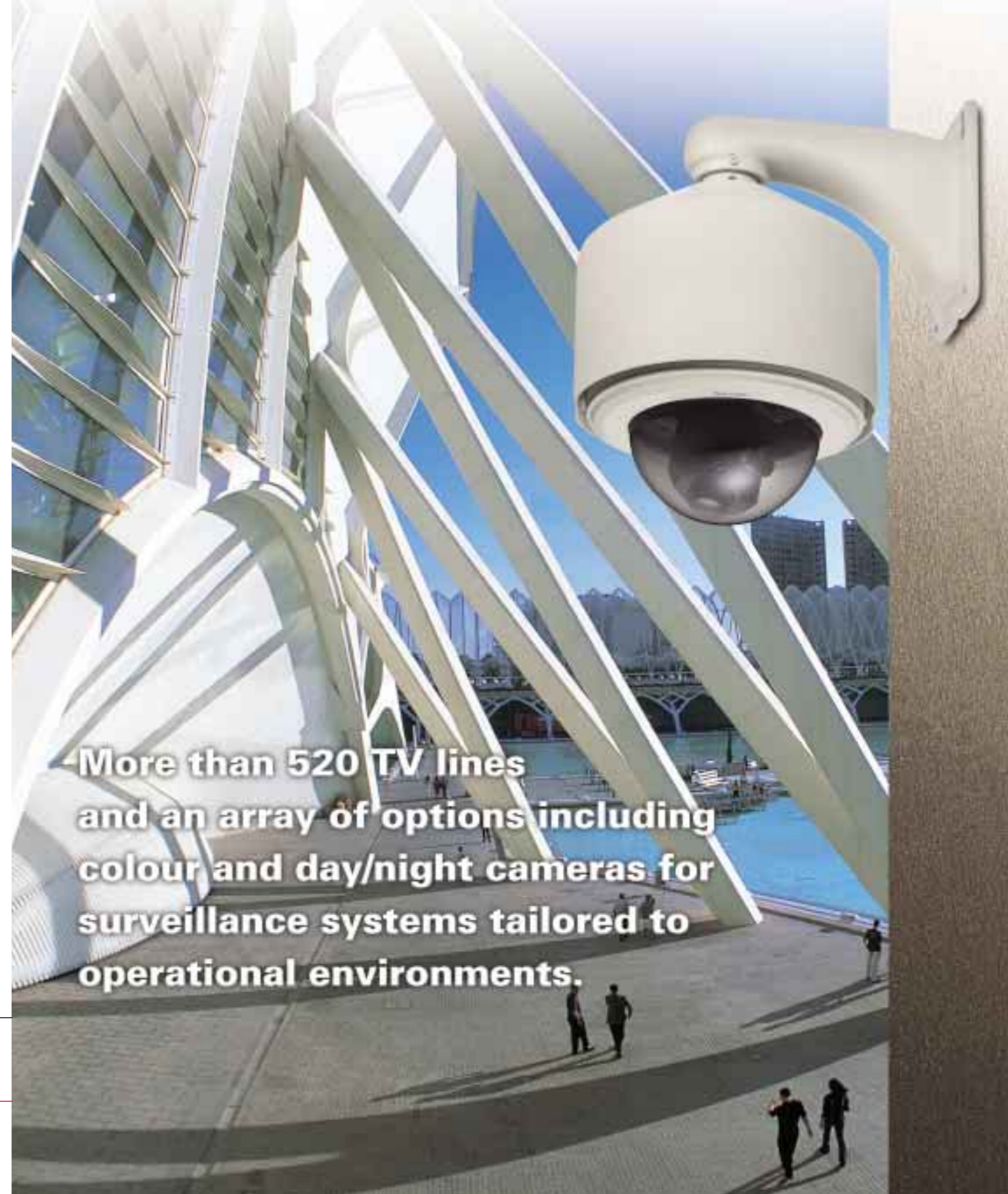


Speed Dome Camera Systems



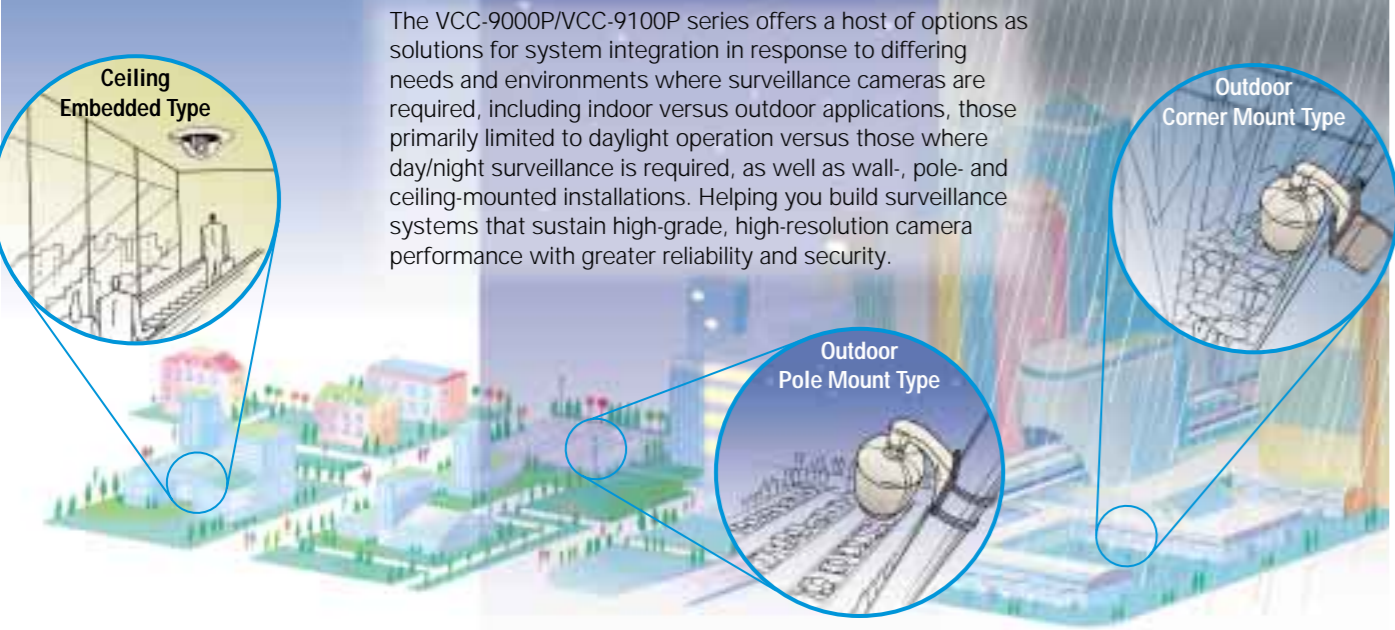
More than 520 TV lines and an array of options including colour and day/night cameras for surveillance systems tailored to operational environments.

Flexibility

for cameras adaptable to operational environments.

