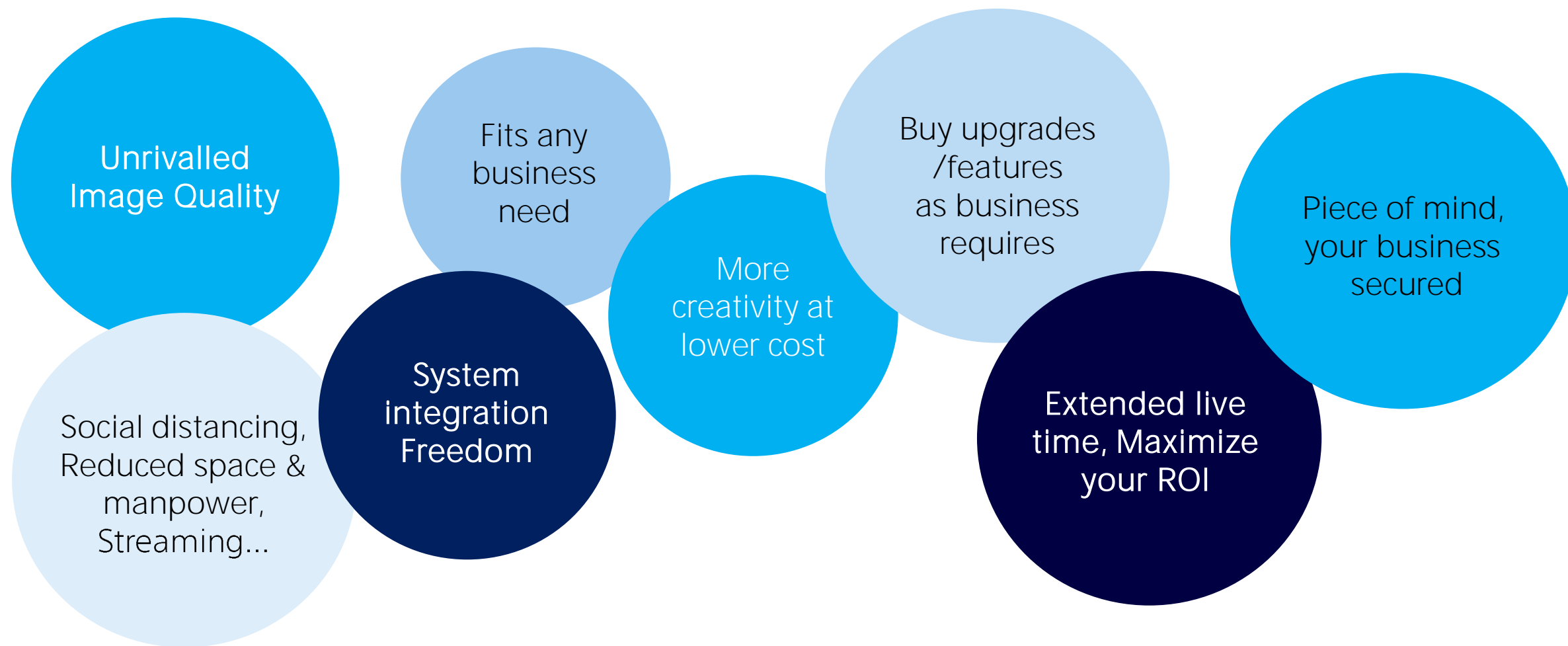




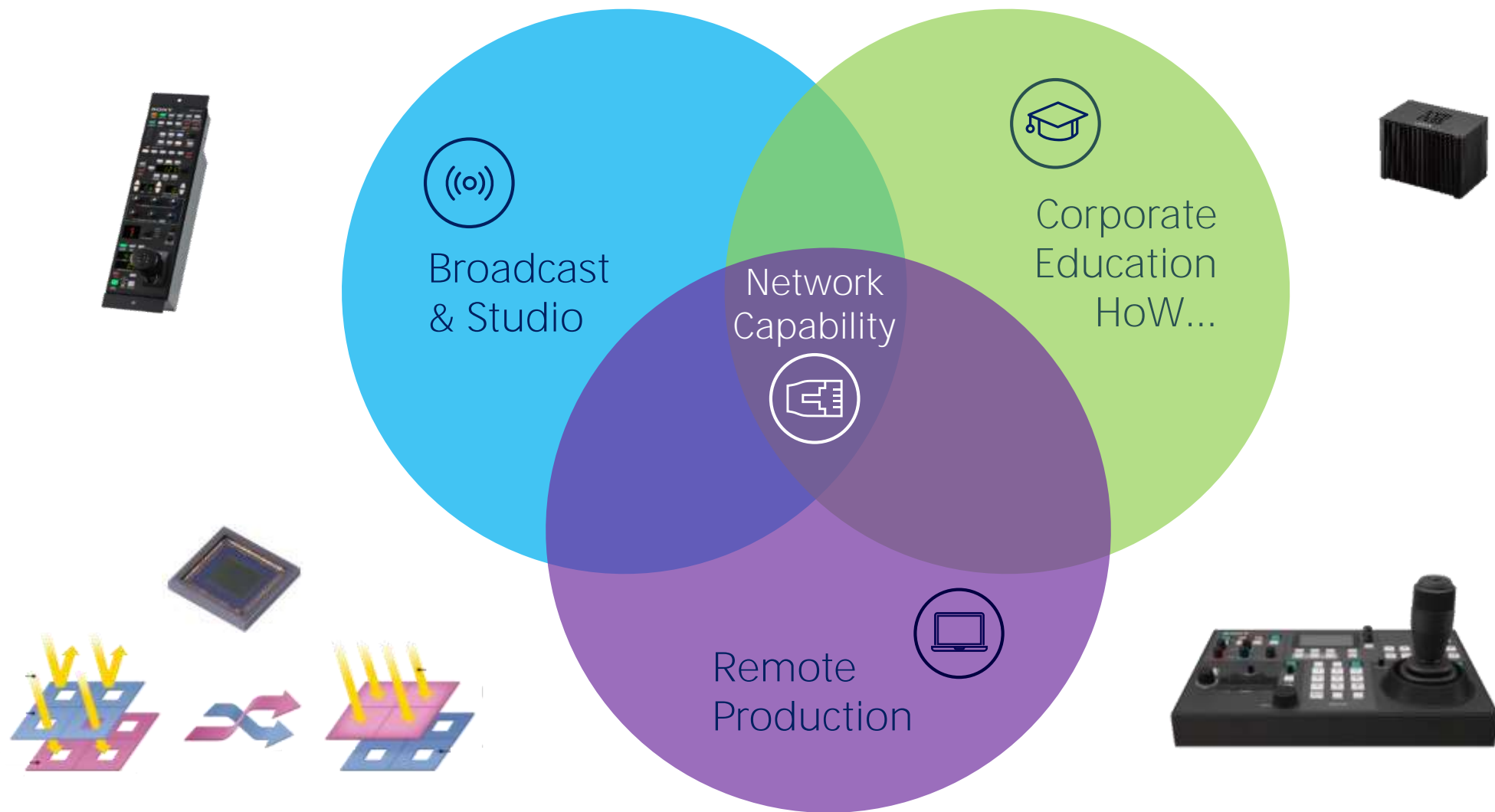
Network Camera Applications

Which Features requirement?

Sony Network cameras value proposition



Sony technologies for multiple applications:



Camera: *what is important?*

Zoom Lens

- Powerful Tele Zoom
- Wide Angle of View
- Image Stabilizer

Image sensor

- High Sensitivity & Artistic look = 1" sensor
- Low Noise = Exmor-R sensors
- Power Zoom = Clear Image Zoom*
- Night shot = IR Cut Filter
- ND filter wheel



Sony Digital Processing

- Shading & Paint controls
- HD Digital Extender = 2xTeleconverter
- Picture Profiles for easy camera setup

PTZ Control

- PTZ sync = simultaneous Motion
- Preset PTZ Trace > 3 Min. Learn & replay action
- Preset PTZ + Paint = Mode 1
- Preset PTZ only = Mode 2
- Preset Memories = from 16 to 100
- Pan speed = High and Slow modes



Connectivity: *what is important?*



Broadcast & Studio

- PoE+ & redundant DC input
- HD/3G-SDI output
- Sync. / Genlock input
- Tally over IP / VISCA
- Paint Control / IP (RCP/MSU)



Corporate & Education

- HDMI 2.0 output
- PoE+ (Power over Ethernet)
- Streaming / RTSP/NDI|HX
- Line/mic audio input



Remote Production

- PoE+ (Power over Ethernet)
- Streaming / RTSP/NDI|HX
- Line/mic audio input
- Shading over IP
- Extended Web menu UI



Feature Need per usage

How to choose the right PTZ Camera

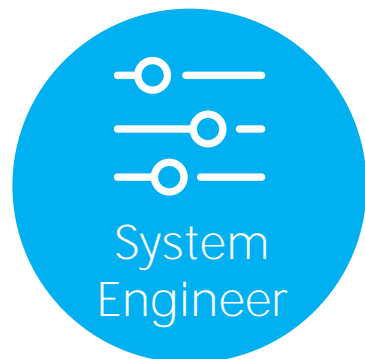
Broadcast needs



Ultimate image
Nice Bokeh
Low Latency
On air Tally
Virtual Reality

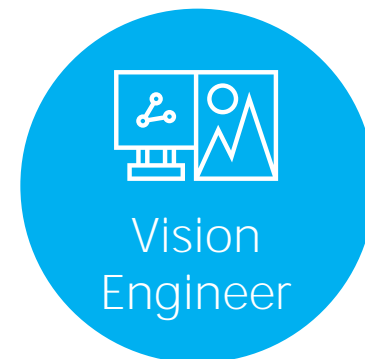


Easy Focus
Presets memories
Advanced PTZ trace
Smooth movements
Slow Live PTZ
Joystick & zoom ctrl



Secure SDI Wiring
Cameras in sync
VISCA/IP protocol
Web menu ctrl & updates
Low Power consumption
Reliability

Paint/shading
Iris,gain & Exposure
White Balance, Gamma
Master Black
Scene Files
Save/recall/copy



Solution: *the BRC family*



BRC-X400



BRC-H900



BRC-H800



BRC-X1000



SRG-XB25



SRG-XP1

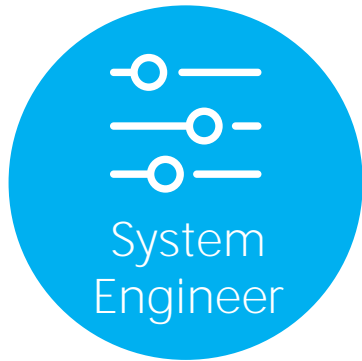
NEW

For Broadcast & Event productions

- camera in sync, Lowest latency guaranteed
- PoE+ & Remote via Network
- SDI Signal Quality
- Tally for Presenter-Talent interactivity
- Live camera full paint & shading
- 3rd party remote integration
- smooth On-air movements
- FreeD protocol * for VR/AR studio integration

* Planned on BRC-H800/X1000/X400 in Sept 2020

Corporate & Education requirement

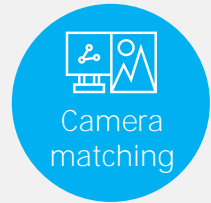


Simple all in LAN Wiring:

(PoE , NDI|HX stream
PTZ control ...
Advanced Web menu UI
VISCA/IP protocol
Compact
Reliable



One Man band



Fully Automated functions:

Gain, Exposure, Iris, Focus
White Balance...
AI : Auto PTZ Tracking ,
chroma key less,CG overlay ...
Presets memories
Advanced PTZ trace
PTZ simultaneous motion
Joystick & zoom ctrl

Solution: *the SRG family*



SRG-XP1



SRG-XB25



SRG-X120



SRG-X400

For Corporate & Education

- Same picture quality as BRC
Affordable
- Customize your needs by
Licence keys NDI or 4K
- all in one, Single LAN cable
- Artificial Intelligence automation
 - AI: Auto tracking PTZ, CG overlay,
 - Chroma key less
 - Close-up by gesture,
 - HD cut-out auto tracking
 - RTMPS stream roadmap
- Actions highlight captured
- Fast debate follow-up
- Natural PTZ movements
- control & view on LAN: remote
product facility

Flexible choices : SRG & BRC for all

SRG



*with SRGL-4K license

NDI|HX License Key by NewTek

BRC (Broadcast Remote Camera)



* Next version SW V3



BRC common features

Genlock

Genlock syncs multi-camera & reduce overall system latency



Front and Rear Tally Lamps

For on-air broadcast use, the BRC-X1000-BRC-H800 features dual tally lamps on the front and rear



S700PTP RCP shading protocol over IP.

