

## 1/4" Colour CCD DSP High-resolution Weatherproof Day/Night AF Zoom Camera

VCC-XZ400P Colour PAL

DIGITAL

- All-in-one design with lens, housing, and metal fittings included
- High sensitivity minimum illumination of 0.002 lx (F1.6, 32x SENSE UP, B/W mode)
- Up to 352x zooming capability
- Dual power operation for 24V AC and 12 to 15V DC





Il-in-one design with IP66 compliant weatherproof housing and metal fittings. A highly sensitive camera that enables 24-hour surveillance with superior pic-

ture quality, its versatility allows installation almost anywhere. In addition to its superior horizontal resolution of 520 TV lines, it also features AF zoom and SSP communication.

## All-in-one design weatherproof camera

#### Integrated unit for easy installation

An all-in-one package with auto-focus camera, lens, weatherproof housing, wall-mount fittings, and even a shade. Installation of the shade is optional and up to the user depending on the environment. Without the shade, the camera is very compact and all you need to do is set it up with system devices of your choice. No other accessory needed.

#### Adjustable Arm

The angle of the arm is adjustable in all directions. Since the flexible joint is secured by screws, the arm maintains its position without sagging over time. In addition, a safety wire is included to prevent accidents. Installation on a ceiling or wall is easy without any additional parts, and installation on a pole or a room corner of walls is also possible with a separately sold bracket. The wires are securely protected inside the arm.



## 520 TV Lines

#### Horizontal Resolution of 520 TV Lines and zoom capability

By adopting a proprietary DSP circuit based on a unique algorithm, the camera produces natural colours, clear and crisp contours without smears. The fine picture of 520 TV lines of horizontal resolution, plus the zoom function, allow secure surveillance of small subjects.

## Max. 352x Zoom

#### 22x Optical Zoom and 16x Digital Zoom

The 22x optical zoom and 16x digital zoom produce a combined close-up effect of 352x. This makes it possible to monitor details of even a far-off subject, allowing one camera to monitor a wide area.

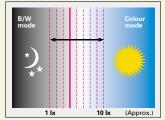


## Day and Night

#### Intelligent switching from colour to B/W

Selecting colour or B/W mode can be done automatically by the camera, or else manually. In addition, the user is allowed to change the switchover point from 1 to 10 lx (nominal) using the on-screen menu. The integration of colour and high sensitivity B/W modes in one camera makes it a versatile tool for any surveillance need. It is truly an all-in-one camera.

#### **Switchover point**



# B/W mode Colour mode IR cut filter ON B/W mode Colour mode IR cut filter ON mode Colour mode IR cut filter ON mode Colour mode IR cut filter ON mode Time F

#### **Built-in Intelligent Digital Motion Detector** and Intelligent Zoom Detector

The Intelligent Digital Motion Detector enables reliable and accurate motion detection by analyzing the "magnitude of movement" and the "size of object" from changes in picture brightness. When a moving object is detected, VCC-XZ400P can send an alarm signal to external units and/or switch the picture to 1.4x to 6x optical zoom mode. Furthermore, an external alarm input terminal makes it possible, when an alarm signal is received, to automatically zoom in to the site of activity, according to a pre-set zooming operation.







#### 3 kinds of backlight compensation to yield best results

#### 1) Multi-spot photometry (48-section)

The screen is divided into 48 sections on which luminous intensity is measured separately to determine the lighting/backlight conditions of all objects. This makes it possible to apply optimum backlight compensation even for peripheral objects and moving objects.

#### 2) 5-section photometry mode setting

The screen will be divided into 5 sections to which the user will assign 15-scale weights. The brightness of the picture will be kept at optimum by giving priority to the area with the higher weight.



An example of weight setting: Top = 1, Bottom = 5, Left = 10, Right = 10, Center (fixed) = 15. The size and position of the center area is adjustable.

#### 3) Multi-spot masking system (48-section)

Certain areas can be eliminated from the photometric measurement using a 48-section grid. The light intensity for the remaining area is measured and the image brightness is adjusted accordingly.



