

SONY

# The Art of Live Production

Move your Audience for your next  
Live event, whatever the scale.  
Find out more on [pro.sony.eu](http://pro.sony.eu)



**GO MAKE**  
TOMORROW



# Professional live production solutions

Together we'll make live astounding.

You've only got one chance to capture the excitement and emotion of live events.

At Sony we're unlocking the power of live. As your trusted production partner, we'll help build audience engagement – and make viewers feel like they're actually there on the big day.

We've got the unmatched heritage and know-how to cut complexity and deliver bigger commercial returns on every size of production budget. We'll take you beyond definition, harnessing latest developments including HDR and expanded colour palettes to create electrifying 4K pictures that audiences can't resist. And we'll streamline your workflow with smart options like IP Live that mesh seamlessly with current programme making infrastructures.









From sports and entertainment to corporate events, web TV and remote production, the shape of live content creation is changing fast. And we're right beside you to make the most of new opportunities.

Trust Sony to help realise your own commercial vision – and stay ahead with better-looking images, expanded creative options and lower real-world costs.

## Live Innovations

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# 4K

## live production



## All the detail. For every audience.

Live production in 4K Ultra HD is a reality – whether you're capturing sport, concerts and entertainment or important historic and cultural events. At Sony we've got the products, the solutions and the workflows to support 4K productions on any scale, from shooting to viewing.

### New levels of immersive reality

From the first commercial TV broadcasts to online and satellite services - there's explosive growth in the range of platforms for viewers to enjoy life-like action captured in 4K. And right now we're leading the way in helping broadcasters and content owners bring stunning Ultra HD images to audiences worldwide.

Since 2013, our unparalleled 4K live production know-how has helped capture a spectacular series of major live events. Along the way we've supported customers with several industry breakthroughs – including the world's first native 4K system camera using 2/3" image sensors, the widely acclaimed HDC-4300. Today our technology, solutions and skills are available to everyone who needs to create immersive 4K live content.

By constantly refining the latest 4K technologies, we're improving the delivery of true-to-life viewing experiences that make audiences to feel as if they're really there.

### Higher on-screen quality, wider workflow options

With four times the resolution of Full HD, 4K brings its own challenges in a live production environment.

We'll take the headaches out of creating your own smooth, seamless 4K workflow, connecting camera chains to multi-format switchers, servers and monitors using the latest technologies like XAVC and IP.

And remember – as well as future-proofing all your content, live production in 4K gives broadcasters even more workflow options, like high-quality HD 'cutouts' pinpointing a particular area of the whole pitch captured in 4K. What's more, you'll be able to derive highest quality Full HD deliverables to satisfy the widest range of distribution options.

### 4K innovation to suit every application

We offer a choice of 4K live acquisition solutions to suit every broadcaster's creative preferences and operational needs.

Proven at hundreds of sporting and other live events worldwide, our acclaimed HDC-4300 4K/HD camera is joined by the HDC-4800 Ultra High Frame Rate (UHFR) camera system. Partnered with the BPU-4800 4K baseband processor, this game-changing camera is capable of shooting full-resolution Ultra HD images at up to 400P (8x) or Full HD at 800P (16x) to reveal split-second action.

As an alternative, many directors also enjoy the image quality and workflow options of our single-sensor F55 Super35mm CineAlta camera, rigged for live environments to deliver stunning, cinematic footage that viewing audiences love.

4K

Following successful deployment at the FIFA Confederations Cup in Russia, the Sony Sports Innovations team was selected to provide Venue Production Services to Host Broadcast Services at the 2018 FIFA World Cup. Sony delivered both HD and 4K HDR services at all 64 matches.



**The HDR image really brings that picture to life, you can really see the details in the blacks and colour rendition looks amazing.**

Andy Beale,  
Chief Engineer, BT Sport





# HDR

## live production

**SR Live**  
for HDR

## Adding value to every production

We've consistently been at the forefront of significant innovations in live production, from High Definition to 4K – and now High Dynamic Range (HDR), too.

We're also a key contributor to industry discussions on standardisation, interoperability and other technical aspects of HDR. And that means no other company can offer broadcasters and live production specialists the same breadth of expertise and hands-on support that Sony does.

We have overcome one of the biggest challenges facing ambitious content creators with an eye on generating bigger profits, today and tomorrow.

Our SR Live workflow dramatically simplifies cost-effective parallel production in HDR and SDR, eliminating the need for costly 'doubled' OB facilities and crews. A single production workflow can satisfy all broadcasters' current and future delivery format requirements - HD, 4K UHD, SDR and HDR. And crucially, there's absolutely no compromise to your quality and integrity of your SDR content.

### Bring audiences closer to reality

With a wider range of brightness levels from sparkling highlights to deep, intense blacks – plus an extended colour gamut – HDR brings viewing audiences closer to reality.

Combined with the higher resolution of 4K Ultra HD, live production in HDR ensures your content stands out in today's ultra-competitive marketplace, and tomorrow's. What's more, it can also add valuable extra impact to HD productions. And that's

why it makes sense to join forces with a partner with the technical know-how and experience to make HDR an integral part of your live workflow.

### From lens to living room

Amazing images are our business. And only Sony is uniquely positioned to contribute to your end-to-end HDR-enabled live production workflow, from lens to living room. From 4K system camera chains, switchers, servers and monitors to projectors and the latest BRAVIA televisions

# HDR



### CASE STUDY

Sky Sports HQ offers a glimpse of the 'studio of the future'. The new broadcast complex is equipped with a wide range of advanced Sony 4K HDR technologies. Highlights include HDC-4300 and HDC-P43 cameras, an XVS-7000 mixer and over 140 Sony professional displays, including HDR-ready BVM-X300 and PVM-X550 reference monitors.

**By deploying Sony's technology, we've been able to future-proof our site and develop a vibrant, diverse and dynamic studio. At Sky Sport we have realised our future vision of sport production: high quality, state-of-the-art, smart and innovative.**

Alessandro Reitano, Vice President, Sports Production, Sky Deutschland

– we'll ensure your HDR production gives audiences the immersive viewing experience it deserves.

### Stay up to speed

Broadcasters, facilities companies and freelance engineers are invited to learn more about live production in HDR with regular workshops, seminars and masterclasses hosted at our Digital Motion Picture Centre Europe in Pinewood Studios.

Find out more at  
[www.pro.sony.eu/dmpce](http://www.pro.sony.eu/dmpce)

### Futureproof with HDR

Capturing today in 4K HDR takes full advantage of today's HDR delivery options – like the latest 4K Ultra HD televisions and projectors – while futureproofing your content for tomorrow's delivery platforms.



# IP LIVE

## production

**IP Live**  
Production System

## Ready today, open for tomorrow

It's happening right now. IP Live enables new workflows and drives bigger RoI – making smarter use of your current production assets while harnessing the resilience and open standards of today's IT-centric world.

This approach allows intelligent sharing of resources and remote integration, enabling efficient use of live production tools that can be readily shared, scaled or reallocated to meet changing needs. Hardware and processing power can be decentralised, with vision mixing and audio control surfaces linked to servers and processing hardware

in another room or off-site. With IP Live, the only limits are your creative and business ambitions.

### Live production workflow made smarter

4K live production with IP becomes simpler and more flexible while driving bigger returns on your production

budgets. Multiple high-resolution video and audio feeds – plus reference signals and control data – can be transmitted synchronously with low latency over distances of hundreds or thousands of kilometres. So even modest Outside Broadcast projects can benefit fully from your best production tools and people back at base.

And you'll save on the headache of deploying valuable vehicles, hardware and production teams over long distances, when you can create better-looking productions remotely... more efficiently and at lower cost.

### Standards based, freely scalable

Meshing smoothly with your existing SDI-based infrastructure, IP Live leverages the physical infrastructure of the computing industry, overlaying robust standards and protocols for the real-time transport of rich media content in the rigours of demanding TV production environments. It's inherently futureproof, supporting new standards like SMPTE ST-2110 and AMWA NMOS. Just as importantly, broadcasters can migrate progressively to the benefits of IP Live at their own pace, adding IT switches to increase system capacity or connect additional production sites.

### A fast-growing industry ecosystem

IP Live is here right now, and it's ready for business. Driven by Sony, the fast-growing IP Live Alliance already brings together more than 60 equipment vendors and technical partners in the live production space, offering broadcasters an impressive choice of IP-ready products and solutions, including system cameras, vision mixers, video servers, image processing and graphics, audio and more.

At Sony we're actively leading conversations around interoperability and open standards support, ensuring a vibrant third-party ecosystem and seamless interworking across all aspects of live production workflow – now and in the future. As an illustration of this, our IP Live production system offers smooth integration with leading

## IP LIVE



4K Garden (China)  
4K IP OB Truck

### Be IP:

Look at who reaps the benefits of IP Today

FRANCE GALOP An IP infrastructure with the confidence of SDI	KOCCA (Korea) 4K IP Studio	TVLB (China) 4K IP OB truck	Shangdong TV (China) IP Remote Production Studio	CCTV Reliability in even the most challenging live environments	PTS (Taiwan) 4K IP OB Truck and Studio
BBC Studioworks Hybrid 4K/HD IP Studios	SIC An IP based TV production centre	MIE TELEVISION BROADCASTING CO LTD All IP production system with control of several studios using the single sub system	NARA TELEVISION CO LTD New 4K IP OB truck and IP based studio	NEP AUSTRALIA An all-IP production facility connected to more than 29 stadiums	SBS (Japan) 4K / HD studio connected with remote HD Stadium
RAI RESEARCH LABORATORY Experimental evaluation & training of Live production over IP	TPC Seamless integration into existing OB van workflows	TV GLOBO A 4K/HD Hybrid SDI/IP OB van	TOPCOOL MEDIA 4K IP OB truck	SKY PERFECT JSAT Significant flexibility and scalability, with a trusted partner	Zhejiang TV (China) 4K / HD IP OB truck

### CASE STUDY

BBC Studioworks has chosen Sony to deliver 4K over IP in its Television Centre studios at the newly refurbished White City site in Central London. Sony's IP solution works harmoniously with the studios' existing infrastructure, minimising disruption to existing workflows while opening up a path to HDR.

vendors' control systems such as Lawo VSM, Axon Cerebrum and Imagine Communications Magellan.

### We're here for the journey

Our IP Live Production System lets broadcasters and content creators satisfy increasing market demand for 4K content, while addressing the cost and complexity issues associated with conventional SDI production workflows. Plan your smooth migration to the benefits of IP Live with Sony Professional Services. From

initial consultancy and planning to technical implementation, operational support and training, we'll help design and deliver the ideal solution that complements your business goals and creative ambitions. Today and tomorrow.





# SIMPLIFIED

## live production

## Let's make it easy

Every live event deserves the best production. We'll help you reach wider audiences with incredible pictures – faster, with less stress and at lower cost.

Think of live production. And it's tempting to think of big crews, serious hardware infrastructure and major budgets. But it doesn't have to be that way. From sports and music concerts to reality TV, acts of worship, corporate events and more – we've made it easier than ever to create amazing images for less.

### Create rich visual experiences for less

With Simplified Live Production from Sony you don't have to be a major broadcaster to give audiences the rich visual experiences they deserve. We've drawn on cutting-edge innovation to re-imagine conventional live production workflows, bringing you the tools and the know-how to engage viewers on every

platform. Faster, more easily and more cost-effectively than ever before. And on any scale, from small pop-up happenings to major events.

### Quality without compromise

Simplified Live Production makes any size of budget work harder. With Sony behind you there's no need to make compromises on picture or sound quality. So you can reach more audiences on more

platforms, whether it's Facebook, YouTube or your football club's local TV channel.

We've down-sized the challenges of live production, helping you satisfy audiences with amazing content – while delivering greater flexibility and far lower costs than you'd imagine.

### Everything you need

Our power-packed portable camcorders and remote Pan Tilt Zoom cameras capture broadcast-quality images in 4K or Full HD in any situation. They're great partners for our MCX-500 Multi-camera Live Producer and AWS-750 Anycast Touch all-in-one production solution that put you

in total control. Add our wireless microphone packages and slim, cost-effective professional monitors – and there's everything you need to create polished productions with less hardware and less hassle.

And that's only the start. Virtual Production by Sony re-imagines broadcast as a service, giving you instant access on demand to pro-quality editing and graphics tools via a web browser from anywhere in the world.



### CASE STUDY

Red Bull Switzerland selected Sony's new cloud-based Virtual Production service to livestream the 2018 Alpenbrevet motorcycle race across social media platforms. The event was captured using portable camcorders and robust 4G wireless connectivity, with a laptop providing remote access to the Virtual Switcher's intuitive graphical interface.



**SRG-360SHE**

Affordable HD/SD Robotic cameras and 1/3-inch CMOS CCD sensor HD/SD robotic camera

**HXC-FB80**

Affordable three 2/3-inch Exmor CMOS sensors 4K/SHD studio camera

**HXR-NX200**

4K/Full HD 1.0-type Exmor R CMOS image sensor camcorder

**AWS-750**

Anycast Touch portable Live content producer

**MCX-500**

Multi-Camera Live Producer

**LMD-B240**

24-inch affordable Full HD LCD monitor with high picture quality and rich features set

**LMD-B170**

17-inch affordable Full HD LCD monitor with high picture quality and rich features set

**MVS-3000A**

Affordable compact HD/SD video switcher

**DWZ-M70 & DWZ-B70HL**

Digital wireless audio packages using 2.4GHz ISM band with high quality digital sound

## Education

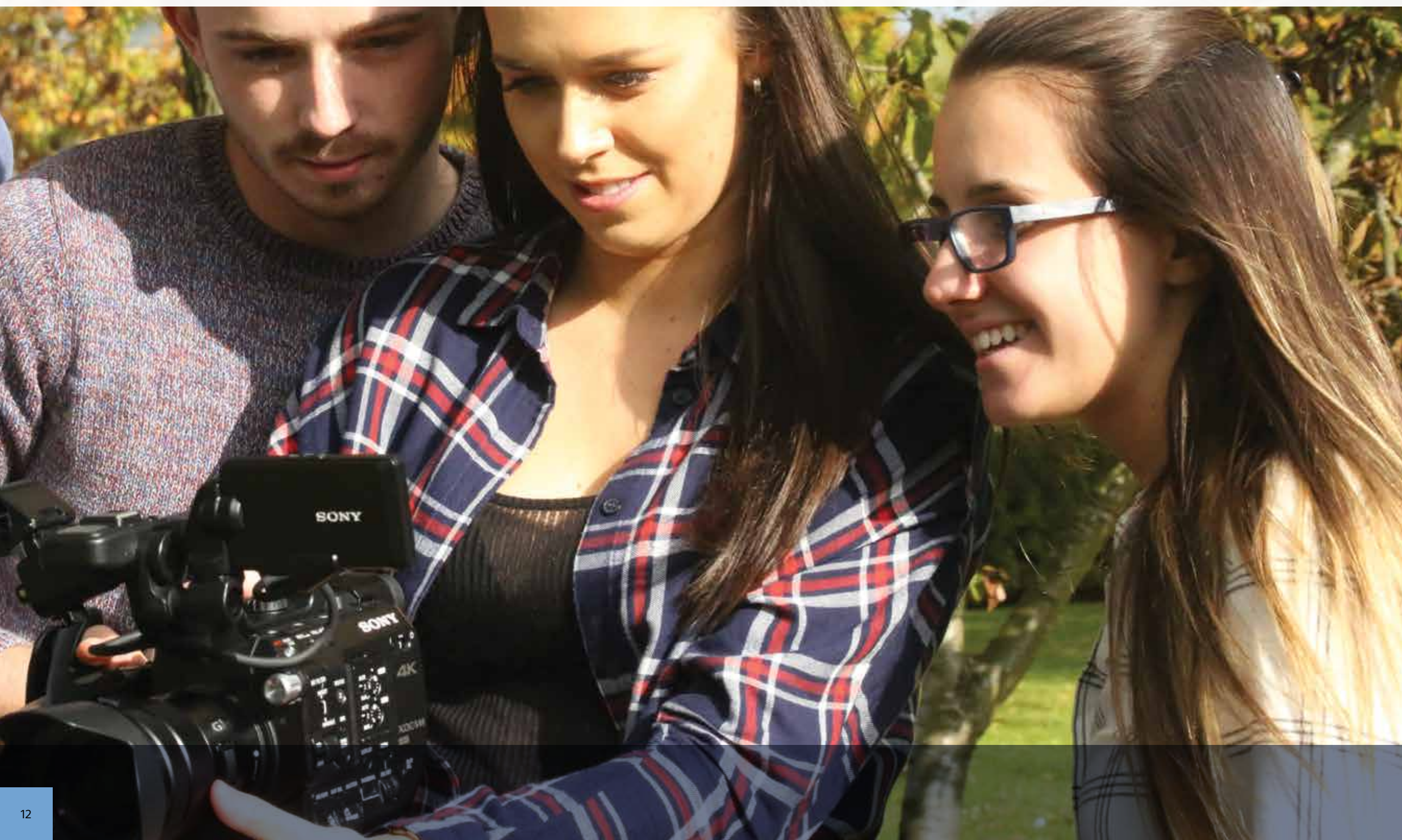
### Inspiring a new generation

As leading suppliers to the live production market, we're helping a new generation of professionals prepare for the opportunities of this vibrant, fast-moving industry.

