

**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)

**4K**

**SR Live**  
for HDR

**IP Live**  
Production System

# 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

4	4K Live Production	4K
6	HDR Live Production	HDR
8	IP Live Production	IP LIVE

## Application Sectors

10	Education	
12	Live Streaming	
14	Corporate	
16	Reality TV	
18	News Studios	
20	Live Entertainment	
22	Outside Broadcast	
24	Remote Production	

## Sony Solutions

28	PTZ Cameras	
34	Studio Cameras	
42	Production Switchers	
50	Servers and Recording	
56	Professional Audio	
64	Professional Monitors	
70	IP Live Production	
76	Virtual Production	

## Service and Support

78	PrimeSupport
80	Engineering Team
82	Sony Authorised Services Centres
84	Professional & Managed Services
86	Training Team

# 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.

4K

Following on from a successful deployment this summer at the FIFA Confederations Cup in Russia, the Sony Sports Innovations team has been selected to provide Venue Production Services to Host Broadcast Services at next year's FIFA World Cup. We will be delivering both the 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



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.

# 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.





**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-NX5R**  
Full-HD Compact  
Camcorder  
3CMOS with latest  
technology



**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

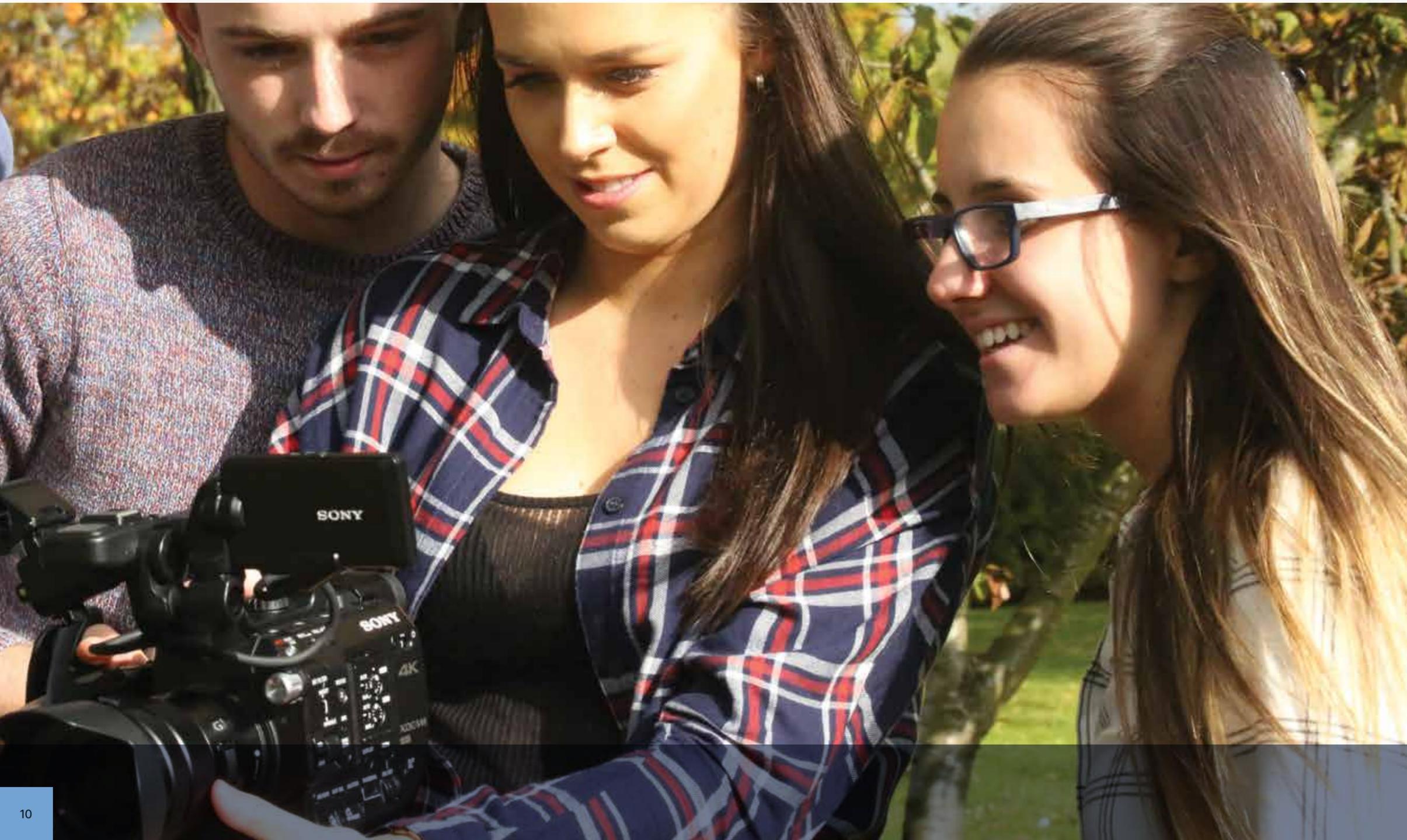
### Inspiring a new generation

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



### HXR-NX5R

Full-HD Compact Camcorder 3CMOS with latest technology



### 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.



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



### HXR-NX5R

Full-HD Compact Camcorder 3CMOS with latest technology



### 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

## 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.



**SRG-360SHE**

Affordable HD/SD  
Robotic cameras

**BRC-H800**

HD Pan Tilt Zoom  
camera

**MVS-3000A**

Affordable compact HD/SD  
video switcher

**PWS-4500**

4K/HD multi-port AV storage

**LMD-A Series**

High-grade LCD monitors

**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

**LMDA series**

TRIMASTER EL™ OLED monitors with wide viewing angle

**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 series

TRIMASTER EL™ OLED monitors with wide viewing angle



### 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.

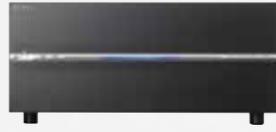
In live configuration, our large format sensor cameras capture stunningly natural 4K Ultra HD images with incredible detail, rich colour and contrast. Teamed with wide aperture lenses they're also the natural choice for creating cinematic depth-of-field effects. And now by shooting in 4K HDR, content 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**

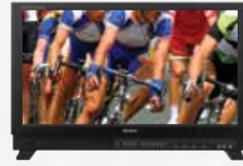
Multi-format 4K, HD, HFR and HDR cameras

**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.

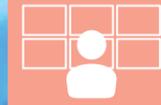
Every year Sony helps hundreds of broadcasters and facilities specialists capture and deliver spectacular images in 4K and Full HD.

