SAMSUNG TECHWIN

SAMSUNG DIGITall
everyone's invited™

High Sensitivity, WDR
Color CCD Camera
SHC-721/720
(Day & Night)

Another Eye Guarding the World

Powerful multi-functions, Crystal

The SHC-720 and SHC-721 series are high resolution cameras equipped with 1/3-inch color double scan CCD and Super Vision II DSP which delivers a powerful dynamic range. These cameras produce crisper images, even in severe lighting conditions of large contrasts between lightness and darkness. Also the units permit high quality pictures to be captured in low minimum 0.01 Lux condition. The SHC-721 features ICR (Infrared Cut Filter Removable) function to switch the image from monochrome to color automatically according to the illumination.

All models feature motion detection, Wide white balance, privacy zone masking, powerful electronic shutter control, OSD, RS-232C remote control, 500TV lines of horizontal resolution, and dual voltage.
For easy control of various setting modes, the control switch panels are located on the side of the cameras.

Super Vision
SV·II

Crisp & Clear Images

- Poweful WDR (Wide Dynamic Range)
  Super Vision II

- High Resolution
  More than 500 TV Lines (Color)
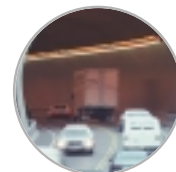 550 TV Lines (Monochrome : SHC-721)

24 Hour Surveillance

- High Sensitivity
  Min. 0.01 Lux
- With ICR (Infrared Cut Filter Removable)
  Day & Night Switching (SHC-721)

Powerful Multi-functions

- Area Setting On the 48 Zones
  Motion Detection
- Free Position
  Privacy Image Masking
- With Wide Range of Color Temperature
 Automatic White Balance

clear images !

Powerful Wide Dynamic Range (WDR)

What is the difference between WDR of SV II and normal BLC ?

The backlight compensation technology allows the camera to find the best picture conditions in any other environment and automatically gives a necessary light level compensation, so that users can always obtain the clear picture, the finest detail and perfect light contrast. But through the BLC function, the activating of zone area is focusing on the center of monitor occupying 20% of the full screen. Generally it is depending on the zone that was preset by the manufacturer. The focus image is clear but the other background image are dull.

Samsung Techwin's SV II WDR technology helps to get detailed information of dark part without saturation of bright part. There is no limitation of zone area with the perfect backlight compensation, and the color image is crisper than any other BLC functions.

It combines two fields which are high shutter speed exposure in bright areas and low shutter speed exposure in dark areas into one composite image.

Samsung SV II

Lens → Double Scan **CCD** → CDS/AD → DSP (High Shutter / Low Shutter) → Image

Micom
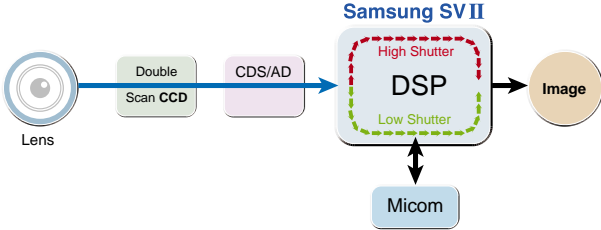
Normal | BLC | WDR (SVII)

Motion Detection

The unit transmits alert signal when it detects a motion of an object on the screen. If the camera is connected with an external alarm, user can pay attention to the screen when it sounds alarm.

This feature is useful when user has to monitor several screens simultaneously. The area zone can be assigned by OSD setting with the sensitivity control. The areas can be set among the 48 area zones.

Motion Detected
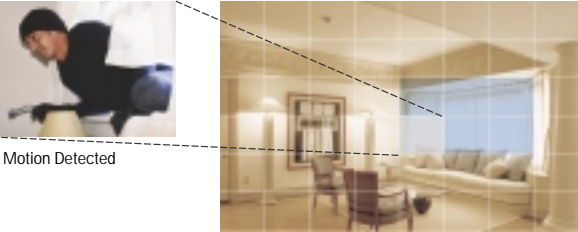
• MD1 : Detecting the motion by outline or difference of a color tone (Useful for daytime, bright area)
• MD2 : Detecting the motion by the variation of brightness (Useful for nighttime, dark area)

Privacy Image Masking with Free Position

For the protection of privacy, users can set a masking area up to four areas not to be under surveillance. It is free to set up a area position and size.