Areas in which illuminance will not be measured

#### Easy Setting with an On-Screen Menu

The VCC-XZ400P's on-screen menu allows the user to change settings without touching the camera.

#### **Built-in RS-485 Terminal**

The camera comes with a RS-485 connector for SSP (SANYO Security Serial Protocol) communication. With optional system controller VSP-8000, the VCC-XZ400P can be zoomed in or out remotely.

#### **Privacy Masking**

When there is a house or even an object as small as a window within the camera frame, it is possible to mask the area so that it will not appear on the monitor screen to protect other's privacy. Up to 4 rectangular masks of arbitrary size can be set per screen. These masking areas



may be protected with a four-digit (max.) password.

#### 32x Electronic Sensitivity

The VCC-XZ400P minimum required illuminance of 0.06 lx is improved by a power of 32x by amplifying the gain. The result is that the camera can capture video images with only 0.002 lx. (F1.6, SENSE UP, B/W mode)

#### 13 Mode Electronic Shutter Speeds

x2, x4, x8, x16, x32, 1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, and 1/10000 sec.

#### **Built-in Electronic Shutter**

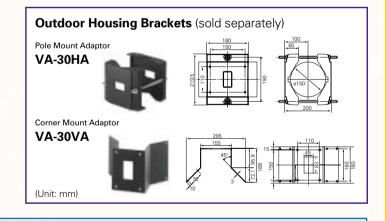
A high-speed electronic shutter that is internally switchable for eight modes using a DIP switch allows adjustment increments from 1/50 to 1/10000 sec.

#### AC / DC Power Source Compatibility

VCC-XZ400P come with power supply terminals of 24 V AC and 10 to 12 V DC. Select an appropriate source, depending on the location.

#### **Other Features**

- Title display
- Adjustable gamma correction and aperture setting
- Display of assignable camera ID and titles (max. 16 characters)
- Intelligent digital motion detector
- Safety wire
- Pole mounting and Corner mounting possible with optional metal fitting



### SSP compatible devices



VSP-8000 VSP-CB10 VSP-RV200



#### Camera

1/4" Colour CCD DSP High-resolution VCC-9300P

1/4" Colour CCD DSP High-res Day/Night Speed Dome Camer VCC-9400P DAY NIGHT



1/4" Colour CCD DSP High-resolution Day/Night Auto Focus Zoom Camera (Colou



### Recorder

1ch Digital Video Recorder 1ch Digital Video Recorder 4ch Digital Video Recorder

1ch Digital Video Recorder

DSR-M800P DSR-M804P New DSR-3000P

DSR-300P New

9ch Digital Video Recorder DSR-3016P

DTL-4800P

40-hour Recording + Real Time VCR
\*The optional VZU-485/232C board is required SRT-8040P 960-hour Recording S-VHS/VHS Time Lapse VCR

24-hour Recording Time Lapse VCR 24-hour Recording Time Lapse VCR TLS-4024P

#### DSR-3009P

960-hour Recording + Real Time VCR SRT-8960P

TLS-S8000P 960-hour Recording Time Lapse VCR TLS-1960P TLS-9924P

## MPX-CD163P

VSP-SV2000P **NEXUSAGE** 

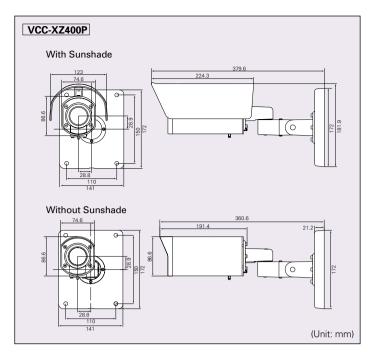
**■** Multiplexer 9-channel Duplex Multiplexer (Colour) MPX-CD92P MPX-MS92P

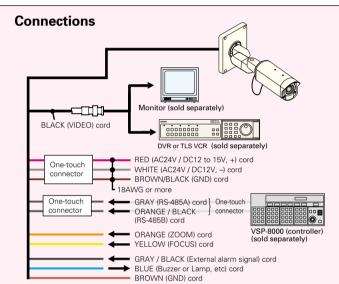
9-channel Simplex Multiplexer (B/W) 9-channel Digital Transport Multiplexer MPX-CD93P 16-channel Duplex Multiplexer (Colour)