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-P43**  
4K/HD POV Camera



**LMD Series**  
High-grade LCD monitors



**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

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

### 4K HD

#### BRC-X1000 OPTIONAL ACCESSORIES



**RM-BR300**  
Remote control unit for BRC series cameras

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

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



TECHNOLOGY	MARKETS
4K	
IP	

## BRC-H800

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

### HD

#### BRC-H800 OPTIONAL ACCESSORIES



**RM-BR300**  
Remote control unit for BRC series cameras

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

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



TECHNOLOGY	MARKETS
IP	

## 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-BR300**  
Remote control unit for BRC series cameras

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



TECHNOLOGY	MARKETS
IP	

## 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
IP	



## 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-BR300**  
Remote control unit for  
BRC series cameras



**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

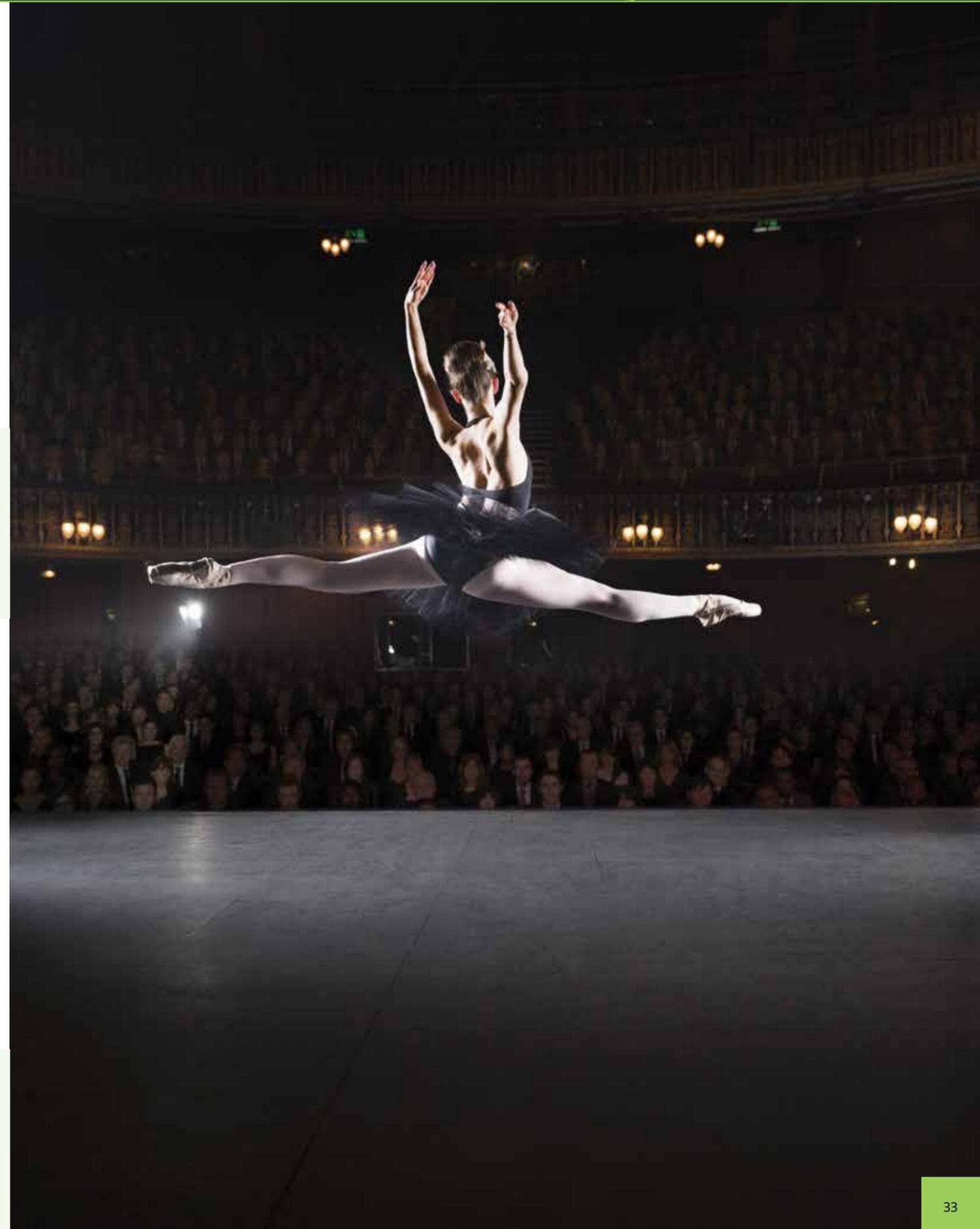
OPTIONAL ACCESSORIES



**RM-BR300**  
Remote control unit for  
BRC series cameras



**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



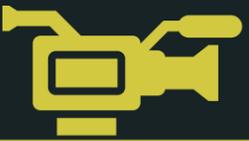
## Studio Cameras

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-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

TECHNOLOGY	MARKETS
4K	
IP LIVE	
HDR	



HDC-4800

## 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

TECHNOLOGY	MARKETS
4K	
HDR	



HDRC-4000

## HDC-4300

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

- IP Live compatible
- HD System as standard up to 1080/150p
- 12G-SDI capability
- High-frame-rate capture for 4K 2x and HD 8x super slow motion\*
- HDR Capable

\*Option licenses required

TECHNOLOGY	MARKETS
4K	
IP LIVE	
HDR	



HDC-4300

## HDC-P43

4K/HD POV Camera

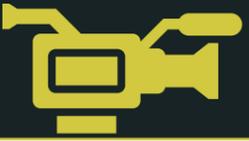
- Direct installation of B4-mount lenses
- Superb 4K capabilities with high dynamic range and wide colour space
- 12G-SDI capability
- IP Live compatible
- High-frame-rate capture for 4K 2x and HD 8x super slow motion\*
- Seamless integration into Sony HD workflows
- Compact and lightweight with low power consumption
- Two remote control optical filters

\*Option licenses required

TECHNOLOGY	MARKETS
4K	
IP LIVE	
HDR	



HDC-P43



## 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-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



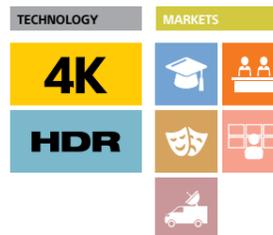
## HDC-1700

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



## HSC-100RT & HSC-300RT

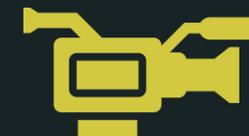
Three 2/3-inch Power HAD FX CCD sensors portable HD/SD cameras for digital triax operation, plus large lens options

- 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 &amp; HSC-300RT





## 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

## 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

## 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





## 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.



**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





## XVS-9000

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

- 5 M/E operation in 4K with 4 keys 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 keys 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



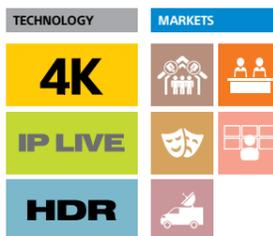
XVS-7000

## XVS-8000

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

- 5 M/E operation in 4K with 4 keys 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 keys 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 keyers on PP row
- 80 inputs/48 outputs
- Optional 2 or 4 channel DME and 8 channel format conversion

