viewfinder, URSA Studio Viewfinder and Fiber Converters feature familiar controls and design, so they operate exactly as experienced camera operators expect. URSA Broadcast helps you get the most value out of your investment in cameras, lenses and accessories, which means you'll save time and money, so the camera virtually pays for itself!



Non Stop Recording

Works with both standard CFast and SD card media!

URSA Broadcast features both dual CFast 2.0 recorders and dual SD/UHS-II card recorders so you can choose the media that works best for you. Both types of media are standard, non-proprietary, inexpensive and readily available at most computer and camera stores. You can record 10-bit broadcast quality DNxHD 145, DNxHD 220X or ProRes files with metadata, making URSA Broadcast compatible with virtually all editing software. That means URSA Broadcast is easy to integrate and fit in to your existing broadcast systems. You can even record lossless 12-bit CinemaDNG RAW files for high quality programming and post production workflows. With dual slots for each media type, URSA Broadcast gives you redundant recorders and non stop recording! When the first card is full, recording automatically continues onto the next card so you can swap one card while recording continues on the other.



Live Sport, Concerts and Events

Cover massive big league games,
superstar concert performances and more!

URSA Broadcast is perfect for covering large events such as concerts and sports. You can have handheld cameras shooting from the sidelines, or set up tripods all around the stadium. Simply add a Blackmagic URSA Mini Shoulder Kit, URSA Viewfinder, a battery plate and mic mount, and you'll be able to follow the action as it happens. Use existing HD lenses and record to SD cards, or use Ultra HD lenses and record to SD/UHS-II cards. If you're working with a switcher, add the optional Blackmagic Camera Fiber Converter to get full talkback, tally, remote camera control and more, all over a regular SMPTE fiber connection that uses standard IP for low latency transmission of broadcast quality video and data up to 2 km away. Thanks to its extended video dynamic range and high frame rate shooting, you get crystal clear HD or Ultra HD images with incredible color, texture and detail at any frame rate.



Traditional Broadcast Ergonomics

Familiar controls that put everything at your fingertips!

Like most traditional broadcast cameras, URSA Broadcast puts the most important controls on the outside of the camera body so you can quickly change settings without having to take your eyes off the action. All of the control buttons, switches and dials are grouped logically, making them easy to remember. That means you'll be able to use muscle memory to operate the camera without having to look at the buttons or hunt through menus. URSA Broadcast combines the familiar ergonomics of a broadcast camera with incredible image quality in an extremely tough, durable design.

Strong and Lightweight Design

A handheld camera that's tough enough for anything!

URSA Broadcast features a super strong magnesium alloy body that makes it durable enough to use in the most extreme environments. The magnesium alloy also makes it lightweight and helps to keep the camera cool by piping heat into an exchanger that allows convection cooling and heat dissipation from the camera's body. You get professional connections, an external display, foldout touch screen and 9 mounting points for adding accessories and building custom rigs.



Fold Out Monitor

Fold out LCD screen for on set monitoring!

The bright high resolution fold out screen gives you a built in on set monitor so you don't have to carry around extra equipment. The monitor simply folds out and pivots up and down, making it super easy to shoot down low or high above crowds. The screen features a wide viewing angle and displays crystal clear images so that you can accurately check exposure, focus and framing. Instantly play back clips, even high frame rate slo-mo shots, to make sure you get the perfect take. When you're ready to move to a new location, just fold it up and go.

Status Display

See critical shooting information in bright daylight!

The status display is a high visibility LCD screen that's designed to be easily seen, even in bright light! The status display shows record timecode, locked timecode and reference timecode, along with the current shooting frame rate, shutter angle, aperture, white balance, gain and iris. It also features a battery indicator, card recording status and audio meters for monitoring levels. The screen's backlight can be turned on when you're shooting in dimly lit locations, and off when you're shooting outdoors and in bright light to increase contrast, making it easy to read under any condition!



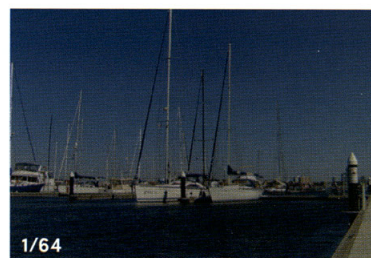


B4 Included

Built in ND Filters

High quality neutral density filters with IR compensation!

