

Special Cameras



OmniCam

hymotion

underwater

miniCam

mini Jib



4Sky is one of the most amazing and dynamic camera system available today to enhance the coverage of your spectacular events.

Using a four-cable suspended system that enables a camera to move dynamically across a sports field, arena, or concert stage from virtually any spot or angle, flowing freely vertically and horizontally through a pre-defined indoor or outdoor space.



With Augmented Reality built-in we can provide astonishing grafics interaction.

From ground level to dizzying heights delivering perspectives unavailable to conventional cameras.











4Sky System Overview:

- Stabilized camera head
- Panasonic 4K AK-UB300 camera / Sony P50 / P31
- Canon 4K CJ12x4.3 lenses
- Remote OCP camera control
- 4 Winches
- 4 Pulleys
- Control station
- Two intercom positions
- Optical fiber cables
- All signals delivery at OBVan

Gyro-stabilized Camera Head:

- 4 stabilized axis
- The camera head is passive stabilized by gyroscopes, and active stabilized by electronic IMU devices (inertial measurement unit)
- Max. speed up to 10m/s, limited to 8m/s
- 6 function control
- Pan, Tilt, Dutch Roll, Zoom, Focus & Iris
- 4K, HD-SDI, Data, Camera control by optic fiber

4 Pulleys:

- 3 Axis free movement
- High-end design

4 Winches:

- Winches can accomodate 400m of cable
- Aramid fiber optic cable with 980Kg tensile strength
- Two independent circuits, one for control, the other for safety status monitoring. UPS powered.
- Two independent brakes
- Four inteligent monitoring sensors
- Power: 3x380V, 16A

Control Station:

HARDWARE:

- PC Work Station
- 3x monitors
- UPS
- Two remote control panels; for 3D movement & for camera control

SOFTWARE monitoring & set up views for:

- · Camera head
- Winches
- Motors
- Controllers
- Overall system behavior
- Pre-set memories and paths motion control for 3D movement
- Full control over camera head travel an cables limits, including 3D solid construction for anti-collision.
- Augmented Reality; Astonishing grafics interaction.

4Sky was selected for the football season of the following leagues:



Portugal



Spain





Saudi Arabia





France

United Arab Emirates

Greece













LIGHTWEIGHT SUSPENDED CAMERA SYSTEM

System Overview:

- New Patent Pending Omnicam4Sky suspension technology
- Stabilized camera head
- Z-Cam E2 / BlackMagic MS 4k-3G cameras
- Olympus M.Zuiko Digital ED 7-14mm f/2.8 ED 12-100 f/4
- Remote OCP camera control
- 4 Winches
- 4 Pulleys
- Control station
- Two intercom positions
- Optical fiber cables
- · All signals delivery at OBVan

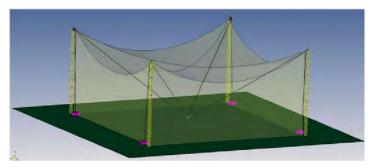
Stabilized Camera Head:

- 4 stabilized axis
- Camera head with active electronic stabilizer plus IMU devices (inertial measurement unit)
- Max. speed up to 6,1m/s-22Km/h, limited to 8m/s
- 6 function control
- Pan, Tilt, Dutch Roll, Zoom, Focus & Iris
- 4K, HD-SDI, Data, Camera control by optic fiber

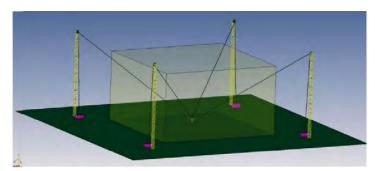
4 Pulleys:

- 3 Axis free movement
- · High-end design

New Flying Area



New Patent Pending Omnicam4Sky suspension technology -standard in 4Sky Lite - optional in 4Sky



General Systems

















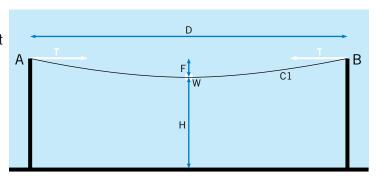
2Sky 2D Cable Cam System

Point to point suspended system with 3 axes gyro-stabilized remote 2Sky system uses the same programmable control and set up as 4Sky, but only with 2 winches and 2 pulleys.