TECHNOLOGY	MARKETS
4K	
HDR	



MVS-7000X

## MVS-3000A

Affordable HD/SD video switcher with 2M/E

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

MARKETS



HD

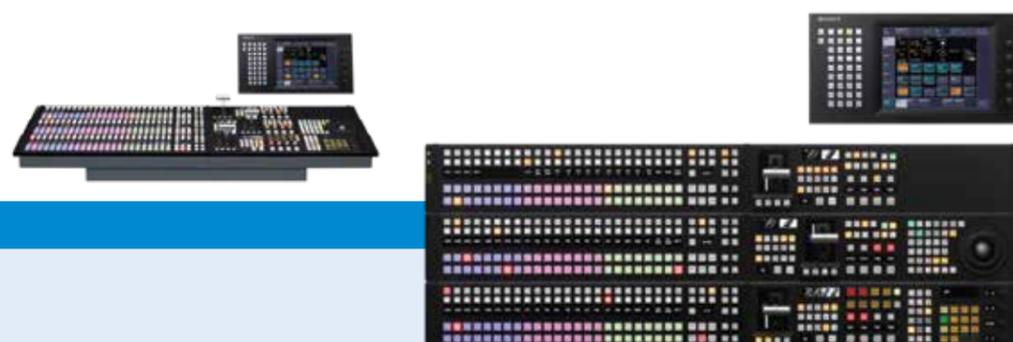
MVS-3000A

## MVS-6530

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

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

MARKETS



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

- 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



**4K HD** XAVC ProRes DNxHD

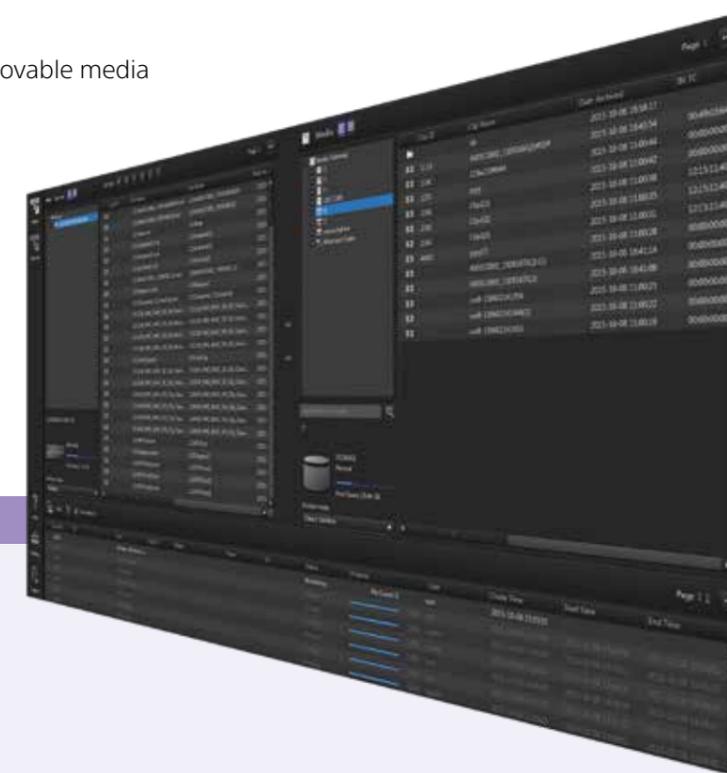


PWS-4500

## 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



PWS-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

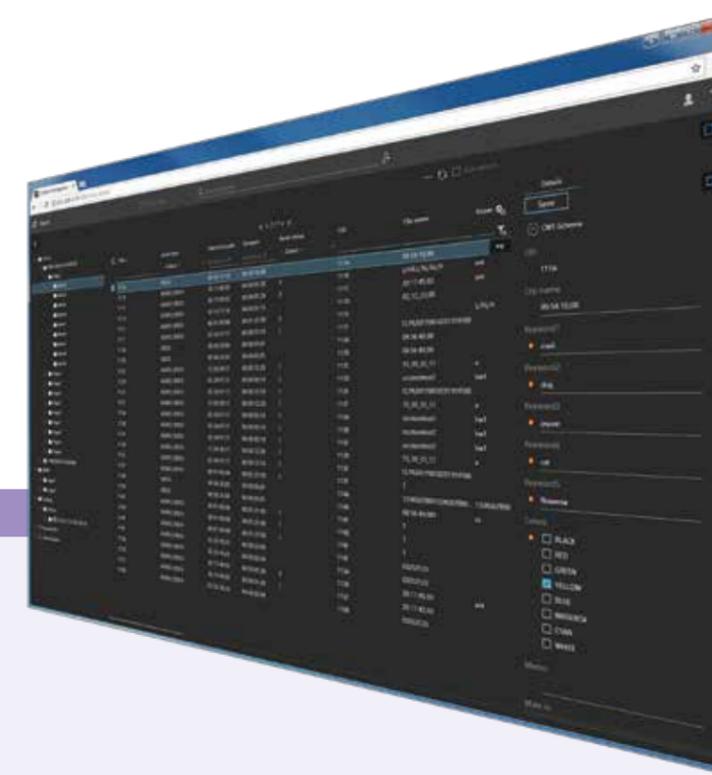


PWS-110PR1

## PWS-110CM1

Content Management for

- 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



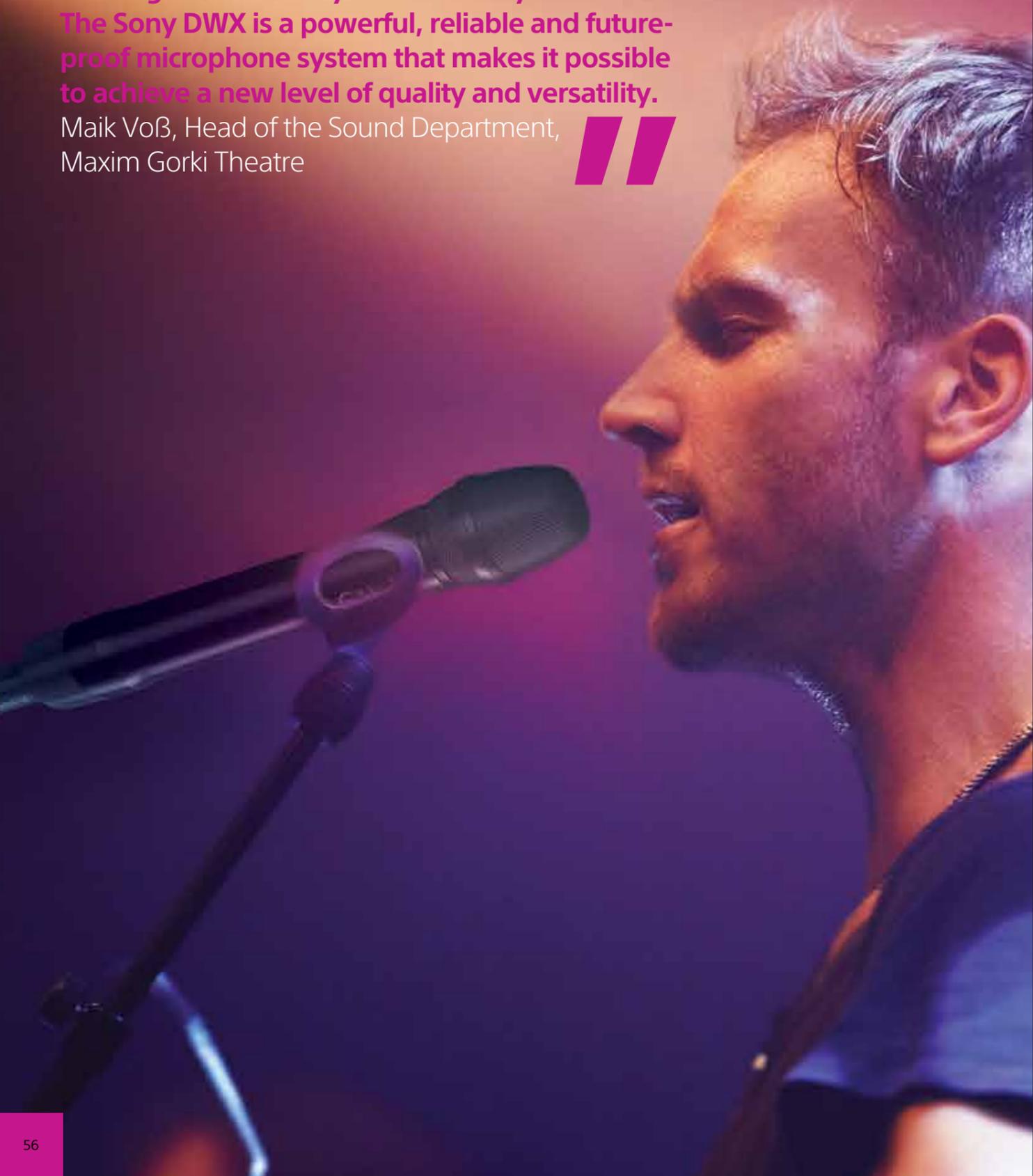
