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Studio | Film Set | Location | Live Events





“Simply Beautiful”

Joe Marine - Shooter/Writer/Director, No Film School

URSA is a truly original piece of production engineering. It is designed around the needs of today's film crew and is alone to offer all the following features:

- 12-Bit RAW Super 35 sensor
- 10" fold-out preview monitor
- Internal dual RAW and ProRes recording
- Grade pictures in-camera using Resolve Live
- Global shutter with EF, PL or B4 lens mount
- Built-in exposure, focus & audio scopes
- User-upgradeable sensor
- 12G-SDI connectivity
- Use as a 4K HDMI recorder
- Dual 5" screens for settings & levels monitoring

URSA takes high end production to a whole new level. As well as delivering excellent video quality, the system gives users the ultimate workflow flexibility and shooting control. It's as effective as a single shooter camera or as a system at the heart of a multi-disciplinary team.

Shoot live and feed a Blackmagic Design switcher or record and grade in DaVinci Resolve for the perfect finish.

To find out more, speak with your local Blackmagic reseller.

UltraHD - a decade ahead of schedule

HD was Nineteen Years years in the making. While the first transmission was in 1990, regular broadcasts to the home did not start until 2004. It took another five years before free to air 1080 arrived in the UK.

Meanwhile UltraHD at 3840x2160 was standardized by SMPTE in 2007 and within a mere Six Years, it was available in the home courtesy of YouTube and Netflix.

UltraHD - an everyman format

With UltraHD, there's extremely high quality technology for every level of user. For example, in 2014 Panasonic launched the HX-A500 sub-£400 actioncam at the same time as unveiling its flagship 4K Varicam 35.

The pieces of the jigsaw have come together fast. There's already a choice of 4K technology for live production, video recording, switching, signal conversion, editing and grading.

Invest now

Early HD adopters were well rewarded. Firstly, even where delivery was to be in SD, their 1080 rushes were future-proofed, ready for 1080 to become standard. Secondly, editors were able to re-frame HD clips with no loss of resolution in SD, giving them instant advantages over their competitors. Finally, HD users were ahead of the game as the higher resolution started to become mainstream.

A decade on, professionals are investing heavily in UltraHD for exactly the same reasons.

Visibly better

HD 1920 x 1080



UltraHD 3840 x 2160



Camera	Panasonic DMC-GH4
Type	Mirror-less Compact Camera
Lens	Micro 4/3rds mount
Recording Formats	1080 - 96fps 4K - 24p UltraHD up-to 30p
Special Feature	YAGHE Interface: <ul style="list-style-type: none"> • 10-bit Quad SDI • XLRs & audio control • Timecode input



GH4 records rich, high quality **4K internally** or via HDMI.

With the YAGH interface unit, it adds **10-bit** SDI out, XLR inputs and timecode for excellent multi-cam integration.

With **zebras** and **peaking**, GH4's focusing system is extremely fast and accurate, while exposure control is excellent.

A large range of fast, professional lenses complete the package.

*"It really is terrific to have **PROPER** video assist functions like focus peaking, zebras, waveforms. These are immeasurably helpful."* **Philip Bloom**



Panasonic Leica 45mm Macro

"Panasonic HX-A500 was comfortable to use and produced some fabulous video footage."

Expert Reviews

Camera	Panasonic HX-A500
Type	Wearable actioncam
Lens	Fixed 160°
Recording Formats	UltraHD @ 30p HD up-to 120fps SD up-to 250fps
Special Feature	<ul style="list-style-type: none"> • Waterproof and Dustproof • Built-in LCD



Camera	Panasonic Varicam 35
Type	Modular System Camera
Lens	PL mount
Recording Formats	AVC-Ultra ProRes RAW
Recording Media	P2 Express P2 SDXC
Special Feature	<ul style="list-style-type: none"> • Triple codec recording • 2/3" high speed HD module • Codex RAW recorder • 14 stops of latitude



Varicam’s incredible image quality, high dynamic range and its ability to record at a variety of speeds up-to **120 fps** makes for a superb package.

The camera also distinguishes itself with its modular build: the head and recorder can be separated by an umbilicus while the **Super 35 4K** sensor can be switched to a **240fps 2/3" HD unit**. This gives producers the ultimate flexibility and affordability and means the crew does not have to carry two separate cameras.