2Sky installation and suspension forces

The camera could move freely in the 2D space between ground, point A and B. Sole limitation in catenary midpoint (F)











DROP WIRECAM SYSTEM

Drop Wirecam System

Stabilized remote camera head

The system uses the same programmable control and set up as in 4Sky and 2Sky systems, but only one camera operator with control pedal for up/down motion.

The suspension cable carries fiber optic communication. Suitable for indoor use only



@omnicam4sky

5













04S DATA GUIDELINES FOR AR

The 4K camera and lens used are Panasonic HC-UB300 & Canon CJ12x4.3 or alternatively CJ14x4.3

Data structure:

TIMESTAMP / NA / NA / X / Z / Y / Pan / Tilt / Roll / Zoom / Focus / Iris

In a live environment, there are 50 datagrams per second locked onto our video, so it could use external gen-lock but it is not a "must".

Data is sent by UDP, Free-D protocol, only D1 type frames are sent.

As per our experience, the data is delayed 4 to 6 frames when reaching the engine.

If data and video are inserted and processed in the engine itself there are no need for video delay, and is the data that have to be delayed in the engine. (the video is highly delayed in the engine so data has to be delayed)

If fill & Key is sent to Video Mixer together with our video stream an external video delay has to be used for 4 to 10 frames.

A screen and software package with all data info and options is available at 4Sky operation position, so the data stream could be monitored and corrected without any intervention from graphics station desk.











04S- Suspend system family





The Certification were undercharge of Bureau Veritas Portugal, with the Inspection Report No 14.L.02725, and Final Report No 17.L.03265, BV job nr: 8472912.





The OmniCam Track Camera System is a remote-controllable dolly with camera head.

The 11cm narrow-gauge aluminum rail guides the camera smoothly and safely, both along straight runs and around curves with a minimum radius of just 150cm. The OmniCam Track Camera System is also designed for suspended mounting.

A digital control panel operates the dolly. Automated moves can be programmed, or the system can be controlled via a joystick and foot pedal.

Whether ground-mounted or suspended, the low gauge saves you time and money when setting up and transporting. Rail profiles for various lengths and curve radiuses are available.

System can be driven by rope, with inner core fiber optics and batteries, allowing operation without any visible cables.

Capturing unique perspectives from angles unreachable by conventional handheld, tripod, or full-sized remote-controlled camera support systems.







O4S's HyMotion system offers an unprecedented level of convenience and creativity. Further to providing high frame rate speeds, it offers superior flexibility and integration into broadcast operations, with a range of features and ease of use optimized for strict broadcast schedules.

In sports productions, when the game goes into high gear, HyMotion keeps up, giving you 100 times slower-than-live action with instant replays.

Its superior performance, clever design, and breathtaking image quality, extend the range of utra-slow-motion applications.

Key Features:

- Use on Sports, Films, Commercials and Documentaries
- Up to 2.600 fps Phantom V series
- Dual output can be used as a live camera as replay happens
- Runs from single SMPTE fibre cable
- · Single-channel usage on any disk record
- Use any B4 or PL mount