PDW-HD1550/PDW-HD1200





**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.



## 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-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

## WiDIF-HP

### Cross Remote

- 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-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



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



DWT-B03R

OPTIONAL ACCESSORIES



**DWT-BC1**  
Charger Unit



**ECM-77LM - ECM-77**  
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



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



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

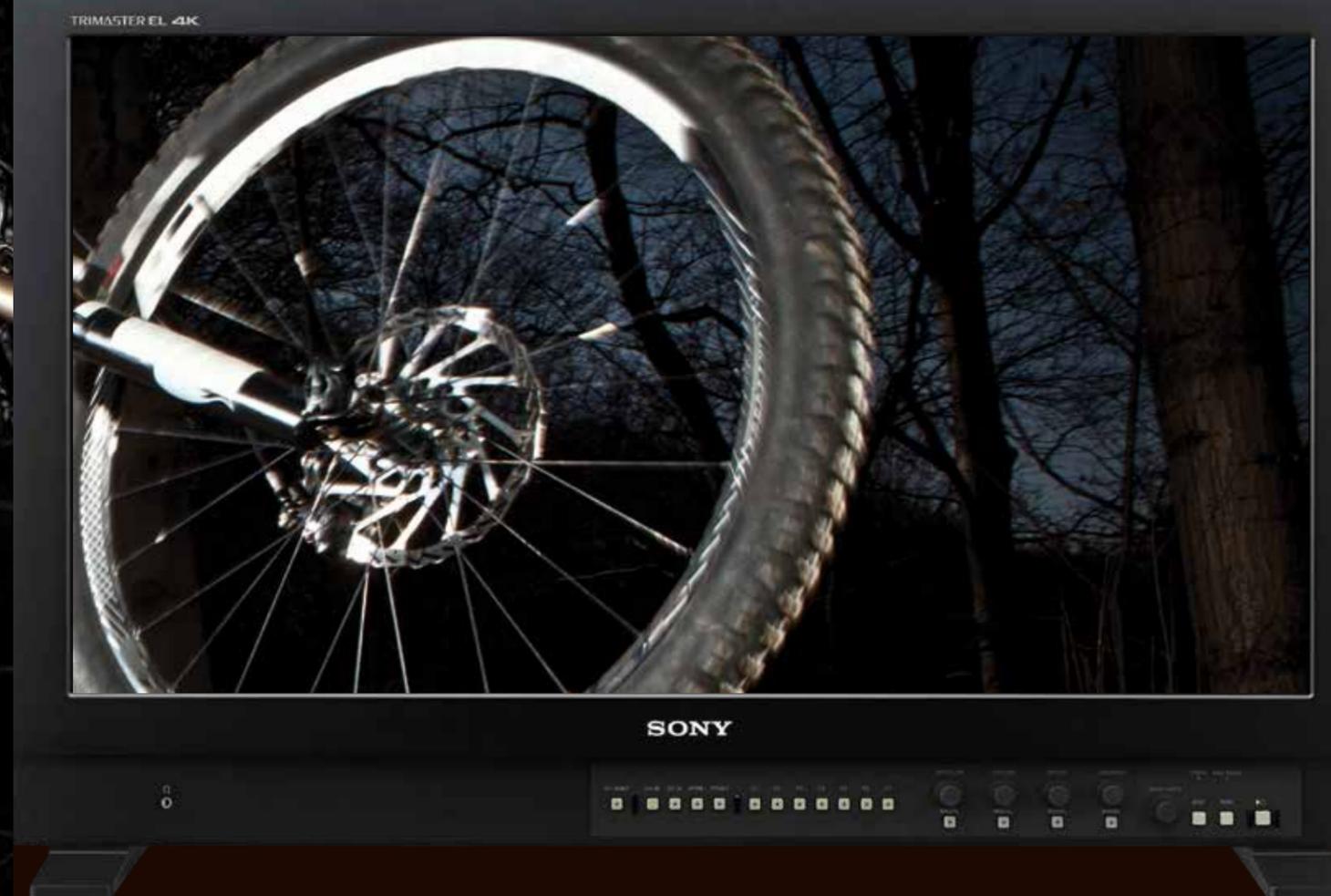
Digital wireless lavalier microphone set for presenters and vocalists

- 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.