STREET 1   14:20:48
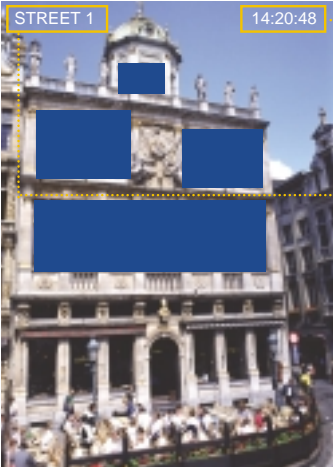
Present Timer

The unit indicates present time on the monitor.

### Camera ID

24 Hour Surveillance with ICR

High Sensitivity Minimum 0.01 Lux
Day & Night Switching with ICR (Infrared Cut Filter Removable)

The SHC-721 and SHC-720 are high sensitive cameras which require minimum illumination of 0.01 Lux with F1.2 lens. It enables users to see subjects in near complete darkness in color mode.

Lighting conditions are no longer a consideration when installing a surveillance system. In low light, SHC-721 converts the image from color to monochrome automatically with the function of ICR.
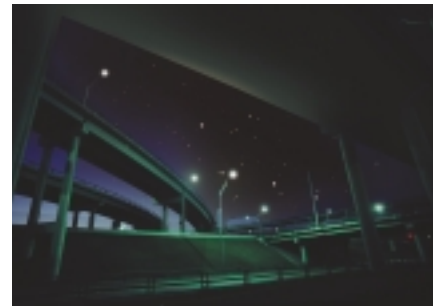The IR cut filter is on when the camera is operating as a color camera for precise color reproduction. And the filter is off for increasing light sensitivity in monochrome mode.
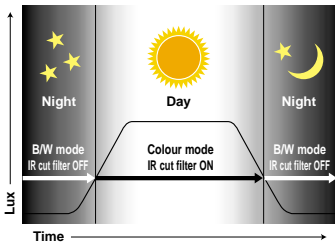
• Auto 1 : Sensitivity priority
• Auto 2 : Color function priority

Day   Night

Powerful Automatic White Balance

Automatic white balance technology is a useful function of adjusting of color temperature in indoors and outdoors.
The color of the conventional camera is inclined to blue or red. Generally the color temperature of indoor ranges approximately from 2,500K to 4,000K with red.

On the other hand, the color temperature in outdoor ranges from 7,000K to 10,000K with blue. But Samsung Techwin's automatic white balance technology makes a true color image without tending to red or blue color.

With the powerful automatic white balance, user can select the white balance according to the circumstance.

ATW
(Auto Tracking White balance) :
At the situation of luminance level or color temperature is changed frequently

• W-ATW : Color Temperature 2,400 ~ 12,000 °K (Fluorescent Lamp, Outdoor)
• S-ATW : Color Temperature 1,800 ~ 6,000 °K (Sodium lamp, Inside the tunnel)

Convenient OSD functions

ALL functions can be controlled easily by pressing the button of the OSD menu key on the side of the camera.
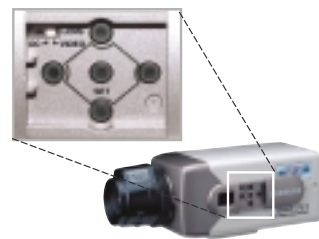
OSD functions

Setup	
Camera ID	OFF
Backlight	WDR
White Bal.	W-ATW
Motion Det.	OFF
Lens	DC
Shutter	OFF
Sense up	OFF
Color	Auto 1
Sync	Int
Special	

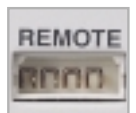# Dual Power (AC24V / DC12V)

The units accept either AC 24V or DC 12 V power sources and will automatically switch to the appropriate mode upon receiving power.

AC 230V (SHC-721PH)

RS-232C

RS-232C function enables the OSD menu at a remote place.

REMOTE

WDR Color Camera

SV·II

SHC-721

www.samsungcctv.com

Actual Size

Main Features

- 1/3" 410,000 Pixels, Double Scan Color CCD
- WDR Function (*SVII*) : Wide dynamic range
- ICR (Infrared Cut Filter Removable) : SHC-721
  - Automatic or manual switch from color mode to monochrome
- Horizontal Resolution
  - Color : More than 500 TV Lines
  - Monochrome : More than 550 TV Lines
- Automatic Filter Change (Auto Mechanism) : SHC-721
- Min. Illumination
  - Color : 0.5 Lux at F1.2 (AGC ON) / Min. 0.01 Lux at F1.2 (Sens-up Mode)
  - Monochrome : 0.01 Lux at F1.2 (AGC ON)
- Built-in Motion Detector
- Privacy Image Masking with Free Position
- Present Timer & Camera ID
- Powerful Electronic Shutter Control : 1 / 60 ~ 1 / 200,000
- OSD (On Screen Display)
- RS-232C Remote Control
- Signal to noise ratio of 50dB
- Dual Voltage AC 24V / DC 12V
- Dimension (mm) : 69(W) x 56(H) x 125(D)
- Weights : 460g / 470g (Without Lens)