Take Full Control via LAN



Boost Efficiency

Remotely control multiple fixed cameras at once without the need for individual camera operators.

A single person can select each shot across multiple BRC cameras by remote control set-up with automatic IP

Std Multicam



Multiple Cameramen
and shader



PTZ Cam



Single operator



BRC deep dive

How to choose the right PTZ Camera

One inch 4K sensor family

for Broadcast and Events ...



BRC-X1000

UHD & HD outputs



BRC-H800

HD Outputs

One inch 4K Exmor-R sensor benefits

- Twice the sensitivity
- Less noise
- Large 1" sensor = Shallow depth of field

High quality
and fine detail

Exmor R

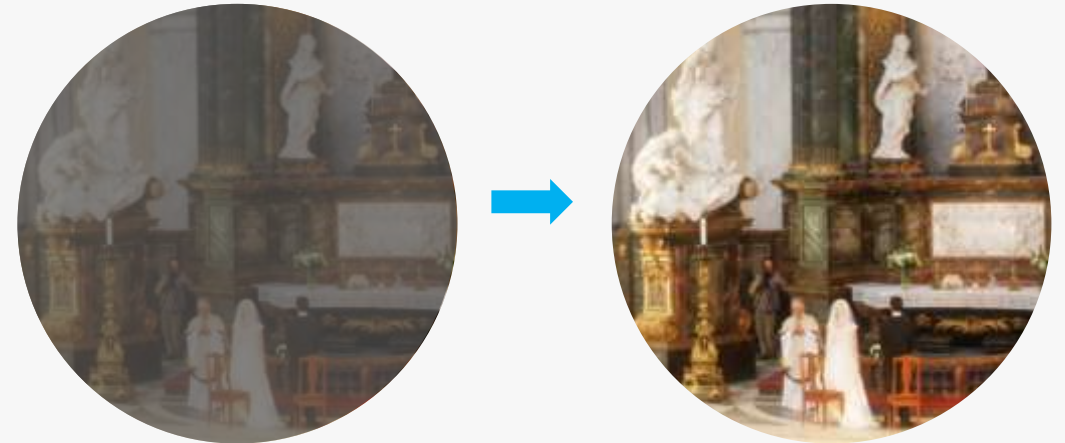
Front-illuminated

Back-illuminated



Conventional

Exmor R



6 x Picture Profiles as PXW-FS5/FS5 Mk2

Enhance your picture look & creativity



BRC-X1000/H800



e.g. PXW-FS5

Easy settings recall via on screen menu.

	Gamma	Colour Matrix
PP1	Movie (STD)	Movie(STD)
PP2	STILL	STILL
PP3	ITU709	PRO
PP4	ITU709	ITU709
PP5	CINE1	CINEMA
PP6	CINE2	CINEMA

BRC-X1000

Image sensor

1" Exmor R 4K CMOS

Resolution

UHD/Full HD

Video format

2160/29.97p, 1080/59.94p, 1080/59.94i,
720/59.94p,

2160/25p, 1080/50p, 1080/50i,
720/50p,

2160/23.98p, 1080/23.98p

Optical zoom

12x (18x 4K, 24x HD with Clear Image
Zoom)

4x ND Motorized filters
Infra Red cut filter

I/F

Dual Link 3G-SDI x 2 (Mon/Line), HDMI
x 1, Ethernet x 1 (Ctrl), RS-422 x 2 (In/Out)



Power

PoE+ and /or 12V DC (redundant)

Ext. sync

SD Black Burst, HD Tri-Level

Preset memories

100 Position Preset memories:

Mode 1 (PTZ + pan/tilt)

Mode 2 (PTZ only)

16 PTZ trace memories > 180 Sec.
movement learn/replay action

PTZ control

PTZ Motion Sync

PTZ Trace Memory (up to 180 Sec.)

PT motion speed range select (slow)

Firmware upgrade

Via IP (Web page)

BRC-H800

Image sensor

1" Exmor R 4K CMOS

Resolution

Full HD

Video format

1080/59.94p, 1080/59.94i, 720/59.94,
1080/50p, 1080/50i, 720/50p,
1080/23.98p

Optical zoom

12x (24x with Clear Image Zoom)
4x ND Motorized filters
Infra Red cut filter

I/F

3G-SDI x 2(Mon/Line), HDMI x 1,
Ethernet x 1(Ctrl), RS-422 x 2(In/Out)



Power

PoE+ and /or 12V DC (redundant)

Control

VISCA/IP, VISCA RS-422, S700p

Ext. sync

SD Black Burst, HD Tri-Level

Preset memories

100 Mode 1 (with paint) or Mode 2
(PTZ only)
16 PTZ trace memories

PTZ control

PTZ Motion Sync
PTZ Trace Memory
PT motion speed range select (slow)

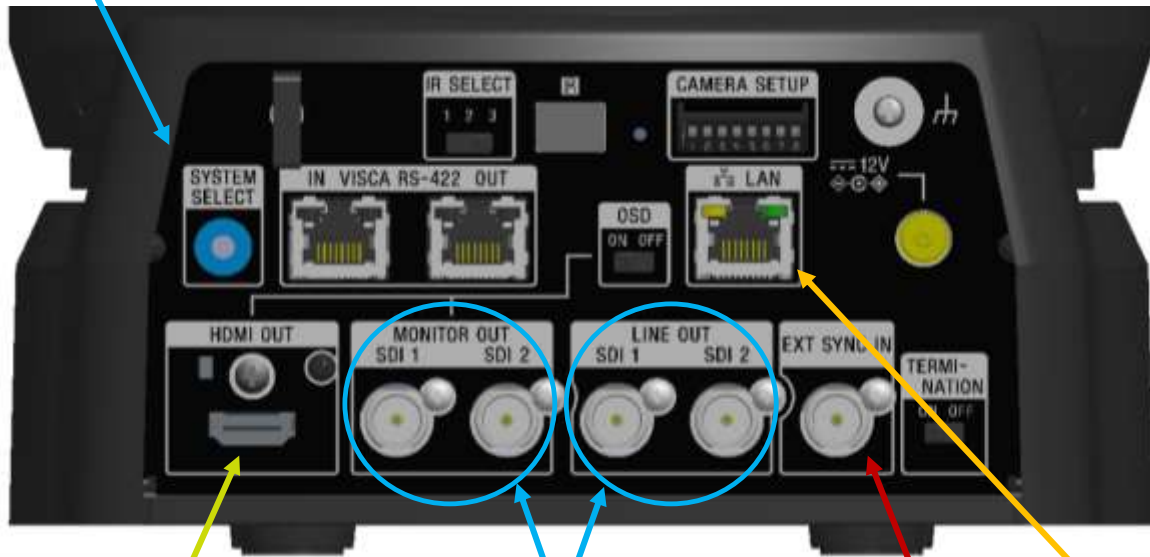
Firmware upgrade

Via IP (Web page)

Connectivity

BRC-X1000

Syst Freq



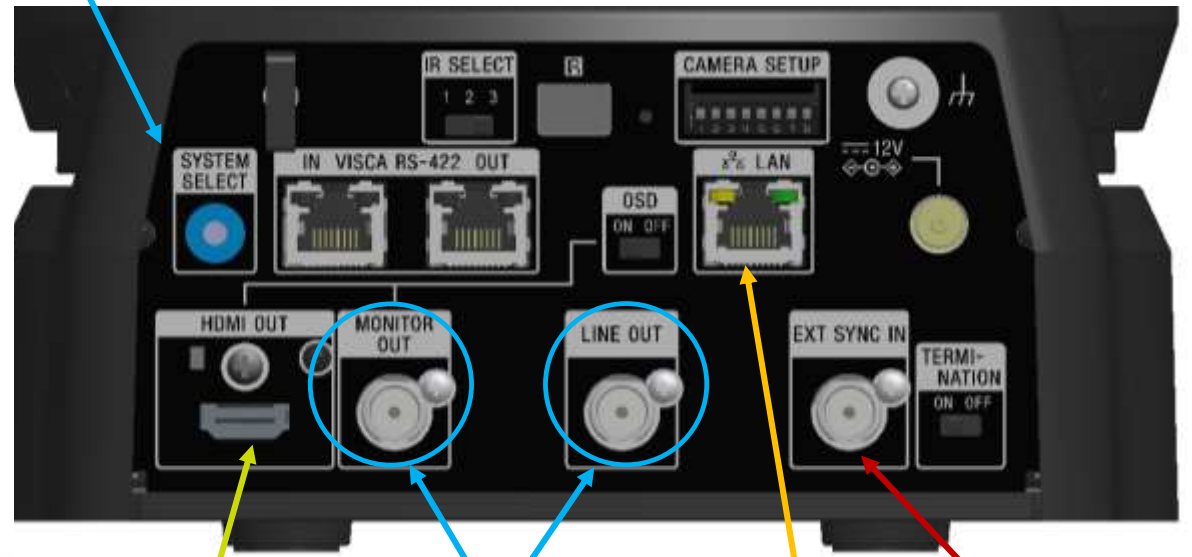
HDMI
UHD HD

UHD Dual link 3G-SDI x 2
HD/3G-SDI x 4

Genlock

BRC-H800

Syst Freq



HDMI
HD

HD/3G-SDI x 2

Genlock

LAN PTZ /shading remote, POE+

BRC cameras

Comparison chart

				
Model	BRC-X1000	BRC-H900	BRC-H800	BRC-X400
Interface	3G-SDI x2 ^{*1} HDMI	HD/SD-SDI Composite RGB/Component S-Video	3G-SDI HDMI	3G-SDI HDMI IP
Sensor	1.0-type Exmor R™ CMOS sensor	1/2-type Exmor™ 3CMOS	1.0-type Exmor R CMOS sensor	1/2.5 type Exmor R CMOS
Signal format	2160/29.97p, 25p, 23.98p 1080/59.94p, 59.94i, 50p, 50i, 23.98p 720/59.94p, 50p	60 Hz: 1080/59.94i, 720/59.94P, NTSC 50 Hz: 1080/50i, 720/50P, PAL	1080/59.94p, 59.94i, 50p, 50i, 23.98p 720/59.94p, 50p	2160/29.97p, 25p, 23.98p (HDMI and IP only), 1080/59.94p, 50p, 29.97p, 25p, 23.98p 1080/59.94i, 50i 720/59.94p, 50p
NDI®/HX*	-	-	-	Yes (Optional)
Zoom	18x (4K with CIZ)/24x (HD with CIZ), Max. 48x (HD with CIZ and Tele Convert Mode)	14x	24x (with CIZ), Max. 48x (HD with CIZ and Tele Convert Mode)	30x (4K with CIZ)/40x (HD with CIZ), Max. 80x (HD with CIZ and Tele Convert Mode)
Pan/Tilt Speed	0.3°/sec – 60°/sec	0.3°/sec – 60°/sec	0.3°/sec – 60°/sec	Max. Pan: 300°/sec Max. Tilt: 126°/sec
Horizontal Viewing Angle	Approx. 64.6 degree (Wide)	Approx. 59.6 degree (Wide)	Approx. 64.6 degree (Wide)	Approx. 70.0 degree (Wide)
Preset Position	100	16	100	256 (CGI), 100 (VISCA)
Picture Adjustment	Gamma/Knee/Detail/ Black gamma/Color matrix	Gamma/Knee/Detail/ Black gamma/Color matrix	Gamma/Knee/Detail/ Black gamma/Color matrix	Gamma/Knee/Black Gamma/Color Matrix
Audio input	-	-	-	Yes (2ch)
Genlock	Yes	Yes	Yes	Yes
Power	DC12 V, PoE+	DC 12 V	DC12 V, PoE+	DC 12 V, PoE+
Control	RS-422 (VISCA)/RJ-45 (VISCA over IP)	RS-232C, RS-422 (VISCA)/ RJ-45 (VISCA over IP (Optional))	RS-422 (VISCA)/RJ-45 (VISCA over IP)	RS-422 (VISCA)/RJ-45 (VISCA over IP)
Ceiling Mount	Yes	Yes	Yes	Yes
Remark	*1 with Dual link 3G-SDI (2Si only) for 4K video output			

1 / 2.5 inch 4K sensor family

Capture every point of view

Advanced Compact Network PTZ cameras
Ideal for remote production



BRC-X400



SRG-X400



SRG-X120

Flexible choice & licenses

BRC-X400
SRG-X400
SRG-X120

Sony IP 4K PTZ camera, NDI®|HX capability

- Superb Exmor R CMOS sensor picture
- Ultra-Fast or Slow Pan speed
- ND filter & IR cut filter Day/Night & Auto mode
- Advanced Web Menu (PTZ ,viewing, stream, Updates...)