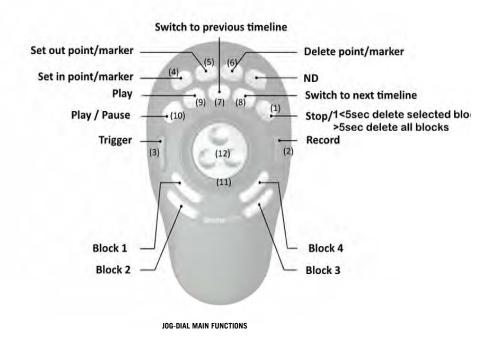
omnicam4sky.tv



SSM500 CAMERA SYSTEM WORKFLOW

SSM500 connection diagram





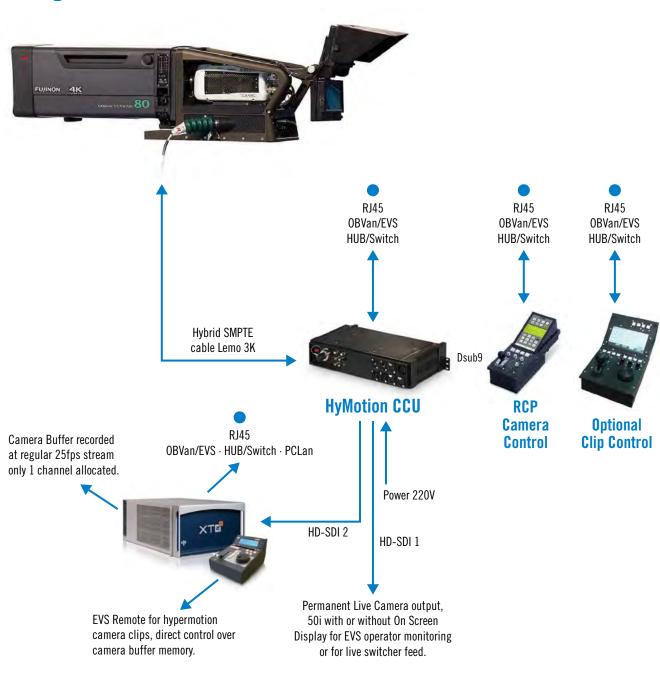
@omnicam4sky

10



HYPERMOTION CAMERA SYSTEM

Configuration scheme:





The MiniCam X5A system & X5C standalone camera can be used in a variety of applications, such as InGoal and BeautyShot Cameras.

With custom-made rig and signal transmission solutions, 04S delivers HD SD-SDI 3G video signal pictures from special angles with fully remote-controlled cameras.



04S offers a package with unbelievable picture quality that suits all the needs that can be met with this type of camera:

- Horizontal field of view (HFoV) from 50° to 129°
- Camera picture remote control (X5A + X5C) or joystick local menu (X5C only)
- Remote iris control (X5A) or manual (X5C)
- Machined aluminum case protecting lens and camera
- Ruggedized connectors with only one cable for all functions

10. Full Specs X5A / X5C / X5A $_2$ /X5C $_2$

		X5A2	Х	5C ₂	X5A	X5	iC
Image Sensor		1/ 2.8" Megapixel Sony Exmor CMOS Sensor					
Scanning System		Progressive, Interlace					
Total number of pixels		1952 (H) x 1116 (V)					
Lens Mount		C/CS Mount					
Video Output Mode		HD-SDI: 1920X1080p (30/25fps), 1920x1080i (60/50fps), 1920x1280x750p (60/50fps) 3G-SDI: 1920X1080p (60/50fps)					
Sync. System		Internal					
Genlock		N/A					
Video Output Level		HD-SDI, 3G-HDI (Level A)					
Min. Illumination		Color: 0.2Lux @ F1.2 / B/W: 0.01@F1.2					
Shutter		Auto / Manual (1/30~1/50,000 & x2~x30)					
White Balance		ATW/AWC — Set/ Indoor/ Outdoor/ Manual					
Gain Setting		AGC 1-15 Level, MANUAL 0-100 Level (Deafault 40)					
Auto Exposure Detection		4 Areas, 4 modes: Off / WDR / BLC / HSBLC					
Flicker Cancellation		FLK — Shutter mode					
Detail		0~15 Level					
Color Correction		YES					
Color Saturation Adjustment		YES					
Noise reduction		2D, 3D					
Gamma Correction		YES					
Master Pedestal		YES					
Pedestal (R,G,B)		R, B					
Color Balance		R, B					
Pixel Defect (dead pixel compensation)		3 modes: real time, static point, black points					
D-WDR/ACCE wide Dynamic Range		Low / Middle / High/ Off, 0~15 steps					
Image Flip		Up/ Upsidedown / Mirror / V-flip / Rotate / D-Zoom / NEG.IMAGE					
Camera Control Options		Remote RCP Remote RCP/ Local OSD			Remote RCP Remote RCP/ Local OSD		
Varifocal Lens		2.8 - 8mm (2.8x) 2.2 - 6mm (2.7x)					
Iris Range		F1.3 – Close					
Operation	Zoom	Manual					
	Focus	Manual					
	Iris	Motorized remotly (RCP)	Motorized remotly (RCP002) Manual Motorized remotly (RCP002)		CP002)	Manual	
Field Angle	Н	120° 00' (W) - 46° 26' (T)			112.4° (W) - 38.8° (T)		
(HxV)	V	91° 36'(W) - 34° 59' (T) 81.3° (W) - 29.1° (T				29.1° (T)	
Focus Range		∞ - 0.3m (wide: ∞ - from Front of Lens)					
Resolution		3 Megapixel, Exceeds 1920 x 1080 HD Cameras					
Object Dimension	WIDE	1324 x 479					
At M.O.D. 16:9	TELE	293 x 158					
Operating / Storage — Temperature		-5°C~+ 50°C (Humidity: 0%RH ~80%RH) -20%C~+ 60°C (Humidity: 0%RH~90%RH)					
Power - Consumption		DC12V @ 4W	DC12V @ 4W			24V @ 3,3W	
Dimension (LxWxH)		142mm X 63mm X 52m	142mm X 63mm X 52mm 114mm x 59mm x 48mm 142mm X 63mm X 52mm 114mm x 59mm x 48			9mm x 48mm	
Weight		320g		210g	320g	210g	



