Specifications

MODEL	VCC-9300
Image sensor	1/4" interline transfer method CCD
Effective pixels	768 (H) x 494 (V)
Horizontal resolution	Over 520 TV lines
Lens	22 power zoom lens, f = 4.0 to 88 mm (F1.6 to 3.8), Electronic zoom and gearing, Zoom speed setting possible
Electronic zoom	16 power (combined with optic zoom give 352 power max.), Zoom magnification setting possible
Auto focus	AUTO / ONE-PUSH / MANUAL, AF area setting possible (3 sizes)
Iris control	AUTO / MANUAL
Synchronization method	Internal synchronization / Line lock
Minimum illumination	2.0 lx (F1.6) at max. AGC gain, 0.06 lx (F1.6) at x32 electronic sensitivity boost [50 IRE] 0.8 lx (F1.6) at max. AGC gain, 0.024 lx (F1.6) at x32 electronic sensitivity boost [20 IRE]
S/N	More than 48 dB
Backlight compensation	Multi-zone photometry / 5 section photometry / Multi-zone Masking
Electronic shutter	Fast shutter speed mode: 1/60, 1/100, 1/250, 1/500, 1/1000,1/2000, 1/4000, 1/10000, Slow shutter speed mode: x2, x4, x8, x16, x32
Electronic sensitivity boost	AUTO / OFF, works with auto iris
White balance	ATW / AWC / MWB
Automatic gain control	ON / OFF / MANUAL
Motion detector	ON / OFF, individual settings possible
Aperture	H / V setting possible
Privacy masking	ON / OFF, max. 8 masks (wide view screen, 1 screen max. 4 masks), Password lockable
Alarm input/output	8 external inputs, 2 external outputs, Motion detector with external alarm AND/OR output options
Mirror image effect	Horizontally (H), vertically (V), horizontally and vertically (VH)
Character display	ON / OFF, screen titles and camera ID max. 8 characters each
View setting	9 settings
Auto mode	Sequential pan / Auto pan / Tour (2 tour recordings, 30 seconds each)
Rotation range	Horizontal: 360° endless, Vertical: 0 to 180° (digital auto flip)
Rotation speed	Horizontal: 360°/second (preset), 0.5 to 120° (manual), Vertical: 360°/second (preset), 0.5 to 120° (manual)
Preset position setting	64 settings
Communications	Coaxial control, RS-485
Operational temperature/humidity	+14° to +122°F [−10° to +50°C], below 90% RH
Power source	24 VAC, 60 Hz
Power consumption	15 W
Weight	2.5 kg [80.7 oz]

MODEL	VCC-ZM300
Image sensor	1/4" interline transfer method CCD
Effective pixels	768 (H) x 494 (V)
Horizontal resolution	Over 520 TV lines
Lens	22 power zoom lens, f = 4.0 to 88 mm (F1.6 to 3.8), Electronic zoom and gearing, Zoom speed setting possible
Electronic zoom	16 power (combined with optic zoom give 352 power max.), Zoom magnification setting possible
Auto focus	AUTO / ONE-PUSH / MANUAL, AF area setting possible (3 sizes)
Iris control	AUTO / MANUAL
Synchronization method	Internal synchronization / Line lock
Minimum illumination	2.0 lx (F1.6) at max. AGC gain, 0.06 lx (F1.6) at x32 electronic sensitivity boost [50 IRE] 0.8 lx (F1.6) at max. AGC gain, 0.024 lx (F1.6) at x32 electronic sensitivity boost [20 IRE]
S/N	More than 48 dB
Backlight compensation	Multi-zone photometry / 5 section photometry / Multi-zone Masking
Electronic shutter	Fast shutter speed mode: 1/60, 1/100, 1/250, 1/500, 1/1000,1/2000, 1/4000, 1/10000, Slow shutter speed mode: x2, x4, x8, x16, x32
Electronic sensitivity boost	AUTO / OFF, works with auto iris
White balance	ATW / AWC / MWB
Automatic gain control	ON / OFF / MANUAL
Motion detector	ON / OFF, individual settings possible
Aperture	H / V setting possible
Privacy masking	ON / OFF, max. 4 masked locations, Password lock possible
Alarm input/output	1 alarm input (for external alarm switch), 1 alarm output (for sending signal to system controller or alarm detection device such as a buzzer)
Mirror image effect	Horizontally (H), vertically (V), horizontally and vertically (VH)
Character display	ON / OFF, camera ID max. 18 characters
View setting	9 settings
Communications	Coaxial control, RS-485
Operational temperature/humidity	Temperature: +14° to +122°F [−10° to +50°C], Humidity: 35 to 90% RH
Power source	24 VAC, 60 Hz / 12 to 15 VDC
Power consumption	4.5 W
Weight	380 g [12.3 oz]

NOTE: Specifications subject to change without notice.