BRC-X400



SRG-X400



SRG-X120

5.2K€

3.4K€

2.7K€

1/2.5 inch 4K Exmor R sensor benefits

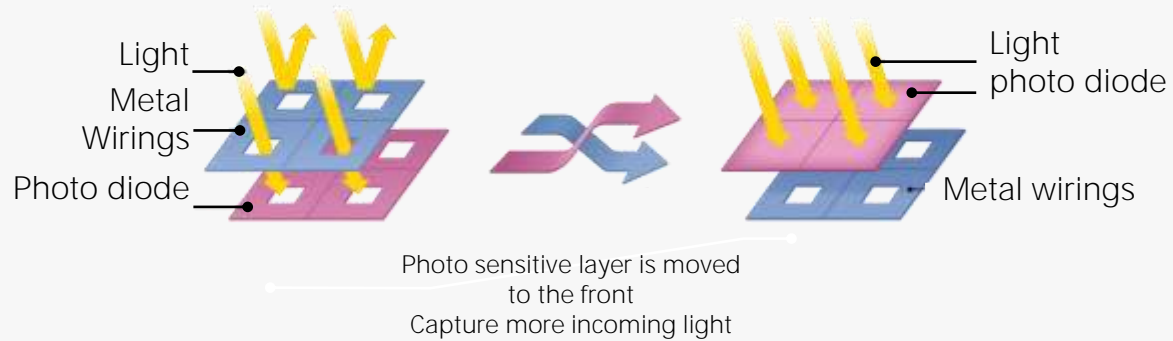
- Twice the sensitivity
- less noise
- Long Depth of Field = easy focus

High quality
and fine detail

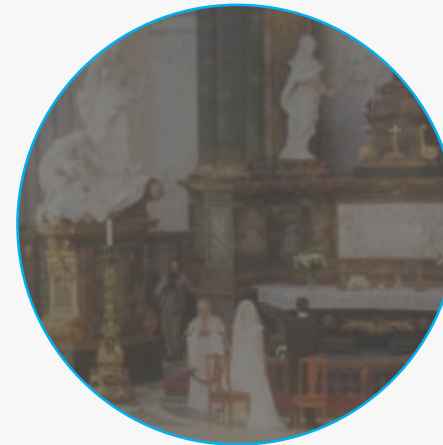
Exmor R

Front-illuminated

Back-illuminated



Conventional



Exmor R



Genlock support and tally lamp

Genlock support and tally lamp enable smooth camera switching in live events and reality shows.



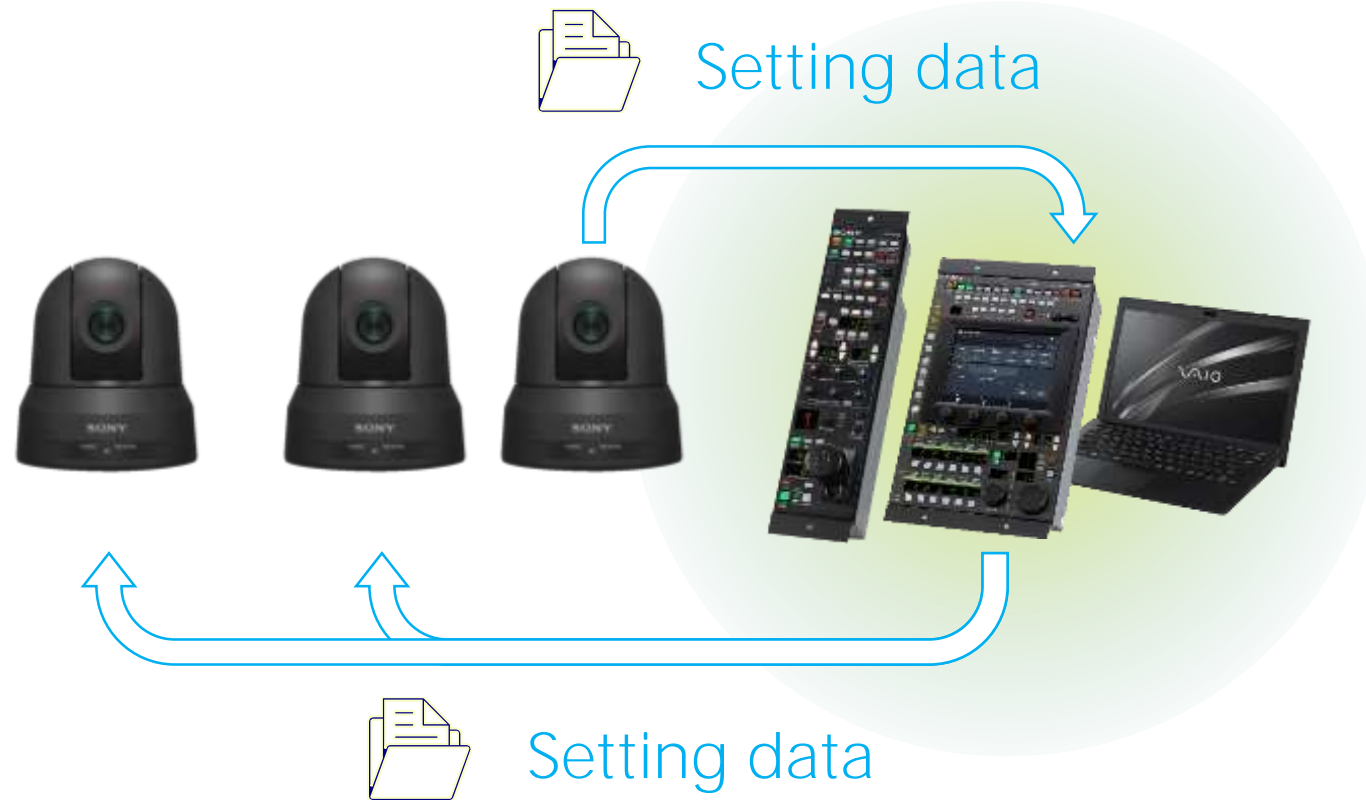
Genlock , Tally and RCP control are the main difference between BRC-X400 & SRG-X400/X120

SRG-Xxxx do not support

- Genlock
- Tally
- S700 (RCP control)

Scene file copy

Newly available 'scene file' function* can apply the same menu from one camera to the other cameras for fast set-up.



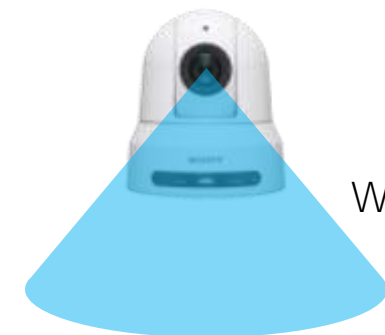
Wider Angle of View

Conventional camera



60° degree
Viewing angle

BRC-X400 SRG-X400

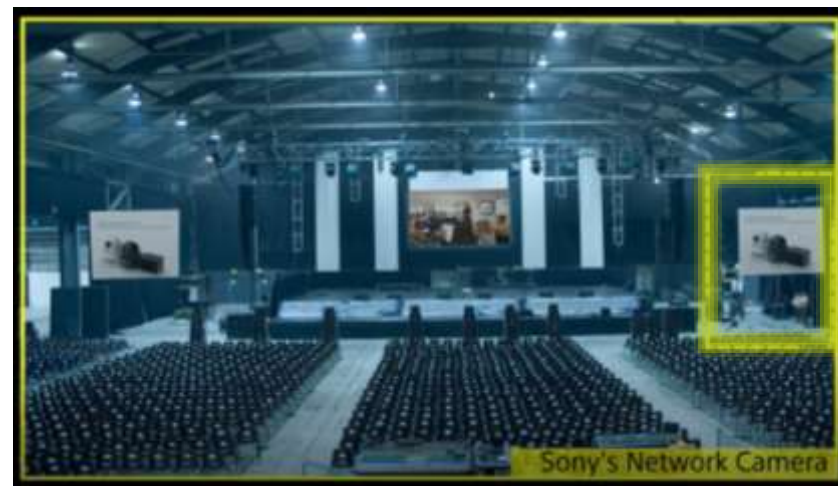


70° degrees
Wide Viewing angle

Wide-angle
shooting

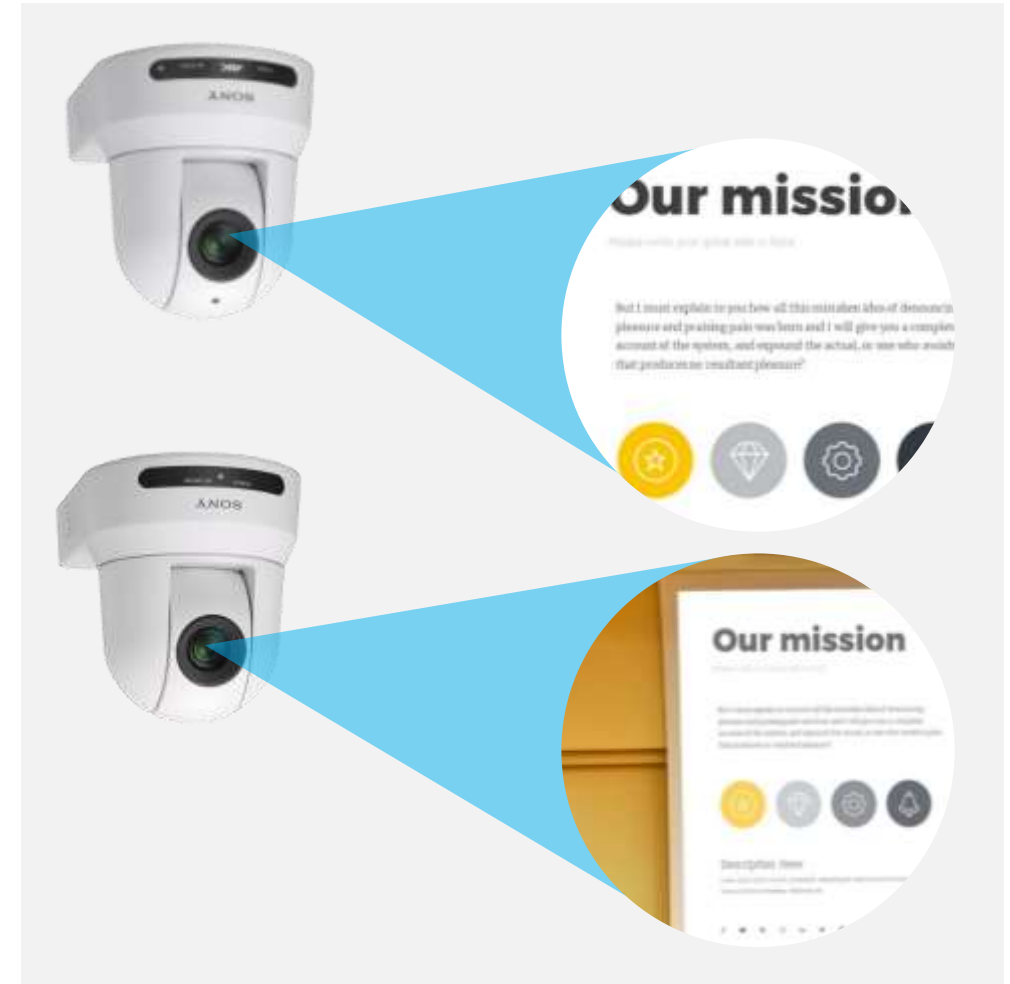


Conventional Camera

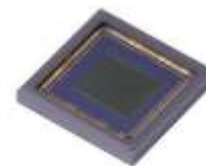


Sony's Network Camera

High Resolution + Power Zoom = sharper images



Clear Image Zoom



Lossless sensor de-Bayering



Optical zoom

Clear image zoom

Tele convert mode
BRC-X400 only

20x (X400)
12x (X120)