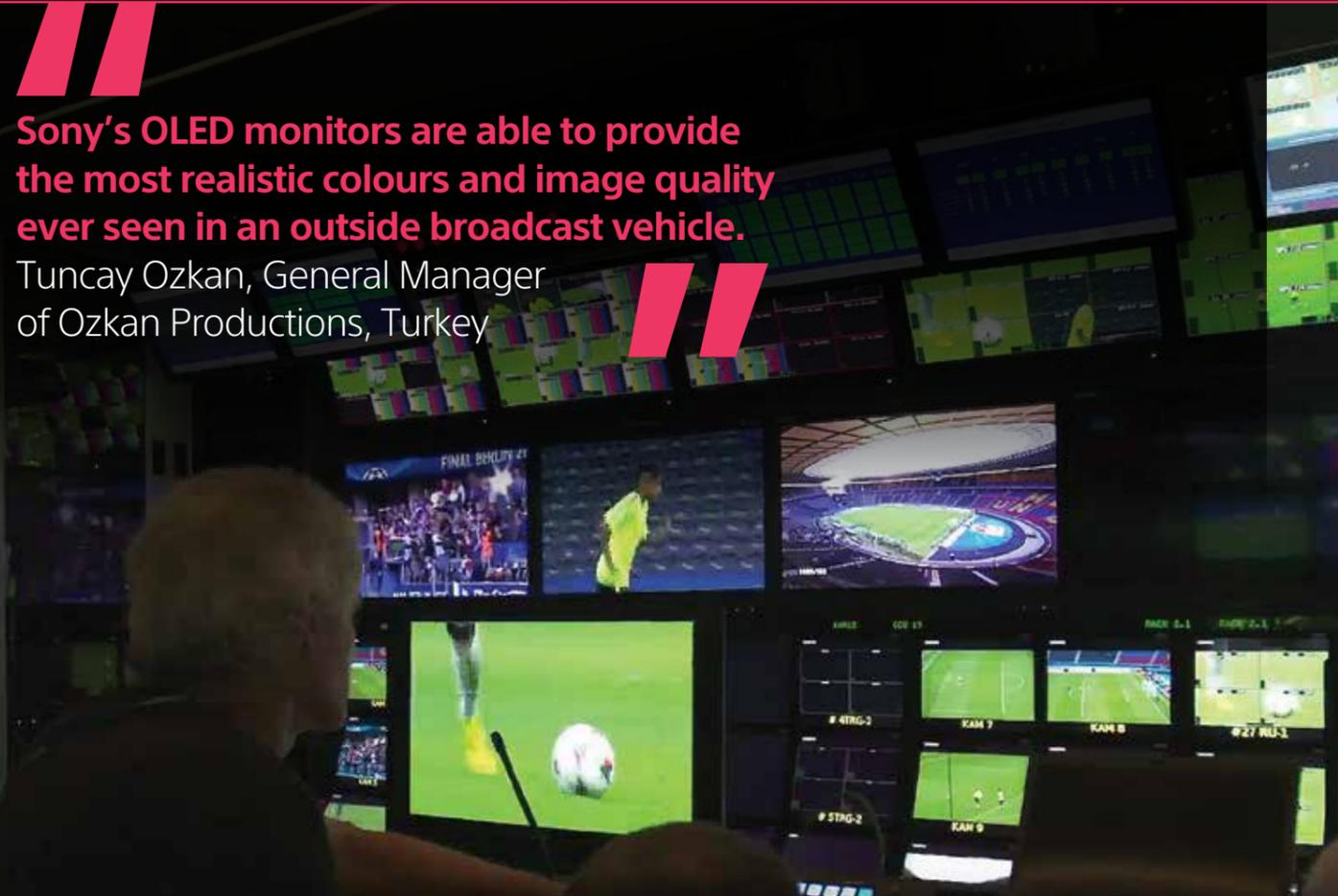
The most demanding content creators trust the exceptional clarity, contrast, black levels, wide colour gamut and low latency of our reference grade BVM-X300 Ver2 and 55" PVM-X550 monitors that are ideally suited to high-end 4K HDR production.

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.



Sony's OLED monitors are able to provide the most realistic colours and image quality ever seen in an outside broadcast vehicle.

Tuncay Ozkan, General Manager of Ozkan Productions, Turkey



## 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	MARKETS
4K	
HDR	
OLED	



PVM-X550



### 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	MARKETS
4K	
HDR	
OLED	



BVM-X300



### HIGH-GRADE PROFESSIONAL MASTER MONITORS

## BVM-E251 & BVM-E171 Professional OLED Master 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

TECHNOLOGY	MARKETS
HDR	
OLED	



BVM-E251 & BVM-E171



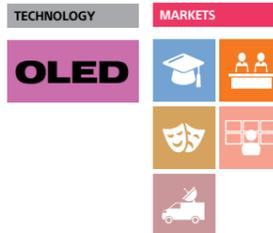
## HIGH-GRADE PROFESSIONAL PICTURE MONITORS

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

24.5-inch 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 & 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