Our entry-level products and solutions give students an invaluable grounding in the features and operating practices they'll encounter throughout their successful careers in broadcast, media and content creation.

Every Sony Professional product offers exceptional performance and reliability, while delivering exceptional value for money to universities, schools and colleges.

Our Knowledge Portal provides a wealth of value-added training resources for students and their tutors, from free e-Learning modules to webinars, masterclasses and face-to-face training delivered by industry experts.







Share your content the way people expect it. Live.



### SRG-300SE & SRG-360SHE

Affordable HD/SD Robotic cameras



### AWS-750

Anycast Touch portable live content producer



### MCX-500

Multi-Camera Live Producer



### PXW-Z150

4K/Full HD HDR Compact Camcorder with large 1.0-type CMOS sensor



### PWS-100RX1

Network Station for XDCAM - Wireless Streaming Receiver



### LMD-B240

24-inch affordable Full HD LCD monitor with high picture quality and rich features set



### LMD-B170

17-inch affordable Full HD LCD monitor with high picture quality and rich features set



### DWZ-M70 & DWZ-B70HL

Digital wireless audio packages using 2.4GHz ISM band with high quality digital sound

## Live Streaming Your world awaits

Your audience is the whole world. The web has transformed the speed and flexibility of visual communications, letting individuals and organisations communicate around the clock with a global audience. For broadcasters and news providers, it's a powerful channel to break your story ahead of the competition. And for a whole new generation of independent content creators, the web instantly opens up a global viewing audience of millions, side-stepping the cost and complexity of traditional TV production workflows.

Let Sony help you engage online audiences with crisp, professional looking images that always stand out from the crowd. Whether you're a major news channel, a fast-growing online entertainment destination or an ambitious vlogger with their sights on stardom, our live streaming solutions put professional quality pictures and sound in easy reach.

Grab pro-quality footage for your webcast or live event in 4K or Full HD with our compact, easy-to-use cameras. Mix video and audio sources, add titles and fine-tune your story with Anycast Touch, our go-anywhere live content production station that puts everything right at your fingertips.





## Corporate Delivering your clear message

Staff meetings. Global shareholder presentations. Inspirational speakers. New product launches and events. Nothing beats the immediacy of live video for communicating directly with customers and staff, members of the public and other stakeholders, wherever they are.

From blue-chip brands to councils and houses of worship, thousands of organisations around the world trust Sony to help get their point across, reliably and cost-effectively.

You don't need expert skills to capture great-looking content for instant sharing on any platform, whether it's broadcast, local IT networks or the web. From professional-quality remote cameras to our all-in-one Anycast live content producer, Sony makes it easier than ever to deliver your message with sparkling pictures in 4K or Full HD and crystal clear sound.



Share your content  
the way people  
expect it. Live.



### SRG-300SE & SRG-360SHE

Affordable HD/SD  
Robotic cameras



### MCX-500

Multi-Camera Live  
Producer



### AWS-750

Anycast Touch  
portable live  
content producer



### PXW-Z150

4K/Full HD HDR  
Compact Camcorder  
with large 1.0-type  
CMOS sensor



### HXR-NX200

4K/Full HD 1.0-type  
Exmor R CMOS image  
sensor camcorder



### LMD-B240

24-inch affordable Full  
HD LCD monitor with  
high picture quality  
and rich features set



### LMD-B170

17-inch affordable Full  
HD LCD monitor with  
high picture quality  
and rich features set



### DWZ-M70 & DWZ-B70HL

Digital wireless audio packages  
using 2.4GHz ISM band with  
high quality digital sound





**SRG-360SHE**

Affordable HD/SD  
Robotic cameras

**BRC-H800**

HD Pan Tilt  
Zoom camera

**BRC-H800W**

HD Pan Tilt  
Zoom camera

**MVS-3000A**

Affordable compact  
HD/SD video switcher

**PWS-4500**

4K/HD multi-port  
AV storage

**LMD-A Series**

Premium LCD monitors with  
wide viewing angle and high  
contrast ratio

**DWX Generation 3**

For superior digital sound quality and  
multi-channel operation

## Reality TV People watching

The unstoppable success of Reality TV is one of the decade's biggest broadcasting trends. But live production presents some unique challenges, when participants and crew are often in unfamiliar surroundings, far removed from the controlled comfort of a television studio.

Automated production plays a vital role in making reality TV more 'real'. Our reliable, virtually silent robotic cameras capture crisp, broadcast quality images around the clock – even in low light conditions where other cameras struggle. And our discreet, unobtrusive digital wireless microphone systems are ideal for capturing crystal-clear audio from every participant as the on-screen drama unfolds.





**HSC Series**

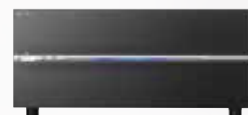
Three 2/3-inch Power HAD FX CCD sensors portable HD/SD camera for digital triax operation and large lens options

**BRC-H900**

Three 1/2-inch type Exmor CMOS sensor all-in-one Full HD robotic camera

**BRC-H800**

1-inch type Exmor R CMOS sensor Full HD robotic camera

**PWS-4500**

4K/HD multi-port AV storage

**ELC**

Live Production Control Automation

**LMD-A Series**

Premium LCD monitors with wide viewing angle and high contrast ratio

**XVS Series**

4K/IP professional production switcher system

**DWX Generation 3**

For superior digital sound quality and multi-channel operation

# News Studios

## Be the first on air

Today's fast-moving news agenda demands that there's only one chance to break your story – or get left behind by your competitors. Your audience won't wait patiently until 6pm to see the day's big stories on TV: they've already seen the footage on their smartphones. News happens any place, any time – and the real competition for today's broadcasters comes not just from other channels, but from anyone with a social media account.

Sony offers a complete range of solutions for live news production that are in tune with today's dynamic content landscape – helping content creators get to air with better-looking pictures – quicker than ever and at lower cost.

You'll see our studio camera systems, switchers, servers and monitors in broadcast studios around the world. And now our Enhanced Live Production Control System (ELC) streamlines existing control room workflows. Automating routine functions and reducing errors in a pressured on-air situation, ELC allows key staff to be repurposed from mundane technical tasks to creating higher-quality editorial content.

**Our news teams were reluctant to automate. But over the last two years of successful operation we've shown comprehensively that ELC works brilliantly, even in a breaking news situation. The interface is so intuitive – it's really simple to automate your show.**

Hank van de Loo, Technical Manager,  
RTL Netherlands







### HDC Series

Multi-format 4K, HD and SD system cameras



### F55 Live

4K Live Camera System based on the PMW-F55 delivers true-to-life entertainment



### PWS-4500

4K/HD multi-port AV storage



### PVM-A Series

TRIMASTER EL™ OLED monitors with wide viewing angle and very high contrast ratio.



### XVS Series

4K/IP professional production switcher system



### DWX Generation 3

For superior digital sound quality and multi-channel operation

## Live Entertainment

### Heightened artistic expression

From live drama to opera, ballet and more – Sony's live production expertise give directors unparalleled power over realising their personal creative vision.

In live configuration, our large format sensor cameras capture stunningly natural 4K Ultra HD images with incredible detail, rich colour and contrast. Teamed with wide aperture lenses they're also the natural choice for creating cinematic depth-of-field effects. And now by shooting in 4K HDR, content creators have control over a broader palette of unique artistic possibilities – bringing TV audiences closer to even more rewarding viewing experiences.



**Plus Belle la Vie** is a Telfrance Série and Rendez-Vous Production series with the associated participation of France Télévisions. Attracting over five million viewers daily, the flagship soap opera has standardised on **Sony's F55 large format sensor CineAlta cameras** in live configuration to shoot both studio-based and outdoor scenes.



**HDC Series**

Multi-format 4K, HD, HFR and HDR cameras

**PWS-4500**

4K/HD multi-port AV storage

**HDRC-4000**

HDR Production Converter Unit

**BVM Series**

TRIMASTER EL™ OLED reference monitors

**XVS Series**

4K/IP professional production switcher system

**DWX Generation 3**

For superior digital sound quality and multi-channel operation

# Outside Broadcast

## We're where the action is

From electrifying live concerts to sporting and cultural events that attract millions of viewers – you'll find our Outside Broadcast vehicles and production facilities right at the heart of the action.

Every year Sony helps hundreds of broadcasters and facilities specialists capture and deliver spectacular images in 4K and Full HD.

We're the go-to partner for solutions of any scope or scale, from large-scale custom designed OB vehicles to compact fly-away production systems. We often take the lead at major sports fixtures and other live events, coordinating other technical partners and contractors to deliver an end-to-end OB production chain from acquisition to uplink and live transmission.

As an acknowledged technology leader, we'll help you capitalise on the exciting possibilities of new workflow innovations like 4K HDR. And now we're taking live production into a new era with the world's first IP-enabled Outside Broadcast vehicles.



**Our new OB truck is a key component of TV Globo's production plans for the upcoming big sporting events happening in Brazil from 2016 onwards. Sony has always been a reliable strategic partner – this gives us confidence that it will be delivered successfully. What's more, their vision around 4K/IP live technology is very well aligned with our own.**

Raymundo Barros, CTO of TV Globo







**SRG-300SE**  
Affordable HD/SD  
Robotic cameras



**BRC-H800**  
HD Pan Tilt  
Zoom camera



**HDC-P50**  
4K/HD HDR POV camera



**LMD-A Series**  
Premium LCD monitors  
with wide viewing angle  
and high contrast ratio



**IP Live Technology**  
Increased efficiency,  
reliability and scalability with  
reduced system costs



**PWS-4500**  
4K/HD multi-port AV  
storage



**XVS Series**  
4K/IP professional production  
switcher system

## Remote Production Anywhere in the world

There's a shift towards more flexible, decentralised programme production. Leveraging the power, scalability and flexibility of networking standards from the IT industry, broadcasters can locate resources wherever they're needed, linking them as required to meet any production need while reducing operational costs.

At Sony we've helped a growing number of broadcasters successfully design and implement remote production solutions. Our family of IP Live products and solutions allows news stations and live events specialists to transmit real-time signals from remote cameras to studios located hundreds of kilometres away – bringing unparalleled flexibility and cost efficiency to live production.



CNN affiliated regional 24-hour news channel N1 has cut costs by networking production resources over IP at three sites in Belgrade, Zagreb and Sarajevo – separated by several hundred kilometres – using our NXL-IP55 IP Live production unit.



# Capturing live excitement

SONY SOLUTIONS

MAKING EVERY OCCASION SPECIAL



Our smart, dependable solutions for Live Production make every occasion special. We'll help you capture and share stunning images in 4K or Full HD that convey all the excitement and emotion the moment to viewing audiences everywhere.

From cameras and switchers to servers, recorders and monitors – we've got the tools and the know-how to make any live production a success. And now with our all-IP workflow, programme makers can enjoy even greater creative flexibility while driving down operating costs.



During the recordings of our latest musical show, we had a need to place a camera where it was not possible to place an operator. We opted to make use of a robotic camera from Sony BRC series and the result exceeded all expectations. The compatibility between Anycast and the BRC cameras is without doubt the best option to anyone requiring a solution for an easy installation and usage.

David Caetano,  
Foco Musical, Portugal.



## PTZ Cameras

Compact, cost-effective cameras for a wide range of remote applications

Our compact SRG and BRC PTZ robotic cameras deliver silent, reliable operation and seamless integration in any environment. They're ideal for a wide range of applications including corporate video, auditorium, houses of worship, education, sports, events, reality TV and remote studios. Explore our extensive choice of high quality remotely-controlled camera options to fit all budgets and operational needs.