36

Options for the Full Spectrum of Operational Needs

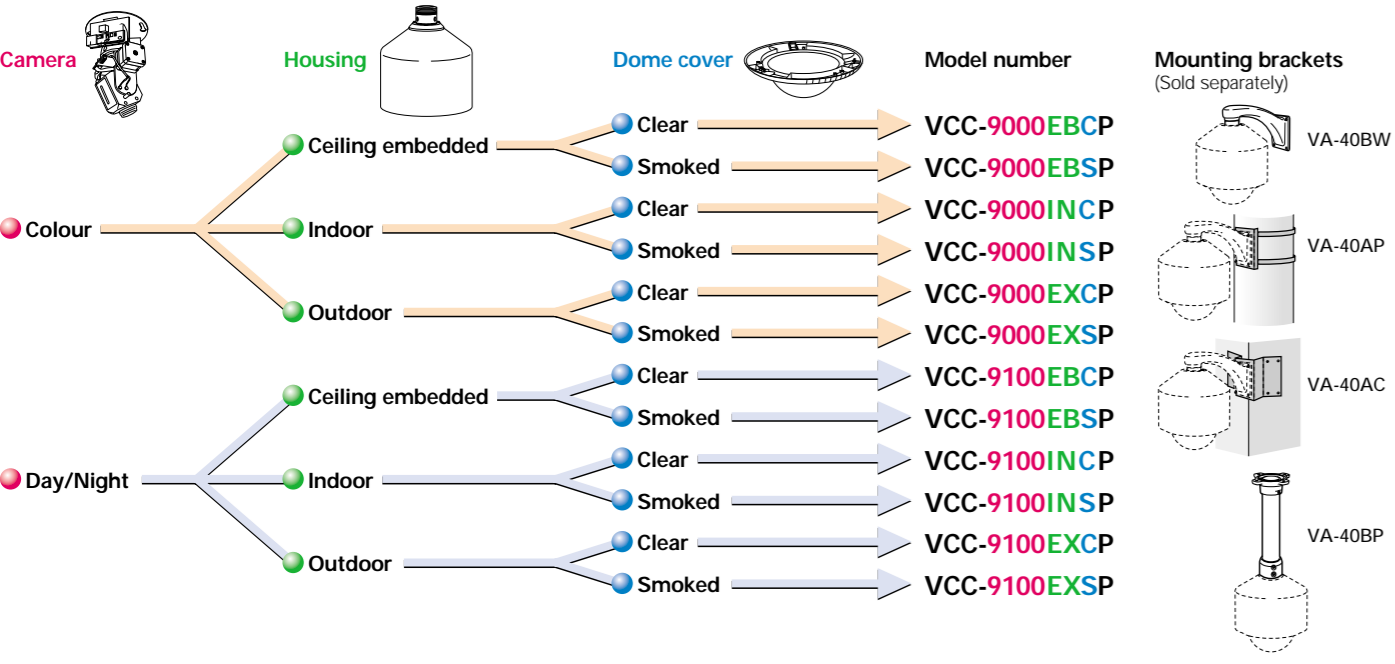


The VCC-9000P/VCC-9100P series offers a host of options as solutions for system integration in response to differing needs and environments where surveillance cameras are required, including indoor versus outdoor applications, those primarily limited to daylight operation versus those where day/night surveillance is required, as well as wall-, pole- and ceiling-mounted installations. Helping you build surveillance systems that sustain high-grade, high-resolution camera performance with greater reliability and security.

Component codes displayed in model number system

Camera type	Housing type	Dome cover type	Scanning system
VCC-9000 Colour	EB Embedded	C Clear	P PAL system
9100 Day/night	IN Indoor	S Smoked	
	EX Outdoor		

Select the component combinations best suited to your needs from the diagram below.