Dimensions

VCC-9300

POWER SUPPLY CORD, APPROX. 2 M
EXPANSION CONNECTOR (5 PIN, WHITE)
ALARM INPUT CONNECTOR (10 PIN)
CAMERA CONTROL CONNECTOR (5 PIN, BLACK)
BNC–R JACK
COMPOSITE CABLE, APPROX. 50 CM LONG

TOP
FRONT
SIDE
TOLERANCE ±20.09°
(mm)

VCC-ZM300

(mm)

ZOOM COM IN
FOCUS ALARM OUT

① Video output connector (VIDEO OUT: BNC type)
② Power indicator (POWER)
③ Cursor button
④ Menu setting button (SET)
⑤ RS-485 control push-lock terminals (RS-485, A, B, G)
⑥ 24 V AC or 12 V DC input terminals (AC 24 V, DC 12 V, GND)
⑦ Zoom terminal (ZOOM)
⑧ Focus terminal (FOCUS)
⑨ Grounding terminal (COM)
⑩ Alarm output terminal (ALARM OUT)
⑪ Alarm input terminal (ALARM IN)

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 (or as many as 8 using the VCC-9300 when screens are stacked).
These masked areas may be protected with passwords (maximum four digits).

Note: Images here may differ from actual camera-generated images.
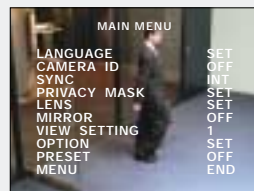
Intelligent Digital Motion Detector

The intelligent digital motion detector enables reliable and accurate motion detection by analysing the "magnitude of movement" and the "size of object" and other factors from changes in picture brightness. When a moving object is detected, the VCC-9300 can send an alarm signal and/or switch to zoom modes of 1.4X to 6X. Scene elements such as swaying trees and flickering lights, etc., can also be masked to prevent triggering of false alarms.

1.4X to 6X zoom
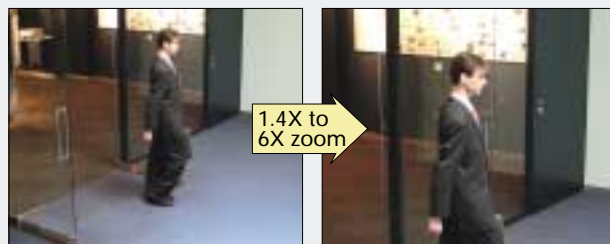
Note: Images here may differ from actual camera-generated images.

Easy On-screen Setup and Customizing of Default Settings

Both the VCC-9300 and VCC-ZM300 can be programmed on-screen and operated using a controller with SANYO's Security Serial Protocol (SSP). Moreover, as an added bonus, with VCC-ZM300 you can even program and customize default other settings using the cursor and menu setting buttons integrated into the rear panel of the camera.

MAIN MENU
LANGUAGE   SET
CAMERA ID   OFF
SYNC   OFF
PRIVACY MASK   SET
LENS   SET
MIRROR   OFF
VIEW SETTING   1
OPTION   SET
PRESET   OFF
MENU   END

32X Sensitivity Boost for Minimum Illumination of 0.06 Lx

While achieving 2.0 lx minimum subject illumination at maximum gain, sensitivity can be further heightened to 32X for 0.06 lx minimum illumination when the sensitivity boost function is activated at 50 IRE (F1.6).