## BRC-X1000 & BRC-X1000W

1-inch Exmor R CMOS sensor all-in-one 4K robotic camera

- 4K/HD recordings: 3840x2160 29.97p/25p, 1920x1080 59.94p/59.94i/50p/50i, 720 59.94p/50p
- Zeiss Vario-Sonnar lens with 12x optical zoom, (18x 4K and 24x HD with Clear Image Zoom)
- Enhanced PTZ with wide pan/tilt range, sync, slow speed range select and preset motion tracing
- High Sensitivity: 3 lx minimum illumination (4K)
- Dual link 3G-SDI (x2) and HDMI video output
- Version 2 or later supports S700 protocol for mixed BRC/system camera environments
- Available in black or white

### 4K HD

BRC-X1000

OPTIONAL ACCESSORIES



**RM-IP10**  
IP remote control panel  
for BRC cameras



**RM-IP500**  
IP remote control panel  
for BRC cameras



TECHNOLOGY



MARKETS



## BRC-H800 & BRC-H800W

1-inch Exmor R CMOS sensor all-in-one Full HD robotic camera

- HD recordings: 1920x1080 59.94p/59.94i/50p/50i, 720 59.94p/50p
- Zeiss Vario-Sonnar lens with 12x optical zoom, (24x HD with Clear Image Zoom)
- Enhanced PTZ with wide pan/tilt range, sync, slow speed range select and preset motion tracing
- Simultaneously output video through 3G-SDI, HDMI
- Dual link 3G-SDI (x2) and HDMI video output
- Version 2 or later supports S700 protocol for mixed BRC/system camera environments
- Available in black or white

### HD

BRC-H800

OPTIONAL ACCESSORIES



**RM-IP10**  
IP remote control panel  
for BRC cameras



**RM-IP500**  
IP remote control panel  
for BRC cameras



TECHNOLOGY



MARKETS



## BRC-H900

Three 1/2-inch type Exmor CMOS sensor all-in-one Full HD robotic camera

- HD/SD recordings: 1080/59.94i/50i, 720/59.94p/50p, NTSC/PAL
- Minimum illumination 4 lx (50IRE, F1.9, +24 dB), plus 14x optical zoom lens and advanced colour adjustment
- IP control option, plus video outputs: HD/SD-SDI, Component RGB and Composite Y/C

### HD

BRC-H900

OPTIONAL ACCESSORIES



**BRBK-IP10**  
IP remote control option  
board for BRC-H900 and  
BRC-Z330 cameras



**RM-IP10**  
IP remote control panel  
for BRC cameras



TECHNOLOGY



MARKETS



## RM-IP500

PTZ Camera Remote Controller

- Ergonomic PTZ control of multiple remote cameras for live events production and content creation
- Joystick adjustment of pan and tilt, plus zoom control either via joystick or seesaw lever
- Adjustable speed control for smooth, accurate PTZ camera movements
- Control up to 100 BRC or SRG cameras via IP
- Store and recall up to 100 presets (camera angles and settings)
- Dedicated knobs and control buttons give direct access to frequently needed camera functions

### HD

RM-IP500

OPTIONAL ACCESSORIES



TECHNOLOGY



MARKETS







## SRG-360SHE

1/2.8-inch Exmor CMOS sensor Full HD robotic camera with triple streaming outputs

- HD recordings: 1080/59.94p/50p, 1080/59.94i/50i, 720/59.94p/50p
- 30x optical zoom, View-DR Technology and IP Control
- Enhanced PTZ with wide pan/tilt range, sync, slow speed range select and preset motion tracing
- Simultaneously output video through 3G-SDI, HDMI and as H.264 stream via IP



### TECHNOLOGY



### MARKETS



# HD

**SRG-360SHE**
**OPTIONAL ACCESSORIES**


**RM-IP10**  
IP remote control panel  
for BRC cameras



**RM-IP500**  
IP remote control panel  
for BRC cameras



## SRG-300SE

1/2.8-inch Full HD CMOS Exmor Sensor HD Progressive robotic Camera with IP Streaming function

- HD 1080/50p,25p & 1080/50i & 720/50p,25p
- 30x Zoom, ViewDR Technology and IP Control as standard
- IP Video Streaming included
- 3G-SDI output



### TECHNOLOGY



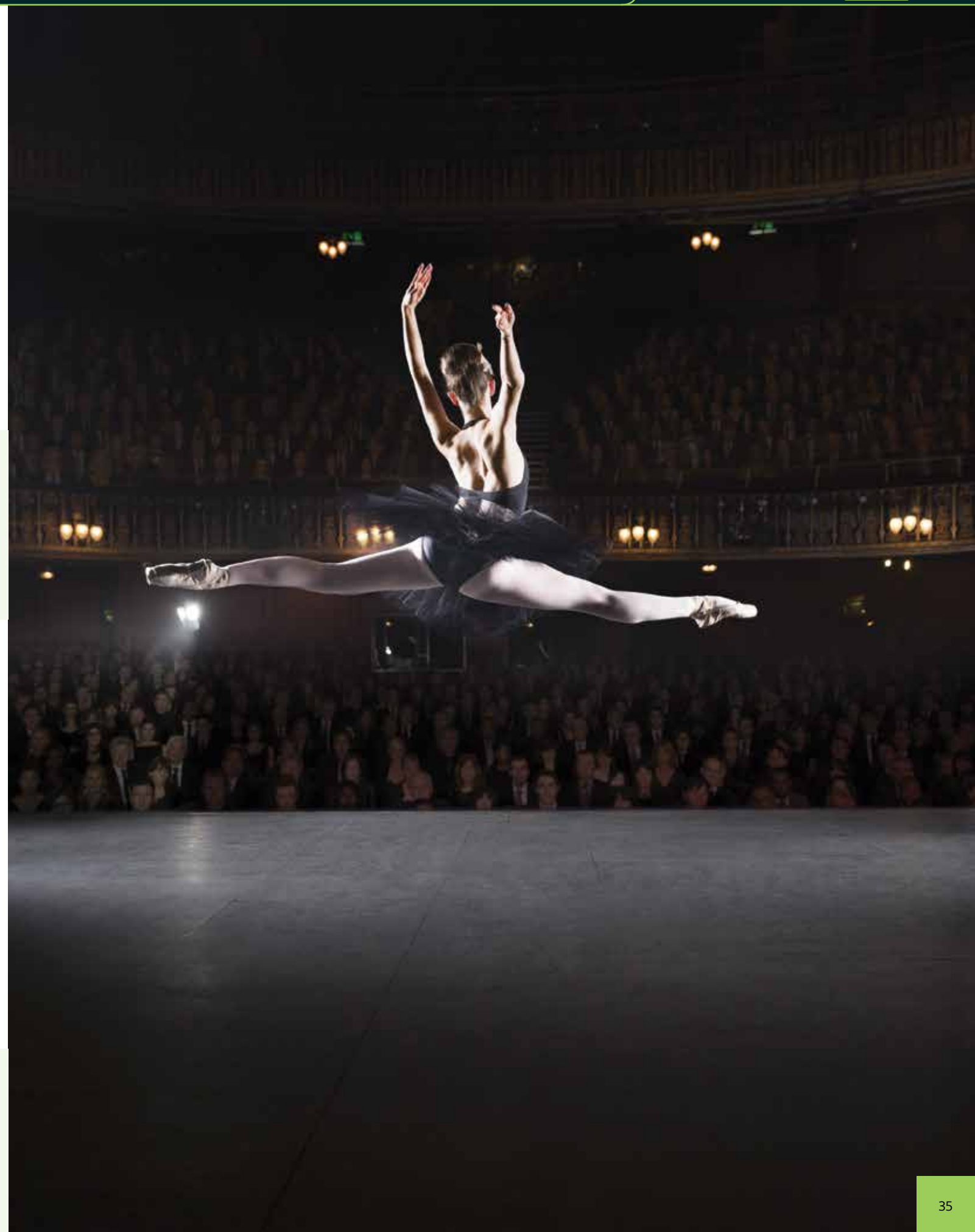
### MARKETS



# HD

**SRG-300SE/HE**
**OPTIONAL ACCESSORIES**


**RM-IP10**  
IP remote control panel  
for BRC cameras







**The technology used to cover a game of this magnitude [the Superbowl] needs to have the power to fully integrate the level of graphics that NFL fans have grown accustomed to while still producing as clean a feed as possible. The Sony HD equipment offers a significant level of production flexibility and the image quality is extremely high. This all translates into delivering an enhanced viewing experience for the consumer at home.**

Ken Aagaard, senior vice president,  
operations and production services at CBS Sports



## Studio Cameras

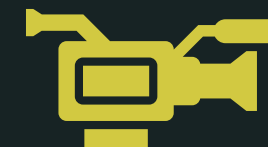
Give all your images that extra wow factor

With thousands of studio cameras in daily operation worldwide, Sony leads the way in capturing live events with extraordinary image quality, flexibility and operational reliability.

Acknowledged as a worldwide standard, our flagship HDC series is headed by the HDC-4800 4K/HD Ultra High Frame Rate Camera System. A game-changer for sports and other live production environments, it handles 4K, HD and super slow-motion in a single platform without requiring extra dedicated production staff – helping you generate even bigger returns on today's production budgets.

The versatile HDC-P43 Point-of-View (POV)-style camera captures superb Full HD pictures in a remarkably compact package that's ideal for stadiums and other remote applications.





## HDC-4300

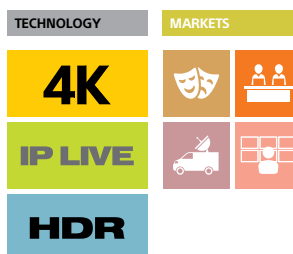
Three 2/3-inch 4K Progressive CMOS multi-format HD/4K system camera

- Supports HDR (High Dynamic Range) and HFR (High Frame Rate) shooting
- WCG (Wide Color Gamut) Prism block to support ITU-R BT2020 color space
- HDR with S-LOG3 or HLG (Hybrid-Log-Gamma) OETF
- Compact and lightweight camera body to ease operation and ergonomics
- Full compatibility to all Sony system cameras and accessories
- Similar form factor and weight compared to a standard portable HD system camera
- Same DoF (Depth-of-Field) than a conventional 2/3"-HD camera
- IP interfaces (ST2110) for future-proof transmission of audio and video signals over networks (option)
- 12G SDI interface
- HD Cut-Out signals are available by optional software licenses for BPU or HDCU

\*Option licenses required



HDC-4300



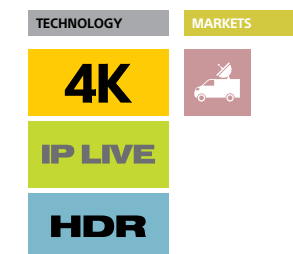
## HDC-4800

4K/HD Ultra High Frame Rate Camera System with Super 35mm CMOS sensor

- 200fps (4x) and 400fps (8x) in 4K 50p (with software SZC-4008)
- 400fps (8x) and 800fps (16x) in HD (with software SZC-2016)
- Never miss any action with up to 4 hours in 4K UHFR recording
- Simple, fast and seamless highlight editing with real-time clips sharing with PWS-4500 SharePlay 10Gb network
- Flicker reduction function without any delay
- Live HDR / Wide Colour Space support
- IP Live Ready



HDC-4800



## HDC-3500 & HDC-3500/H

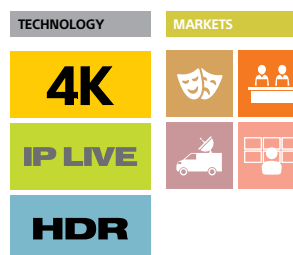
IP-Ready 4K\*/HD HDR Multi-format Live Camera System

- World's first three 2/3-inch 4K CMOS Image Sensors with Global Shutter and F11 sensitivity(50i/P) with -62dB S/N Ratio
- High speed processor supports 3840/50p, 3840/59.94p, 1080/50p and 1080/59.94p progressive formats
- Upgradable to 4K Live HDR\*
- Full HD double speed acquisition for high quality slow motion\*
- Dual servo controlled optical filters for ND and CC
- Light, compact and portable with robust magnesium body
- Compatible with HDC-2000 series CCU and system components
- HDC-3500 supports optical fibre transmission as standard
- HDC-3500/H accepts optional side panels for fibre, triax or wireless transmission
- New Wide Color Prism to support Wide Color Space BT.2020
- IP (ST 2110)/12G SDI capable with compatible CCU\* option board required

\*Option licenses required



HDC-3500 & HDC-3500/H



## HDC-3100 & HDC-3170

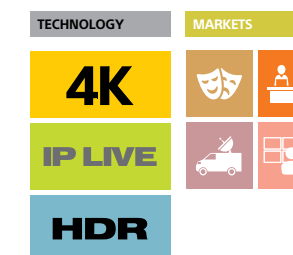
IP-Ready 4K\*/HD HDR Multi-format Live Camera System

- New 2/3-inch 3-CMOS HD Image Sensors with Global Shutter
- F13 sensitivity(50i) with -62dB S/N Ratio
- New High Speed Digital Signal Processor in the Camera
- HDC-3100 support fibre transmission and HDC-3170 support 3rd generation digital triax transmission
- Upgradable with various Weekly License and Monthly License for Progressive, PsF
- HDR and SR-LIVE supported
- IP (ST 2110)/12G SDI capable with compatible CCU\* option board required
- Backward Compatibility with HDCU-2000 series 4K

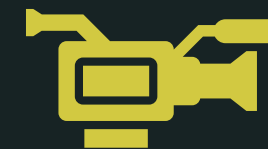
\*Option licenses required



HDC-3100 & HDC-3170





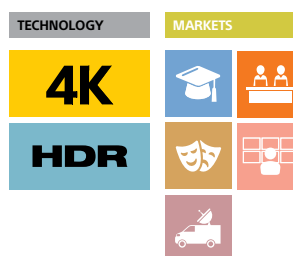


## HDC-P50

### 4K/HD HDR POV Camera

- World's first three 2/3-inch 4K CMOS Image Sensors with Global Shutter
- Compact 4K POV Camera
- 4K/HD HDR Signal output is available from Camera directly (12G-SDI or 3G-SDI)
- High sensitivity, Low S/N ratio, Wide Dynamic Range
- New Wide Color Prism to support Wide Color Space BT.2020
- New High Speed Digital Signal Processor in the Camera
- Upgradable with various License for 4K, Progressive, PsF.

\*Option licenses required



HDC-P50

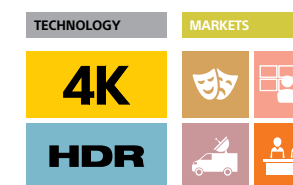
## HDC-2500 Series

### Three 2/3-inch Full HD Progressive CCD 3G multi-format HD system camera with large lens and double-speed options

- 3Gbps optical fibre or 3G digital triax transmission
- 12G-SDI capability
- IP Live compatible
- Multi-format operation, including SD down-conversion
- Upgrade to 4K/HDR acquisition with optional HKCU-2040 Processor Board for HDCU-Series CCU



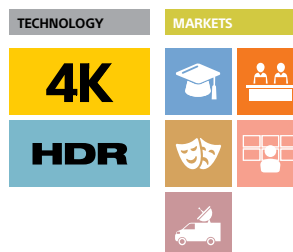
HDC-2500 SERIES



## HDC-1700

### Three 2/3-inch Full HD Power HAD FX CCD multi-format HD/SD portable system camera with large lens options

- 3Gbps optical fibre transmission (option)
- 12G-SDI capability
- IP Live compatible
- Multi-format operation, including SD down-conversion
- Upgrade to 4K/HDR acquisition with optional HKCU-2040 Processor Board for HDCU-Series CCU

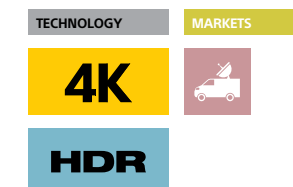


HDC-1700

## HDRC-4000

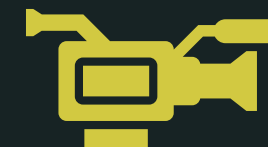
### HDR Production Converter Unit

- Supports SR-Live workflow for HDR (High Dynamic Range) live production
- Enables 4K HDR-based live production workflow for multi-purpose distribution, including 4K HDR, HD HDR and HD SDR
- 12G-SDI capability
- AIR (Artistic Intent Rendering) Matching Function maintains 'look' of master image in real-time conversion of intermediate production format to any desired distribution format



HDRC-4000





## HDC-P1/A

Three 2/3-inch Power HAD FX CCD sensors Full HD compact POV system camera with HD-SDI output

- Compact and lightweight design, ideal for 3D rigs
- Multi-format operation, with 1080/25PsF and 1080/50P formats available\*
- ND/CC dual optical servo filters

\*Option licenses required



HDC-P1/A

### MARKETS



## HXC-FB80

Three 2/3-inch Exmor CMOS sensors 4K/HD system camera

- Multi-format operation with HXCU-FB80 CCU, including quad 3G-SDI and 12G-SDI for 4K UHD
- Supports HLG (ITU-R BT.2100) for HD HDR production
- Fibre connection to CCU with choice of SMPTE Lemo connectors or Neutrik opticalCON DUO, enabling extension up to 10km with single-mode fibre
- Enhanced usability with MCS (Multi Camera System) operation, motorised

ND filter, Moiré filter option and optional PC-based HZC-RCP5 Remote Control Software