Speed Dome Camera Systems

Specifications

Camera type	Day / Night Camera	Colour Camera
Model No.	VCC-9100□□□P	VCC-9000□□□P
Scanning system	PAL standard (625 lines, 25 frames/sec)	
Image sensor	1/4" interline transfer method CCD	
Picture elements	Effective	752 (H) x 582 (V)
	Total	795 (H) x 592 (V)
Horizontal resolution	More than 520 TV lines	
Zoom lens (F1.6 to 3.8)	22x, f = 3.6 to 79.2 mm	22x, f = 4.0 to 88 mm
Electronic zoom	Auto (2x, 4x, 8x, 16x selectable speed) / Off Max. 352x combined with optical zoom	
Auto focus	Auto / Off (Manual)	
Iris control	Auto / Off (Manual)	
Synchronisation method	Internal synchronisation	
Minimum illumination	Colour mode	1.2 lx (Normal)
		0.04 lx (32x electronic sensitivity boost)
	B/W mode	0.06 lx (Normal)
		0.0002 lx (32x electronic sensitivity boost)
(F1.6, 50 IRE)	Colour mode	0.5 lx (Normal)
		0.015 lx (32x electronic sensitivity boost)
(F1.6, 20 IRE)	B/W mode	0.8 lx (Normal)
		0.024 lx (32x electronic sensitivity boost)
S/N ratio	Colour mode	0.02 lx (Normal)
		0.0006 lx (32x electronic sensitivity boost)
Backlight compensation	More than 50 dB (AGC off)	
Electronic shutter	On (centre-weighted photometry) / Off	
Electronic sensitivity boost	High-speed mode	8 steps: 1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000
	Low-speed mode	5 steps: 2x, 4x, 8x, 16x, 32x
Day/night operation	Auto (interlocked with auto iris), up to 32x / Off	
White Balance	Auto / Colour / B/W	
Gain control	ATW / MWB	
Aperture	Auto	
Privacy masking	H / V setting possible	
Mirror image effect	Max. 4 areas	
Character display	Horizontally (H) / Vertically (V) / Horizontally and vertically (VH)	
Auto mode	Screen titles and camera ID (max. 16 characters each)	
Movement range	Sequence / Tour / Auto pan / Zone	
Movement speed	Horizontal	360° endless
	Vertical	0 to 90°
Preset position setting	Horizontal	Preset: 300°/sec, Manual: 0.5 to 140°/sec
	Vertical	Preset: 300°/sec, Manual: 0.5 to 140°/sec
Auto flip	80 settings	
Communications	Mechanical auto flip	
Operating conditions	RS-485	Yes
	Coaxial control (SSP)	Yes
Power requirement	Protocols: SANYO, Pelco "D", Kalatel, Vicon	
	Temperature	0 to 40°C = VCC-9100EBCP/EBSP, VCC-9100INCP/INSP, VCC-9100EXCP/EXSP -20 to 50°C = VCC-9100EBCP/EBSP, VCC-9100INCP/INSP, VCC-9100EXCP/EXSP
Power consumption	Humidity: Below 90% RH	
	24 V AC ±10%, 50 Hz	
Weight	10 W = VCC-9100EBCP/EBSP, VCC-9100INCP/INSP, 50 W = VCC-9100EXCP/EXSP	10 W = VCC-9000EBCP/EBSP, VCC-9000INCP/INSP, 50 W = VCC-9000EXCP/EXSP
	3.0 kg = VCC-9100EBCP/EBSP, 3.7 kg = VCC-9100INCP/INSP, 4.6 kg = VCC-9100EXCP/EXSP	3.0 kg = VCC-9000EBCP/EBSP, 3.7 kg = VCC-9000INCP/INSP, 4.6 kg = VCC-9000EXCP/EXSP

Dimensions

(Unit: mm)

Housings

Outdoor type: Clear / smoked, VCC-9000EXCP/EXSP, VCC-9100EXCP/EXSP

Indoor type: Clear / smoked, VCC-9000INCP/INSP, VCC-9100INCP/INSP

Embedded type: Clear / smoked, VCC-9000EBCP/EBSP, VCC-9100EBCP/EBSP

Mounting Brackets

VA-40BW Wall mount installation bracket

VA-40AC Corner mount installation bracket

VA-40BP Pendant mount installation bracket

VA-40AP Pole mount installation bracket

All specifications and features are subject to change without notice.
 All weights and dimensions are approximate.
 All photographs are representations only.
 For complete information on product specifications and accessories, please contact your local SANYO supplier.

Caution: Please consult the instruction manual to ensure safe and proper operation of the product.



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SMS105

Performance

for a vivid record of objects captured on video.