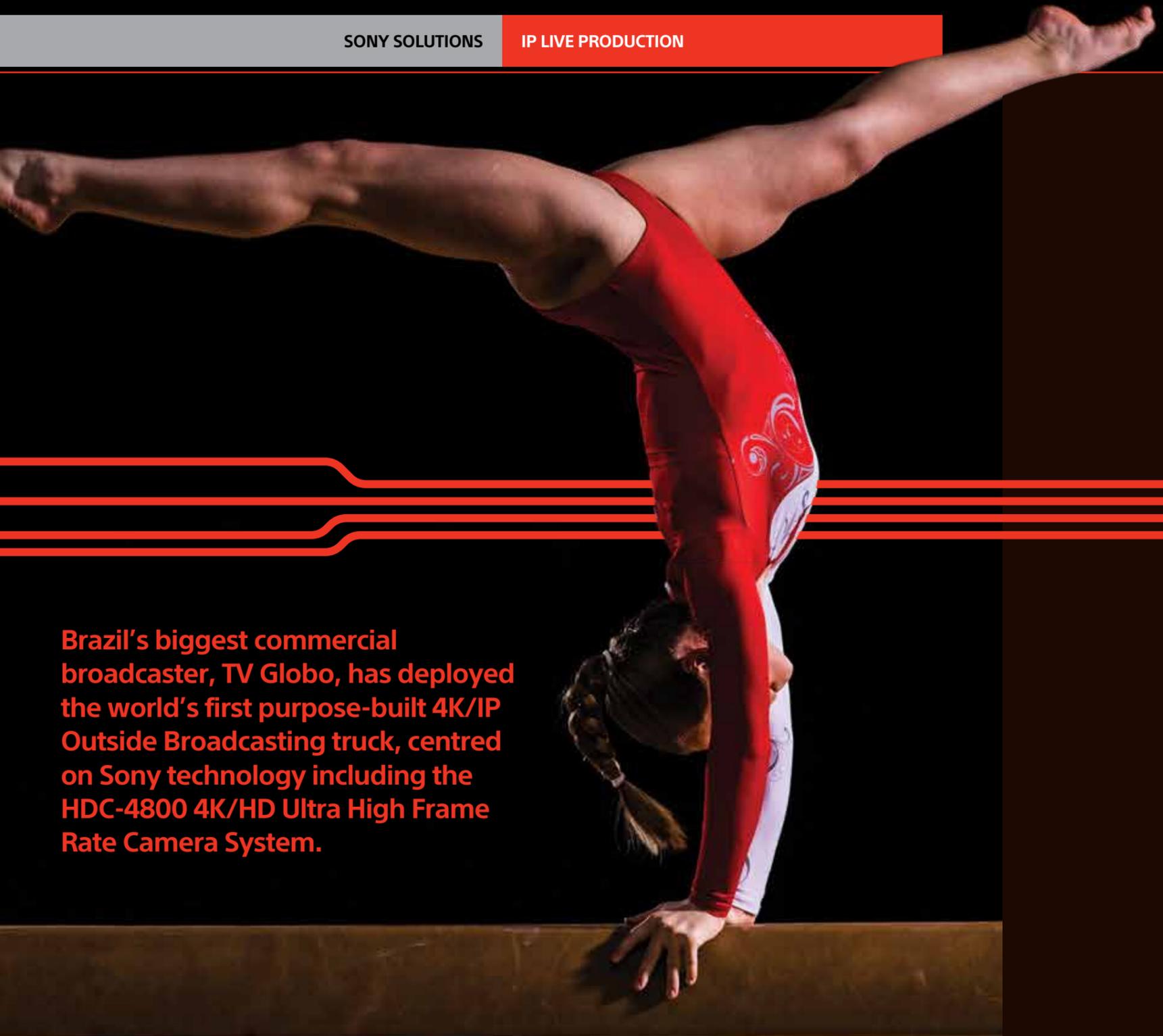
**LMD-B240 & LMD-B170****LMD-A240, LMD-A220, LMD-A170 &  
LMD-941W Professional LCD Picture Monitor**

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 & 941W**



Brazil's biggest commercial broadcaster, TV Globo, has deployed the world's first purpose-built 4K/IP Outside Broadcasting truck, centred on Sony technology including the HDC-4800 4K/HD Ultra High Frame Rate Camera System.



## IP Live production

Ready Today, Open For Tomorrow

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.



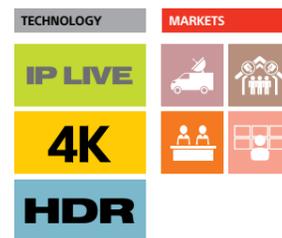


High-end IP Live production is supported by products like our **HDC-4800, P43** and **HDC-4300** system cameras, combined with the **BPU-4500, BPU-4800** or **HDCU-4300** to leverage the power of Sony's IP Live Production System. A total IP-based infrastructure is completed with our **PWS-4500** production servers and **XVS** vision mixer range.

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

Live production interoperability framework interface

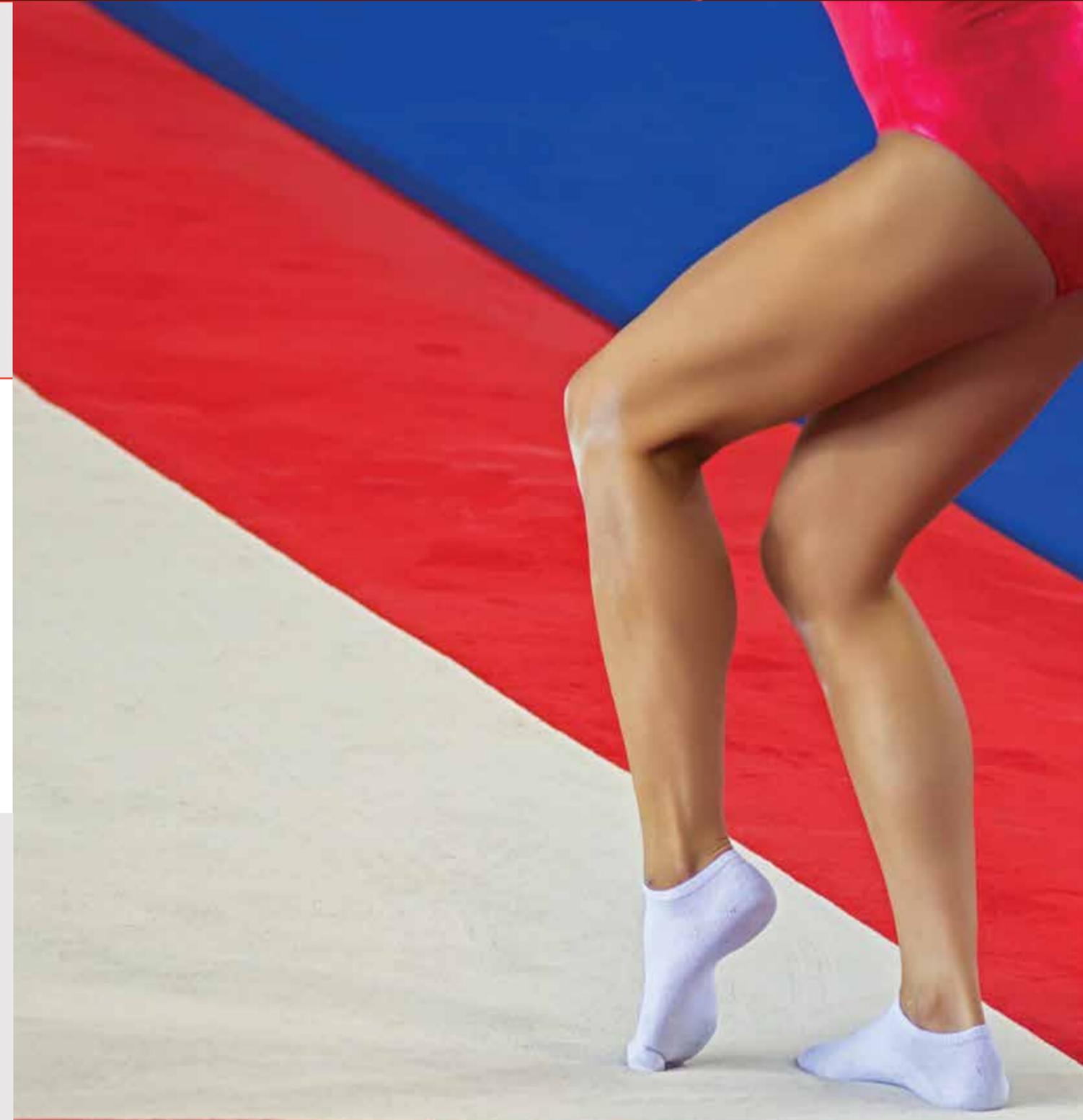
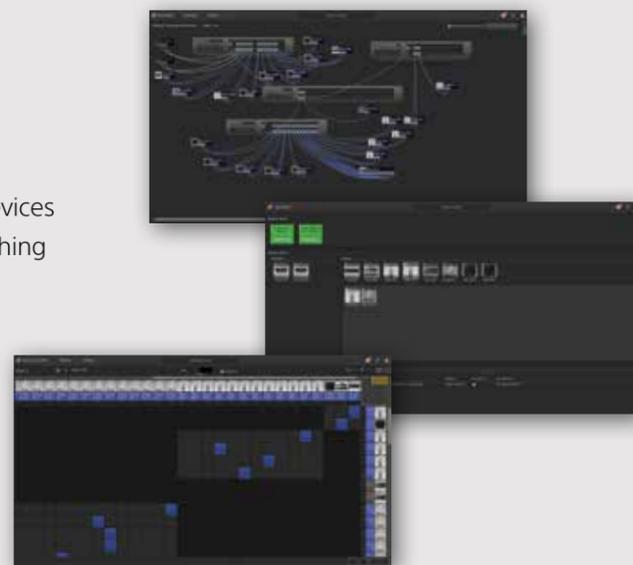
- Multiple media transport support (SMPTE ST 2110, essence independent mapping)
- Future-proof software design supporting standards evolution
- Support for COTS router hardware from leading manufacturers
- Real-time video, audio, control and tally transmission over IP
- Network synchronisation PTP support 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