- Choice of system configurations with range of lens options



HXC-FB80

### TECHNOLOGY



## HSC-100RT & HSC-300RT

Three 2/3-inch Power HAD FX CCD sensors portable HD/SD cameras for digital triax operation, plus large lens options

- Latest-generation HAD FX CCD sensor
- Multi-format operation, including SD down-conversion
- Fibre (HSC-100RF/300RF) models also available, with IP capability



HSC-100RT & HSC-300RT

### MARKETS



## HXC-P70

Three 2/3-inch Exmor CMOS sensors Full HD compact fibre system camera

- Light, compact POV camera with low power consumption and optical fibre connections
- Multi-format operation
- Hybrid-type optical fibre cable connection to CCU extends signal transmission with power supply to 500m
- Long-distance transmission up to 10km with single-mode fibre cable
- Use same HXCU-FB70 CCU as HXC-FB75

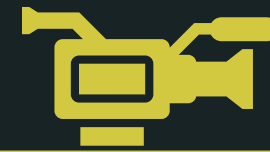


HXC-P70

### MARKETS







## F55 Large Format Sensor Live Production Camera solutions

Super 35mm CMOS sensor CineAlta cameras for 4K and HD Live Production

- Live capture of 4K/UHD images up to 50fps and in HD slow-motion up to 300fps
- CA-4000 camera adaptor sends 4K output over SMPTE fibre cable and supports system operations (intercom, tally, return)
- Integrates with existing HD infrastructure and provides simultaneous HD output (with BPU-4000 baseband processor unit)

F55



TECHNOLOGY

4K

IP LIVE

HDR

MARKETS



## HZC-RCP5

Camera remote control software

- PC software controls up to five cameras including HXC-FB80, HXC-P70, HXC-D70, HXC-100R/RF and HSC-300R/RF models
- Cost effective remote control via LAN for multiple camera systems
- Emulates RCP series panel, while offering additional functionality
- Powerful control of multiple camera parameters via Panel Screen and Paint Menu Screen modes

MARKETS



HZC-RCP5







**Over the years, Sony's switchers have been widely accepted by many users and have acquired an extraordinary reputation for distinguished features and long-term reliability.**

Andy Hotten,  
Live production specialist



## Production switchers

Future-proofed power and flexibility plus consistent operability

Our acclaimed switcher line-up reflects decades of intensive development plus a deep understanding of the daily rigours of live operations. Created in response to rapidly growing demand for 4K production and IP-based workflows, the next-generation XVS Series is the world's first family of professional production switchers that supports our IP Live Production System.

The XVS Series makes uncompromising power, flexibility and reliability brilliantly accessible. Many convenient features are directly inherited from the popular MVS Series, allowing smooth transition from HD to 4K and from SDI to IP Live with no need for costly re-training.





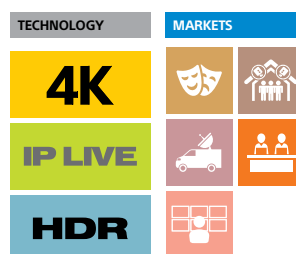
## XVS-9000

IP-ready 4K/HD/SD video switcher for live production

- 5 M/E operation in 4K with 4 keyers per ME, up to 80 inputs and 40 assignable outputs
- 5 M/E operation in HD with 8 keys per ME (or 10 ME with 4 keys per ME), up to 160 inputs and 80 assignable outputs
- Choice of 12G or 100G IP based interfacing
- SMTPE ST 2110 over 100G IP interface
- Up to 4 channels 4K 3D Digital Multi Effects (DME)
- Extensive format support
- Up/down/cross/level conversion between 4K and HD for both inputs and outputs
- Four-channel multi-viewer display with 4, 10, 13 or 16-way layout options
- High-capacity non-volatile 20 channel frame memory with backup storage for approx. 50,000 images
- Flexible configuration with modular X-Panel

\* Exact specifications depend on configuration and options purchased

XVS-9000



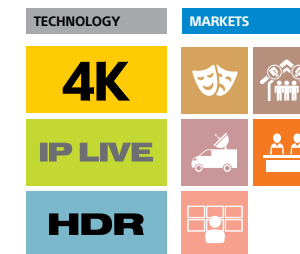
## XVS-7000

IP-ready 4K/HD/SD video switcher for live production

- 3 M/E operation in 4K with 4 keyers per ME, 28 inputs, 12 assignable outputs
- 3 M/E operation in HD with 8 keys per ME (or 6 ME with 4 keys per ME), 112 inputs and 48 assignable outputs
- Choice of SDI or IP based interfacing
- 4 channel 3D/nonlinear effect (DME)
- Built-in format conversion
- Two-channel multi-viewer display with 4, 10, 13 or 16-way layout options
- High-capacity non-volatile 20 channel frame memory with storage for approx. 50,000 images

\* Exact specifications depend on configuration and options purchased

XVS-7000



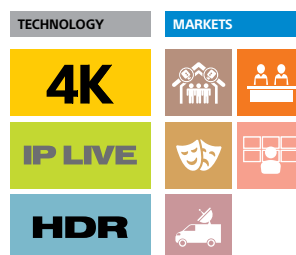
## XVS-8000

IP-ready 4K/HD/SD video switcher for live production

- 5 M/E operation in 4K with 4 keyers per ME, 40 inputs and 12 assignable outputs
- 5 M/E operation in HD with 8 keys per ME (or 10 ME with 4 keys per ME), 160 inputs and 48 assignable outputs
- Choice of SDI or IP based interfacing
- 4 channel 3D/nonlinear effect (DME)
- Built-in format conversion
- Two-channel multi-viewer display with 4, 10, 13 or 16-way layout options
- High-capacity non-volatile 20 channel frame memory with storage for approx. 50,000 images

\* Exact specifications depend on configuration and options purchased

XVS-8000



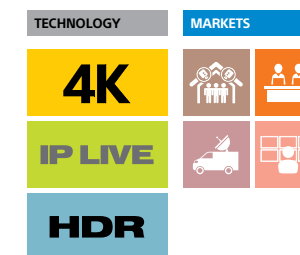
## XVS-6000

IP-ready 4K/HD/SD video switcher for live production

- 2 M/E operation in 4K with 4 keyers per ME, 16 inputs and 6 assignable outputs
- 2 M/E operation in HD with 8 keys per ME (or 4 ME with 4 keys per ME), 64 inputs and 24 assignable outputs
- Choice of SDI or IP based interfacing
- 2 channel 3D/nonlinear effect (DME)
- Built-in format conversion
- Two-channel multi-viewer display with 4, 10, 13 or 16-way layout options
- High-capacity non-volatile 20 channel frame memory with storage for approx. 50,000 images

\* Exact specifications depend on configuration and options purchased

XVS-6000



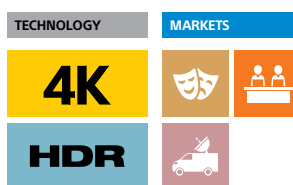




## MVS-7000X

High-end 3G/HD/SD video switcher with 6M/E

- 6 M/E configuration/8 keys on PP row
- 80 inputs/48 outputs
- Optional 2 or 4 channel DME and 8 channel format conversion



MVS-7000X

## MVS-3000A

Affordable HD/SD video switcher with 2M/E

- 2 M/E configuration/4 keys per M/E bank
- 32 inputs/16 outputs
- Optional 2 channel DME and 8 channel format conversion



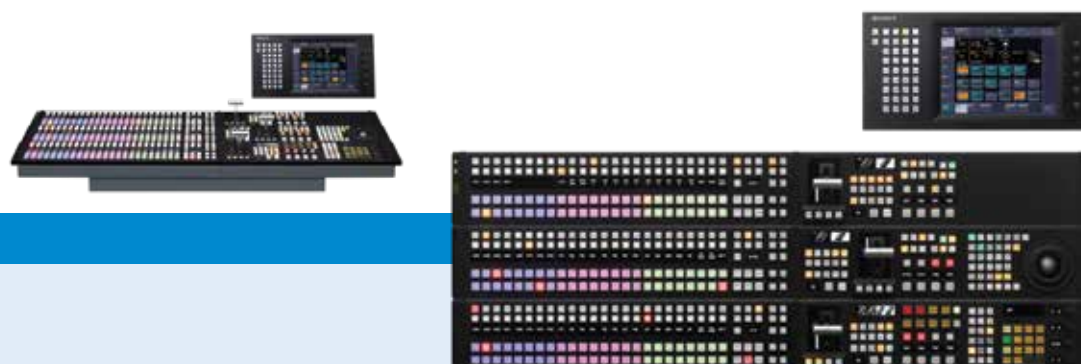
HD

MVS-3000A

## MVS-6530

Mid-range HD/SD video switcher with 3M/E

- 3 M/E configuration/8 keys on PP row
- 48 inputs/32 outputs
- Optional 2 channel DME and 8 channel format conversion



HD

MVS-6530

## ICP-X7000

Modular control panel for XVS series & MVS series (MVS-8000X, MVS-7000X)

- Supports highly flexible panel configuration options to suit wide range of operational needs
- Consistency with MVS-8000 switcher panel for smooth, simple cross-training
- OLED source name displays, assignable RGB XPT buttons and XPT pads accommodate different operational styles and ensure control accuracy



ICP-X7000





## ELC-MVS01

Live production control automation system

- Unified control of newsroom computers and other studio hardware by a single operator
- Seamless integration with Sony XVS and MVS series switchers plus cameras, robotics pedestals, graphics, lighting and audio playback systems
- Real-time rundown synchronisation and playlist updates
- Manual mode allows operator to take control at any time

MARKETS



ELC-MVS01

## MCX-500

Multi-Camera Live Producer

- Ideal for streaming productions e.g. Facebook Live and YouTube Live
- Smart controls with configurable LCD Touchscreen
- Mix between 8 video sources + 1 Title (total 9 inputs)
- Multi-view monitoring
- Advanced titles and effects
- Stream content live over the internet
- PC, Mac & Tablet integration
- Record AVCHD Full HD 1920x1080 60i/50i or 1440x1080 60i/50i

MARKETS



MCX-500

## AWS-750

Anycast Touch portable live content producer

- Portable, easy-to-use all-in-one live production solution
- Intuitive dual touchscreen operation
- Video switcher, encoder, recorder, audio mixer, titler and remote camera controller

MARKETS



AWS-750

By selecting the XVS-8000 video switcher as part of its new UHD OB truck, Croatel is able to meet growing customer demand for 4K and HDR production capabilities, future-proofing its investment as broadcasters continuously look to differentiate their live sports programming. Multi-format support and compatibility with SDI and IP connections gives Croatel complete flexibility to incorporate different vendors' equipment to meet the demands of any given project.





## Servers & recording

From HD to 4K: efficient, robust recording and storage solutions

With over 60 years' experience of video recording, we're a world leader in delivering reliable, robust and cost-effective recording solutions for critical live and other events.

A cornerstone of our next-generation IP-ready 4K/HD live production offering, the PWS-4500 multi-port AV storage unit uses the efficient, flexible XAVC format to record both 4K UHD and HD content. With flexible I/O options, networked file sharing and HFR recording capability, it's the brilliantly versatile choice for today's live production workflows – and tomorrow's.





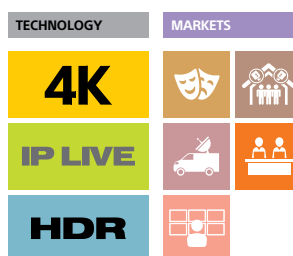
## PWS-4500

IP-ready 4K/HD multi-port AV server/storage unit

- Efficient XAVC Intra Codec for HD, 4K and HDR
- HFR support up to 8x HD and 4K 2x slow motion
- Simultaneous 4K and HD recording
- Easy transcoding between XAVC and other formats
- Avid and EVS integration with Media Gateway
- Expandable storage up to 110hr HD, 24hr 4K
- Efficient Live operations between servers via 10Gbps SharePlay network and file based workflow using Open 10Gbps Network
- 12G SDI interface with option board

**4K HD** **XAVC** **ProRes** **DNxHD**

PWS-4500

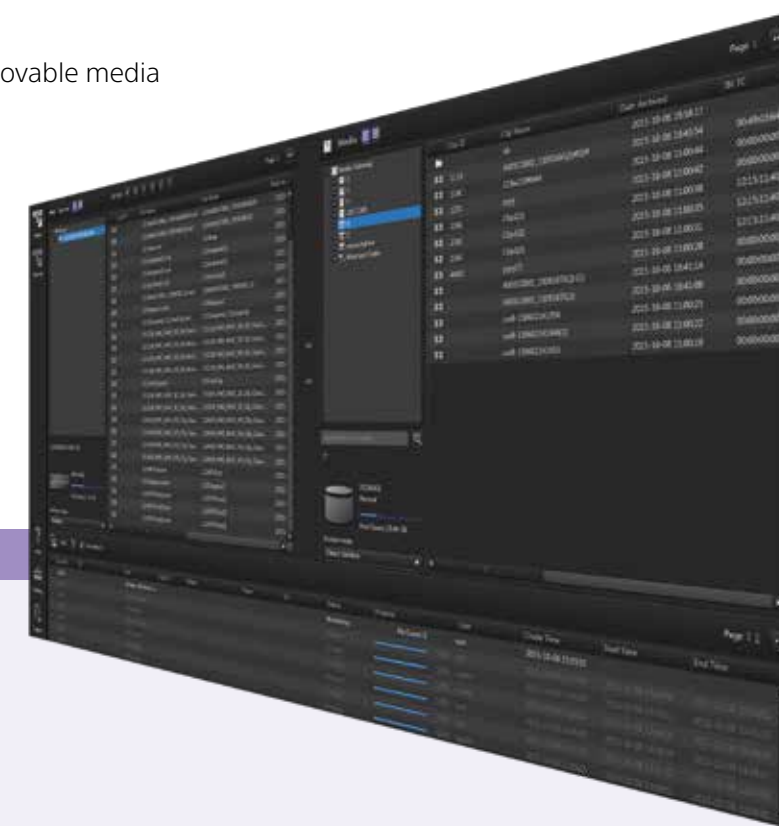


## PWS-110MG1

Media Gateway

- Clips and record trains transfer (ISO REC) to removable media
- Media transcoding
- Mirror mode and auto archive
- Retrieve clips to PWS server
- Content view with Catalyst Browse
- Watched folder workflows
- Integration with AVID Interplay and EVS

PMS-110MG1



## PWS-110PR1

Production Control

- Slow-motion replay
- Playlist and clip management
- Camera mapping via SharePlay
- Loop recording and playback
- Push clips to EVS
- 4K HD cut-out
- Auto-archive, push/pull clips over network