520

TV Lines of Horizontal Resolution

With a built-in auto-focus zoom lens, the high-performance VCC-9000P/VCC-9100P series allows for greater accuracy in monitoring of activities in a wide range of environments. This is combined with the superior clarity and sharpness of digital imaging achieved by SANYO's digital signal processing (DSP) system for over 520 TV lines of horizontal resolution.



520 TV lines picture



Standard resolution picture

352x

Power Zoom (22x Optical, 16x Digital)

The 22x optical zoom and the 16x digital zoom can be combined for close-ups at a magnification power of 352x. This allows even distant subjects to be observed in detail, enabling one camera to monitor a wider area.



Optical zoom

Digital zoom

32x

Electronic Sensitivity Boost

While offering minimum illumination of 1.2 lx with the VCC-9100P or 2.0 lx with the VCC-9000P, camera sensitivity can be further enhanced via an up to 32x electronic sensitivity boost.

(F1.6, 50 IRE)

Model No.	Mode	Normal	32x electronic sensitivity boost
VCC-9100P	Colour	1.2 lx	0.04 lx
	B/W	0.06 lx	0.002 lx
VCC-9000P	Colour	2.0 lx	0.06 lx

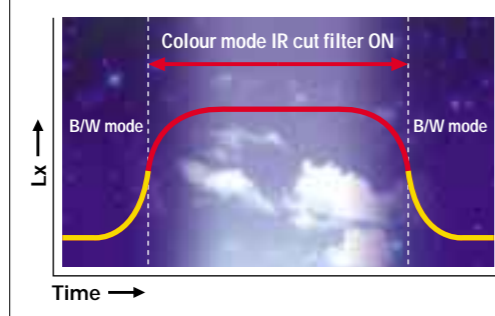


DAY/NIGHT VCC-9100P Option

for Round-the-Clock Applications

As the VCC-9100P senses the amount of light in the viewing area, it automatically turns the IR cut filter on and off as required. As more precise colour reproduction is essential in the colour operation mode, the filter is turned on. In the B/W mode, clear bright images (to a minimum required illumination of 0.06 lx) are produced by switching the filter off and increasing light sensitivity.

Proprietary Auto-Switching Infrared Cut Filter



The VCC-9100P's sensitivity to exposed light allows it to automatically switch from colour to B/W mode so as to effectively engineer the capabilities of two CCD cameras into one for an ideal 'all-in-one' cost-effective solution for all surveillance needs.

Agility

for surveillance that captures the moment of truth.

80 Preset Positioning and Sequential Monitoring Functions

Up to 80 preset positions (with different settings for pan, tilt, zoom and focus) can be registered for a single VCC-9000P or VCC-9100P. A simple key entry to a controller allows you to easily switch to the scene you want to monitor. Moreover, up to 4 sequential monitoring patterns, each consisting of up to 36 preset positions, can be stored and recalled.

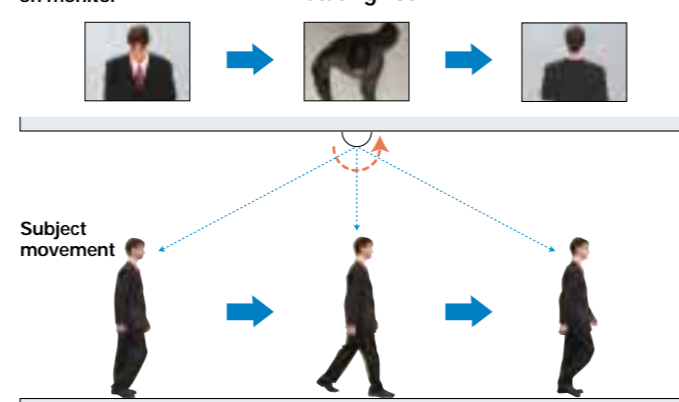


Mechanical Auto Flip for Monitoring Objects Directly Below

The camera within the dome automatically flips the image (top/bottom or left/right) into an upright position by rotating 180° as it tracks a subject passing directly below the dome. This feature allows continuous monitoring of moving objects over a range of 180° in the vertical plane without unwanted image inversion.