Workflow was at the heart of the Panasonic engineering team. Varicam 35 can **record 3 separate files** - 4K, HD and proxy. Each clip can be captured ungraded or with a LUT applied, simplifying on-set monitoring, proxy editing and colouring.

“...the latest footage from their premier new camera, the VariCam 35, is simply breathtaking – the best we have seen so far at IBC 2014” **Definition Magazine**



Lone Rider



HC-X1000

UltraHD at 60 frames per second

Camera	Panasonic HC-X1000
Type	Handheld Camcorder
Lens	20x Leica zoom
Recording Formats	4K - 24p UltraHD up-to 60p
Special Feature	<ul style="list-style-type: none"> • 1080 60p @ 200Mb/s • Dual XLR • 0 lux night recording • Built-in ND filters



Panasonic HC-X1000 is the first affordable **60fps** UltraHD camcorder.

It's a very well thought out system, with lightning quick auto-focusing. Triple lens rings, forward and rear positioned XLRs and **ND filters** make it great to use on the run.

AVCHD, MOV and MP4 formats make editing quick and easy; **All-Intra 200Mb/s HD** recording will even make it an appealing option for broadcasters.

"The convenience of having everything required for 4K run-and-gun shooting in a small package." **News Shooter**



Camera	Blackmagic Design Studio Camera 4K
Type	Integrated Studio Camera
Lens	Micro 4/3rds mount
Special Feature	<ul style="list-style-type: none"> • Fibre connectivity • Integrated tally • Integrated talkback • 10" viewfinder • 4 hour battery



Both in terms of raw features and price point, the Studio Camera 4K is truly extraordinary.

The massive **10" monitor** is bright and accurate, making framing each shot incredible easy. Set up and control via the screen is very straightforward.

Connectivity is just as impressive. The camera includes all the comms and control that you would find on a high end studio model. Integrated fibre links facilitates integration into a studio or stadium.



Plug and Play Fibre

The way it's meant to be.



Camera	Blackmagic Design URSA
Type	Upgradeable System Camera
Lens	PL / EF / B4 mount
Recording Formats	Dual recording: ProRes 12-bit RAW
Recording Media	CFast card
Special Feature	<ul style="list-style-type: none"> • 10" high resolution monitor • Dual scope / levels monitors • User-upgradeable sensor • 12G-SDI / optical connectors • 4 hour battery



URSA introduces a whole new way of working. Its main **10" screen** gives UltraHD shooters a unique perspective, making framing each shot so accurate.

Two **additional displays** are used by the sound technician and camera assistant to control and monitor the picture and

sound settings, without getting in the way of the main operator. It's an idea that's brilliantly conceived and executed.

As with all Blackmagic cameras, the file-based workflow is in the hands of the user but rewards the capture of RAW files for grading in DaVinci Resolve.

"If you want to get the most out of 4K you really need a monitor like this. I think after using the Ursa, people are going to have a hard time going back to a smaller monitor - I know I will. Focusing on that thing is a dream."

Guy Florita, Director





Camera	Blackmagic Design Production Camera 4K
Type	System Camera
Recording Media	SSD disks
Lens	PL / EF mount
Special Feature	<ul style="list-style-type: none"> • ProRes • DNxHD • RAW



The Production Camera 4K is precision engineered from **machined metal** to deliver a rugged digital film camera. As a result, it has the strength to be rigged even when supporting a heavy PL mount lens.

The super small design includes an SSD recorder capable of recording RAW, a **touchscreen LCD**, plus standard SDI, audio and Thunderbolt connections.

The built in 5" LCD touchscreen is for picture framing, shot review, system

control and can also be used for entering metadata directly into the camera.

Entering **metadata** directly into the camera means every time you record the shot, information is recorded into the media file so editing software such as DaVinci Resolve 11 can quickly identify and locate the shot you need when you are in post production saving editing time and eliminating manual logging.

"I really like the image and the fact that it has global shutter, and ProRes HQ is wonderful. It's also incredibly cheap, not counting the stuff you have to buy for it (it also comes with the full version of Davinci Resolve!)"