miniCam

X5U underwater

Designed for stand-mounting and hanging in a wide variety of applications, the X5U mini HD camera, is the professional solution for capturing crisp video in true color, suitable for use in broadcast events.

X5U, its the perfect choise for underwater environment to a maximum of 3mts depth







CAM

- 1/3" Sony CMOS Sensor 2.2M Pixels (Total) / 2.1M Pixels (Active)
- HD-SDI/3G-SDI Output
- •1080/720@25p/30p/50i/60i/50p/60p
- WDR / DNR / AGC / Sens-Up
- DC12V/24V
- 3 meters cable lengh
- 3 meters maximum depth of use
- Dimensions (LxWxH): 90mm x 65mm x 65mm

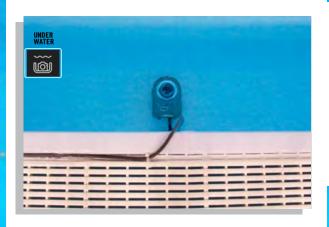
LENS

- Resolution:
 - 5 megapixel, Exceeds 1920x1080 HD cameras
- Focal Lenght (mm): 2.8 mm
- Operation Zoom, Focus, Iris: Manual
- Angle Of View (H) 16:9 1/3": 105°(W)



Underwater Camera Solutions

Go deeper with your pictures, placing our PTZ remote-controlled camera system underwater or using a completly submersible camera housing with Pan / Tilt on our MiniJib. X5U can be set on multiple applications even completly submerged at 3 meters maximum depth of use









Light camera pole with carbon arm elements that can be assembled in a few minutes to a total length of 5,5m (18.2 ft) and let you move a camera where an ordinary crane cannot be used.

An electronically-stabilized PTR (Pan, Tilt, Roll) Head with a X5A MiniCam and a sensitive joystick, delivering smooth and accurate motion control. DJI Ronin head available in model 2022



The stabilization corrects all unwanted shaking and vibrations, but also keeps the camera pointed in the same direction, helping operation and delivering rock-steady shots.

+351 210 180 810 · info@omnicam.pt





BROADCAST CAMERA SEAT SPOT

The LowBoy® is a mobile camera seat for low shooting camera positions, very easy to transport and quick to assemble and disassemble.

Suitable for outdoor sport broadcasts such as football, athletics and tennis, or any other that needs a low position camera with 360° panning, with smooth, steady and noiseless operation.



Estúdios MEDIAPRO Portugal · Asseiceira Grande · 2665-618 Venda do Pinheiro · Portugal



Completely redesigned, this is a new generation of low camera seats, lighter, easier to carry, more discreet, with small-footprint implementation.