30x (4K) (X400)
40x (HD) X400

80x (HD)

Connectivity BRC-X400

BRC-X400

Syst Freq
or
via Network

Genlock
(not avail. on SRG's)

Redundant DC
power input



HDMI QFHD or SD/3G-SDI (HD)

2Ch Mic input
with Phantom supply

RTSP, NDI|HX stream
PTZ remote, Web Menu
S700 Live shading protocol
POE+ (no 12V AC/DC adapter required)

Cost-effective solution for the best studio system

Product Line up for studio system

High Value Content Creation

Cost effective system

BRC-X1000
BRC-H800
BRC-H900
BRC-X400



HXC-FB80



HXC-P70



HDC-3100
HDC-3170



HDC-5500
HDC-3500



HDC-P50



HDC-4300

Cost-effective solution for the best studio system

PTZ-camera



RM-IP500



BRC-H900



BRC-H800



BRC-X1000

Broadcast system



HXC-FB75



PC-RCP



HXC-P70



RCP

Low cost switcher



MCX-500



MCS-8M



AWS-750



XVS-G1



NEW

Cost-effective solution for the best studio system

Configuration

PTZ camera



BRC-H800



HXC-FB80 & HXCU-FB80



HXC-P70

System camera

IP control



RM-IP500



RCP-1500



firmware up v2.0



Hub



MCX-500



MCS-8M



HZC-RCP5*



AWS-750

Streaming

* MCX500, AWS-750



* BRC support is under study

LAN
SDI
Streaming



LMD-A240



LMD-A240

Flexible operation for Various and Rich Expression

Operation Style

Main camera

Play role of main picture in this operation



Main camera with operator

Sub camera

Shoot from flexible angles, Complement main picture



With Crane, Steadicam, PT machine

Sub camera

Shooting from ceiling, on, tripod
Control from remote location



Ceiling mount, with tripod



Flexible operation for Various and Rich Expression

HXC-FB80



HXC-P70



BRC-H800



Main camera with shooting techniques

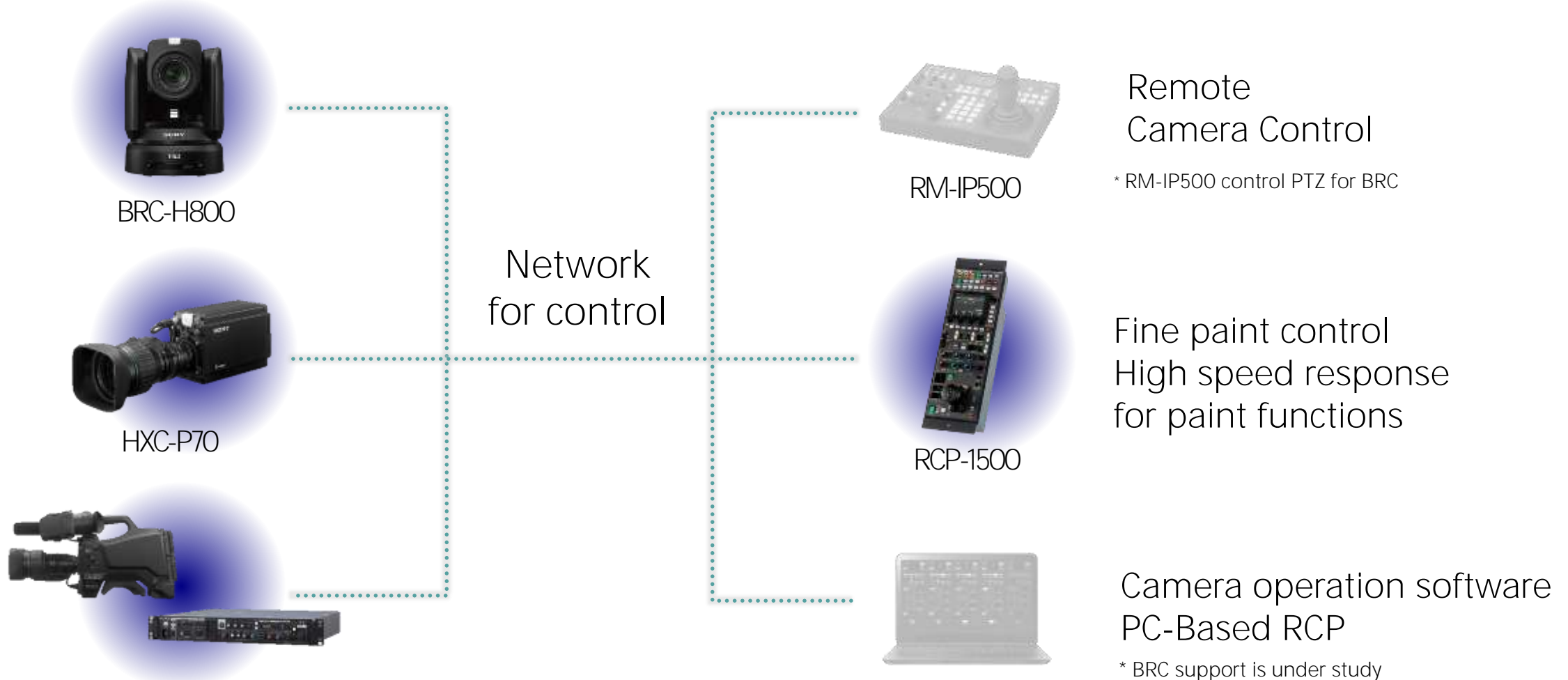
Unmanned operation, simple shooting

HXC-FB80	HXC-P70	BRC-H800
Manned operation One(Operator) to one(Camera)	Unmanned operation One to many	Unmanned operation One to many
Sophisticated operation Flexible response to any events	Fixed point camera or PTZ* * need PT machine Steadicam, Crane	Fixed point camera or PTZ

Flexible operation for Various and Rich Expression

IP control system

HXC-FB80, HXC-P70, BRC-H800 can be controlled by same RCP in same IP network
RM-IP500 and PC-RCP co-exist in the network.



Flexible and efficient IP-based live production

NDI[®]

NDI[®] | HX capability



Single network
cable



Remote
viewing

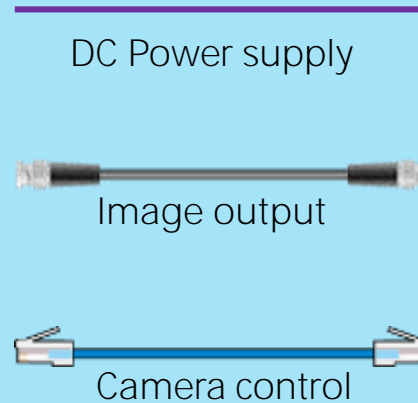
NDI|HX low latency streaming

BRC-X400, SRG-X400, SRG-X120 with NDI|HX



1. Single network cable:
2. Simple system integration:
3. Any time, anywhere:
4. Remote production:

Conventional

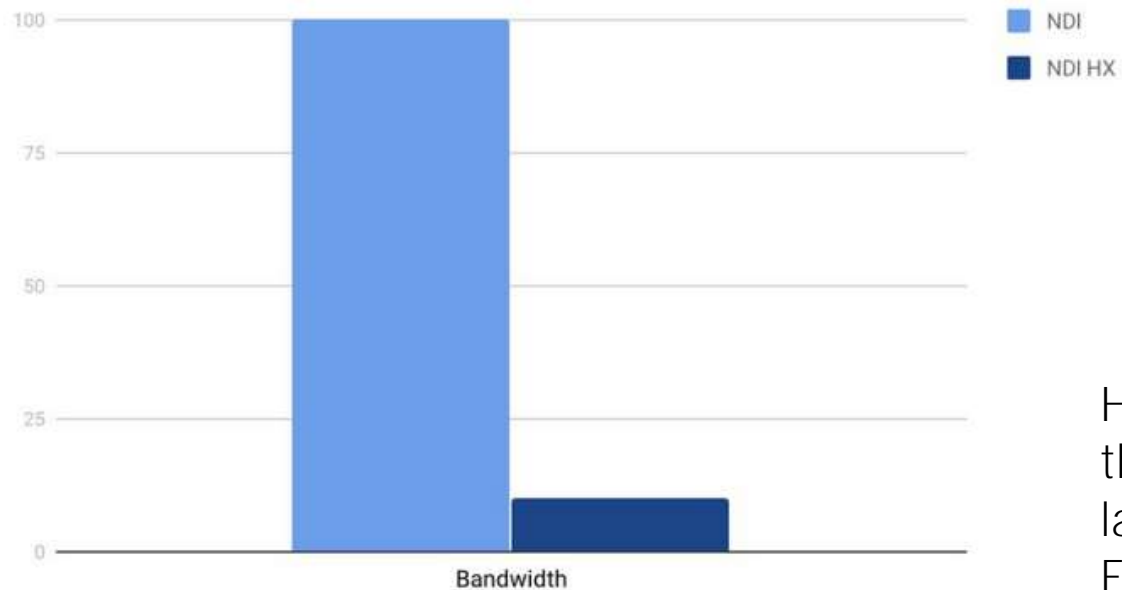


IP-based

- Power supply
- Image output
- Camera control

What is « NDI|HX » versus « NDI »?

NDI vs NDI HX Bandwidth



	NDI Hx	NDI
Codec	MPEG4 H264	H264
Bit rate	10 Mb/s	100 Mb/s
Latency	Arround 50 ms : 2 or 3 Frame @ 1080/30p	1 frame @ 1080/30p

NDI|HX quality is close to RTSP streaming, the benefit is the standardization in Live production solution, fixed latency over a single LAN cable.

Existing software tools and 3rd party Video switchers

Features decision chart

BRC-X400	Gen Lock	Tally	S700PTP	Tele Convert 80x HD	
	Gamma Select	Knee	Preset Mode1/2	Color Matrix	Master Black
	Scene File	Picture Profile	Preset R/W externally	Color Bar	Bar Title
SRG-X400	40x (w/ CIZ)	Auto Tracking (B2B, Vup)	Face Recognition (B2B, Vup)	Object Detection (B2B, Vup)	
SRG-X120	4K	12x (w/ CIZ)	PTZ Sync	Fast Preset (300/s)	Pict Freeze Preset
	SDI/HDMI/IP	PoE+	IP streaming	NDI Hx	IPv6
	Audio	WebUI	Ceiling Mount	Body Color (W/B)	User's Version-Up
	Wide Angle (70 deg)				

Specifications(BRC-X400)

Model Name	BRC-X400
Video Output	3G-SDI/HDMI/IP streaming (4K output only via HDMI and IP)
Zoom Ratio	30x (4K with CIZ)/40x (HD with CIZ), (Digital 12x)
Image Sensor	1/2.5 Exmor R CMOS
Minimum Illumination (50IRE)	1.6 lux (50IRE, F2.0 30fps)
Signal System (Max)	3840 x 2160 29.97p/1080 59.94p
Horizontal Viewing Angle (Wide)	Approx. 70 degrees
Pan/Tilt Range	P : ±170°
	T: +90°, -20°
Max Preset Speed [deg/s]	300°/sec (Pan), 126°/sec (Tilt)
Number of Preset	100 (VISCA) 256 (via CGI protocol HTTP)
Picture Freeze Preset	Yes
Body Color	Black and White
Control Interface	VISCA, VISCA over IP, S700PTP, CGI
PoE+	Yes (IEEE802.3at compatible)
Audio	2ch
IP Streaming	Yes
External Sync In	Yes
AC adapter	DC12V
Tally Lamp	Yes (front)
Option	NDI® HX

FRONT



REAR



NDI® is a registered trademark of NewTek, Inc.