Philip Bloom, DOP



Computer Interfaces

Model	UltraStudio 4K	
Type	External Thunderbolt interface	
Video i/o	SDI, HDMI & analogue	
Audio i/o	8 ch AES/EBU or 4 ch analog audio	

Model	DeckLink Studio 4K	
Type	PCI card	
Video i/o	SDI, HDMI & analogue	
Other	Includes RS-422 deck control, up, down and cross conversion, plus built in HD internal keyer	

Model	DeckLink SDI 4K	
Type	PCI card	
Video i/o	SDI & fibre	
Other	Includes up, down and cross conversion, plus built in HD internal keyer	

Model	DeckLink 4K Extreme	
Type	PCI card	
Video i/o	SDI & fibre	
Other	Includes up, down and cross conversion, plus built in HD internal keyer	

Model	DeckLink 4K Extreme 12G	
Type	PCI card	
Video i/o	Dual 12G-SDI and optical connections	
Other	12-bit RGB for advanced grading & VFX; dual channel 4K 60fps	

EDIUS

EDIT ANYTHING



The editing workstation: the industry's F1 racing car

Edit stations need to be optimized for media environments. The OS and creative software have to be configured to share projects seamlessly across networks. Processors and drives must be selected to render and stream HD and 4K video files quickly and reliably. For stability under pressure, the hardware and the creative software must be tightly integrated.

Time for the Expert

The EDIUS System Integrator (ESI) programme brings the role of specialist resellers to the fore. They have years of experience, configuring workstations, accelerating NLE software and integrating creative tools with central storage. ESI partners give you:

- A trusted way of investing in editing software with no binding subscription
- Access to Grass Valley's EDIUS professional editor at a highly competitive price
- One-to-one advice from your preferred reseller
- The full benefit of the reseller's many years of experience
- Personal technical support and ongoing training

Have the confidence to attack bigger, more demanding projects, with the support of industry-leading technical experts. Take advantage of the ESI program today.



For more visit www.holdan.co.uk/ESI



ESI
EDIUS System Integrator

DaVinci Resolve Multi-Resolution Editing and Grading System



“Editing on it feels similar to every other professional NLE. You can add tracks, delete tracks, in-points, out-points, split tracks, insert, overwrite, replace clip, turn snapping on and off, link and unlink audio and video, etc. Everything you’d expect in a modern NLE.”

Jeremiah Hall, Emmy-winning Producer

As camera sensors become increasingly sensitive and gather more and more dynamic range, DaVinci Resolve outstrips standard NLEs in its ability to control light and reveal the subtleties within each frame.

Resolve is the software behind countless Hollywood movies and high end dramas. As such, it is tailor made for **4K workflows**.

While its reputation for grading and colouring functionality is well established, Resolve’s **editing** capabilities are now hugely impressive. For many, the software is ready to become the only editing software they need.

The software is surprisingly easy to use but has a staggering level of depth that will give professionals the **ultimate control** they require.



Colour



Edit



Deliver



Film Scanning - with Thunderbolt 2



The Cintel Film Scanner scans 35mm media at real-time, with its 20Gb/s **Thunderbolt 2** connector.

It captures the native 4K data stored in the celluloid, enabling you to **re-purpose film assets** and distribute them to new markets. The low price puts post house scanning into the hands of the many.

There are hundreds of thousands of **35mm** and **16mm** films waiting to be scanned for UltraHD delivery. The Cintel scanner is the cost-affordable solution.

EDIUS Pro 7 Real-time Editing Software



EDIUS Pro has long been a **4K-ready** editing system. It's fast, precise and intuitive to use, making post production high efficient.

Media can be imported as files or ingested via third party capture hardware (including Blackmagic's 4K Extreme and Ultrastudio 4K). Within EDIUS, video clips can be **edited**, colour **graded**, **stabilized**, analysed and **legalized** for broadcast. Sound editing is equally powerful with a **loudness** meter and a range of audio filters. The package includes a **titling** module, advanced **effects** and support for third party **plug-ins**. The system is completed with timeline-based disk authoring and encoding tools.

As an all-in-one content creation solution, EDIUS enables the editor to remain in **one program**. There's just one interface to learn and no need to run multiple programs simultaneously, each impacting negatively on computer performance.

Nor does EDIUS force technicians to spend time endlessly **transcoding** content into a common format: the program takes care of it all on the timeline. EDIUS works with just about every format as soon as it's inserted into the edit.

These time-saving features allow the editor to focus on the most important factor: **creativity**.

