



Introduction

miniCam X5A System/X5C

Introduction for MINICAM X5A system & X5C standalone camera

1. MINICAM X5A

- 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

WDR (Wide Dynamic Range)

WDR allows a camera to filter the intense back light surrounding a subject and thus enhances the ability to distinguish features and shapes on the subject.

DNR (Digital Noise Reduction, 2D/3D-NR)

DNR technology will supply you with outstanding clear images by reducing noise of picture. DNR technology has excellent disk-saving effect. X5A supports brilliant DNR technologies like DNR, 3D-NR and 2D+3D.



Slow Shutter control (Sens-Up), Color temperature Range (1800K ~ 10500K).

DC12V Internal

2. VARIFOCAL LENS

• **Resolution:** 3 megapixel, Exceeds 1920x1080 HD cameras

• Focal Lenght (mm): 2.2 - 6 (2.7x)

• Iris Range: F1.3 – Close

Operation Zoom, Focus, Motorized Iris: Manual
 Iris control w/ X5A System: Motorized

• Angle Of View (HxV) 16:9 - 1/3": WIDE: 129°43'x75°23'

TELE: 50°30'x28°38'

• Focusing Range (From Front Of The Lens) (m): ∞ - 0.3

• Object Dimensions at M.O.D. 16: 9 - 1/3": WIDE: 1324x479

TELE: 293x158

Note that the this lens has full in-focus wide angle/fisheye, including picture corners



3. MINICAM BOX

• 1 SMPTE hybrid Cable connector LEMO 3K®

• 1 Channel Video HD-SDI

· Transmitter with 2 channel loop output

• 1 Port Network

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

• 1 Data 3

Signals: RS232 (2Ch/Bidirecional)Interface: Phoenix Connector 5P/

MC 1,5/12-ST-3,81

 \cdot Bit rate: 0-256Kbps \cdot Error rate: ≤10⁻⁹

• 1 Channel Video COMPOSITE

· Receiver

• 1 Optical Fiber

Interface: ST Connector
 Mode: Single-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



4. MINICAM CCU (Camera Control Unit)

• 1 SMPTE hybrid Cable connector LEMO 3K®

• 1 Channel Video HD-SDI

Receiver with 2 channel

• 1 Port Network

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

• 1 Data 3

 Signals: RS232 (2Ch/Bidirecional)
 Interface: Phoenix Connector 5P/ MC 1,5/12-ST-3,81

Bit rate: 0-256Kbps \cdot Error rate: $\leq 10^{-9}$

• 1 Channel Video COMPOSITE

· Transmitter

• 1 Optical Fiber

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

• Input 110-220VAC

· Chassis Male 3PIN AC IEC C14 Socket Plug

Chassis rack dimension

· 1.5U Rack mount

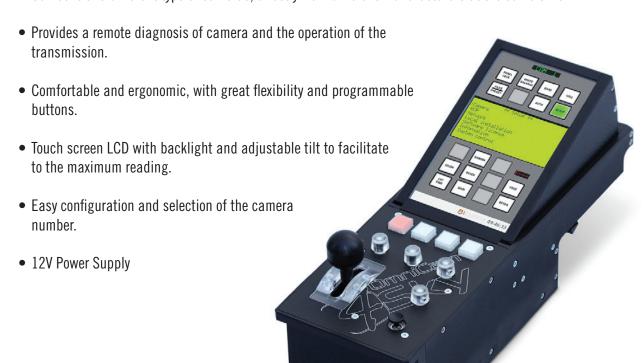




5. RCP 002 (Remote Control Panel)

Features:

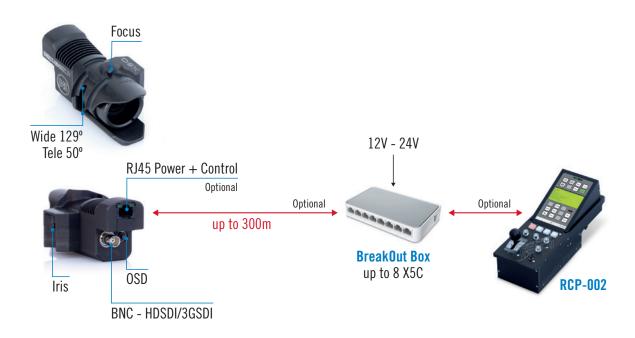
- RCP 002 is a universal remote control panel for various modes of cameras. The user interface is designed
 for convenience, with a menu with accessible functions on the touch screen for a detailed view and clear
 functions and values.
- Operates based on Ethernet using TCP/IP or Serial communication protocol.
- Can control 8 different type of cameras, directly from different manufacturers at the same time.