Specifications(SRG-X400/X120)

Model Name	SRG-X400		SRG-X120
Video Output	3G-SDI/HDMI/IP streaming (4K output only via HDMI and IP)		
Zoom Ratio	30x (4K with CIZ)/40x (HD with CIZ), (Digital 12x)		12x (4K/HD), (Digital 12x)
Image Sensor	1/2.5 Exmor R CMOS		
Minimum Illumination (50IRE)	1.6 lux (50IRE, F2.0 30fps)		
Signal System (Max)	3840 x 2160 29.97p(optional license)/1080 59.94p		
Horizontal Viewing Angle (Wide)	Approx. 70 degrees		
Pan/Tilt Range	P : ±170°		
	T: +90°, -20°		
Max Preset Speed [deg/s]	300°/sec (Pan), 126°/sec (Tilt)		
Number of Preset	100 (VISCA) 256 (CGI http)		
Picture Freeze Preset	Yes		
Body Color	Black and White		
Control Interface	VISCA, VISCA over IP, CGI		
PoE+	Yes (IEEE802.3at compatible)		
Audio	2ch		
IP Streaming	Yes		
External Sync In	No		
AC adapter	DC12V		
Tally Lamp	No		
Options	SRGL-4K = 4K Sony upgrade NDI® HX license @ NewTek		

NDI® is a registered trademark of NewTek, Inc.

FRONT



REAR



3rd Party with Sony PTZ camera's



SONY

GO MAKE
TOMORROW



Control Panels for BRC & SRG camera

BRC's & SRG's camera controls

Multiple Camera control protocols S700PTP Protocol, VISCA/IP, VISCA RS422



BRC & SRG Camera Control
PTZFI & white balance
RM-IP500 / RM-IP10



BRC Camera fine paint Control
RCP-1000/3000 series
MSU-1000/3000 series

NB: BRC-H900 requires a CNA-1 for MCS mode

Remote Panel RM-IP10

Simple IP PTZ control panel (firmware V2.17)

- 112 x BRC or SRG camera control over IP
- Simple RJ-45 I/F 10Base-T/100Base-T
- 7 x BRC camera over VISCA (RS232C or RS422)
- Multiple panels on the same network
- 16 Preset per camera
- Free download Win10 PC software
with manual/auto IP address
[RM-IP10 Setup Tool \(V1.1.0\)](#)



Remote Panel RM-IP500

Advanced IP PTZ & shading control panel

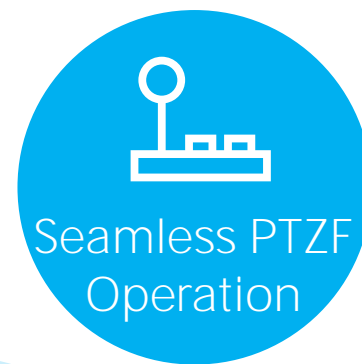


- 100 x BRC or SRG camera control over IP
- Active/Lock button per control zone
- Auto IP address and manual swap
- 100 x Preset (Position & Profile) per camera
- Ethernet LAN & TALLY I/F from MCX-500
- 7 x BRC camera VISCA (RS422) supported
- Multiple panels on a same network
- 10 x 10 Camera groups & direct recall button
- Exposure, White balances, Detail , Back level , ND filters , Gamma IRIS, Shutter, etc...



Seamless PTZF Operation

Zoom operation with joystick



Speed Control of PTZF with rotating knobs

Live Colour Shading

Direct Operation to adjust colour functions

Direct buttons

(Gains, Black, Iris, Focus etc.)

6 Assign buttons

(Detail level, Knee Point , Flicker free, etc...)

Camera menu

Picture profiles for in depth paint settings

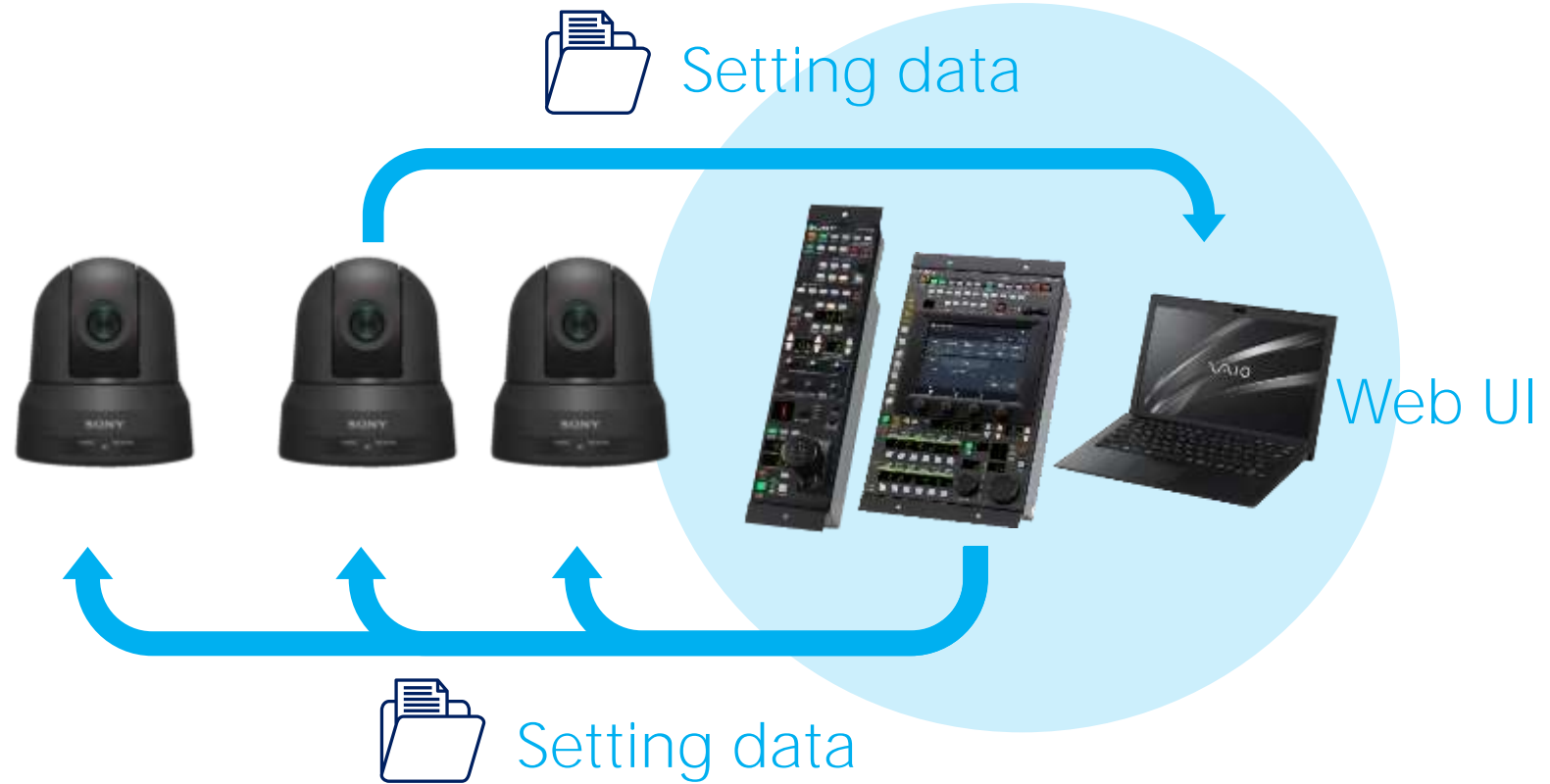
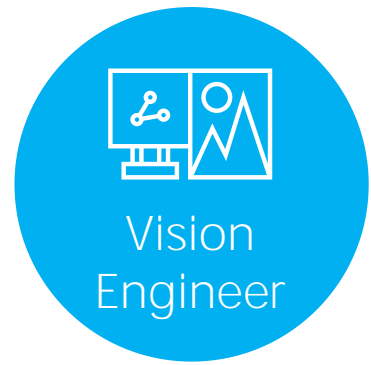


