

# VCC-4594 (NTSC)

## Specifications

<b>Model</b>	VCC-4594
<b>Scanning system</b>	NTSC standard TV system (525 TV lines, 30 frames/sec.)
<b>Image sensor</b>	1/3" (approx. 4.8 x 3.6 mm) interline transfer method CCD
<b>Picture elements</b>	Total: 811 (H) x 508 (V), Effective: 768 (H) x 494 (V)
<b>Horizontal resolution</b>	520 TV lines
<b>Minimum illumination</b>	Approx. 0.03 lx with a F 1.2 lens (B/W mode), Approx. 0.6 lx with a F 1.2 lens (color mode)
<b>Video output level</b>	1.0 V(p-p) (75 ohms composite)
<b>Video S/N ratio</b>	More than 48 dB
<b>Backlight compensation</b>	Manual ON/OFF switching, Multi-zone light measuring system / Center focus photometry — Slide SW (side) (Activated when auto iris lens used)
<b>White balance</b>	ATW/Manual switching — Slide SW (side)
<b>Color adjust at manual</b>	R, B — VR (side)
<b>Gain control</b>	Automatic
<b>Light control</b>	Optical auto iris lens / Electronic iris (indoor use)
<b>Lens mount</b>	CS mount (or C mount with the supplied adaptor)
<b>Flange back</b>	12.5 mm ± 0.5 mm adjustment
<b>Auto iris lens</b>	DC / VIDEO — Slide SW (side)
<b>Auto iris output</b>	DC: drive coil (+, -), brake dump coil (+, -) Video: +12 V DC (max. 50 mA), video output (high-impedance)
<b>Lens iris level</b>	Level: L - H — VR (side)
<b>Electronic iris</b>	ON / OFF — Slide SW (side)
<b>Electronic iris range</b>	0.6 lx to 35,000 lx (F 1.2 lens: color mode), 1.0 lx to 50,000 lx (F 1.4 lens: color mode)
<b>Synchronizing system</b>	Internal sync, Line lock manually switchable — Slide SW (side)
<b>V phase adjustment</b>	LINE PHASE — VR (rear) VIDEO OUT — BNC (rear)
<b>Sockets</b>	Video signal — VIDEO OUT — BNC (rear) Auto iris lens — LENS — 4-pin (side) Power supply — 24 V AC, GND — 3-pin terminal (rear)
<b>Environmental conditions</b>	Temperature: -10°C to +50°C Humidity: less than 90% (no condensation)
<b>Power requirement</b>	24 V AC / 60 Hz
<b>Power consumption (approx.)</b>	3.8 W (with auto iris lens), 2.9 W (without auto iris lens)
<b>Camera mount</b>	1/4" — 20 UNC (top / bottom) selectable
<b>Dimensions (approx.)</b>	67 (W) x 54 (H) x 126.5 (D) mm [2.64 (W) x 2.13 (H) x 4.98 (D) in.] (w/o camera & lens mounts)
<b>Weight (approx.)</b>	450 g (15.9 oz.) without lens

Note: Specifications subject to change without notice.

## Realization of high-resolution surveillance systems for the future

By using high-resolution versions of multiplexers, DVRs, and monitors, it is possible to record and reproduce superior pictures captured by the VCC-4594. These are advanced surveillance solutions from SANYO.