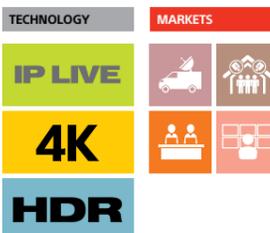
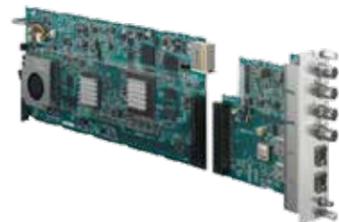




## NXLK-IP40F

### SDI-IP gateway boards

- Enables hybrid SDI/IP production solution
- 4K/HD/SD support
- Convert SDI to IP and IP to SDI
- Supports Essence Independent Mapping and SMPTE ST2110 HD (Future)
- 4x 3G-SDI ports and 2x SFP+



## NXL-IP4F

### SDI-IP standalone converter unit

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



## NXL-FR318

### SDI-IP signal processing unit

- 3U rack-mounting frame chassis
- Supports up to 9 NXLK-IP40F
- 2x power supply units



## NXLK-IP45F

### AV multiplexer/demultiplexer board

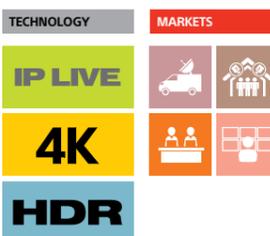
- Multiplex audio over IP (Dante/AES67) and video over IP
- De-multiplex audio and video over IP to SDI or IP
- Supports HD and 4K resolutions
- Supports up to 16 audio channels
- 2x RJ45 ports and 2xSFP+ GbE ports
- 4x 3G-SDI in/out selectable and 4x 3G-SDI outputs



## 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





# 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.

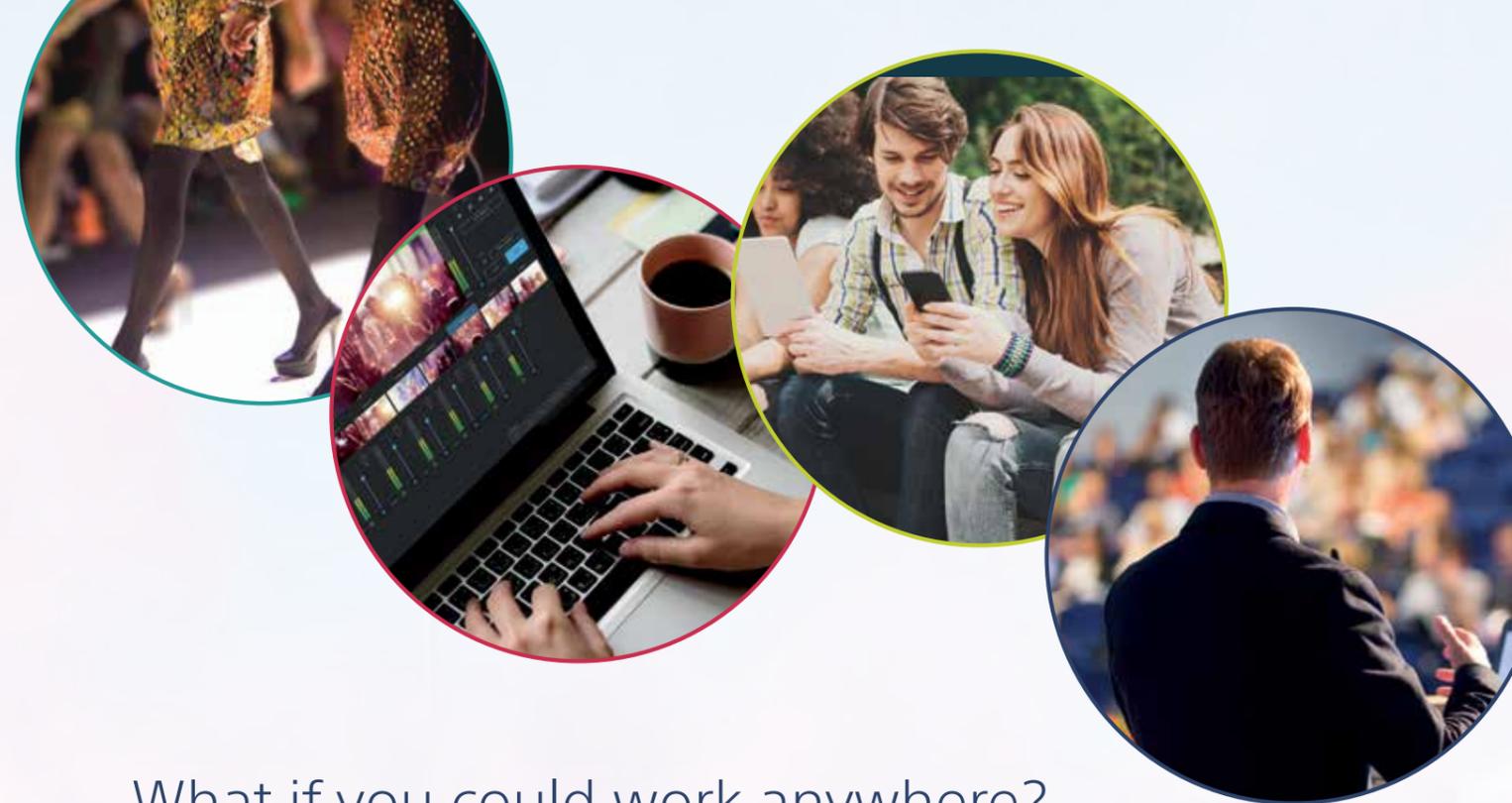
## Virtual Production by Sony

Virtual Production is an on-demand cloud production service that provides a complete production toolset for multi-platform professional streaming, only when you need it. There no infrastructure requirements, no capex investment, not even the need to download a software...