Vision
Engineer



* Available functions depends on Camera's specification

BRC-X400 Scene files load & save



* Since V2.0 April 2020

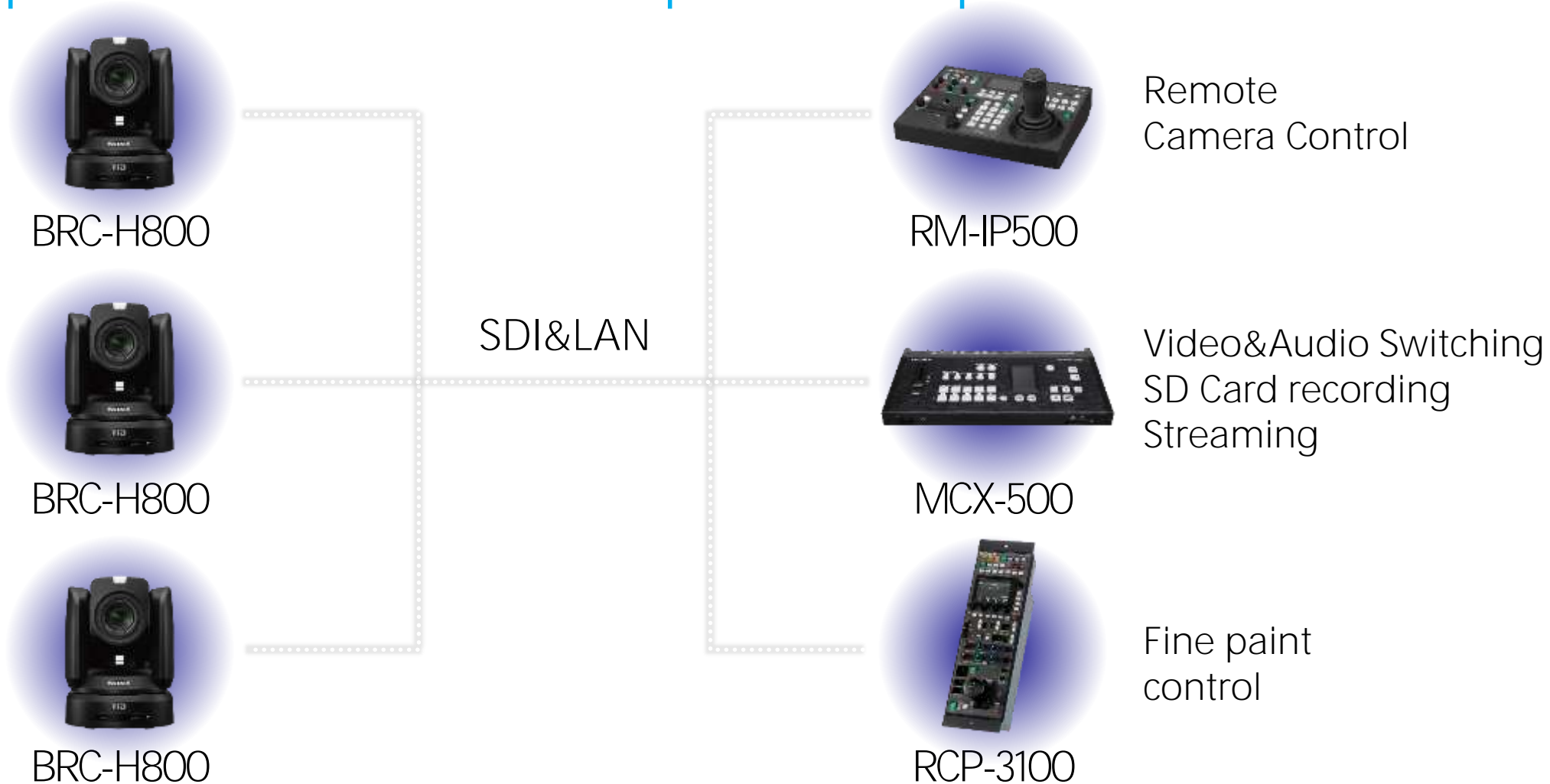
BRC integration in HDC camera system



Vision
Engineer



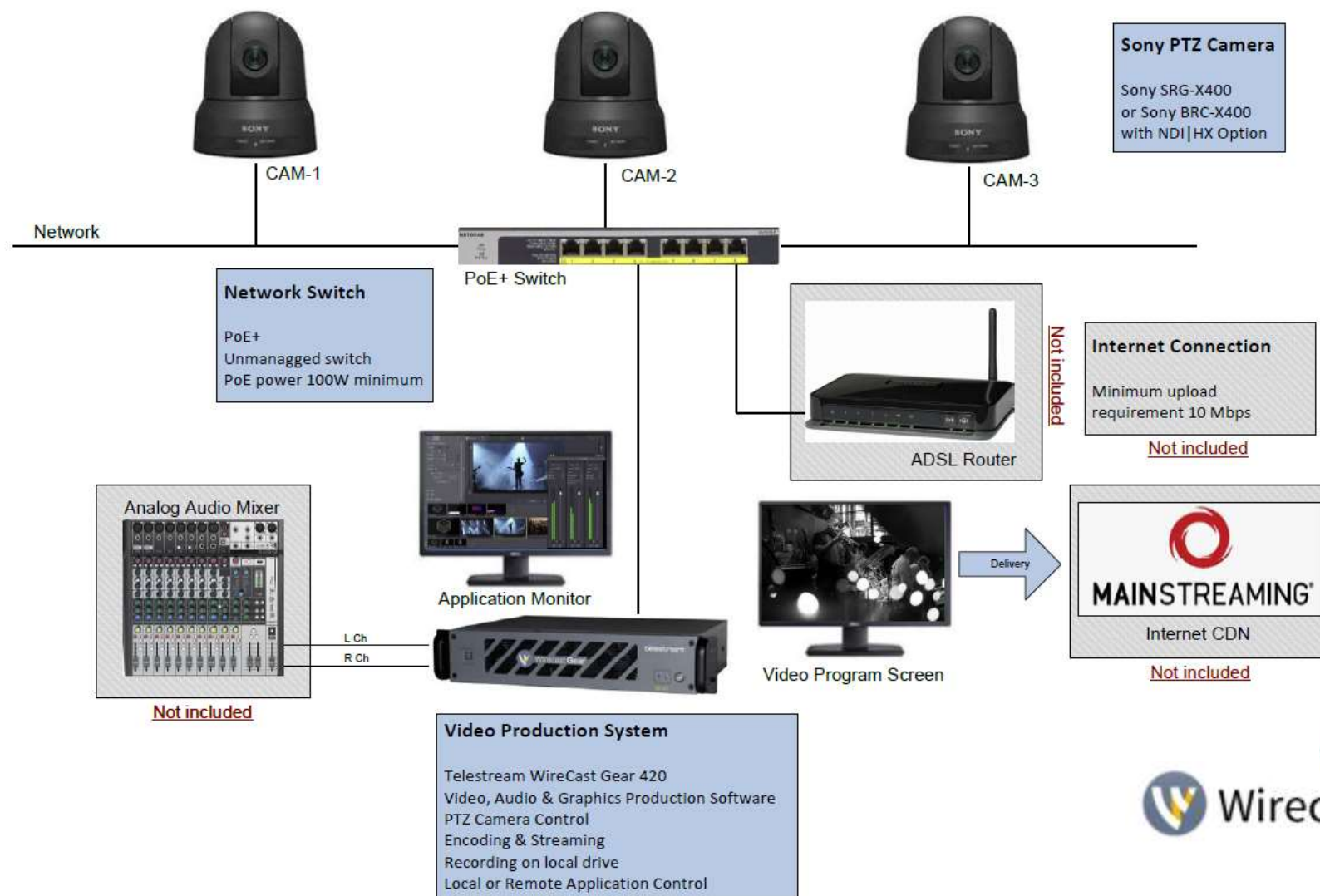
Simple solution for compact live production



3rd Party with Sony PTZ camera's



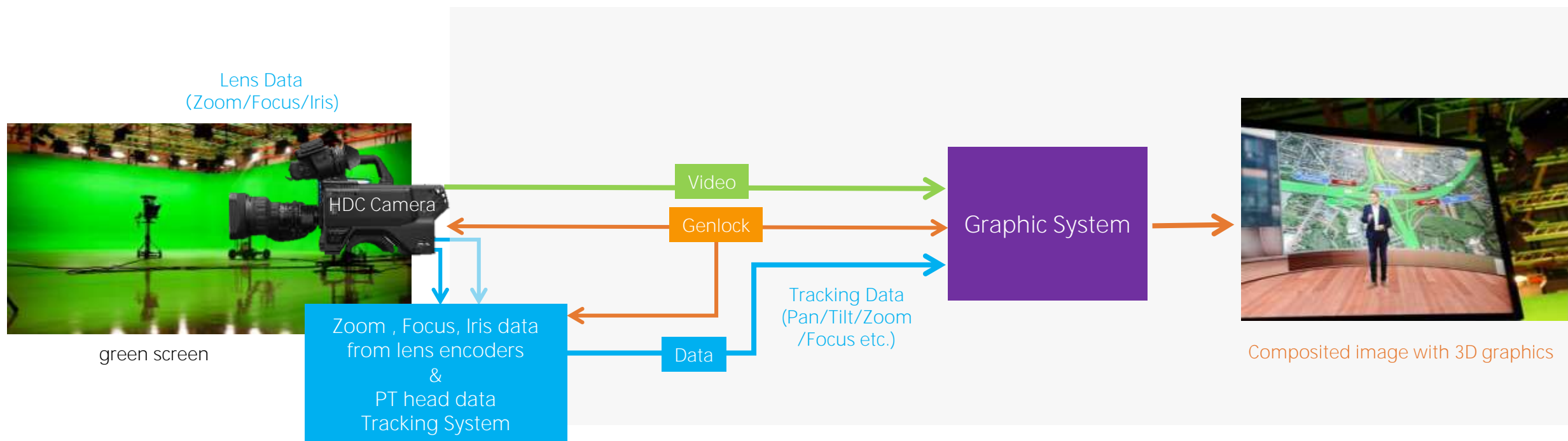
PoC Remote Production : WIRECAST / NDI|HX



FreeD protocol Update

Simplified VR /AR

Traditional Virtual Reality Studio with Lens & PTZ head data



Example of Virtual Studio with HDC cameras

Solution: FreeD protocol

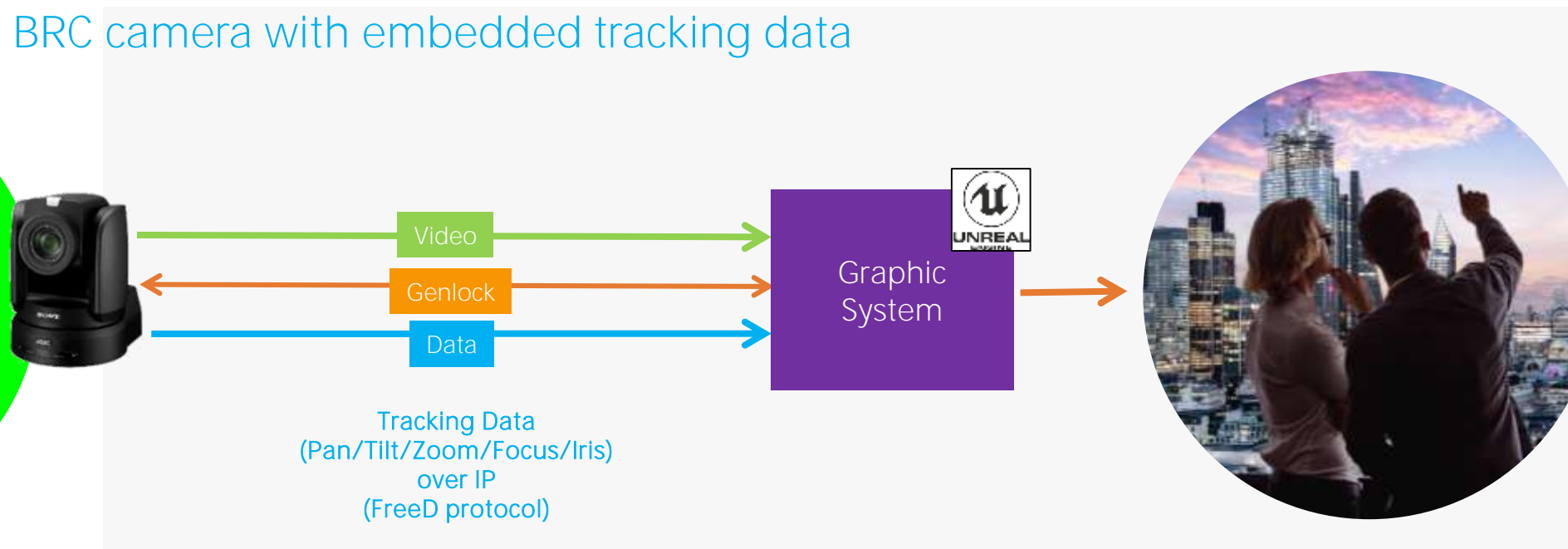
EPIC Games protocol for **UNREAL ENGINE**

Engine for Virtual Reality & Augmented Reality Studios

BRC camera with embedded tracking data



green screen

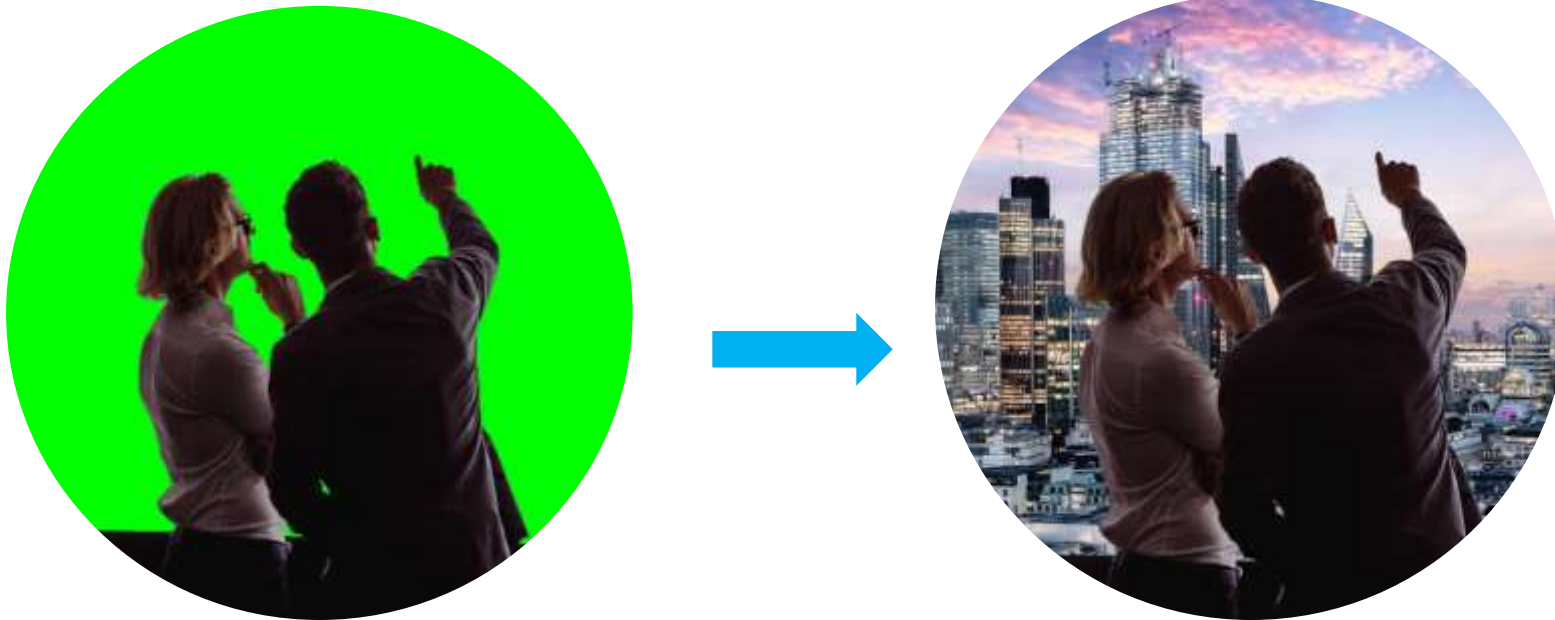


Composited image with 3D graphics

FreeD protocol free upgrade

Firmware update on BRC-X1000, BRC-H800, BRC-X400 (Sept '20)

- Answers your business needs
- Simplified solution by PTZ camera with tracking
- Supported by most Virtual Studio rendering machines
-and more features



Sony PTZ Cameras Virtual Studio VR



Virtual Studio													
Reckeen													✓
Virtual Studio Free-D Protocol Support													
Reckeen	✓	✓	N/A	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ross Video	✓	✓	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
The Future Group (Pixotope)	✓	✓	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vizrt	✓	✓	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Sony PTZ Cameras Streaming , Conference , UC