"As their slogan says, "Edit Anything." We threw all kinds of strange formats at EDIUS Pro 7. As previously mentioned, RED R3D files, AVCHD, P2, and strange resolutions such as 2560x1440 screen captures, and even SD MPEG-4 AVI files.

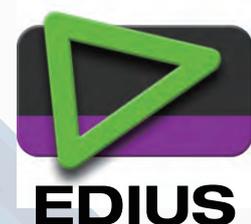
The big editing software programs all had issues with these AVI files.

Admittedly, we said "yeah right" when seeing "Edit Anything" on the splash screen for EDIUS Pro 7. When it loaded these AVI files, we were very surprised. We even tried to break it with F4V files, and EDIUS Pro 7 laughed in our faces. Every format we threw at this editor, was eaten up."

Videomaker.com



**64-bit native processing with maximum memory access
for streamlined real-time editing**



Blackmagic Design UltraHD Live Production

Live 4K production, whether it's for television, AV, or webstreaming is already a reality.

The UltraHD experience is no different from HD production; indeed, Blackmagic's HD-only switchers have been discontinued as the new range delivers support for every broadcast resolution.

The modularity of the range means that multiple ATEMs can be used jointly, allowing multiple operators to drive different parts of the desk.

Control is via dedicated panels and/or by using a software interface.

The two models which support mix effects (M/E) are capable of producing incredibly dynamic, original video. Effects and keys can be layered to create the kind of powerful results that were once available only from massive and immensely expensive desks.

Beyond video, ATEM has sophisticated multi-channel audio mixing capabilities, as well as audio follow video mixing and independent high quality audio inputs.

Camera control is also built-in: Blackmagic Studio Cameras can interface directly with the switcher for colour control and



ATEM Production Studio 4K

ATEM 1ME 4K

ATEM 2ME Production Studio 4K



8 SDI inputs | 6 outputs

Features include chroma key, transitions, upstream and downstream keyers, audio mixer, 2 x multiviews and media pool plus HDMI and XLR connectivity.

10 SDI inputs | 8 outputs

Features include chroma key, transitions, upstream and downstream keyers, DVE, audio mixer, 2 x multiviews and media pool plus HDMI and XLR connectivity.

20 SDI inputs | 13 outputs

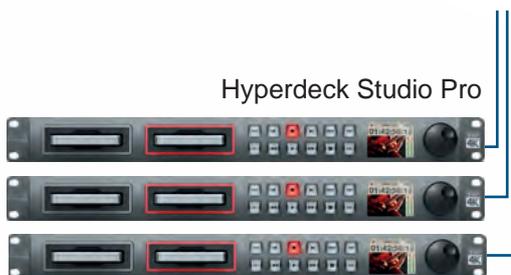
Features include chroma key, customizable transitions, upstream and downstream keyers, DVE, Super Source, audio mixer, 2 x multiviews and media pool plus HDMI and XLR connectivity.



ATEM 1 M/E Broadcast Panel



ATEM 2 M/E Broadcast Panel



Hyperdeck Studio Pro

SSD Recorder

Record UltraHD video using ProRes. Twin SSD drives allow for infinite recording.