MPX-CD162P MPX-MD162P 16-channel Duplex Multiplexer (B/W) 16-channel Digital Transport Multiplexe



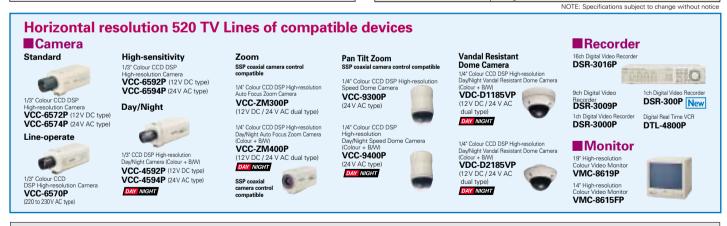






# Camera Set-up Unit VAC-70 (sold separately) MODEL VAC-70 Video output terminal BNC x 1 Environmental conditions Power requirement 3V DC, Alkali type AAA format batteries x 2 Dimensions 90(W) x 135(H) x 36(D) mm (3.54(W) x 5.32(H) x 1.42(D) in.] Weight (approx.) 230 g [8.1 oz.]

MODEL	VCC-XZ400P
Scanning system	PAL standard 625 lines, 50 fields/sec.
Image sensor	1/4" (approx. 3.6 mm x 2.7 mm) interline transfer method CCD
Picture elements	Total: 795(H) x 596(V), Effective: 752(H) x 582(V)
Horizontal resolution	520 TV lines
Minimum illumination	0.06 lx at max. AGC,
(approx.)	0.002 lx at x32 sensitivity with F1.6 lens, B/W mode
	1.2 lx at max. AGC,
	0.04 lx at x32 sensitivity with F1.6 lens, colour mode
Electronic sensitivity boost	AUTO / OFF — (on- screen) Up to 32x max. setting
Video output level	1.0 V (p-p) (75 Ω, composite)
Video S/N ratio	More than 50 dB (AGC OFF)
Backlight compensation	ON = Multi-spot photometry (48-section) /
	5-section photometry mode setting /
	Multi-spot masking system (48-section) — (on- screen)
Day/Night	AUTO / COLOUR / B/W
White-balance	ATW / AWC / Manual
Gain control	OFF /-6 / ±0 / +6 / +9 / +12 / +15dB
Motion detector	ON / OFF, individual settings possible
Privacy masking	ON / OFF, max. 4 masked locations Password lock possible
Mirror image effect	Horizontally (H), vertically (V), horizontally and vertically (HV)
Electronic shutter	Fast shutter mode:1/50, 1/120, 1/250, 1/500, 1/1000,
	1/2000, 1/4000, 1/10000 sec.
	Slow shutter mode: x2, x4, x8, x16, x32
Light control	Auto / Manual
Lens	f = 3.6 to 79.2mm F1.6 to 3.8 auto focus
Auto-focus	Auto / Manual / One-push
Synchronizing system	Internal sync. / Line lock
V phase adjustment	LINE PHASE
Optical zoom	22x
Electronic zoom	16x
Communication	Coaxial / RS-485 (SSP)
Video signal	VIDEO OUT
External lens control  Alarm input	ZOOM /FOCUS, ±6 to ±12 V DC
	1
Alarm output	
RS-485	A, B, GND
Environmental conditions	Temperature: -20°C to 50°C [-4° to 122°F],
Daniel and and and	(with power source connected) Humidity: within 90% RH
Power requirement	24 V AC, 50 Hz or 12 to 15 V DC
Power consumption (approx.)	
Dimensions (approx.)	54(W) x 62(H) x 116(D) mm [2.13(W) x 2.44(H) x 4.57(D) in.]
Weight (approx.)	1.6 kg [56.4 oz.] (without sunshade)
	1.8 kg [63.5 oz.] (with sunshade)



\*Caution: please consult the instruction manual to ensure safe and proper operation of the product.









DI Solutions Company of SANYO Electric Co., Ltd. obtained Quality Management System ISO9001 and Environmental Management System ISO14001 certifications.

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