URSA Broadcast features high quality neutral density (ND) filters that let you quickly reduce the amount of light entering the camera. The 1/4, 1/16th and 1/64th stop filters have been specifically designed to match the image sensor and color science of URSA Broadcast, providing you with additional latitude and better colorimetry, even under harsh lighting conditions. This lets you use different combinations of aperture and shutter angle, in a wider range of situations. The IR filters have been designed to evenly filter both optical and IR wavelengths. This eliminates the IR contamination usually associated with most ND filters. The ND filters are true optical filters with a precision mechanism that quickly moves them into place when the ND filter dial is turned. The filter settings can be displayed as either a fraction, number, or stop reduction on the LCD.





Optional EF

Optional PL

Optional F

Works with Low Cost Lenses

Compatible with B4, PL, EF and F mount lenses!

URSA Broadcast features an interchangeable lens mount so you can easily swap the included B4 lens mount for an EF, PL or even F mount. That means if you're just starting out you can use low cost, high quality EF photographic lenses and then change to more expensive lenses when you're ready. Using an EF, PL or F mount lens is a fantastic option when permanently rigging and mounting cameras in locked off positions on set, so you don't tie up broadcast

lenses for camera positions without operators. Because the lens mounts are easy to change, you can also quickly reconfigure cameras from job to job. URSA Broadcast comes with a B4 mount already installed, and you can also purchase optional PL, EF and F mounts separately as needed. With URSA Broadcast, you get a single camera that works with virtually all professional lenses so you can choose precisely the lens you need!

Broadcast Quality Audio

Built in broadcast quality sound recording!

URSA Broadcast has a high quality microphone and professional audio recorder built in so you don't have to carry any extra sound equipment! The built in stereo microphone can be used for recording or you can connect professional microphones using the two XLR mic inputs. The XLR connections have 48V of switchable phantom power so you can plug in everything from shotgun to wireless clip on mics. With two microphone inputs, you can record a reporter in the field wearing a lapel or handheld mic, while also capturing ambient sounds from the second input. You can also record the same microphone to both channels using different levels to avoid clipping from unexpected loud noises in the field. URSA Broadcast also features external knobs for adjusting levels and onscreen meters so you can trim audio levels even when shoulder mounted.



Blackmagic Studio Fiber Converter

Video, talkback, tally and more all over a single cable!

The Blackmagic Studio Fiber Converter converts SDI, talkback, tally and more into bi-directional optical fiber so you can use URSA Broadcast on live switched programs where the cameras need to be placed up to 2 km away from the switcher. You get enough power for your camera plus all accessories, tally, two dual channel intercoms for talkback with a redundant engineering channel in case the fiber goes down, an Ultra HD camera feed, 3 independent HD return feeds, full remote camera control, PTZ, tracker talkback and ethernet. The Blackmagic Studio Fiber Converter has real time constant safety monitoring that continually checks the power and SMPTE fiber cable. It will instantly cut the power if potentially dangerous cable damage is detected or earth leakage is detected.

Blackmagic Camera Fiber Converter

Extend and power URSA Broadcast up to 2 km away from your studio!

The Blackmagic Camera Fiber Converter attaches to the back of your URSA Broadcast camera so you can use and power it remotely from a Blackmagic Studio Fiber Converter up to 2 km away! You get an Ultra HD camera with 3 return feeds, multiple channels of talkback, tally, control, PTZ, tracker and much more, all down a single SMPTE standard optical fiber cable. You also get a backup talkback link so you can still support and diagnose problems if the fiber link is offline.

Blackmagic URSA Studio Viewfinder

The big clear viewfinder you need for covering live events

The Blackmagic URSA Studio Viewfinder attaches to the top of all URSA Broadcast models and gives you a large studio quality viewfinder that's perfect when you're covering live events and need to stand behind the camera for hours. You get a bright 7 inch display with easy grip handles and detachable sun shade so you can comfortably shoot long events day or night. The controls let you change brightness, contrast, peaking and more. The large tally light lets both the talent and operator know which camera is on the air, and it even includes customizable perspex numbers that you can insert for easy camera identification.



Blackmagic URSA Studio Viewfinder



Blackmagic Studio Fiber Converter shown rack mounted, URSA Broadcast shown with Blackmagic Camera Fiber Converter.

Flexible Power

Compatible with industry standard batteries and power!



Plug in the broadcast standard 4 pin 12V XLR power input.

Install a VLock or Gold Mount plate for use with batteries.

Install a Blackmagic Camera Fiber Converter for power via SMPTE fiber.