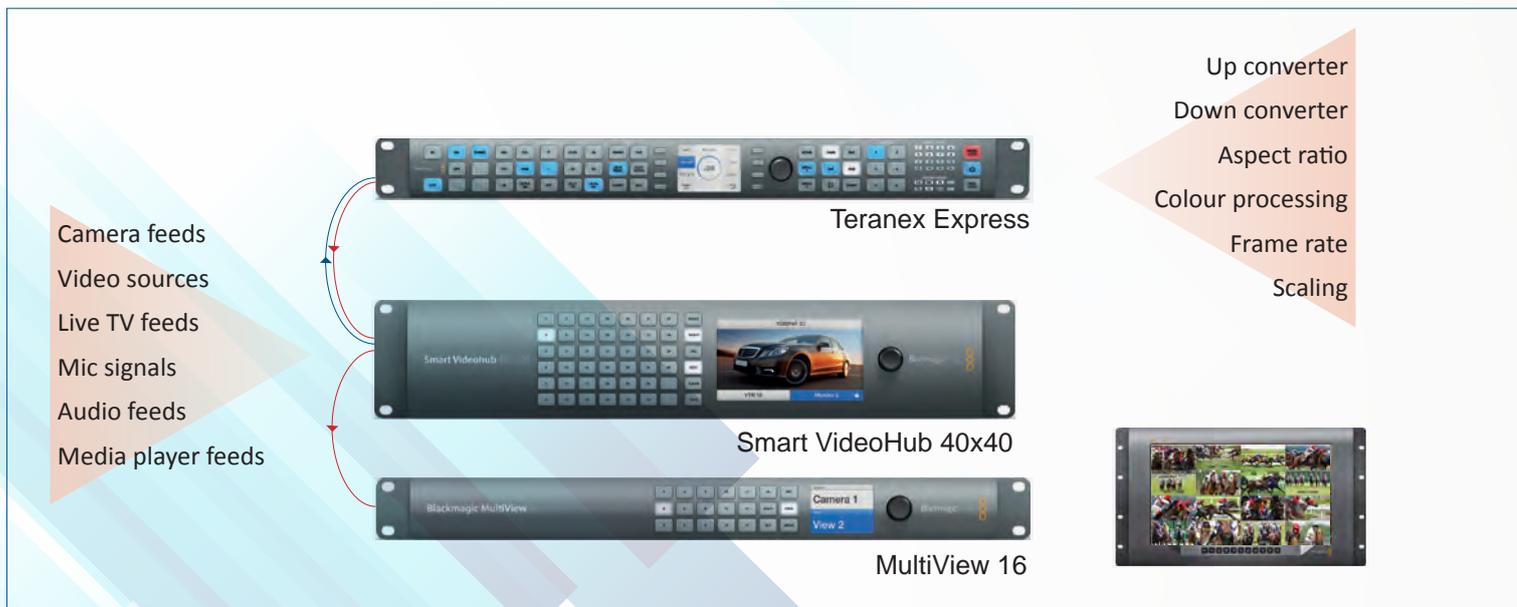
Live UltraHD output

Blackmagic Design 6G-SDI Converters: the 4K Glue



Converter	Type	In	Out
SDI to HDMI 4K	Mini Converter	SDI	HDMI 4K with analog and AES/EBU audio
HDMI to SDI 4K	Mini Converter / Heavy Duty	HDMI video with HDMI/ analog/AES/EBU audio	SDI
Analog to SDI 4K	Mini Converter / Heavy Duty	SDI	Analog video with down converter and audio
SDI to Audio 4K	Mini Converter / Heavy Duty	SDI	8 ch AES/EBU or 4 ch analog audio
Optical Fiber 4K	Bi-directional Mini Converter	SDI	Optical fiber
SDI Multiplex 4K	Mini Converter	Convert between Single Link 6G-SDI, Dual Link 3G-SDI and Quad Link HD-SDI 4K.	
SDI Distribution 4K	Mini Converter	SDI	8 x SDI
Quad SDI to HDMI 4K	Mini Converter	6G, 3G or Quad SDI	HDMI 4K

Multiviewer and SDI Router



4K Muscle



4K files demand a new level of hardware processing. HP's Z workstations have what editors and colourists need to power through the most demanding projects.

Built for the most demanding media environments.

4K and UltraHD: a beautiful outlook

Model	Panasonic BT-4LH310
Size & Type	31" 10-Bit, LED Backlit IPS DCI 4K Panel
Inputs	4 3G-SDI, 2 HDMI & 2 Display-Port Inputs
Other	3D-LUT, LUT upload 6-Pole Colour Correction

Panasonic's first 4K graded monitor reproduces beautiful colours and sharp pictures. It is a high fidelity screen that can be relied on for editing, colour correction or camera set up.



Model	Blackmagic Design SmartView 4K
Size & Type	15.6" Active-Matrix UltraHD LCD
Inputs	12G-SDI Inputs
Other	Dual 3D LUT Support

Blackmagic's rack-mounted display yet again leads the way with its incredible price / performance ratio. It's the natural choice for production environments and is the ideal unit for installing in portable production units or OB vans.

4K Distribution

Holdan is one of Europe's leading broadcast, professional video and AV distributors.

Representing brands such as Panasonic, Blackmagic Design, HP and Grass Valley, we have considerable experience in workflows beyond 1080.

We work through qualified resellers and integrators. To find your local 4K specialist partner, call our sales team and we will put you in touch with the people that have the experience you need.

Stay in touch with us via Twitter @holdanblog or our website to keep up with the latest UltraHD news.

