







#### Color Video Camera

# XC-505/XC-505P

The XC-505 and XC-505P are ultra-compact and lightweight color video cameras incorporating a highsensitivity, 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 75 (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	625 lines, 2:1 interlace, 25 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/V/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 (W x H x D)	7/8 x 7/8 x 2 61/64 inches (22 x 22 x 75 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)	

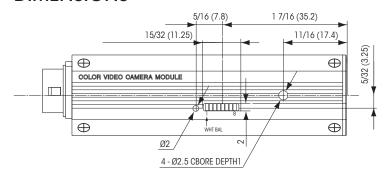
#### DC IN/VIDEO connector (multi 12-pin)

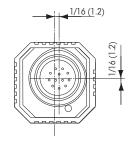
Signal	Sync signal types		
	External Sync signal		Internal Sync
Pin No.	HD,VD	VS Input	signal
1	GND		
2	+12 V		
3	VBS/Y Output (GND)		
4	VBS/Y Output (signal)		
5	HD Input (GND)	-	-
6	HD Input (signal)	-	-
7	VD Input (signal)	VS Input (signal)	-
8	GND (-/C)		
9	-/C Output (signal)		
10	RS-232C (TXD)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

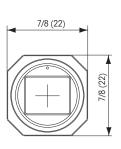
\* For details on how to change this setting, please refer to the Technical Manual.



# **DIMENSIONS**







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