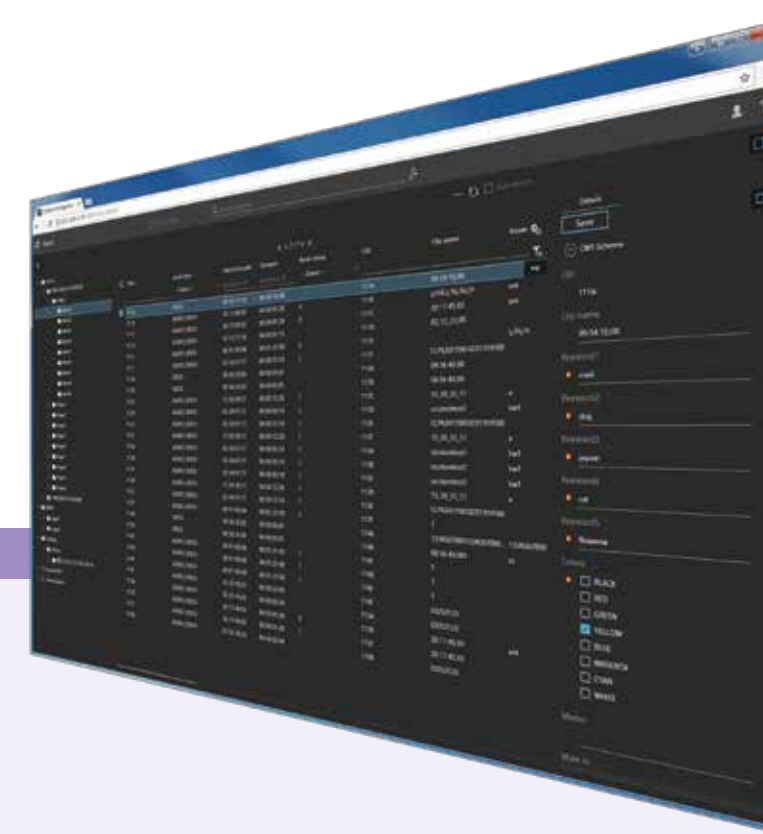
PWS-110PR1

## PWS-110CM1

Content Management for PWS-4500

- Enable Metadata Based Workflow
- Easy and efficient content search among multiple PWS-4500
  - Browse/Search clips using metadata
  - Transfer clips between the PWS-4500 servers
  - Clip export to external HDD/NAS/NLE devices
- Access to up 4 users as standard

PWS-110CM1



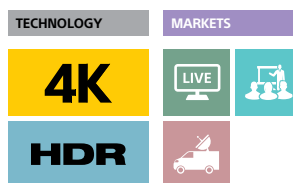




## PMW-PZ1

### 4K SxS memory player

- XAVC HD, 4K & HDR Support
- XDCAM HD422 Support
- Simple copy and back-up process
- Versatile interfaces: 3G-SDI x4, HDMI, USB 2.0



4K HD

PMW-PZ1



## PMW-1000

### Compact HD/SD SxS memory recording deck

- Two SxS ExpressCard™ memory card slots and jog/shuttle control
- SD/HD-SDI interfaces plus HDMI interface
- Records XDCAM HD422 and HD420, plus XAVC HD recordings and SD playback



HD

PMW-1000



## XDS-PD2000/XDS-PD1000

### XDCAM deck/IT servers

- Internal storage: 512 GB Solid State Drive (XDS-PD200) 1 TB Hard Disk Drive (XDS-PD1000 and XDS-1000)
- Two SxS memory slots and Professional Disc drive, supports all SxS card types, including Memory Stick and SDHC cards, using MEAD adaptors, plus all XDCAM Professional Disc models including Single Layer, Dual Layer, Triple Layer and Quad Layer discs
- Supports all XDCAM and XDCAM EX file formats
- XAVC Support (option) for XDS-PD2000 only



XDS-PD2000/1000



## PDW-HD1550/PDW-HD1200

### Professional Disc recorder/player

- Supports XDCAM HD422 codec formats for recording and playback
- Up/down format convertor, plus cross conversion
- Linear editing option



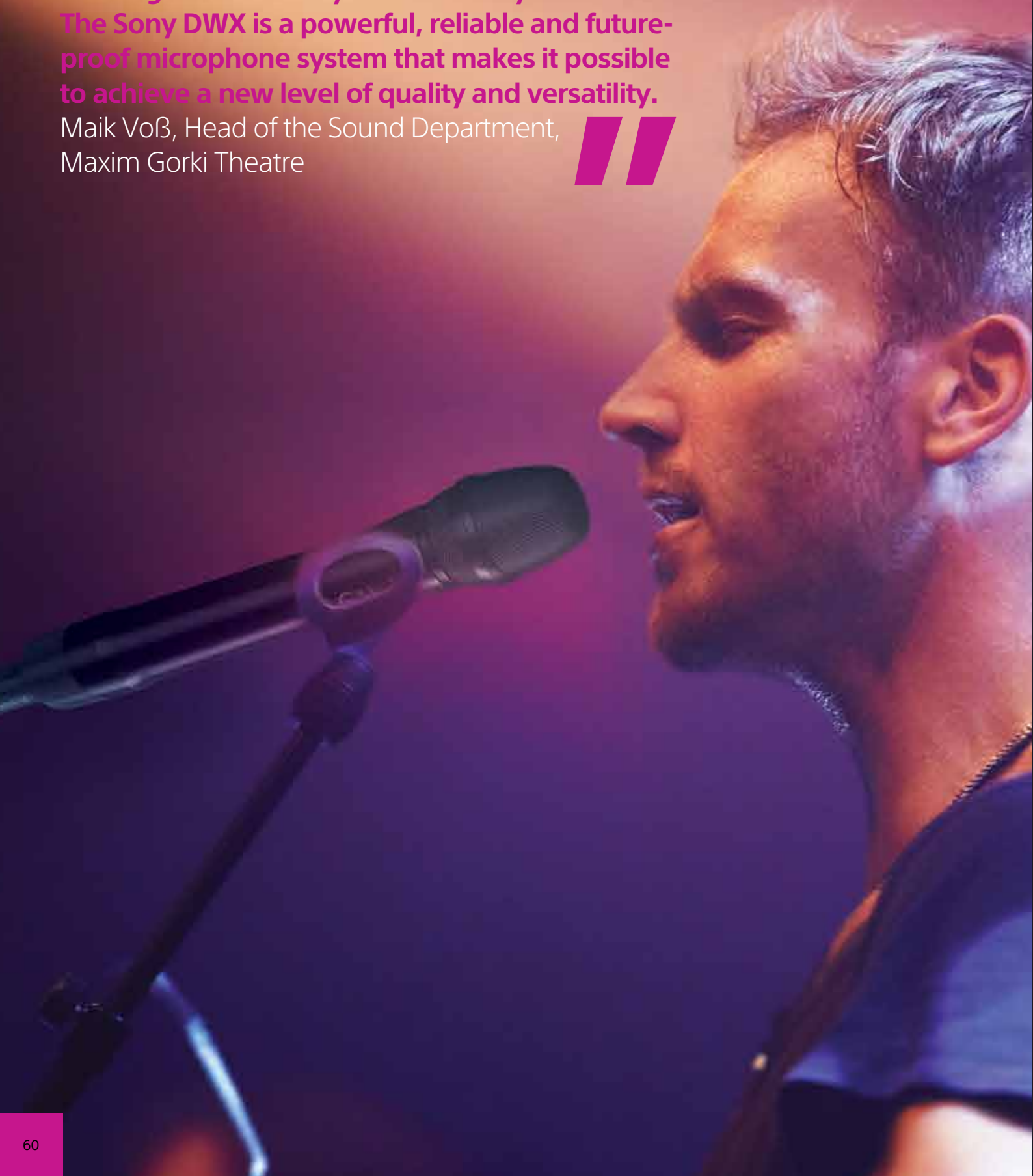
PDW-HD1550/PDW-HD1200





// We opted for what our research showed to be the best digital wireless system currently available. The Sony DWX is a powerful, reliable and future-proof microphone system that makes it possible to achieve a new level of quality and versatility.

Maik Voß, Head of the Sound Department,  
Maxim Gorki Theatre



## Professional audio

Superior digital sound quality and multi-channel operation

Created for use in live events and in broadcast TV studios, the digital DWX range seamlessly brings UHF wireless microphone technology into the digital domain. DWX is the no-compromise, ultimate quality choice, whatever your gig.





## DWX

DIGITAL WIRELESS

The DWX range offers world-leading digital microphone expertise, including the superb WiDIFHP codec, which captures the subtlety of analogue, but adds the advantages of an all-digital architecture. The DWX range marks the beginning of a new era in live stage and broadcast audio equipment – not just because it's all-digital, but because this user-focused technology comes in the smallest, lightest and most ergonomic packages available.



## WiDIF-HP

### Cross Remote

## DWR-R02DN/W

2 channel rackmount digital wireless receiver

- **Three codec modes designed for a wide variety of applications**
- Mode 1: For compatibility with DWX series applications
- Mode 2: High quality sound with a 96kHz sampling rate and Low audio latency of 1.5 msec\*
- Mode 3: Operation optimised for reliable transmission by preventing drop out by interference with additional error correction
- Superb quality 24bit/96kHz sampling digital audio
- Simultaneous multi-channel operation
- Remote control of transmitter functions from the receiver

- Full control over Cross Remote™ via Wireless Studio software
- 1U-size rack-mountable design
- Supports a variety of output functions with four AES3/EBU outputs up to 24-bit/96 kHz plus World Sync input/output
- Flexible AC/DC power options
- Operation with a bandwidth from 470 MHz to 710 MHz (depending on region) (US: 470-698 MHz)

\*In mode 2, Analog out. 2.5 msec for digital out.



DWR-R02DN

### OPTIONAL ACCESSORIES



**AN-01**  
Uni-directional  
UHF Antenna



**AN-820A**  
Active antenna Sony  
wireless microphone  
rack receivers



**RMU-01**  
Remote Control Unit  
for Digital Wireless  
Microphone System



**WD-850A**  
UHF Antenna Divider



## DWR-R03D

2 channel rackmount digital wireless receiver with Dante

- Very high audio quality with 20Hz-22kHz frequency response and dynamic range over 106dB
- New Mode 4 Sony High Definition Sound
- High density multi-channel operation
- Auto frequency coordination
- Wide 244MHz bandwidth with 375kHz spacing (depending on region)
- X-Dimension Diversity™ technology
- Low audio latency to 1.2msec to analogue output
- HDR RF input
- Dante interface for audio-over-IP
- Switchable analogue (balanced) and AES/EBU digital sub out
- Auto setup, Master/Slave
- Auto channel swap
- AES 256-bit encryption
- Dual OLED displays



DWR-R03D

### OPTIONAL ACCESSORIES



**AN-01**  
Uni-directional  
UHF Antenna



**AN-820A**  
Active antenna Sony  
wireless microphone  
rack receivers



**RMU-01**  
Remote Control Unit  
for Digital Wireless  
Microphone System



**WD-850A**  
UHF Antenna Divider

## DWR-S02DN

2 channel slot-in portable digital wireless receiver

- Three codec modes designed for wide variety of applications
- (1) For compatibility with DWX series applications
- (2) High quality sound with 96kHz sampling rate and low audio latency of 1.5 msec\*
- (3) Optimised for reliable transmission by preventing drop out by interference with additional error correction
- Superb audio quality by AES3 out and 24bit/48kHz D/A converter
- Various viewfinder functions with Sony XDCAM camcorders
- Full digital workflow
- Wide bandwidth up to 72MHz (depending on region)
- Active/Free channel scan

\* In mode 2, analogue out. 2.5 msec for digital out.



DWR-S02DN







## DWM-02N

### Handheld digital wireless microphone

- Superb audio quality using 24bit/96kHz high quality A/D converter
- Simultaneous multi-channel operation
- Three interchangeable heads and third party support: quick-change mechanism compatible with over 50 capsules from various manufacturers
- OLED display
- RF remote for all functions by Wireless Studio remote software
- Remote control of transmitter functions from the receiver
- Selectable RF output power (1/10/50 mW)
- Digital low-cut filter
- Up to 72MHz bandwidth
- Three codec modes designed for wide variety of applications
- Powered by 2x AA/LR6 batteries or rechargeable batteries with up to 9 hours running time

#### MARKETS



#### DWM-02N

#### OPTIONAL ACCESSORIES



##### CU-C31

Condenser cardioid Mic Capsule for use with DWM-02 and DWZ series handheld transmitters



##### CU-F31

Dynamic Super-cardioid Mic Capsule for use with DWM-02 and DWZ series handheld transmitters



##### CU-F32

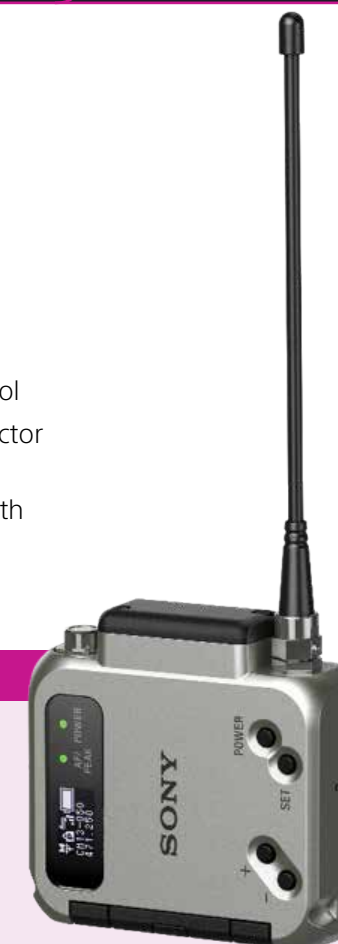
Dynamic Wide-Cardioid Mic Capsule for use with DWM-02 and DWZ series handheld transmitters

## DWT-B03R

### Bodypack digital wireless transmitter

- Very high audio quality with 20Hz-22kHz frequency response and dynamic range over 106dB
- New Mode 4 Sony High Definition Sound
- High density multi-channel operation
- Tough, light moisture resistant magnesium body, just 99g (approx.)
- Compact size 53x60x17mm (approx. excluding antenna)
- Up to 148MHz bandwidth (depending on region)
- Selectable RF output power (2/10/25mW)
- Phase reverse
- Cross Remote for full RF control
- Lemo 3-pin and Hirose connector available
- Up to 7 hours running time with NP-BX1 Lithium Ion Battery
- OLED display

#### MARKETS



#### DWT-B03R

#### OPTIONAL ACCESSORIES



DWX-BC1  
Charger Unit



ECM-77LM  
Capsule with Lemo

## DWT-B01N

### Bodypack digital wireless transmitter

- Superb audio quality using 24bit/96kHz high quality A/D converter
- Simultaneous multi-channel operation
- Lightweight, rugged design in die-cast magnesium
- Switchable mic or line input level and adjustable attenuator
- OLED display
- RF remote for all functions by Wireless Studio remote software
- Up to 72MHz bandwidth
- Selectable RF output power (1/10/50 mW)
- Digital low-cut filter
- Three codec modes designed for wide variety of applications
- Powered by 2x AA/LR6 batteries or rechargeable batteries with up to 9 hours running time

#### MARKETS



#### DWT-B01N/E

#### OPTIONAL ACCESSORIES



EC-1.5CF  
Microphone Cable



BATC-2AA  
Battery Case



ECM-77BC  
Discrete omni-directional  
lapel Electret condenser  
microphone

## DWT-P01N

### Plug-on digital wireless transmitter

- Superb audio quality using 24bit/96kHz high quality A/D converter
- Simultaneous multi-channel operation
- Lightweight, rugged design
- Switchable mic or line input level and adjustable attenuator
- +48V power supply
- OLED display
- RF remote for all functions by Wireless Studio remote software
- Up to 72MHz bandwidth
- Three codec modes designed for wide variety of applications
- Powered by 2x AA/LR6 batteries or rechargeable batteries with up to 9 hours running time

#### MARKETS



#### DWT-P01N

#### OPTIONAL ACCESSORIES



BATC-2AA  
Battery Case





# DWZ

## A version for you

The DWZ Series offers high quality sound combined with our renowned digital wireless reliability in a simple to set-up-and-use design. The interchangeable microphone head mechanism on the ZTC-M02RC handheld microphone is designed for using third-party capsules: the Intelligent Feedback reducer eliminates unwanted acoustic feedback.