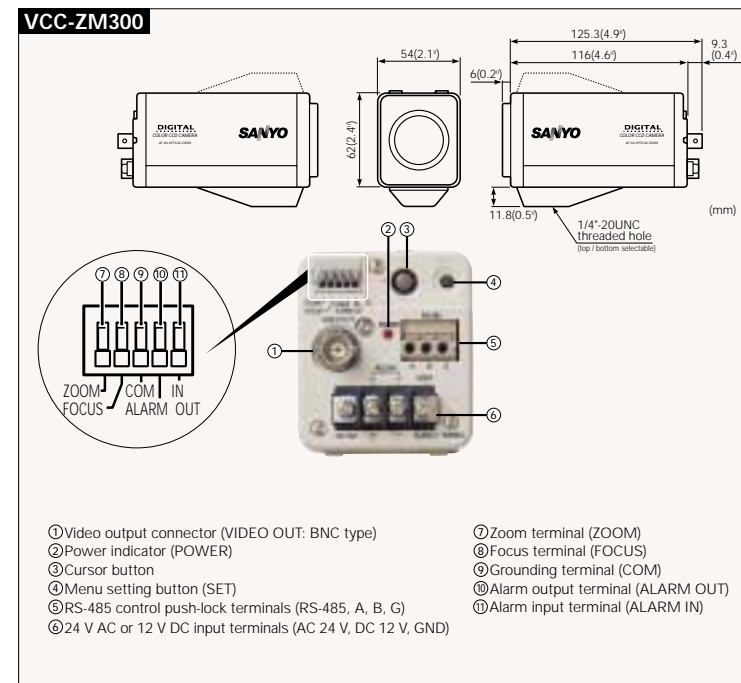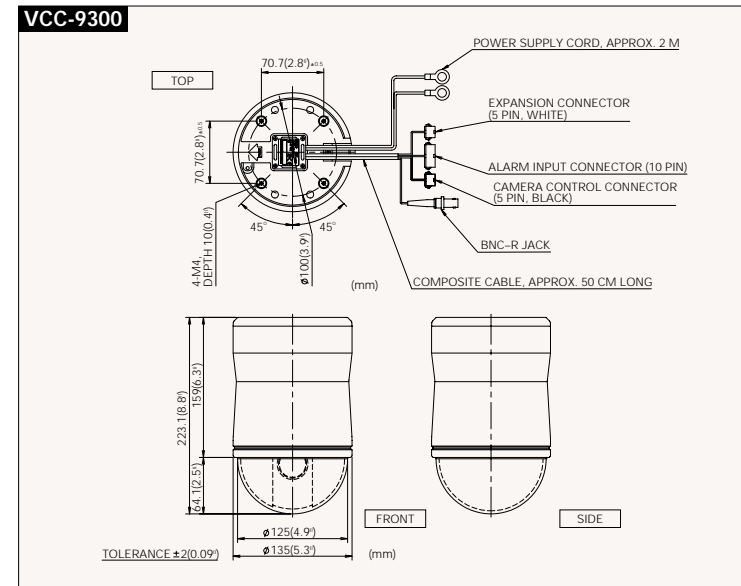### Other useful features

• Adjustable gamma correction and aperture settings
• Display of assignable camera ID and titles (16 characters max.)

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

Distributed by:

SANYO

1/4" Color CCD DSP High-resolution Cameras

VCC-9300 Color (NTSC)
VCC-ZM300 Color (NTSC)

DIGITAL

Speed Dome Camera

VCC-9300

Auto Focus Zoom Camera

VCC-ZM300

520 TV Lines of Horizontal Resolution
352X Power Zoom Captures Up-Close Details

ISO 9001
ISO 9001 REGISTERED FIRM

Greater Precision and Dependability in Surveillance Technology

Quality Features the SANYO Brand Is Known For. Extended Features Lending Greater Flexibility.

Super High Resolution of More than 520 TV Lines

With a built-in auto-focus zoom lens, the high-performance VCC-9300 and VCC-ZM300 allow 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 newly developed digital signal processing system for an industry-leading horizontal resolution of 520 TV lines.

Super High-resolution   Standard Resolution
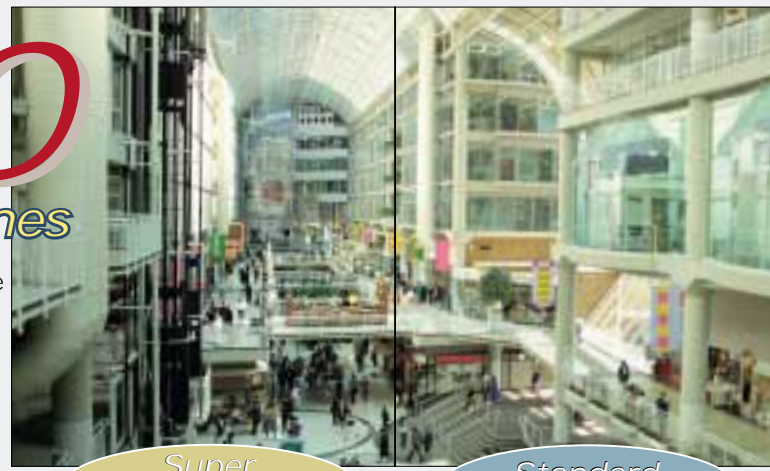
Maximum 352X Zoom Function in the Top Group of Its Class

The 22X optical zoom and 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.