Key Features:

- 360° panning independent of the seat
- · Smooth, steady and noiseless operation
- 6 short legs for stabilization in small space
- Seat adjustable in length and two different heights
- Adjustable leveling without projecting screws
- Very easy to operate, transport and assemble

+351 210 180 810 · info@omnicam.pt

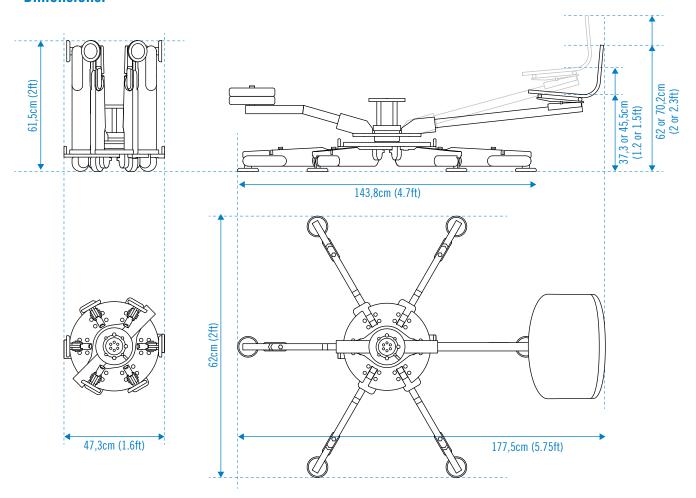






The LowBoy[®] is transported in a wheeled resin case with 81x59x49cm and 50kg (62Kg with optional platform).

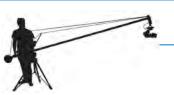
Dimensions:



LinkBox

Transceiver Field Box + CCU Comunication Link

Q45® Family products



C4S® MiniJib with Ronin HeadWide Angle Lens & Remote Iris



Q4S® MiniCam X5A & X5CWide Angle Lens & Remote Iris or manual Iris (X5C)



C4S® MiniCam X5U Underwater & Image control



Dream CHIP Family products





MiniCam Atom SSM500 Up to 500 fps & Remote Iris





MiniCam AtomOne 4K 16 Smalest UHD 4K HDR Global shutter



MiniCam AtomOne mini Zoom Smalest zoom broadcast camera









MiniCam AtomOne mini / AIR / WaterProof

Panasonic







Panasonic AW-UE150K 4K / Sony H800 And a large of others generic Robotic PTZ Camera



045® Transceiver Field Box

Fiber Optic Transceiver Video/LAN with optional 12G



SMPTE Hybrid Cable

Power and Fiber Lemo 3K connectors Up to 2Km



C4S® Transceiver CCUFiber Optic Transceiver Video/LAN with optional 12G



SSM500 SSM Mode / Trigger Mode Remote Clip Control



Q4S® RCP002 / 003 Universal Remote Control Panel



Panasonic AW-RP50 Remote Camera Controller



Sony RM-IP500 Remote Camera Controller

Other Ethernet Controller







Transceiver Field Box E6SERIES

MINICAM FIELDBOX

- 1 SMPTE hybrid Cable connector LEMO 3K®
- 2 Channel Video HD-SDI-12G (1 bi-directional)
 - · Transmitter with 2 channel loop output
- 1 Port Network

· Ethernet: IEEE Protocol · Rate: 10M/100M · Interface: **RJ45**

• 1 Multi-Purpose Port (E6SERIES)

HR10-10R-10S MULTI-PURPOSE CONNECTOR 12V+5 DC OUT CAN CONNECTIVITY



HPRC 2500 FIELDBOX external dimension 48x39x20cm

• 1 Extra Optical Fiber

ST Connector · Interface: Single-Mode · Mode: · Optical power LD: (-11 to -4)dBm · Receiving sensitivity: ≥-26dBm

Output 110-220VAC

· Chassis Female 3PIN AC IEC C13 Socket Plug

Input 110-220VAC

· Chassis Male 3PIN AC IEC C14 Socket Plug



Power consumption reference value: 150w **OUTPUTS**

· Chassis Female 3PIN AC IEC C13 Socket Plug 220V/50w max consumption

. Multi-Purpose Port (E6SERIES) HR10-10R-10S MULTI-PURPOSE

CONNECTOR 12V+5 DC OUT (12V 1A + 5V 1,5A)



MINICAM CCU (Camera Control Unit)



- 1 SMPTE hybrid Cable connector LEMO 3K®
 - ·+ 2Km distance
- 2 Channel Video HD-SDI/4K 12G
 - One channel directional CCU to FieldBox
- 1 Extra Optical Fiber ST

Power consumption reference value: 50w MAX

(The values may vary depending on the length of the hybrid cable between the CCU and the FieldBox)