# DWZ-M70

## Digital wireless set for presenters and vocalists

- Intelligent Feedback reducer function
- 3-way parallel audio output 1/4" TS phone (x2), Balanced XLR (x1)
- 5-Band graphic digital equalizer
- Colour LCD for simple operation & status monitoring for TX & RX
- Clear channel scan for easy set up
- Rack-mountable 1U half-rack size (with optional RMM-HRD1 rack mount kit)
- Detachable whip antenna



DWZ-M70



# DWZ-B70HL

## Digital wireless lavalier microphone set for presenters and vocalists

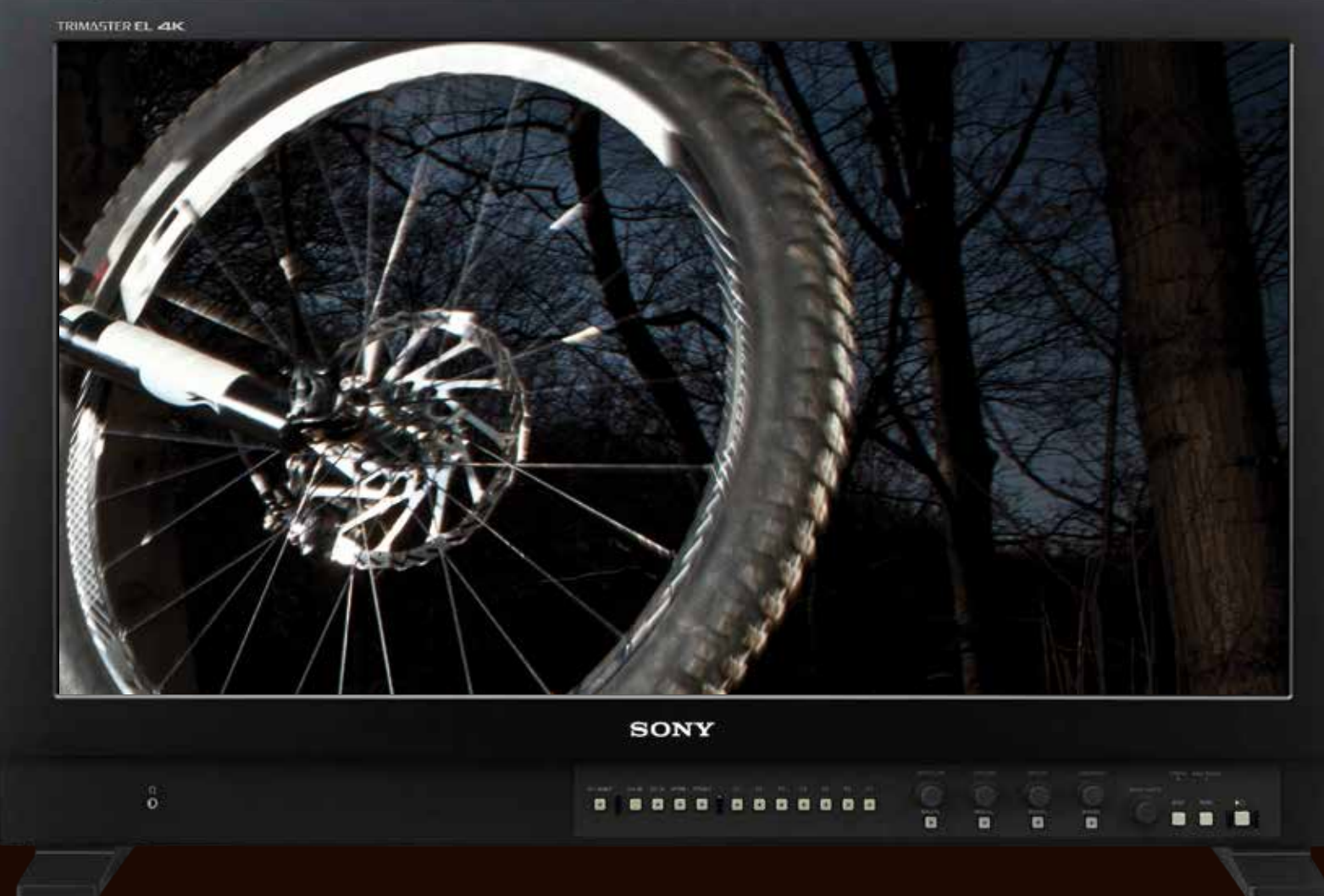
- Intelligent Feedback reducer function
- 3-way parallel audio output 1/4" TS phone (x2), Balanced XLR (x1)
- 5-Band graphic digital equalizer
- Colour LCD for simple operation & status monitoring for TX & RX
- Clear channel scan for easy set up
- Rack-mountable 1U half-rack size (with optional RMM-HRD1 rack mount kit)
- Detachable whip antenna



DWZ-B70HL







## Professional monitors

Images you'll always trust

Drawing on decades of broadcast industry leadership, our professional monitors bring invaluable clarity and precision to today's live studio and field-based workflows. From critical colour grading and QC to on-set monitoring and everyday production tasks, you'll benefit from picture quality, consistency and reliable operation that other displays just can't match.

The most demanding content creators trust the exceptional clarity, contrast, black levels, wide colour gamut and low latency of our reference grade BVM-HX310, BVM-X300 Ver2 and 55" PVM-X550 monitors that are ideally suited to high-end 4K HDR production.

What's more, you'll enjoy the same rock-solid reliability, intuitive operation, consistent picture performance and simple maintenance across our complete range of 4K and Full HD displays – helping you drive bigger returns on every size of production budget. From cost effective LCD monitors to premium OLED quality monitors, Sony has a solution for your needs and budget.





## 4K PROFESSIONAL MONITORS

**BVM-X300 Professional OLED Master Monitor**

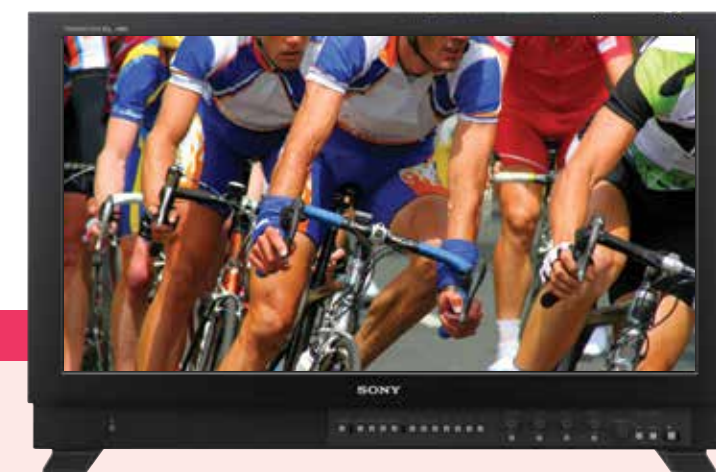
30-inch 4K TRIMASTER EL™ OLED monitor with extremely wide viewing angle

- Full 4K picture resolution (4096 x 2160 pixels)
- High Dynamic Range (HDR) support via multiple EOTF (S-Log3, ITU-R BT.2100 HLG, SMPTE ST2084)
- Supports DCI P3, ITU-R BT.2020, S-Gamut/S-Gamut3 and S.Gamut3.Cine wide colour spaces
- Multi-format 4K/UHD/2K/FHD capability

TECHNOLOGY

**4K****HDR****OLED**

MARKETS

**BVM-X300**

## HIGH-GRADE PROFESSIONAL MASTER MONITORS

**BVM-HX310 Professional Master Monitor**

31-inch 4K HDR TRIMASTER HX™ monitor for critical production applications

- 4K picture resolution (4096 x 2160 pixels)
- High Dynamic Range (HDR) support via multiple EOTF
- ITU-R BT.2100 (HLG), SMPTE ST2084, S-Log3, S-log3 (Live)
- 1000cd/m2 luminance display in full screen
- Wide colour spaces supported
  - DCI P3, ITU-R BT.2020, S-Gamut/S-Gamut3 and S.Gamut3.Cine
- High level of colour consistency with BVM-X300
- 12G-SDI input supported
- Video Payload ID auto configuration (VPID)
  - EOTF, colour space, transfer matrix, RGB range
- Configurable Quad View Display with 3D User LUT supported
- Multi-format 4K/UHD/2K/FHD capability

TECHNOLOGY

**4K****HDR**

MARKETS

**BVM-HX310****PVM-X550 Professional OLED Picture Monitor**

55-inch 4K TRIMASTER EL™ OLED monitor with wide viewing angle

- UHD picture resolution (3840 x 2160 pixels), 4K compatible
- Multi-format 4K/UHD/2K/FHD capability
- High Dynamic Range (HDR) support via multiple EOTF (S-Log3, ITU-R BT.2100 HLG, SMPTE ST2084)
- Quad-View Display mode with Independent EOTF & Colour Space management settings
- Supports DCI P3, ITU-R BT.2020, S-Gamut/S-Gamut3 and S.Gamut3.Cine wide colour spaces

TECHNOLOGY

**4K****HDR****OLED**

MARKETS

**PVM-X550**



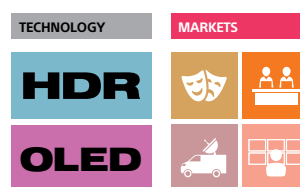


## HIGH-GRADE PROFESSIONAL MASTER MONITORS

## BVM-E251 & BVM-E171 Professional OLED Reference Monitors

24.5-inch and 16.5-inch Full HD TRIMASTER EL™ OLED reference monitors with wide viewing angle

- Accurate black reproduction, high contrast ratio and wide viewing angle
- 12-bit output signal processing engine for precise colour management and smooth accurate gamma performance
- Supports DCI P3, ITU-R BT.2020, S-Gamut/S-Gamut3 and S-Gamut3.Cine wide colour spaces
- Flicker free function and video latency below one field
- Versatile inputs: 2x 3G/HD/SD-SDI I/O, 1x HDMI and 1x composite I/O
- DC power operation for on-set cinematography
- BVML-HE171 optional HDR monitoring licence for BVM-E171



BVM-E251 &amp; BVM-E171

## HIGH-GRADE PROFESSIONAL PICTURE MONITORS

## LMD-A240, LMD-A220, LMD-A170 & LMD-941W Professional LCD Picture Monitor

24-inch, 22-inch, 17-inch and 9-inch Full HD high grade LCD monitors with wide viewing angle

- Superior quality with built-in 10-bit PVM-A signal processing for stunning colour management
- New cabinet design and common User Interface with PVM-A series and LMD-B series
- Versatile inputs: 2x 3G/HD/SD-SD I/O, 1x HDMI and 1x composite I/O
- Professional video monitor with enhanced features set
- Low power consumption in a slim, light chassis, easy to hand-carry
- DC power operation for on-set cinematography
- Version 2 firmware\* adds additional features:
  - Colour space: ITU-R BT.2020/DCI-P3/S-Gamut 3.cine
  - EOTF: 2.6/S-Log3(SDR)/S-Log2(SDR)
  - Sync-free side by side, false colours, audio muting, flexible area marker

\*Available autumn 2017

LMD-A240, A220, A170 &amp; 941W



## HIGH-GRADE PROFESSIONAL PICTURE MONITORS

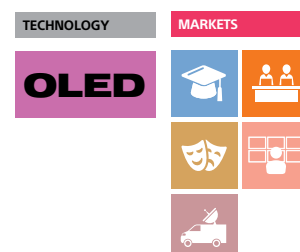
## PVM-A250 & PVM-A170 Professional OLED Picture Monitors

24.5inch and 16.5-inch TRIMASTER EL™ OLED slim, lightweight high grade picture monitors with wide viewing angle

- Stunning OLED performance with Super Top Emission technology 10-bit RGB panels
- Superior quality with built-in 10-bit signal processing for stunning colour management
- New cabinet design and common User Interface with LMD-A series and LMD-B series
- Versatile inputs: 2x 3G/HD/SD-SD I/O, 1x HDMI and 1x Composite I/O
- Professional video monitor with enhanced features set
- Low power consumption in a light & slim chassis, easy to hand-carry
- DC power operation for on-set cinematography (PVM-A170)
- Version 2 firmware\* adds additional features:
  - Colour space: ITU-R BT.2020/DCI-P3/S-Gamut 3.cine
  - EOTF: 2.6/S-Log3(SDR)/S-Log2(SDR)
  - Sync-free side by side, false colours, audio muting, flexible area marker

\*Available autumn 2017

PVM-A250 &amp; A170



## ENTRY-LEVEL PROFESSIONAL PICTURE MONITORS

## LMD-B240 & LMD-B170 Professional LCD Picture Monitors

23.8-inch\* & 17.3-inch affordable Full HD LCD monitor with high picture quality and rich features set

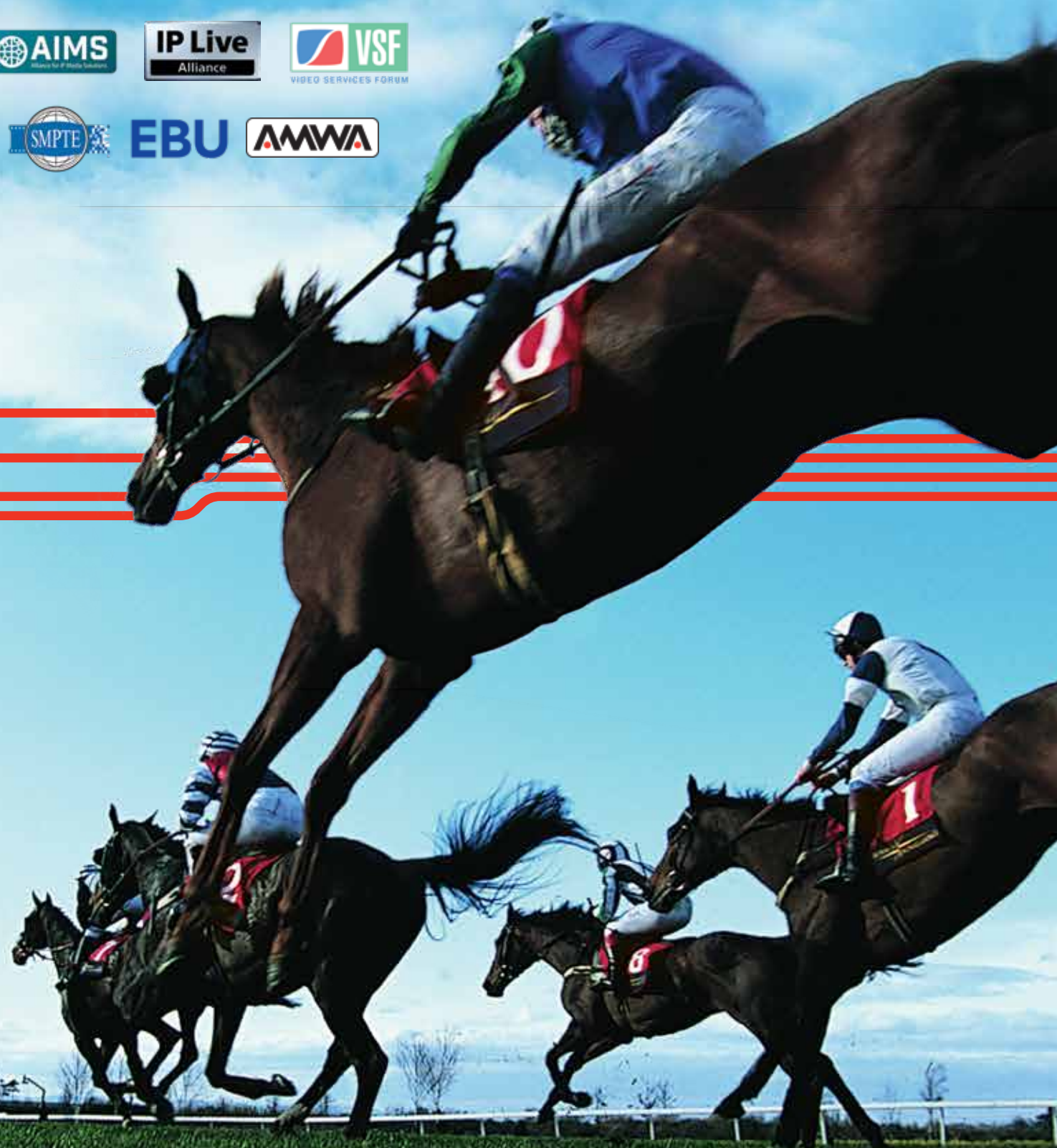
- Superior quality with built-in 10-bit PVM-A signal processing for stunning colour management
- New cabinet design and common User Interface with PVM-A series and LMD-B series
- Versatile inputs: 2x 3G/HD/SD-SD I/O, 1x HDMI and 1x composite I/O
- Professional video monitor with enhanced features set
- Low power consumption in a slim, light chassis, easy to hand-carry
- DC power for outdoor operation

\*LMD-B240 available autumn 2017

LMD-B240 &amp; LMD-B170







France Galop, the governing body of French flat and steeplechase horse racing, has deployed a highly flexible IP Live production control room to modernise racing coverage while renovating its iconic Longchamp Racecourse.