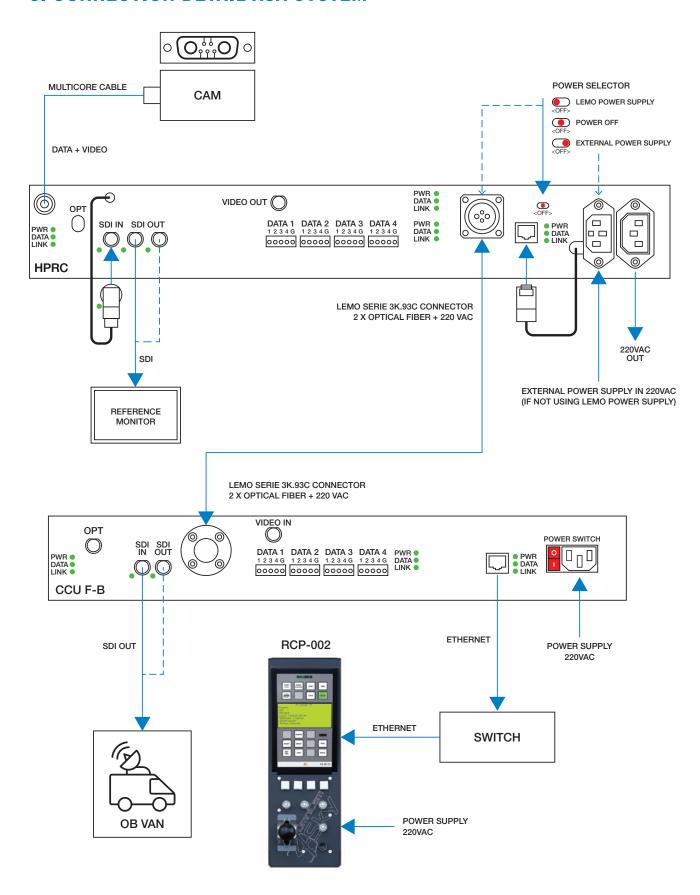
6. CONNECTION DIAGRAM X5C



7. CONNECTION DIAGRAM X5A



8. CONNECTION DETAIL X5A SYSTEM



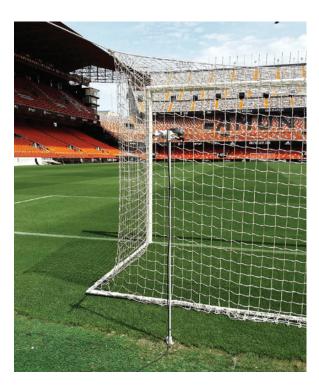
10. X5A / X5C Full Specs

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), 1920x1080j (60/50fps), 1920x1080p (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 Noise reduction 2D, 3D Gamma Correction YES Master Pedestal YES			X5A	X5C	
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Color Saturation Adjustment YES Noise reduction 2D, 3D Gamma Correction YES	Detail		0~15 Level		
Noise reduction 2D, 3D Gamma Correction YES	Color Correction		YES		
Gamma Correction YES	Color Saturation Adjustment		YES		
	Noise reduction		2D, 3D		
Master Pedestal YES	Gamma Correction		YES		
	Master Pedestal		YES		
Pedestal (R,G,B) R, B	Pedestal (R,G,B)		R, B		
Color Balance R, B	Color Balance		R, B		
Pixel Defect (dead pixel compensation) 3 modes: real time, static point, black points	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	D-WDR/ACCE wide Dynamic Range		Low / Middle / High/ Off, 0~15 steps		
Image Flip Up/ Upsidedown / Mirror / V-flip / Rotate / D-Zoom / NEG.IMAG	Image Flip		Up/ Upsidedown / Mirror / V-flip / Rotate / D-Zoom / NEG.IMAGE		
Camera Control Options Remote RCP Remote RCP/ Local OSI	Camera Control Options		Remote RCP Remote RCP/ Local OSD		
Varifocal Lens 2.2mm – 6mm (2.7x)	Varifocal Lens		2.2mm — 6mm (2.7x)		
Iris Range F1.3 – Close	Iris Range				
Zoom Manual	Operation		Manual		
Operation Focus Manual			Manual		
Iris Motorized remotly (RCP002) Manual		Motori	rized remotly (RCP002)	Manual	
Angle Of View WIDE 129°43' x 75°23'	View				
(HXV) 16:9 TELE 50°30' x 28°38'	5:9	TELE 50°30' x 28°38'			
Focusing Range Tele: ∞ - 0.3m (wide: ∞ - from Front of Lens)	Focusing Range		Tele: ∞ - 0.3m (wide: ∞ - from Front of Lens)		
Resolution 3 Megapixel, Exceeds 1920 x 1080 HD Cameras	Resolution		3 Megapixel, Exceeds 1920 x 1080 HD Cameras		
Object Dimension WIDE 1324 x 479			1324 x 479		
At M.O.D. 16:9 TELE 293 x 158	. 16:9		293 x 158		
Operating / Storage — Temperature -5°C~+ 50°C (Humidity: 0%RH ~80%RH) -20%C~+ 60°C (Humidity: 0%RH~90%RH)	g / Storage — Temperature		_		
Power – Consumption DC12V @ 4W DC12V – 24V @ 3,3W	Power — Consumption		DC12V @ 4W	DC12V - 24V @ 3,3W	
	Dimension (LxWxH)		mm X 63mm X 52mm	114mm x 59mm x 48mm	
Weight 320g 210g			320a	210α	

11. Suspention systems for InGoal

These systems are used because they don't depend on local conditions and can be used regardless the goal net and set up.

Spain Stadiums:

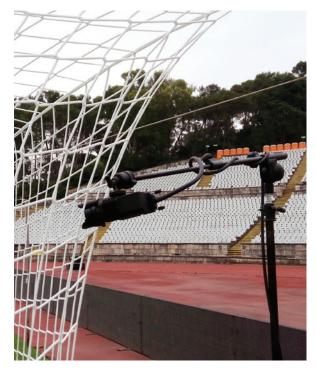








Other Stadiums:











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