**Camera**

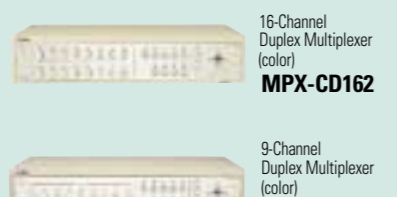


1/3" Color CCD DSP  
High-Resolution  
Day/Night Camera  
**VCC-4594**

1/3" Color CCD DSP  
High-Resolution Camera  
**VCC-6574**

More than  
**520 TV lines**  
of horizontal resolution

**Multiplexer**



16-Channel  
Duplex Multiplexer  
(color)  
**MPX-CD162**

9-Channel  
Duplex Multiplexer  
(color)  
**MPX-CD92**

**DVR**



Digital Real Time VCR  
**DTL-4800**

More than  
**520 TV lines**  
of horizontal resolution

**Monitor**



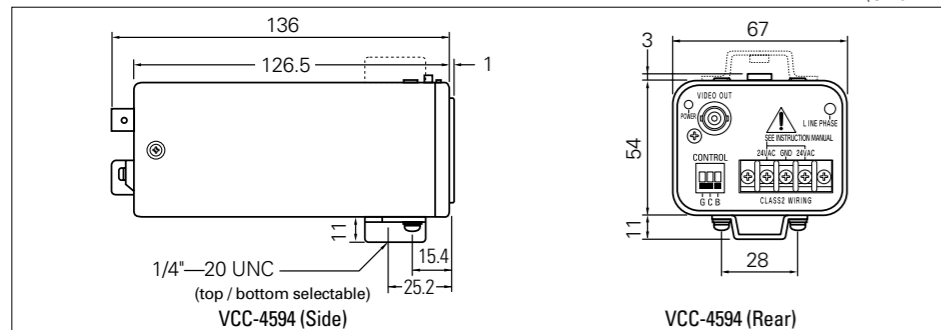
13" Color Video Monitor  
**VMC-8613** (Available soon)  
More than  
**750 TV lines**  
of horizontal resolution

18" Color Video Monitor  
**VMC-8618** (Available soon)  
More than  
**800 TV lines**  
of horizontal resolution

\*More models to be introduced soon.

## Dimensions

(Unit: mm)



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

# SANYO

## Day/Night CCD Camera

## VCC-4594 (NTSC)

### DIGITAL

- Super high-resolution of 520 horizontal TV lines
- Intelligent backlight compensation
- High performance with minimum required illumination of 0.03 lx (F 1.2 lens in B/W mode)
- Digital signal processing (DSP) for sharper, clearer color images



# One unit for use DAY and NIGHT

520 HORIZONTAL TV LINES

# SANYO

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Video Imaging Systems Division  
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SMS-009





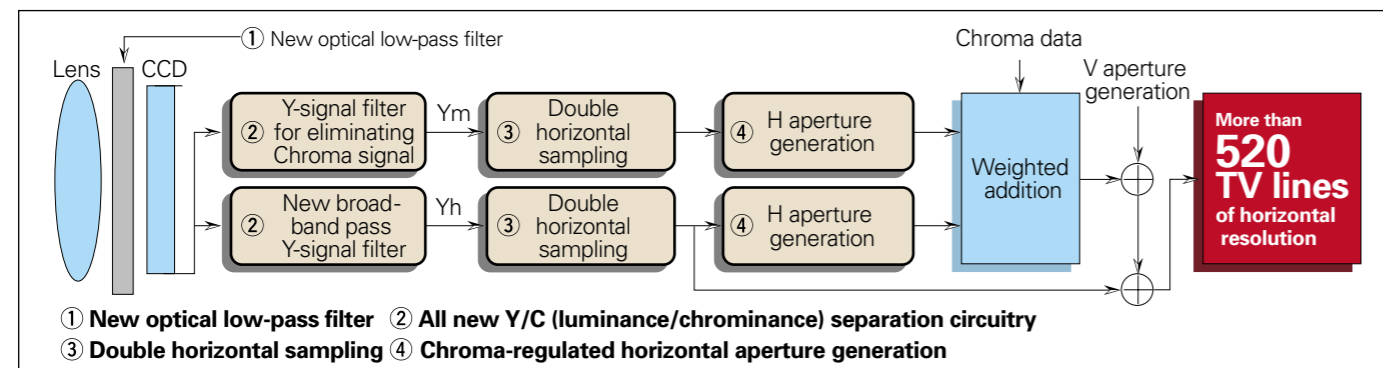
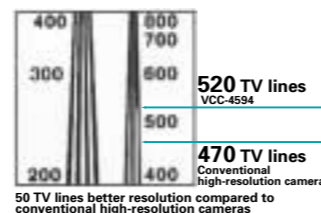


# 520 Horizontal TV lines

## The super high-resolution camera

### Precision surveillance with 520 horizontal TV lines of high resolution

With four innovations developed by SANYO, the VCC-4594 is a 1/3" sized 1-CCD camera achieving horizontal resolution of 520 TV lines. This unbelievably high resolution opens a new era for all security systems.