- - · Chassis Male 3PIN AC IEC C14 Socket Plug
 - 1.5U Rack mount

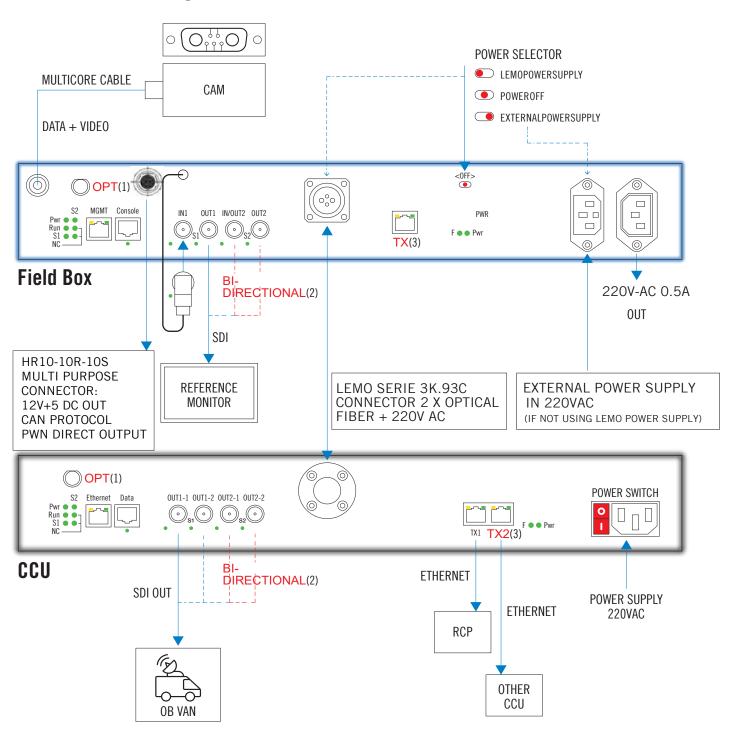
- - ·RJ-45 10/100
- Input 110-220VAC

LinkBox

E6 Series HD-SDI/3G (OPTIONAL 6/12G)



Connection Diagram:



- (1) Spare Optical Fiber way
- (2) Standard config: CCU IN Field Box OUT. Optional RCP-002 software config: Field Box IN CCU OUT
- (3) Extra Ethernet Port





RCP002 was first presented in 2014 by 04S as the first multi-cameras and multi-brands remote control panel using a manche for iris/pedestal control and joystick.

In 2022, **Omnicam4Sky** is pleased to introduce the **RCP003**, as an comprehensive evolution of the previous RCP002, keeping all its functions and added a few new ones more such as: automatic camera recognition, multi IP segments, tally & GPI I/O, standard **OCP/RCP** length size, **RGB** color led for all knobs. A user friendly GUI combined a 7" touch screen panel together with physical buttons and knobs, allow operators to quickly match and manage up to 10 cameras over an ethernet connection.













ALL PHOTOS SHOWN ARE ILLUSTRATIVE ONLY AND ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS



C4S® Family products compatible cams









04S® MiniCam X5U Underwater & Image control



















MiniCam AtomOne mini Zoom

Smalest zoom broadcast camera



Up to 500 fps & Remote Iris



Marshall CV420-CS 4K60 12GSDI







Z CAM E2-M4 - 4K Ultra HD Micro Four Thirds Mount

Panasonic





Panasonic AW-UE150K 4K/UE100 And a large of others generic Robotic PTZ Camera









Vision Research Phantom V64x; Miro

hymotion









BMD Studio; mini URSA; micro Studio & **BMD Teranex**

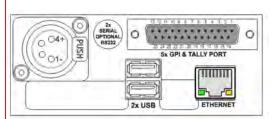
STANDARD MODE

ADVANCED MODE





RCP003 back panel connections



RCP003 connector quick reference

- In 1-5 GPI In (Tally) DC 3V to 30V any polarity
- Out 1-5 GPI Out Relay contact output Max 1A-30V



omnicam4sky.tv

Special Cameras

Estúdios Mediapro Portugal 2665-618 Venda do Pinheiro Portugal $+351\ 218\ 310\ 680$ info@omnicam.pt