	BRC-X1000	BRC-H800	BRC-H900	BRC-X400 (X401)	SRG-X400 (X402)	SRG-X120 (HD1M2)	SRG-300H (301H)	SRG-120DH (121HD)	SRG-120DS (HD1)	SRG-120DU	SRG-XB25	SRG-XP1	REA-C1000
													
Streaming													
NewTek/NDI HX	N/A	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	N/A	✓	✓	
vMix	N/A	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	N/A			
Wirecast (Telestream)	N/A	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	N/A			
Wowza	N/A	N/A	N/A		✓		N/A	N/A	N/A	N/A			
Unified Communication													
Cisco Webex Devices	✓**	✓**		✓**	✓**	✓**		✓**					
Cisco Webex Meetings										✓**		✓	
Microsoft Skype for Business										✓			
Conference System													
Bosch Dicentis				✓	✓	✓							

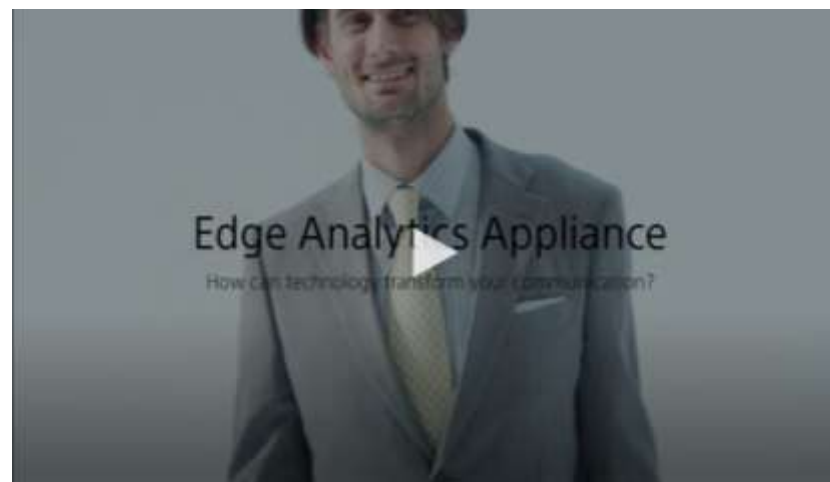
Sony PTZ Cameras Control Systems

	BRC-X1000	BRC-H800	BRC-H900	BRC-X400 (X401)	SRG-X400 (X402)	SRG-X120 (HD1M2)	SRG-300H (301H)	SRG-120DH (121HD)	SRG-120DS (HD1)	SRG-120DU	SRG-XB25	SRG-XP1	REA-C1000
													
Control System													
AMX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Crestron	✓	✓	✓	✓	✓	✓					✓	✓	
Extron				✓	✓	✓		✓			✓	✓	
Controller													
Roland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			N/A
SKAARHOJ	✓	✓	✓	✓	✓		✓*						N/A
Lecture Capture													
Mediasite / Sonic Foundry					✓								✓
Panopto				✓	✓	✓	✓	✓					
Ubicast				✓	✓	✓							✓

REA-C1000 Edge Analytics AI



Edge Analytics Appliance



REA-C1000:

Operator intelligence in a box

Supports BRC-X1000/H800,X400, SRG-X400,X120 Real time crop on camera with 4K HDMI out

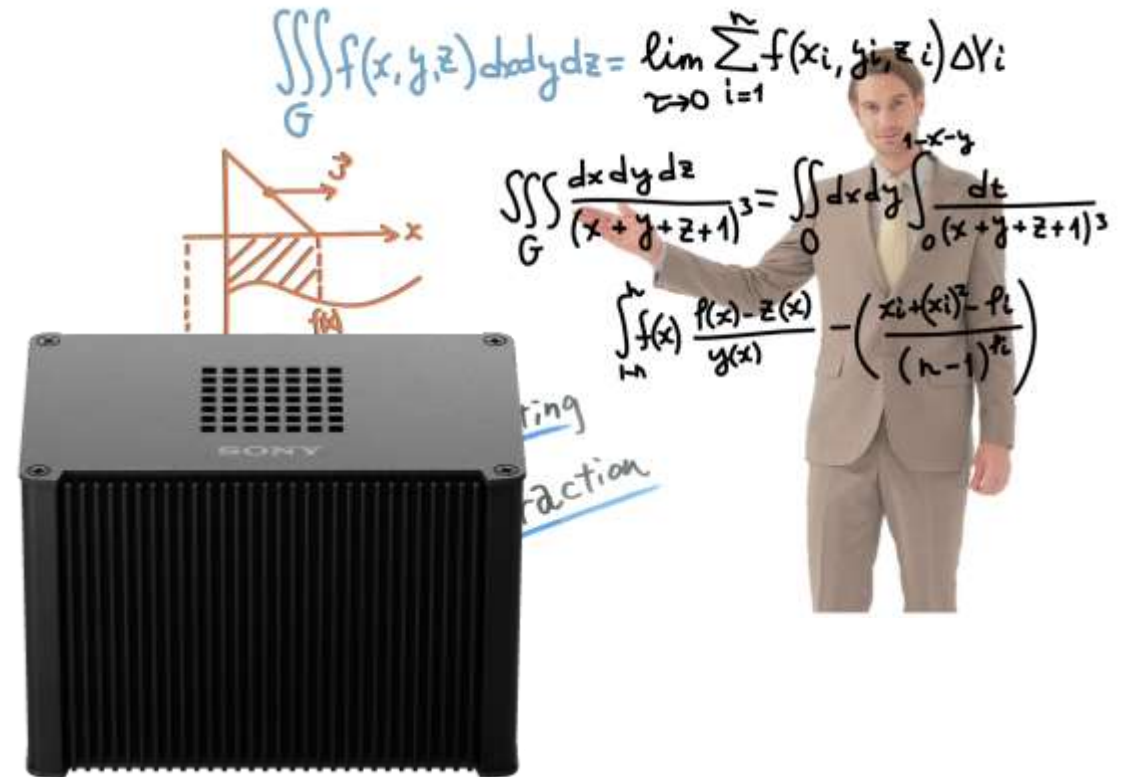
What is the Edge Analytics Appliance?

Grab your audience's attention, increase their engagement

The **Edge Analytics Appliance** improves the quality of presentations and communication with the use of AI-driven GPU video analytics technologies.



Automatically generates attractive video contents **in real time**, **hassle-free** – previously requiring significant time and human resources, and expensive to create.



Unique detection technology



Motion
Detection



Face
Detection



Shape
Recognition



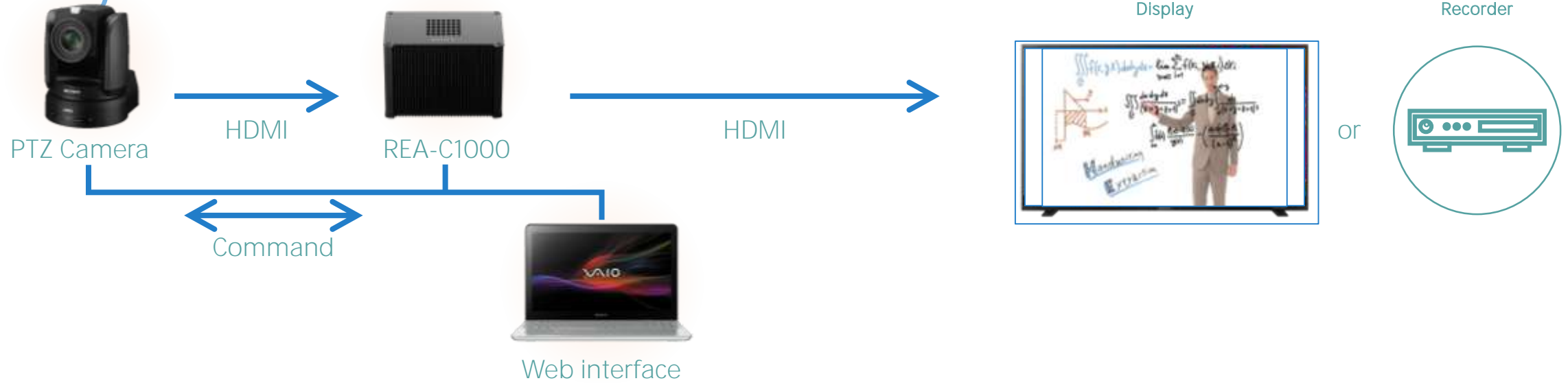
Color Pattern
Recognition

Multiple decision factors enable the automatic tracking of individual people.

Tracking is robust, even when the speaker writes on a board with his back to the camera.

Specification overview

System structure



Web user interface

GPU (Deep Learning Capability)

HDMI In x2

HDMI Out x2

Ethernet

DC in

IP Streaming out (H.264 RTSP) 2nd version

REA-L0100: Handwriting Extraction

REA-L0200: PTZ Auto Tracking

REA-L0300: Close-up by Gesture

REA-L0400: Chroma key-less CG overlay

REA-L0500: Focus Area Cropping

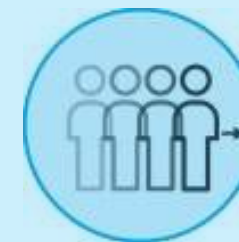
REA-C1000 with 5 WebUI applications



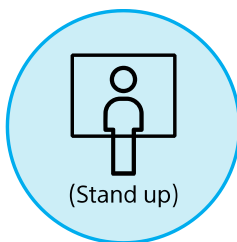
REA-C1000: Edge Analytics Appliance (HDMI in/out)



REA-L0100: Handwriting Extraction (Option License)



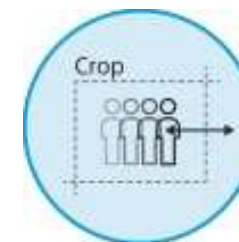
REA-L0200: PTZ Auto Tracking (Option License)



REA-L0300: Close-up by Gesture (Option License)



REA-L0400: Chroma key-less CG overlay (Option License)



REA-L0500: Real-time Cropping for any 4K HDMI fixed camera (Option License)

*All optional features are pre-installed to use during a [60-day free trial](#).

Handwriting Extraction

Handwriting Extraction opens up new possibilities by offering attractive AR (Augmented Reality).



Ideal for



Lecture Capture Content
(review prior
to the actual class)



E-learning/MOOCs



Live viewing via
ceiling monitor

Extract characters and diagrams written by a speaker on a board in real time and display them in front of the speaker like a floating board. It helps record speaker's ideas, thinking process, and passion on video, and transmit them to a audience.

Chroma key-less CG overlay (ver2)

Provides the simple approach of a chroma key solution, based on our motion detection technology – generating enough quality overlay contents in real time, without a dedicated studio and skilled staff.

Ideal for



Online lesson/MOOCs



CEO message video



Interview



Webinar/E-learning

Not for cinema and high-budget broadcasting



Edge Analytics Appliance

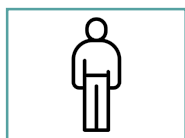
Handwriting Extraction
PTZ Auto Tracking
Chroma key-less CG Overlay

PTZ Auto Tracking

This feature dramatically simplifies PTZ camera operation in locations such as classrooms, conference rooms, and stage environments, by enabling compatible Sony SRG/BRC PTZ cameras to automatically track of a moving speaker while shooting.



Easy switching composition



Full body mode



Upper body mode

Track to keep the angle of the person within the image.



SRG-120DH

SRG-300H

BRC-H800

BRC-X1000

Audience member Close-ups by Gesture



Whole image



Stand up



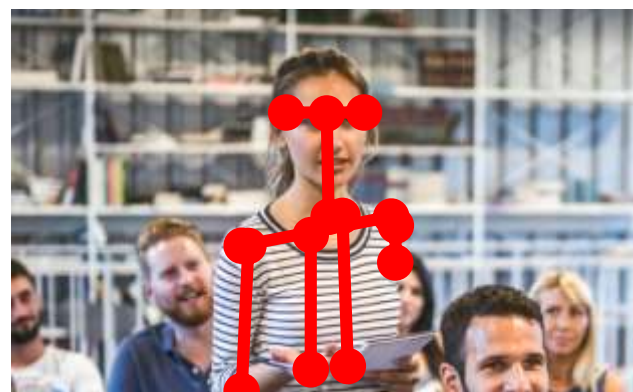
Auto zoom



Whole image



Sit Down



Stand Up

Pose Estimation enables interpretation of "sit down" and "stand up".

