



## Color Video Camera **XC-505/XC-505P**

The XC-505 and XC-505P are ultra-compact and lightweight color video cameras incorporating a high-sensitivity, high-performance 1/3-type Super HAD II CCD. Compared to Sony's popular XC-555 camera, the XC-505 and XC-505P are equipped with several new features including one-push white balance, noise reduction (2D/3D), a built-in color bar, DTL function, and RS-232C support.

These cameras use an NF lens system which can easily be converted into a flexible C-mount lens. What's more, they are easily integrated into space-restricted environments thanks to their one-piece compact and robust body.

The combination of first-class picture quality with superb sensitivity for less-than-ideal lighting conditions makes these cameras well-suited for a wide range of applications such as remote monitoring, security, content creation, machine vision, and sports shooting.

## FEATURES

- High-sensitivity Super HAD II CCD
- One-piece body and ultra-compact design  
7/8 x 7/8 x 2 5/8 inches, 2 oz  
(22 (H) x 22 (W) x 64 (D) mm, 51 g)
- Selectable video outputs and external sync inputs
  - Video outputs: VBS and Y/C
  - External sync: HD/VD, VS, VBS (no genlock)
- Dip switch or RS-232C serial communication options for setting camera functions
- Various image acquisition features:
  - Selectable Auto Exposure and White Balance
  - Defective pixels correction
  - 2D/3D Noise Reduction (NR)
  - Edge Enhancement/Detail Enhancement
  - E-flip
  - Built-in color bar

# SPECIFICATIONS

	XC-505	XC-505P
Image sensor	Super HAD II 1/3-type IT CCD	
Color filter	Complementary color mosaic	
Effective picture elements (H) x (V)	768 x 494	752 x 582
Scanning system	525 lines, 2:1 interlace, 30 frames/sec	
Lens mount	NF mount	
Sync system	Internal/External (automatic switching)	
Horizontal resolution	470 TV lines	460 TV lines
Minimum illumination	1.5 lx at F1.4 AGC: max (18 dB)	
Sensitivity	2000 lx at F11 AGC: OFF (0 dB)	
S/N ratio	48 dB (standard) AGC: OFF (0 dB)	46 dB (standard) 9 AGC: OFF (0 dB)
Shutter speed	1/60 sec (OFF) (NTSC), 1/1000 sec, CCD IRIS, and FLICKERLESS (selectable)	1/50 sec (OFF) (PAL), 1/1000 sec, CCD IRIS, and FLICKERLESS (selectable)
White balance	3200K, 5600K, One Push WB, ATW (auto tracking white balance), and MAN (manual) (selectable)	
Gain control	AGC/Fixed (0 dB)	
Video output	VBS/Y/C (selected with the switch) VBS: 1 Vp-p, 75 ohms, sync negative Y: 1 Vp-p, 75 ohms C: C level depends on the composite video out signal	
External synchronous input	HD/VD, VS, VBS (no genlock)	
Output connect	DC IN/SYNC/VIDEO: multi 12-pin	
Operating temperature	32°F to 104°F (0°C to 40°C)	
Storage temperature	-22°F to +140°F (-30°C to +60°C)	
Operating humidity	20% to 80% (no condensation permissible)	
Storage humidity	20% to 90% (no condensation permissible)	
Power requirement	DC 10.5 V to 15 V	
Power consumption	1.5 W	
Vibration resistance	10 G (20 Hz to 200 Hz)	
Shock resistance	70 G	
Dimensions (H x W x D)	7/8 x 7/8 x 2 5/8 inches (22 x 22 x 64 mm)	
Weight	2 oz. (51 g)	
Supplied Accessories	Lens mount cap (1), Tripod adaptor (1 set), Operating instructions (1)	

## Dip switches for setting functions

Dip switch setting	Functions (Bold: default setting)
1 to 4	White Balance (3,200K, 5,600K, One Push W/B, ATW, Manual)
5 and 6	Shutter Speed (OFF, 1/1,000, CCD IRIS, FLICKERLESS)
7	Auto Gain Control (ON, OFF)
8	Camera Output Signal (VBS, Y/C)

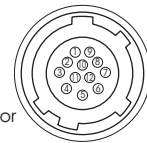


\* This Dip switch is the default setting at ex-factory.

## DC IN/VIDEO connector (multi 12-pin)

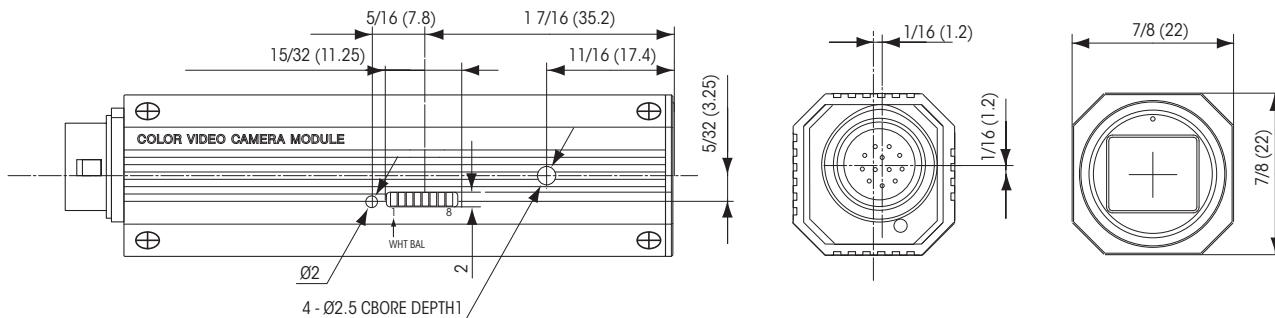
Signal	Sync signal types		
	External Sync signal		Internal Sync signal
Pin No.	HD,VD	VS Input	
1		GND	
2		+12 V	
3		VBS/Y Output (GND)	
4		VBS/Y Output (signal)	
5	HD Input (GND)	-	-
6	HD Input (signal)	-	-
7	VD Input (signal)	VS Input (signal)	-
8		GND (-/C)	
9		-/C Output (signal)	
10		RS-232C (TXD) *	
11		RS-232C (RXD) *	
12	VD Input (GND)	VS Input (GND)	GND

\* For details on how to change this setting, please refer to the Technical Manual.



Multi 12-pin Connector

# DIMENSIONS



# SONY

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1 Sony Drive  
Park Ridge, NJ 07656  
[click.sony.com/videocameras](http://click.sony.com/videocameras)

IS-1228 (MK10652V1)

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