22X optical zoom   16X digital zoom
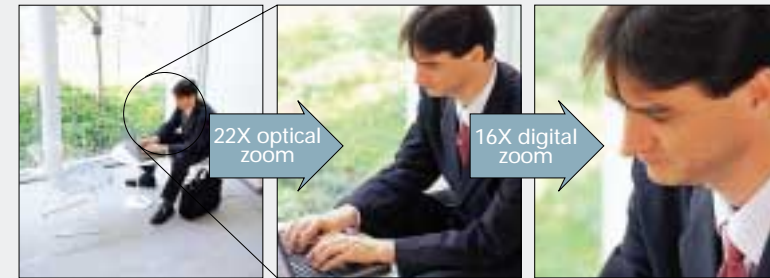
Note: Images here may differ from actual camera-generated images.

3 Methods of Intelligent Backlight Compensation

Three backlight compensation methods (multi-zone photometry, 5 section photometry and multi-zone masking) are preset selectable for measurement of center, peripheral or background elements of individual scenes providing sharp, true-color images in any light situation.

1) Multi-zone photometry (48 sections)
With multi-zone mode settings, light is measured in areas in the center and at the bottom of the image.

2) Five-section photometry mode setting
With the 5-section mode settings, the screen is divided into 5 sections to which the user assigns 8-scale weights so that optimum picture brightness is maintained by giving priority to the area with higher weight.

3) Multi-zone masking system (48 sections)
Areas that do not have photometric measurement performed can be set within a 48-zone grid.
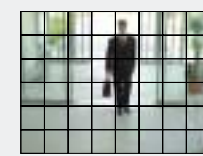The light intensity for the designated area is measured, and the image brightness is adjusted accordingly.

Illustration of multi-zone masking system

Functions Specific to the VCC-9300 Agile Camera Movements Realizing 360-degree Surveillance

### 64 Preset Positioning and Sequential Monitoring Functions

Up to 64 preset positions (with different settings for pan, tilt, zoom and focus) can be registered for a single VCC-9300. A simple key entry to a controller allows you to easily switch to the scene you want to monitor. Moreover,the camera can be programmed to monitor up to 64 preset positions in sequential order (including separate settings for white balance, iris and motion sensing for each preset). Auto-pan monitoring can be also be programmed by designating two end points on a horizontal plane.

Panning in random order between preset positions is also possible.

Auto Flip Function for Monitoring Moving Objects Directly Below

The camera within the dome will automatically flip the image (top/bottom or left/right) into an upright position using a digital processing technique as it tracks a subject passing directly below the dome. This feature allows uninterrupted monitoring of moving objects by simply rotating the camera 180° vertically.

Subject captured on monitor

Subject movement
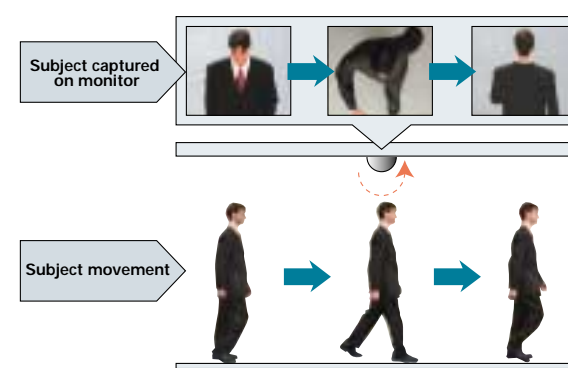
Tour Mode Stores and Replicates Manually Operated Patrols

Capable of storing up to 30 or 60 seconds of manual pan, tilt, and zoom operations in memory and recreate the same movement pattern as sequential setting. (The intelligent digital motion detector does not function while the camera is operating in this mode.)

Illustration of movements traced on a display floor.