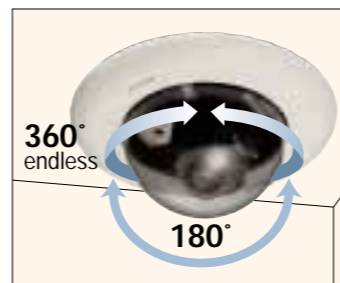


Subject captured on monitor



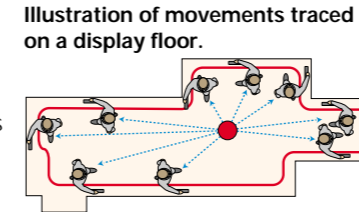
Variable Speed Pan and Tilt

Providing endless panning over 360° in the horizontal plane and 180° of tilt in the vertical, the camera can be made to move at variable speeds (0.5° to 140° per second for horizontal and vertical planes) by joystick or to pan/tilt to scenes designated for monitoring. When preset positions have been entered, it offers the capability to swiftly pan/tilt at a maximum speed of 300° per second between monitoring positions.



Tour Mode Stores and Replicates Manually Operated Patrols

Capable of storing up to 1,000 commands of manual pan, tilt, and zoom operations in memory and recreating the same movement pattern as a trace path setting. Auto-pan monitoring can also be programmed by designating two end points on a horizontal plane.



Backlight compensation (Centre-weighted photometry system)

Luminance measured at the centre of the field of view together with automatic lens aperture adjustment enable a clear image even when backlit.



Backlight compensation OFF



Backlight compensation ON

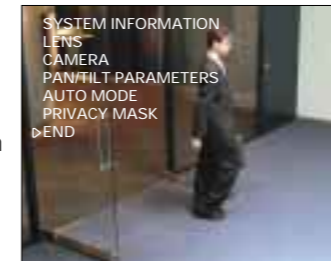
Privacy Masking

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 people's privacy. Up to 4 rectangular masks of arbitrary size can be set per screen.



Easy On-screen Setup and Adjustment of Default Settings

Both the VCC-9000P and VCC-9100P can be set up on-screen and operated using a controller with SANYO's Security Serial Protocol (SSP). Furthermore, newly developed digital video recorders can be connected to allow setup of camera settings and controls using the front panel buttons and an OSD (on-screen display). For details on compatible recorders, please contact your local SANYO supplier.



Built-in Electronic Shutter

Enables eight high-speed shutter settings from 1/50 sec. to 1/10,000 sec. in addition to five low-speed settings from 2x to 32x.

Component codes displayed in model number system

Camera type	Housing type	Dome cover type	Scanning system
VCC-9000 Colour	EB Embedded	C Clear	P PAL system
VCC-9100 Day/night	IN Indoor	S Smoked	
	EX Outdoor		

Model Configurations

Model name	Camera unit + Housing + Dome cover
VCC-9000EBCP	VCC-MC301P (1) + VA-40ME (3) + VA-CM1C (6)
VCC-9000EBS	VCC-MC301P (1) + VA-40ME (3) + VA-CM1S (7)
VCC-9100EBCP	VCC-MC401P (2) + VA-40ME (3) + VA-CM1C (6)
VCC-9100EBS	VCC-MC401P (2) + VA-40ME (3) + VA-CM1S (7)
VCC-9000INCP	VCC-MC301P (1) + VA-40IN (4) + VA-CM2C (8)
VCC-9000INSP	VCC-MC301P (1) + VA-40IN (4) + VA-CM2S (9)
VCC-9100INCP	VCC-MC401P (2) + VA-40IN (4) + VA-CM2C (8)
VCC-9100INSP	VCC-MC401P (2) + VA-40IN (4) + VA-CM2S (9)
VCC-9000EXCP	VCC-MC301P (1) + VA-40EX (5) + VA-CM3C (10)
VCC-9000EXSP	VCC-MC301P (1) + VA-40EX (5) + VA-CM3S (11)
VCC-9100EXCP	VCC-MC401P (2) + VA-40EX (5) + VA-CM3C (10)
VCC-9100EXSP	VCC-MC401P (2) + VA-40EX (5) + VA-CM3S (11)

Note: Please feel free to consult your local SANYO supplier regarding the optimal combination of components for your surveillance and security camera needs.