Your audience is now! So tell your story now as it's happening with Virtual Production the cloud-based production service for content creators needing to meet the needs of today's Internet-first audiences. Sony's Virtual Production Service allows content creators instant access to a range of studio tools in order to produce, edit and deliver content professionally.

Virtual Production is an on-demand cloud production service that 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. It is frame accurate, works with any internet protocol standard and adapts to different bit rates and frame rates to ensure 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)



## 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

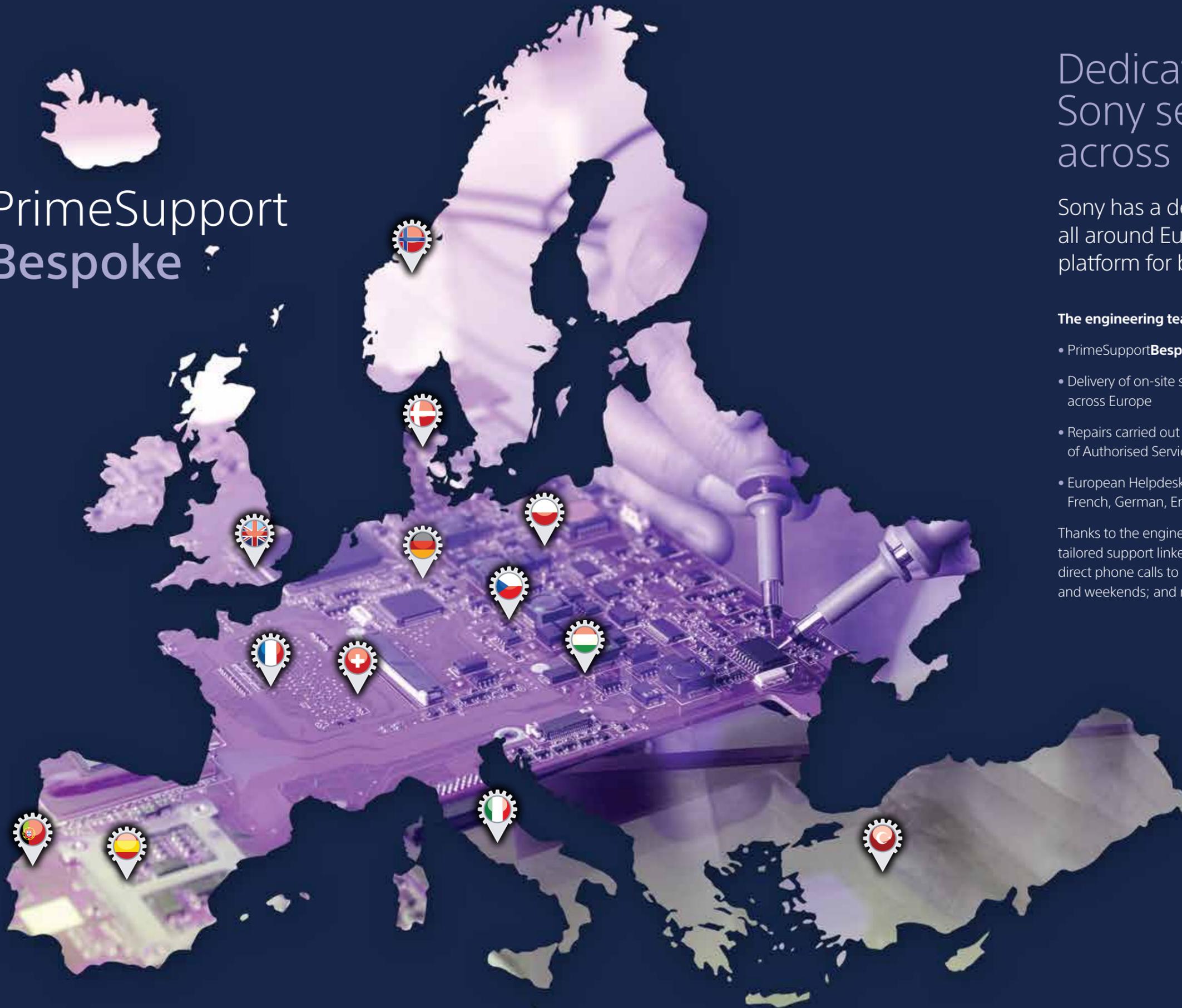
## Dedicated team of Sony service engineers across Europe

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:

- |   |   |   |
|---|---|---|
|  Austria              |  Germany     |  Romania     |
|  Belgium              |  Greece      |  Serbia      |
|  Bosnia & Herzegovina |  Hungary     |  Slovakia    |
|  Bulgaria             |  Italy       |  Spain       |
|  Croatia              |  Netherlands |  Switzerland |
|  Czech Republic       |  Norway      |  Turkey      |
|  Denmark              |  Poland      |  UK          |
|  France               |  Portugal    |   |



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)

© 2018 Sony Corporation. All rights reserved. Reproduction in whole or in part without permission is prohibited. Features and specifications are subject to change without notice. All non-metric weights and measurements are approximate. Sony and make.believe are trademarks of Sony Corporation. All other trademarks are the property of their respective owners.

Distributed by

**Professional Solutions Europe** is the leading supplier of AV/IT solutions to businesses across a wide variety of sectors including, **Media and Broadcast, Video Security and Retail, Transport & Large Venue markets**. It delivers products, systems and applications to enable the creation, manipulation and distribution of digital audio-visual content that add value to businesses and their customers. With over 25 years' experience in delivering innovative market-leading products, **Professional Solutions Europe** is ideally placed to deliver exceptional quality and value to its customers. **Sony's Professional Services** division, its systems integration arm, offers its customers access to the expertise and local knowledge of skilled professionals across Europe. Collaborating with a network of established technology partners, Professional Solutions Europe delivers end to end solutions that address the customer's needs, integrating software and systems to achieve each organisations' individual business goals. For more information please visit [www.pro.sony.eu](http://www.pro.sony.eu)

HCT\_LIVE\_PRODUCTION\_CATALOGUE\_J6333\_UK\_05/04/2018

**SONY**