VCC-9300
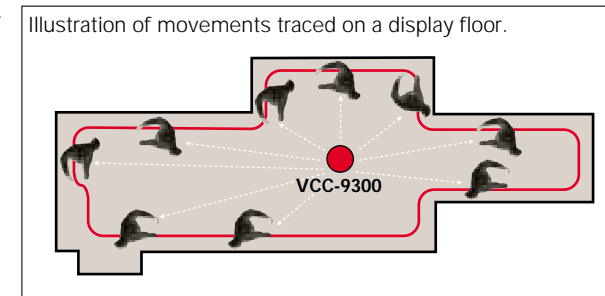
Variable Speed Pan and Tilt

Providing endless panning over 360° in the horizontal plane and 180° of tilt in the vertical, the camera can be moved at variable speeds (0.1° to 120° 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 360° per second between monitoring positions, or immediately respond by showing the location of an external sensor that has triggered an alarm.

360° endless

180°
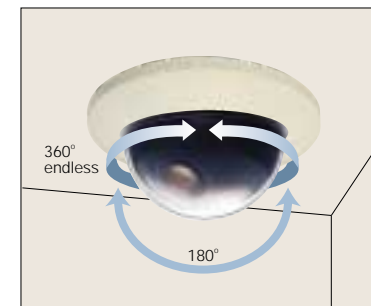
8 Alarm Inputs

The VCC-9300 comes with eight alarm inputs. Alarm signals will activate the camera to automatically focus on preset locations corresponding to the alarm received.
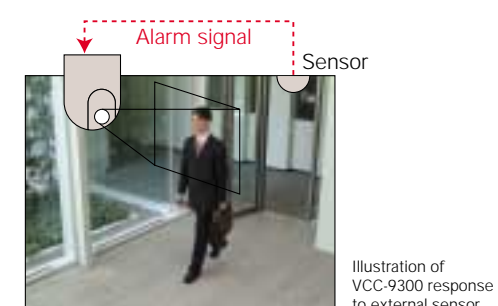
Alarm signal   Sensor

Illustration of VCC-9300 response to external sensor

## Specific to the VCC-ZM300 AC / DC Power Source Compatibility

Input terminals on the VCC-ZM300's rear panel allow you to run it on either 24 V alternating or 12 V direct current power sources. Eliminates the need for specialized electrical work at the point of surveillance to help enable simpler and speedier installation.

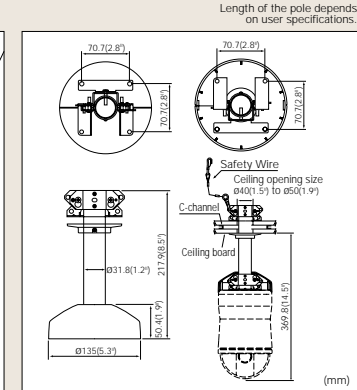**24 V AC / 12 V DC Dual Power Source Operation**
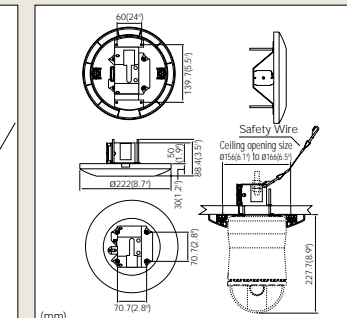
VCC-9300 Accessories (sold separately)
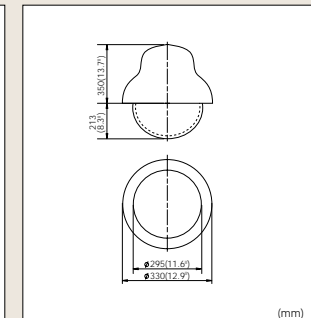
Mounting Bracket Embedded Type **VA-30ME**
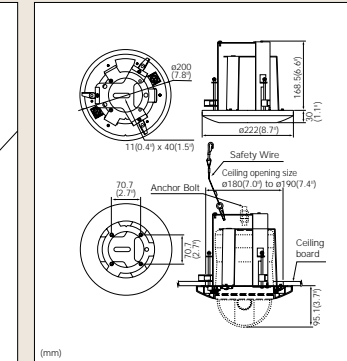
Pendant Ceiling Bracket **VA-30P**

Length of the pole depends on user specifications.

Mounting Bracket Embedded Type **VA-30F**

Outdoor Housing Accessory **VA-30EX**

Available soon

Greater System Flexibility with Coax and Twisted-pair Control

SSP Control System
The VCC-9300 and VCC-ZM300 can be programmed and controlled via Sanyo 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 twisting pair cabling.

Zoom Camera VCC-ZM300

Dome Camera VCC-9300

Coaxial

Multiplexer MPX-CD163 MPX-CD93

Digital

Main monitor

RS-485

SSP System Controller VSP-8000

Digital Video Recorder DSR-3000

Spot monitors