SHC-721/720

AM ⏱ PM

Specifications

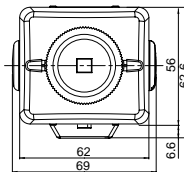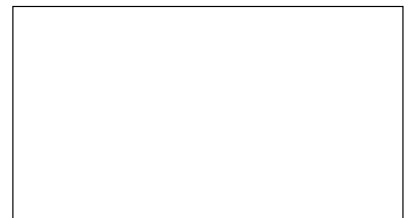| Model	SHC-721N	SHC-721P	SHC-721PH	SHC-720N	SHC-720P
Power Source	Dual Power, DC 12V / AC 24V compatible		AC 230V / 50Hz	Dual Power, DC 12V / AC 24V compatible	
Power Consumption	280mA (DC) / 3.8W (AC)		3.8W	280mA (DC) / 3.8W (AC)	
Image Sensor	1/3", Vertical double density interline CCD				
Total Pixels	811(H) x 508(V), 1/3" CCD	795(H) x 596(V), 1/3" CCD		811(H) x 508(V), 1/3" CCD	795(H) x 596(V), 1/3" CCD
Effective Pixels	768(H) x 494(V), 1/3" CCD	752(H) x 582(V), 1/3" CCD		768(H) x 494(V), 1/3" CCD	752(H) x 582(V), 1/3" CCD
Scanning System	2:1 Interlaced 525 Lines/60 Fields/30 Frames	2:1 Interlaced 625 Lines/50 Fields/25 Frames		2:1 Interlaced 525 Lines/60 Fields/30 Frames	2:1 Interlaced 625 Lines/50 Fields/25 Frames
Synchronization	Internal / Line Lock				
Video Output	1.0V[p-p] NTSC Composite, 75Ω/BNC connector	1.0V[p-p] PAL Composite, 75Ω/BNC connector		1.0V[p-p] NTSC Composite, 75Ω/BNC connector	1.0V[p-p] PAL Composite, 75Ω/BNC connector
Resolution	500 Lines (color) / 550 Lines (B/W)			500 Lines (color)	
Wide Dynamic Range	Built-in (46dB)				
Gain Control	AGC-L, AGC-H, OFF Selectable				
Electronic Shutter Speed	NTSC : AUTO (1/60 ~ 1/200,000 sec), MANUAL (1/60 ~ 1/200,000sec) PAL : AUTO (1/50 ~ 1/200,000 sec), MANUAL (1/50 ~ 1/200,000sec)				
Sens-Up	ON/OFF (selectable limit ~ X128)				
Iris Mode	ESC / Video Drive / DC Drive				
White Balance	W-ATW / S-ATW / H-ATW / L-ATW / AWC / MANUAL				
Min. Illumination	Color : 0.5 Lux at F1.2 (AGC ON) / Min. 0.01 Lux at F1.2 (Sens-up Mode), B/W: 0.01lux (50 IRE) at F1.2 (AGC On)			Color : 0.5 Lux at F1.2 (AGC ON) / Min. 0.01 Lux at F1.2 (Sens-up Mode)	
S/N (Y signal)	50dB (AGC Off)				
RS-232C	Built-in				
Motion Detection	MD1 / MD2 / OFF (Built-in Alarm Output Connector)				
O.S.D	Built-in				
DNR (Digital Noise Reduction)	Built-in (Low / High)				
Privacy Function	ON / OFF (4 Programmable Zone)				
Timer	Built-in (24Hour, Not Memorizing)				
Lens Mount	C / CS Mount			C / CS Moving Mount	
Operating Temperature	-10°C~ +50°C				
Operating Humidity	30% ~ 90% RH				
Dimension (mm)	69(W) x 56(H) x 125(D) without mounting foot & connector				
Weight (W/O Lens)	460g	500g (W/O Power Cord)		470g	

Rear Pannel

SHC-721/720

SHC-721PH

Dimension

SHC-721

SHC-720

CE ⓊL c us FCC
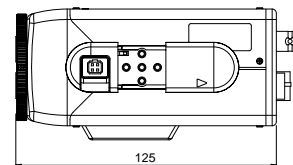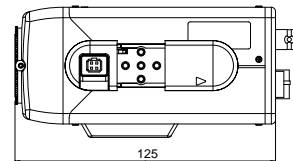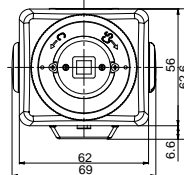
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