IP Live Alliance Partners Provides a range a solution with true interoperability.



## IP Live production

Enabling remote integration and remote production

From simpler infrastructure to greater flexibility and lower costs: IP Live promises plenty of advantages over SDI in today's live production environment. Sony now offers an end-to-end IP live production ecosystem, with components linked by widely-available IT industry routers.

Based on our high-performance IP Live Production System that supports latest standards including SMPTE ST 2110 & AMWA NMOS - broadcasters and content creators can integrate IP into their existing infrastructures - smoothly, progressively and with minimal disruption.





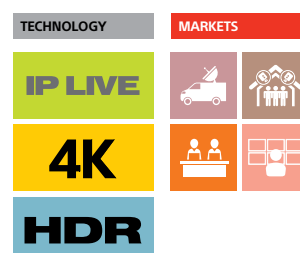


High-end IP Live production is supported by open standards software and Sony's flagship **HDC system cameras**, like the HDC-4800 and HDC-4300, **multi format HD system camera** HDC-1700/2400/2500, combined with our **camera control units** BPU-4500, BPU-4800, HDCU-4300 and HDCU-3100/4300 to leverage the power of Sony's IP Live Production System. A total IP-based infrastructure

## IP Live Production System – Open Standards and Network Media Interface

Live production interoperability framework interface

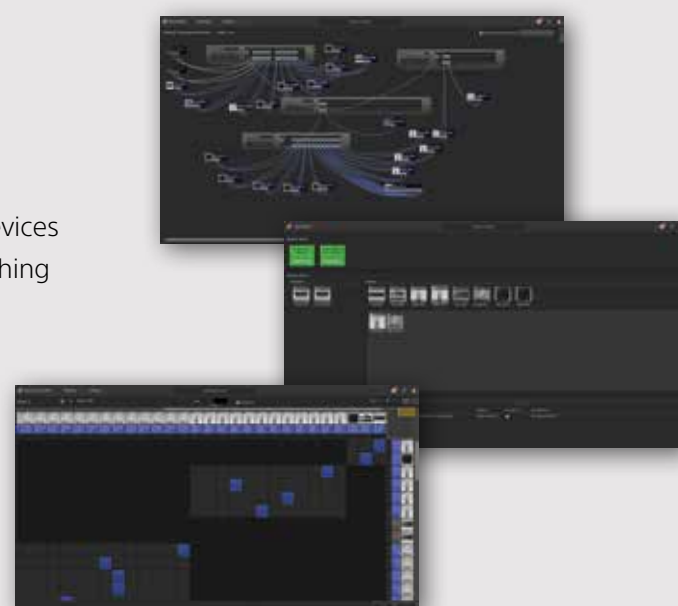
- Multiple media transport support (SMPTE ST 2110, essence independent mapping)
- Future-proof software design supporting standards evolution
- Support for COTS router hardware from leading manufacturers
- Real-time video, audio, control and tally transmission over IP
- Network synchronisation PTP support and clean video switching
- Device discovery (NDCP, AMWA NMOS) and management
- Reliable IP streaming methods and QoS management
- Secure IP video streams with real-time encryption TLS
- Sony open technology and Alliance Partners Programme



## IP Live System Manager

A true software defined network solution to setup, manage and operate IP Live Production systems

- Streamlines live production architecture design
- Enables control and configuration of multiple Edge end devices
- Easily change video routes with software cross-point switching
- Dynamic production management with workgroups
- Monitor live production network layout







## NXLK-IP40F/1

### SDI-IP gateway boards

- Enables hybrid SDI/IP production solution
- 4K/HD support
- Convert SDI to IP and IP to SDI
- 4x 3G-SDI ports and 2x SFP+



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS



## NXL-FR316

### SDI-IP signal processing unit

- 3U rack-mounting frame chassis
- Supports up to 16 open slots (NXL-FR316, NXLKIP40F)
- 2x power supply units



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS



## NXL-IP4F

### IP to SDI standalone converter unit

- Ideal for monitoring IP streams with SDI monitors
- IP (NMI) to SDI converter
- Supports HD (uncompressed) and 4K (LLVC)



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS



## NXLK-IP45F

### AV multiplexer/demultiplexer board

- Multiplex audio over IP (Dante/AES67) and video over IP
- De-multiplex audio and video over IP to SDI or IP
- Supports 4K resolutions
- Supports up to 16 audio channels
- 2x RJ45 ports and 2xSFP+ GbE ports
- 4x 3G-SDI in/out selectable and 4x 3G-SDI outputs



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS



## CAMERA CONTROL UNITS

## HDCU-3100

### IP capable Camera Control Unit

- Adds IP Live production capabilities to Sony HDC and HSC series system cameras
- Eight built-in SDI outputs, including four 3G-SDI outputs
- 4K output with processor board option HKCU-UHD30
- 12G-SDI output board option HKCU-SDI30
- Optional interface kit HKCU-SFP30 adds ST2110 output and return, NMOS IS-04/05 as well as tally, intercom and return over IP
- Long distance signal transmission up to 10km over single mode fibre with optional HKCU-SFP30



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS



## HDCU-3170

### IP capable Triax Camera Control Unit

- Adds IP Live production capabilities to Sony HDC and HSC series system cameras
- Eight built-in SDI outputs, including four 3G-SDI outputs
- 4K output with processor board option HKCU-UHD30
- 12G-SDI output board option HKCU-SDI30
- Optional interface kit HKCU-SFP30 adds ST2110 output and return, NMOS IS-04/05 as well as tally, intercom and return over IP
- Long distance signal transmission up to 10km over single mode fibre with optional HKCU-SFP30



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS



## HDCU-4300

- Number of Video output: HD x3
- Number of Video input: HD x2 (Return)
- Audio: Input x2/Output x2
- Intercom: 2ch



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS



## BPU-4500A

- Number of streams: 4K x2, HD x1
- Connector: SFP+
- Number of port: 6
- Signal formats: 10GBASE-\*\* (Depends on SFP+ transceiver module)



## TECHNOLOGY

IP LIVE

4K

HDR

## MARKETS

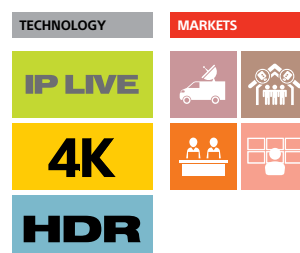




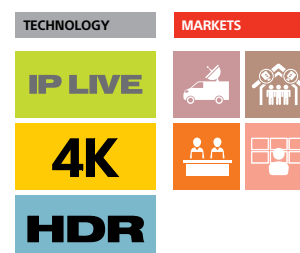
## SWITCHER I/O OPTIONS

**XKS-C8111**

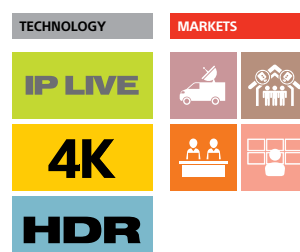
- XVS-8k/7k/6k - 2x QSFP28 Input Board for IP Live (100Gbps) - ST2110 & NMOS Compliant
- 16x Inputs in 1080i/p
- 4x Inputs in 2160p

**XKS-C8166**

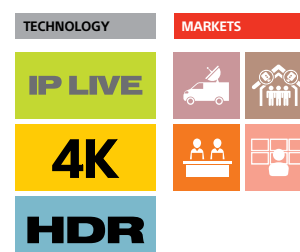
- XVS-8k/7k/6k - 2x QSFP28 Output Board for IP Live (100Gbps) - ST2110 & NMOS Compliant
- 16x Outputs in 1080i/p
- 4x Outputs in 2160p

**XKS-C9111**

- XVS-9000 - 4x QSFP28 Input Board for IP Live (100Gbps) - ST2110 & NMOS Compliant
- 16x Inputs in 1080i/p
- 8x Inputs in 2160p

**XKS-C9121**

- XVS-9000 - 4x QSFP28 Input & Output Board for IP Live (100Gbps) - ST2110 & NMOS Compliant
- 16x Inputs & Outputs in 1080i/p
- 8x Inputs & Outputs in 2160p



## NS-BUS CONTROL PANELS

**MKS-R3210**

MKS-R3210 has 32 buttons for source and destination switching.

**MKS-R1620**

MKS-R1620 has 16 buttons with source and destination display.

**MKS-R1630**

MKS-R1630 has 2 inch display for status indication, showing source, destination and levels, and used for easy configuration of the remote panel.



# Intelligent Media Services

Seamlessly capture, manage and deliver your content – adding value at every stage.



Intelligent Media Services from Sony offers a range of services and micro-services designed to transform traditional media supply chains and unlock more value from your content. Utilising cloud-native solutions, AI technology and PaaS / SaaS subscription models, Intelligent Media Services allows you to produce, manage and deliver content anytime, anywhere, to an unprecedented range of distribution platforms.



find out more on [www.pro.sony.eu/IMS](http://www.pro.sony.eu/IMS)





# Broadcast as-a-service

Share your content the way people expect it. Live.

Anywhere. Any time.

Any channel.

Always in high quality.

And only pay for what you broadcast, when you broadcast it.

No new infrastructure.

No set up costs.

No subscription.

Share events.  
Reach further.  
Broadcast Live.

## Virtual Production by Sony

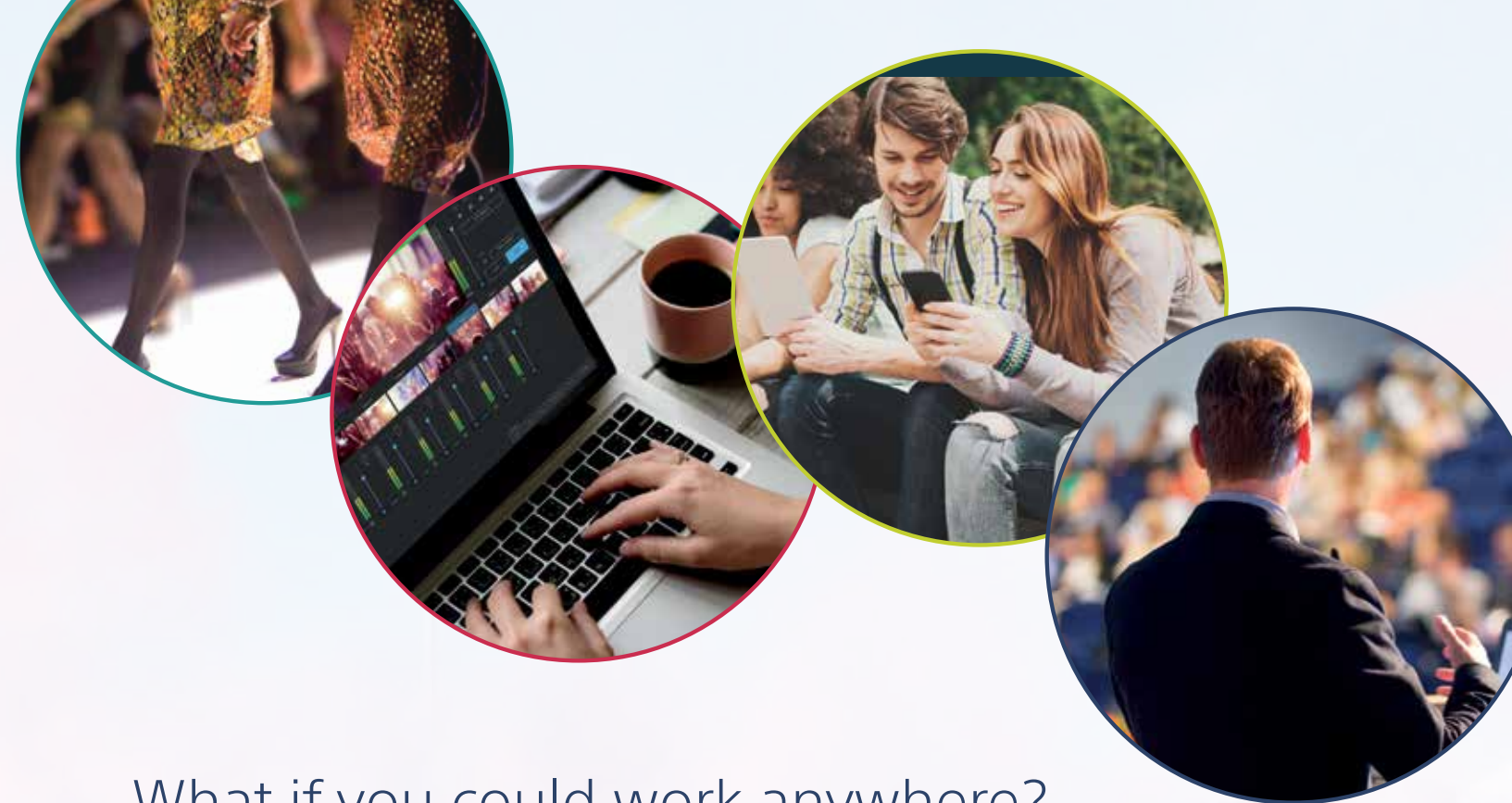
Virtual Production by Sony is the on-demand cloud-based service that provides a complete production toolset for professional multi-platform streaming, only when you need it. With no costly infrastructure requirements, no capex investment and no software to download.

Whether it's a sports event, a music festival or a fashion show, high quality live production has always demanded serious infrastructure, major upfront investment and an army of talented creatives and technicians. But today we're living in a fast-paced, dynamic media environment where your geographical location doesn't have to stand in the way of delivering amazing content, right now.

