



The Uplifting and Modular X10, Driven by Emotion.

The industry's most powerful 4K Ultra Slow Motion System to support both Continuous Super Slow Motion (SSM) and Ultra Slow Motion (USM) at frame rates up to 1000 FPS



For Vision Research® Phantom Flex4K

B4, PL, F Mounts

Up to 120 FPS real-time continuous SSM in UHD

Up to 600 FPS real-time continuous SSM in 1080p/60

Up to 1,000 FPS Ultra Slow Motion in UHD

Up to 1,975 FPS Ultra Slow Motion in 1080i/1080p

Full 4k CMOS sensor

Up to 1000 FPS replay in UHD

Unique Integration with Industry-Leading Production Servers



CAMERA

Latest generation 4K camera

B4, PL, F Mounts

Up to 1000 FPS in ultra slow motion mode in 4k

Up to 600 FPS real-time continuous super slow motion in 1080p60

SMPTE Fiber Optic Connection

4K Single CMOS Sensor

Red and Green Tally

Built-in Intercom

2 microphone inputs

Video returns



OCP

Joystick Control (Iris, Black, Preview)

RGB & Master Gains

RGB & Master Pedestals

Auto White/ Black Balance

Gamma Control, Black Gamma

Standard Color Matrix

Saturation

Flare compensation

Detail enhancement

Frame Rate/Shutter Control

Setup settings (Format, Genlock, etc.)

User presets

Remote updates



CCU

HD-SDI Live Signal

Size: 2U

10x output to the EVS XT3 live production server, with UMotion

Four video return inputs

Ethernet connection between CCU and OCP

Bi-level, tri-level Genlock

Intercom

Up to 1,000m between camera and CCU

Remote updates



SLOW MOTION REMOTE

User-Friendly Slow Motion Remote

Easy Sequence Selection

Auto-clip to EVS server

Instant Replay

Ramping of Speed Within a Replay

Cueing System

Multi-block Management

Compatible with EVS Hypermotion Mode

CONTINUOUS RECORDING MODE

	▼ FRAME RATE 2X	▼ FRAME RATE 6X	▼ FRAME RATE 10X
HD			
1080i50/p50	—	300	500
1080i59/p59 / i60/p60	—	360	600
720p/50	—	300	500
720p59/60	—	360	500
4K			
2160p50	100	—	—
2160p59/60	120	—	—

LIVE & REPLAY MODE

Internal memory: 64GO (two times more than the previous generation)

	▼ TYPICAL CASE (500 FPS)	▼ MAX FPS
1280x720	88,2s	9,8s at 2950 fps
1920x1080	39,2s	9,8s at 1975 fps
4096x2160 (4K)	9,8s	4,9s at 1000 fps

CAMERA

▼ GENERAL

PHANTOM FLEX 4K

Sensor	CMOS Sensor with 6.75µm pixel
Effective picture elements	4096 x 2304
Lens mount	B4 Mount, PL Mount, Nikon F Mount
8-inch Color Viewfinder	Sony OLED, or any HD-SDI viewfinder
Operation temperature	-20°C – +50°C
Dimensions (W x H x L)	144 x 198 x 291 mm
Weight	6,3 Kg (14lbs)

CAMERA BOX

Dimensions (W x H x L)	506 x 195 x 95 mm
Weight	2,8 Kg
Temperature	-20°C – +45°C
Mounting	Native mounting holes Heavy duty frame (optional)

▼ INPUT/OUTPUT CONNECTORS

Viewfinder connector	36 HD-SDI BNC
Output DC (12V/1.5A) + Tally	5-pin Hirose
Lens connector	12-pin Hirose
Hybrid fiber connector	LEMO® EDW.3K.93C.TLC / SMPTE 304 Tajimi / Fischer / Rosenberger connector (optional)

▼ INTERCOM - AUDIO

Head set connector	5-pin XLR
Microphone input	2 x 3-pin XLR / 0 to 60 dB gain / 48V switchable supply / maximum input level 9dBu
Volume control	ENG, PROD, PGM

▼ TRANSMISSION

Transmission cable	SMPTE 311 Hybrid Cable up to 1,000m
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CAMERA CONTROL UNIT (CCU)

▼ GENERAL

Dimensions (W x H x D)	438 (19inch rack) x 88 (2U) x 465 mm
Weight	7 Kg (15,43 lb)
Operation temperature	0-40 degrees C (32-104 F)
Operation humidity	Max 80 % (non-condensing)

▼ CONNECTORS

SDI-in	4 x BNC 1ch 1.0Vp-p 75 Ω
SDI-out	6 x BNC 1ch 1.0Vp-p 75 Ω
SSM output	Up to 10 BNC
AES out	1 BNC
Control data	RJ45 x 2
Tally (R, G)	Dry-contact inputs
Genlock	SD Analog Black Burst (Bi-Level) or HD Tri-Level Sync
Hybrid Fiber Connection	LEMO FMW.3k93C. SMPTE 304 Tajimi / Fischer / Rosenberger Connector (optional)

▼ VIDEO OUTPUT & INPUT FORMATS

Video Output & Input Formats	HD — HD-SDI 1080i 50 / 59 / 60 HD-SDI 1080p 50 / 59 / 60 HD-SDI 720p 50 / 59 / 60
	UHD — HD-SDI 4Kp 50 / 59 / 60

▼ INTERCOM - AUDIO

Line Level	+4dBu Nominal
Intercom ENG/PROD	4-wire System (Balanced)
Intercom PGM	Balanced Line Input / Maximum input level 13dBa
Microphone preamp output	2 x 3-pin XLR / Balanced line level / Maximum output level 13 dBu

▼ POWER

Power requirements	AC 80 V to 240V, 47 to 63 Hz
Power connector	IEC type, 3-pin male
Power consumption	280VA max. with camera

OPERATIONAL CONTROL PANEL (OCP)

User interface	Graphical TouchScreen, Rotary Knobs
Power connector	XLR 4-pin 12 Vdc
Control Data	RJ45 / Up to 100m between CCU and OCP
Dimensions (W x H x L)	99 x 116 x 355 (323) mm
Weight	2 kg (4.41 lb)

SLOW MOTION CONTROL

Controls	Jog, Shuttle, Buttons
Power Connector	XLR 4-pin 12 Vdc
Control Data	RJ45 / Up to 100m between CCU and slow motion remote
Dimensions (W x H x L)	164 x 80 x 255 mm
Weight	1.5 kg (3.3 lb)