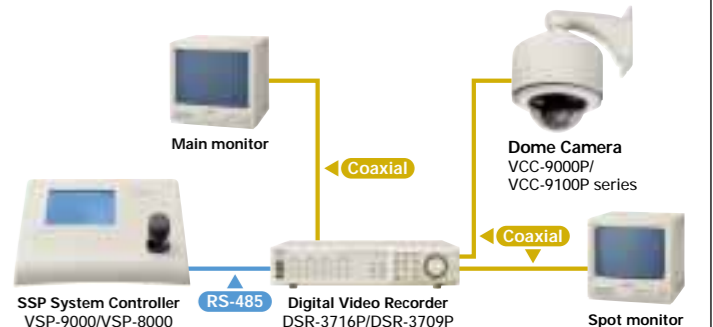
Options

Camera units		Housings	
Model name	Details	Model name	Details
VCC-MC301P (1)	Standard colour PAL type	VA-40ME (3)	Ceiling embedded housing
VCC-MC401P (2)	Day/night PAL type	VA-40IN (4)	Indoor housing
		VA-40EX (5)	Outdoor housing
Mounting brackets		Dome covers	
Model name	Details	Model name	Details
VA-40BW	Wall mounting bracket Use when installing the camera to a wall.	VA-CM1C (6)	Dome cover (Clear) For ceiling embedded housing
VA-40AP	Pole mounting adapter Use when installing the camera to a surface such as a pillar. (Does not include VA-40BW.)	VA-CM1S (7)	Dome cover (Smoked) For ceiling embedded housing
VA-40AC	Corner mounting adapter Use when installing the camera to a surface such as the corner of a wall. (Does not include VA-40BW.)	VA-CM2C (8)	Dome cover (Clear) For indoor housing
VA-40BP	Ceiling suspension bracket Use when suspending the camera from a ceiling.	VA-CM2S (9)	Dome cover (Smoked) For indoor housing
		VA-CM3C (10)	Dome cover (Clear) For outdoor housing
		VA-CM3S (11)	Dome cover (Smoked) For outdoor housing

Greater System Flexibility with Coax and Twisted-pair Control

SSP Control System

The VCC-9000P/VCC-9100P series can be programmed and controlled via SANYO's Security Serial Protocol (SSP), a communications method for interfacing between various components of a security video system, using different transmission media to lend greater flexibility to the configuration of surveillance and monitoring systems. These cameras can thus be effectively integrated into systems for desktop control using next-generation or existing peripheral devices connected by coaxial and/or twisted pair cabling.



SSP Product Lineup

1/4" Colour CCD High-resolution Weatherproof Day/Night AF Zoom Camera VCC-XZ400P DAY/NIGHT	1/4" Colour CCD DSP High-resolution Speed Dome Camera VCC-9400P DAY/NIGHT VCC-9300P	1/4" Colour CCD DSP High-resolution Auto Focus Zoom Camera VCC-ZM400P DAY/NIGHT VCC-ZM300PA	Network Video Server VSP-SV2000P	SSP System Controller VSP-9000 VSP-8000	SSP/Coaxial Converter VSP-CB10	SSP Signal Receiver VSP-RV200
1-channel Digital Video Recorder DSR-300P	4-channel Digital Video Recorder DSR-M814P	1-channel Digital Video Recorder DSR-M810P	16-/9-channel Digital Video Recorder DSR-3716P/DSR-3709P	6-channel Digital Video Recorder DSR-3506P		