Real-time Cropping



2 streams from a single cam



Whole 4k video



Cropped FHD

Focus Area Cropping (ver2)

Fixed Area Cropping



A single camera can capture high quality images of a whole scene, while intelligently following and outputting close-up views of a moving speaker using Sony proprietary video analytics technology.



Angle of interest

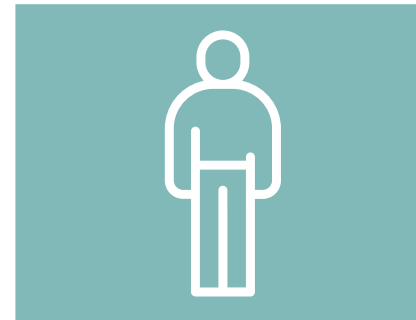


Stage



A single camera can capture high quality images of a whole scene, while simultaneously outputting close-up views according to a preset region and manual operation, via a web browser.

Fixed area



Screen





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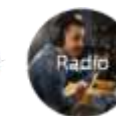
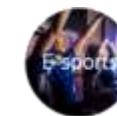
New SRG PoV, BOX Network camera

SONY

SRG-XP1 SRG-XB25

New Mini PoV & BOX Camera (avail. Sept '20)

NEW



SRG-XP1

4K POV 1x fixed lens

PoV cam
Ultra Wide Angle < 102° Field of View
Perfect e-sports / sport camera
Height: 5.5 cm
Width: 7.5 cm
Depth: 12.5 cm



SRG-XB25

4K BOX 25x zoom lens

BOX cam
25x Optical Zoom
Height: 7.5 cm
Width: 8 cm
Depth: 18 cm



4K

50P

Exmor R™
CMOS Sensor

NDI® | HX

RTSP

RTMP

- Small Size Easy Integration
- Very cost effective 4K 50p cameras (~2K €)
- Easy to install Everywhere for multiple applications
- PoE or DC In , NDI|HX license , ePTZ on XP1 ...
- Audio inputs, Tally lamp, HDMI 2.0
- Advanced Web Menu UI

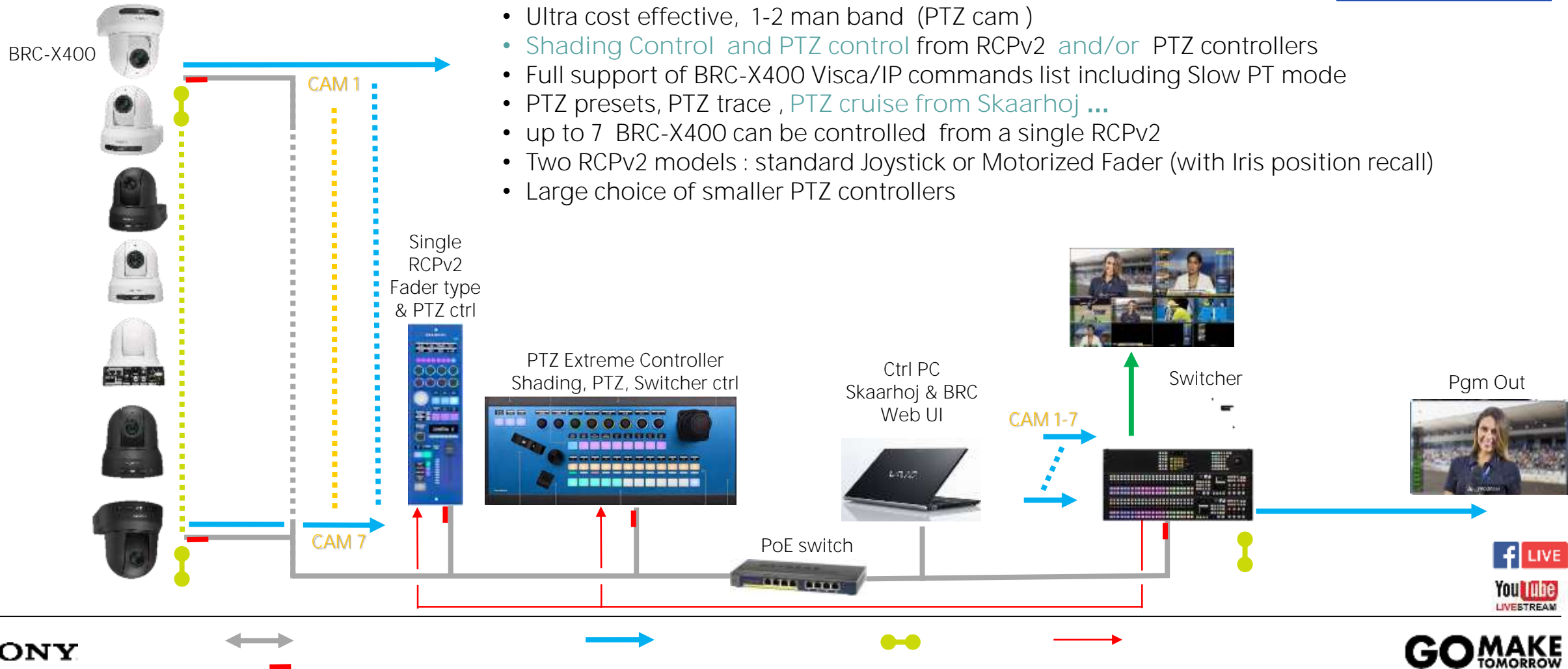
Network PoV, PTZ Live Solutions examples

PTZ & RCP controllers for BRC-X400

SKAARHOJ

Benefits

- Ultra cost effective, 1-2 man band (PTZ cam)
- **Shading Control** and **PTZ control** from RCPv2 and/or PTZ controllers
- Full support of BRC-X400 Visca/IP commands list including Slow PT mode
- PTZ presets, PTZ trace , **PTZ cruise from Skaarhoj ...**
- up to 7 BRC-X400 can be controlled from a single RCPv2
- Two RCPv2 models : standard Joystick or Motorized Fader (with Iris position recall)
- Large choice of smaller PTZ controllers



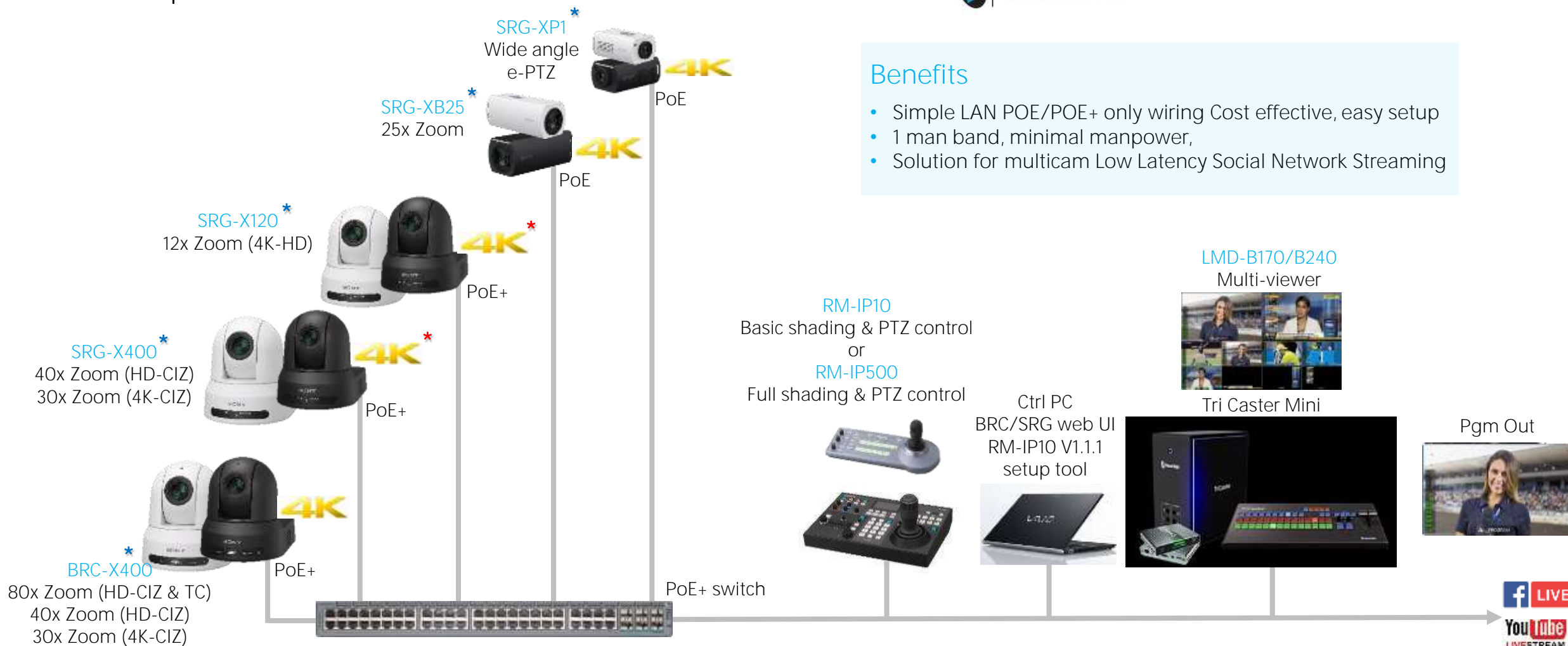
Simplified Live Solutions

NDI|HX or RTMP Live Production with



Benefits

- Simple LAN POE/POE+ only wiring Cost effective, easy setup
- 1 man band, minimal manpower,
- Solution for multicam Low Latency Social Network Streaming



BRC-X1000/H800 Wireless

With  **TERADEK** Orbit PTZ

Wireless TX Base plate and RX for BRC-X1000/H800



Solution

- Sony BRC-X1000/H800 customized base plate
- Wireless 4K/HD HDR video TX with < 1 ms latency (License-free 5GHz)
- Uncompressed, 10-bit, 4:2:2 image quality
- Transmit PTZ camera control Sony VISCA commands RS-232/422
- AES-256 and RSA 1024 encryption

Benefits

- Matching Sony BRC-X1000/H800 camera, size, look & design
- Cable free robust Video & control up to 300m, almost No latency
- High Quality video HD/UHD SDR/HDR compatible
- Full shading and PTZ Control from RM-IP500
- Secure H264 transmission

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Warranty & Prime Support

SONY

Sony Prime Support

All BRC and SRG series covered



PrimeSupport ●●●●

Prime Support **Pro** to **Elite** free upgrade

Camera must be registered within 60_(SRG) / 90_(BRC) days after purchase

1. **2 Years Pro** > **3 Years Elite** as standard + **2 Years** extension option
2. Helpdesk access - Mon-Fri 9:00-18:00 CET
3. Collection of faulty unit for repair within two working days
4. Return of repaired unit to customer's location
5. **Logistics Covered** - all parts and labor covered subject to standard terms & conditions
6. **Replacement Unit, next day dispatch if diagnosed before 15:00 CET (Mon-Fri)**

https://pro.sony/productregistration?l=en_GB



More information



<https://pro.sony/>

- Brochures
- Specifications
- 3rd Party compatibility
- Op. Manuals
- Firmware Updates
- VISCA & CGI protocols
- CAD drawings
- Prime Support ...



27 | OCT | 2020

FROM **VISUAL RADIO** TO **VIRTUAL STUDIO**

an immersive story by Sony and multiCAM systems

Useful links on Pro.sony

[PTZ & Network camera 3rd Party compatibility](#)

[BRC-SRG PTZ family brochure](#)

[BRC-X1000/H800 Manual](#)

[BRC System Guide](#) [BRC Technical guide](#)

[BRC-X1000/H800 Visca command list](#)

[BRC-X1000/H800 V2.02 firmware](#)

[BRC-X1000/H800 CaD drawings](#)

[BRC-X400,SRG-X400/X120 brochure](#)

[BRC-X400,SRG-X400/X120 Manual](#)

[BRC-X400,SRG-X400/X120 Visca command list](#)

[BRC-X400,SRG-X400/X120 CGI \(http\) command list](#)

[BRC-X400,SRG-X400/X120 V2.00 firmware](#)

[BRC-X400,SRG-X400/X120 CaD drawings](#)

[NDI|HX introduction](#)

[RM-IP10 Setup tool for PC](#)



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EOF



SONY