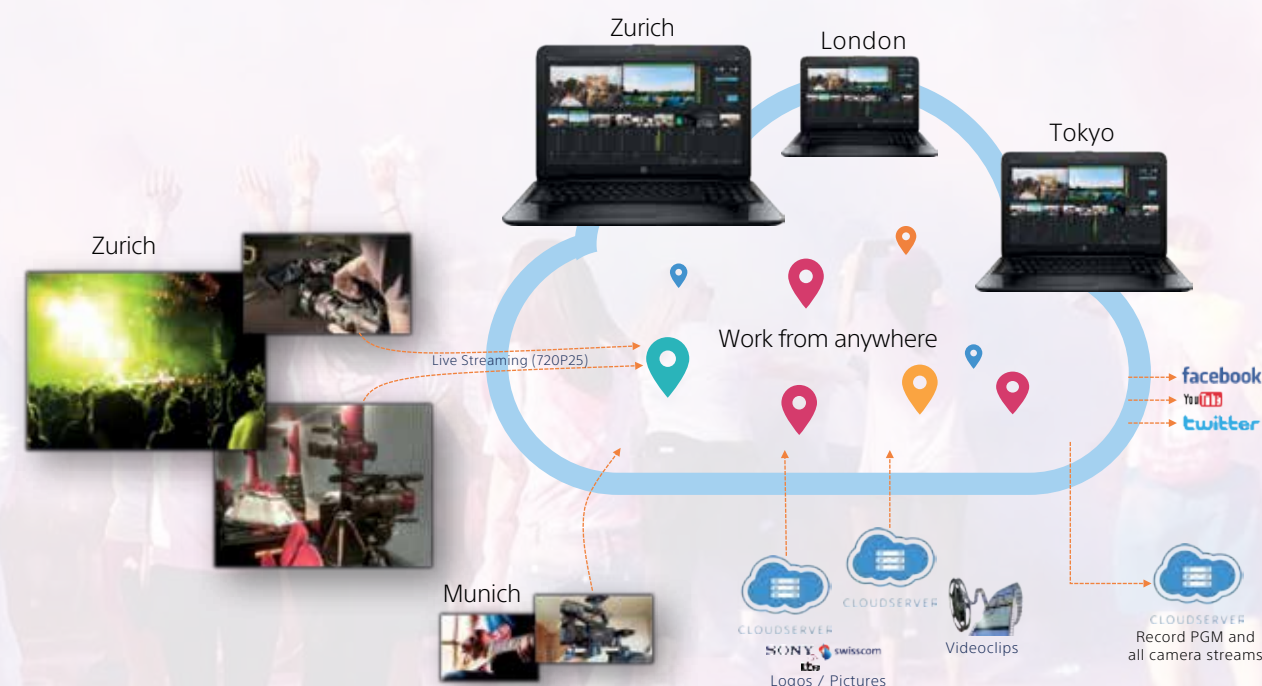
Tell your story as it's happening with Virtual Production – the totally cloud-based on-demand production service from Sony that's built to meet the needs of today's Internet-first audiences. Requiring no infrastructure and no upfront investment, Virtual Production gives content creators instant access to a range of professional-quality studio tools to produce, edit and deliver professional-quality content across multiple platforms.

Virtual Production combines multi-camera wireless acquisition, sophisticated QoS (Quality of Service) technology for better-looking pictures and fewer dropouts over cellular LTE networks, and a range of graphics and production tools to deliver streamed content fast and professionally across multiple platforms. Working with standard Internet protocols, it's frame accurate and adapts to different bit rates and frame rates to ensure stable, consistent pictures and sound.

And as a service, you only pay for what you need, when you need it. Allowing you to focus on your story, whilst saving precious time and cutting costs.



## What if you could work anywhere?



## What it does

- Multiple live stream inputs (local/remote)
- Add logos/pictures to PGM stream
- Add social media tweets to PGM stream
- Mix live-stream with preproduced videoclips
- Record all input- and PGM stream
- Parallel streaming to three different destinations
- Don't bother about complex setup
- Just concentrate on the actual production

find out more on [www.pro.sony.eu/virtualproduction](http://www.pro.sony.eu/virtualproduction)



# Produce anywhere

Crews on location use wireless transmission to feed camera sources to a cloud-hosted virtual switcher. This allows vision mixing of content from anywhere in the world using a standard web browser as content is securely received and logged in the Virtual Production service. Operators can switch camera feeds, add graphics, logos, captions and audio before streaming the programme output directly to online platforms like YouTube and Facebook Live. It's even possible to cut pre-recorded packages into the stream.



Multi-channel audio mixer



Video effects including Picture-in-Picture and Side-by-Side



Simple title creation and social media integration

## Features

Vision mixing	Up to 6 cameras feeds (via QoS, RTP or RTMP) 2 x video players (unlimited clips assignable to each one) 1 image viewer
Graphics	2 x graphics channels 2 x titles Integration of titles with social media feeds (via Twitter)
Audio mixing	Independent audio mixing of all input channels, Pre-fade listen, Automatic audio follow
User roles	Definable user roles for vision mixing, graphics and audio

Transition	Cut Fade User definable transition duration Picture-in-picture Side-by-side
Output	Output to up to 3 different output destinations per switcher (including Facebook Live, YouTube or a customer's own streaming platform)
Recordings	ISO recording Mixed output

There's no need for any production infrastructure on site: just compatible cameras, microphones and transmitters. Aside from your preferred acquisition kit, everything else – including video switching and processing – is instantly available as a highly resilient, reliable cloud-based service. And you don't even need to install or run any software locally.

- Powerful video processing engine running on Amazon Web Services (AWS)
- Synchronisation of audio and video streams
- Frame-accurate switching
- Intuitive, low-latency web based interface
- ISO and programme stream recording
- Integration with Sony Media Backbone Hive and Ci Media Cloud Services
- Captions, graphics and clip playout server

## PXW-Z280

### Compact handheld XDCAM 4K HDR camcorder

- 3CMOS 1/2-type sensor captures broadcast-quality 4K
- XAVC-Intra and XAVC-Long for 4K QFHD and HD, plus MPEG HD422, MPEG HD and DVCAM
- Fast precision autofocus and professional 17x optical zoom lens
- Dual Link Cellular networking
- Flexible HDR workflow with HLG and S-Log3



## PXW-Z90

### Palm-sized XDCAM 4K HDR camcorder

- 14.2 megapixel (effective) 1.0-type stacked CMOS image sensor captures high quality 4K
- XAVC QFHD 100Mbps at 30p/25p/24p, XAVC HD Long GOP 422 50Mbps, MPEGHD422 50Mbps\*, MPEGHD420 35Mbps and AVCHD
- 12x optical zoom lens
- High Frame Rate 120fps for 5x slow motion
- Instant HDR workflow with HLG
- Wireless networking
- Dual XLR audio connectors

\*With optional license







## Looking after you and your professional product



# PrimeSupport

PrimeSupport goes beyond your standard product warranty, giving you privileged access to expert technical advice when you need it.

Our multi-lingual helpdesk can resolve a wide range of operational issues by phone or email. And depending on your chosen level of PrimeSupport, you'll enjoy more great benefits for extra peace of mind.

There's a family of four PrimeSupport care options, tailored to your specific needs in any live production environment.

Get telephone and email helpdesk (during business hours) for assistance on setting up and using your Sony Professional product. If there's technical problem with your product that requires fixing, we'll take care of it with our 14-day repair service\*.

PrimeSupport  
**Pro**

Benefit from extended helpdesk access to our product specialists beyond normal business hours. We'll keep you up and running with our fast-track repair service that includes all shipping costs. We may also offer a loan replacement unit and/or other additional services while your product is being repaired.

PrimeSupport  
**Elite**

Get as much support as you need, when you need it. A la carte options include initial product set-up, on-site engineering support, product health-checks and training.

PrimeSupport  
**On-Demand**

We'll design a support solution that's perfectly tailored to your business and operational needs. You'll also enjoy enhanced helpdesk support with dedicated 60-minute engineer call-back, plus our guaranteed fast-track repair service with no-cost shipping.

PrimeSupport  
**Bespoke**

\*14-day repair service is indicative only: actual turnaround time not guaranteed.





## PrimeSupport Bespoke

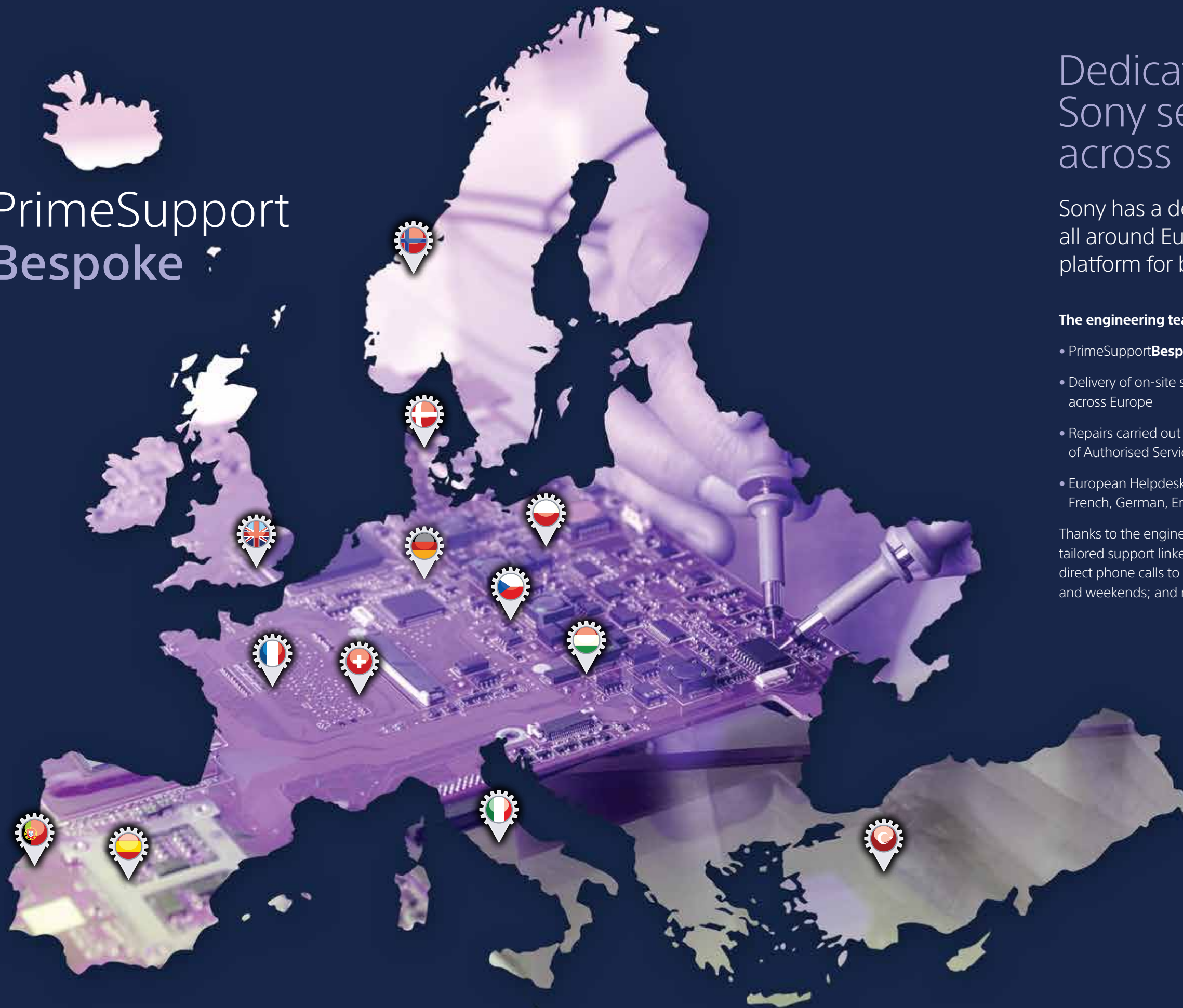
## Dedicated team of Sony service engineers across Europe

Sony has a dedicated team of service engineers all around Europe, offering the largest support platform for broadcast products available.

### The engineering team offers:

- PrimeSupport**Bespoke** packages created by a team of 6 contract designers
- Delivery of on-site support through approximately 60 field engineers across Europe
- Repairs carried out at Sony Pencoed (UK), Sony Alsace (FR) and network of Authorised Service Centres
- European Helpdesk with eight Technicians: 00 800 7669 0000 covering French, German, English, Spanish, Italian

Thanks to the engineering team, customers can access a whole range of tailored support linked to their level of PrimeSupport packages. These include: direct phone calls to Sony Specialists; extended hours support on weekdays and weekends; and next-day spare parts shipment.





To find your local Authorised Service Centre, please visit:  
[www.sony.co.uk/pro/section/asc-map](http://www.sony.co.uk/pro/section/asc-map)



# Authorised Service Centres for professional products

With a well-established network of independent Authorised Service Centres across Europe, Sony provides customers with fast access to professional product support.

Authorised service partners are trained, managed and supported by Sony so customers can expect the best possible service including rapid response and unrivalled technical expertise for complete peace of mind.

## Countries with local Authorised Service Centres:



- Country with local Authorised Service Centre
- Country without local Authorised Service Centre\*

\* Please find an Authorised Service Centre from a neighbouring country, or contact the Helpdesk.

Trained,  
managed  
and  
supported  
by Sony







## Professional & Managed Services

From OB vehicles to complete news studios and much more – whatever the scope of your live production ambitions, we'll help make it happen.

**Sony's Professional & Managed Services group operates worldwide, delivering products, systems and complete solutions that help our customers achieve their technological, creative and commercial goals.**

We've got the unmatched know-how and practical experience to ensure successful delivery of every live production project, large or small. Tap into as much resource as you need, whenever you need it and on any scale.

We're on hand to provide strategic and technical consultancy as well as hands-on help – from initial business modelling, workflow

analysis and solution architecture to practical implementation, technical integration, acceptance, training, maintenance and support.

Working alongside you as prime contractor, we can also orchestrate the seamless integration of other third party products – ensuring efficient delivery of a complete solution, on time and to budget.





# Training

Sharpen your skills and stay ahead of the game with the Sony Professional Training Team.

We offer a wealth of insight and expertise to help broaden your knowledge – from free online e-Learning to product masterclasses, seminars and face-to-face courses led by experienced broadcast production industry professionals.

Our core team of trainers are all experts in their field. They're supported by a network of Independent Certified Experts who can deliver training throughout Europe in your local language.



## Get the Knowledge

The Knowledge Portal is our free online training platform that makes learning accessible anytime, anywhere. It's wonderfully intuitive to navigate on computers or tablets, with hundreds of e-learning modules and more being added all the time.

It's the perfect way to deepen your understanding of our products, technologies and solutions. Learn at your own speed, and earn credits for every module you complete.



## Bespoke Training Courses

We'll keep your knowledge and practical skills up to date in a fast-moving world. Based on your requirements and budget we can tailor courses to suit every organisation's needs. Training can be delivered at Sony's Digital Motion Picture Centre Europe (DMPCE) in Pinewood Studios, at one of our offices or at a European location of your own choice.



## IP Live Studio at Pinewood

Our cutting-edge facility at Pinewood Studios near London lets broadcast operations and engineering staff experience the complete IP Live ecosystem. It's a unique environment to evaluate the latest products, and experience the benefit of IP-enabled workflows at first hand alongside other industry professionals.



For full features visit [www.pro.sony.eu](http://www.pro.sony.eu)

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