URSA Broadcast includes a 4-pin XLR industry standard power connector that works from 12V to 20V for external power supplies and battery packs. The standard power connector also means it's easy to use the camera with all of your existing power supplies and batteries. All URSA cameras use the same battery power connector and mounting points on the rear of the camera so you can use a wide range of battery plates from manufacturers such as IDX, Blueshape, Anton Bauer and more. For ease of installation, you can also add the optional Blackmagic URSA VLock Battery Plate or Blackmagic URSA Gold Battery Plate for using popular V-Mount and Gold Mount batteries because they include a power plug that's designed to plug directly into URSA Broadcast.

Technical Specifications

	Blackmagic URSA Broadcast	Blackmagic Studio Camera 4K	Blackmagic Micro Studio Camera 4K
Effective Sensor Size	2/3 inch sensor size when using 4K B4 mount (Actual sensor size 13.056mm x 7.344mm).	13.056mm x 7.344mm	13.056mm x 7.344mm
Lens Mount	B4 2/3 inch.	Active MFT Mount.	Active MFT Mount.
Lens Control	Electronic control via 12-pin broadcast connector. Control also possible via EF mount pins when using optional URSA Mini Pro EF Mount.	Iris, focus, zoom on supported lenses.	Iris, focus, zoom on supported lenses.
Dynamic Range	12+ Stops	11 Stops	11 Stops
Total Video Inputs	1 x SDI	1 x SDI	1 x SDI
Total Video Outputs	1 x SDI, 1 x SDI Monitoring.	1 x SDI	1 x SDI, 1 x HDMI Monitoring.
SDI Rates	1.5G, 3G, 6G, 12G.	1.5G, 3G, 6G, 12G.	1.5G, 3G, 6G.
Analog Audio Inputs	2 x XLR switchable between mic, line and AES digital audio. Phantom power support.	2 x XLR analog switchable between mic and line levels. Phantom power support.	1 x 3.5mm jack, mic or line.
Analog Audio Outputs	1 x 3.5mm headphone jack, supports iPhone microphone for talkback.	Aviation headphone jacks (Fixed Wing Plugs) output for talkback and audio monitoring.	1 x 3.5mm headphone jack, supports iPhone microphone for talkback.
Microphone	Integrated stereo microphone.	Integrated stereo microphone.	Integrated stereo microphone.
Built in Speaker	Mono	None	None
Reference Input	Tri-Sync/Black Burst/Timecode.	Tri-Sync or Black Burst.	Tri-Sync or Black Burst.
Screen Dimensions	4", 7" if using optional Studio Viewfinder.	10.1"	None
SD Video Standards	None	None	None
HD Video Standards	1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 Interlaced output via SDI 1080i50, 1080i59.94, 1080i60	720p50, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 1080i50, 1080i59.94 and 1080i60	720p50, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 1080i50, 1080i59.94, and 1080i60
Ultra HD Video Standards	2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p50, 2160p59.94, 2160p60	2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p50, 2160p59.94 and 2160p60	2160p23.98, 2160p24, 2160p25, 2160p29.97 and 2160p30
Media	2 x CFast for 4K RAW and ProRes recording. 2 x SD UHS-II card slots for HD and Ultra HD recording.	None	None
Media Format	Can format discs to ExFAT (Windows/Mac) or HFS+ (Mac) file systems.	None	None
Codecs	DNxHD 220X, DNxHD 145, Apple ProRes 4444 XQ QuickTime, ProRes 4444 QuickTime, ProRes 422, HQ QuickTime, ProRes 422 QuickTime, ProRes 422 LT QuickTime and ProRes 422 Proxy QuickTime, CinemaDNG RAW, CinemaDNG RAW 3:1, CinemaDNG RAW 4:1	None	None
External Control	Blackmagic SDI Control Protocol, iPad control via Bluetooth®, 2 x 2.5mm LANC for lens and record control.	Blackmagic SDI Control Protocol. 2.5 mm LANC connection for lens control.	Blackmagic SDI Control Protocol. Expansion connector has LANC for lens control, S.Bus and PTZ.
Color Corrector	DaVinci YRGB.	DaVinci YRGB.	DaVinci YRGB.
Talkback	SDI Channels 15/16 and iPhone headset.	SDI Channels 15 and 16.	SDI Channels 15 and 16.
Live Tally Indicator	Tally on LCD, URSA Viewfinder and URSA Studio Viewfinder.	1 x for talent, 1 x for operator.	1 x for talent.
Power Supply	1 x External 12V power supply. 1 x 12-pin Molex connector on rear battery plate.	1 x External 12V power supply.	1 x External 12V power supply. LP-E6 Lithium-Ion battery included.

Learn more at www.blackmagicdesign.com

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