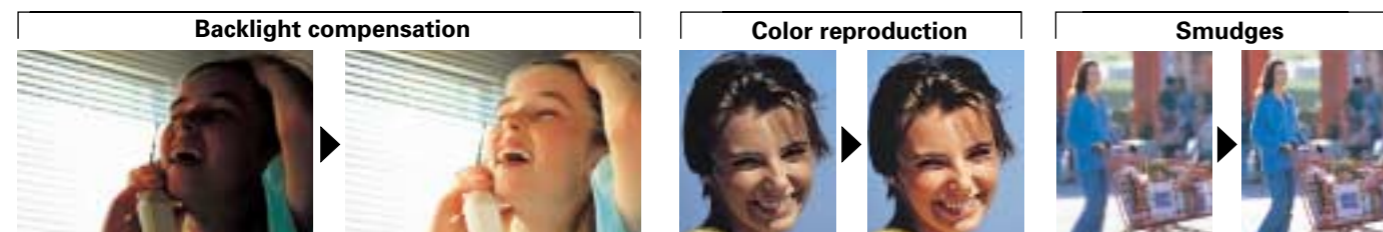
## The new DSP circuitry further improves picture quality

### A clear view of off-center objects Intelligent backlight compensation

The screen is divided into 64 small areas in which luminous intensity is measured separately to determine the lighting conditions of all objects within the frame. This new method provides a clear view of off-center and moving objects that was not possible with conventional backlight compensation.

### Superior color reproduction and aperture compensation

The new DSP (digital signal processing) circuitry comes with the latest algorithm to reproduce natural colors. At the same time, digital processing of the video signal reduces color smudges and produces sharp, crisp pictures.

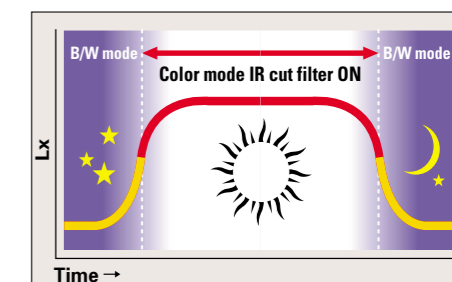


# DAY / NIGHT

## Both day and night use in the same camera

### Proprietary auto-switching infrared cut filter

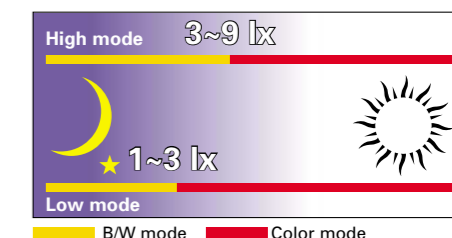
As the camera senses the amount of light in the viewing area, it automatically turns the IR CUT FILTER on and off as required. As more precise color reproduction is essential in the color operation mode, the filter is turned on. In the B/W mode, clear, bright images (to a minimum required illumination of 0.03 lx) are produced by switching the filter off and increasing light sensitivity.



### Intelligent 2-mode switching for color to B/W as well as manual switching

The camera's sensitivity to exposed light allows it to automatically switch from color to B/W mode. And the user is also able to easily switch modes as required for specific applications.

Mode switching can instantly be accomplished using the two push locking switches which provide manual selection over mode selection and auto operation. Full control is also available for setting the brightness range from 1-3 or 3-9 lx as the switchover point for high (color) to low (B/W) mode. Effectively engineering all the capabilities of two CCD cameras into one, the NTSC system VCC-4594 is the ideal "all-in-one" cost-effective solution for all surveillance needs.



# 0.03 lx Minimum required illumination

### Higher sensitivity and lower smear effect than that of previous models

Utilization of an enhanced high-sensitivity CCD sensor (an improvement of 7 dB) enables superior surveillance capabilities under conditions of minimum illumination as low as 0.03 lx (compared to that of 0.07 lx for previous models). Added to this are anti-smear characteristics that have been cut by 20 dB to drastically reduce smear effects such as those caused by headlights during shooting at night to augment the effectiveness of nighttime image production.

### Comparison of VCC-4594 with prior SANYO models

Minimum illumination (F1.2 lens)	B/W mode	Color mode
VCC-4594	0.03 lx	0.6 lx
Previous models	0.07 lx	1.4 lx

