



Another Eye Guarding the World

Low Light, WDR, Day & Night
Color Camera

SHC-721A 



Built-in SSNR chip
Originally Developed by Samsung Techwin

SAMSUNG TECHWIN

SAMSUNG

Extreme Sensitivity, SSNR

The SHC-721A is a high resolution color camera equipped with 1/3-inch double scan CCD and Super Vision II_{plus} DSP which delivers a powerful dynamic range. It produces crisper images, even in severe lighting conditions of large contrasts between lightness and darkness. Also the unit permits high quality pictures to be captured in low minimum 0.003 Lux condition. With SSNR, it reduces random and fixed noise under low illumination and produces a higher S/N ratio and no ghost effect.

The unit features ICR (Infrared Cut Filter Removable) function to switch the image from monochrome to color automatically according to the illumination. Feature are 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.

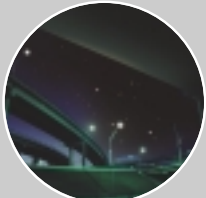
Low Light, WDR, Day & Night Color Camera

Crisp & Clear Images

24-Hour Surveillance

SSNR

- Improved Sensitivity to Extreme
- No Ghost Effect



Min. 0.003 Lux



DNR



SSNR

- High Resolution : 500TVL



- Super Vision II_{PLUS} / WDR (Wide Dynamic Range)



Normal



BLC



WDR (SVII_{PLUS})



Day

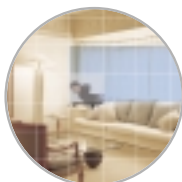


Night

- Day & Night Switching

Powerful Multi-functions

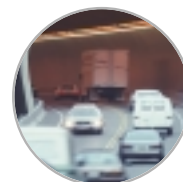
- Motion Detection



- Privacy Image Masking



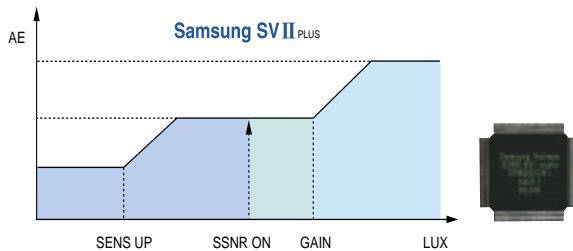
- Automatic White Balance



Crisp and clear images in any li

Outstanding Picture Quality with SSNR Improved Sensitivity without Ghost Effect

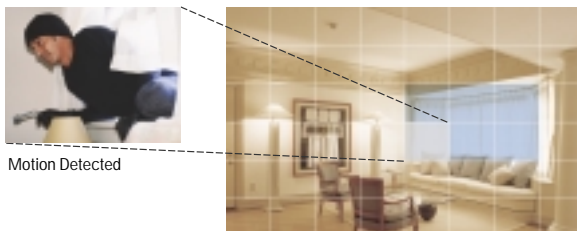
The SHC-721A provides a clear and crisp image of 500TV lines. With Samsung SSNR, the SHC-721A reduces random and fixed noise under low illumination and produces a higher Signal to Noise ratio and no Ghost Effect. Moreover, the camera's recorded image is smaller than that of normal cameras. This increases the recording capacity of a DVR under low illumination. The camera has the effect of reducing a DVR's recorded file size by 70 percent when using a MPEG format DVR and 40 percent when using a JPEG format DVR.



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.

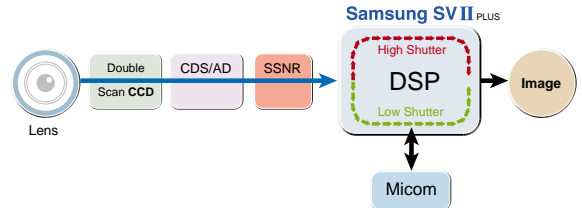


- MD1 : Detecting the motion by outline or difference of a color tone (Useful for daytime, bright area)
- MD2 : Detecting the motion by the variation of brightness (Useful for nighttime, dark area)

Powerful Wide Dynamic Range (WDR)

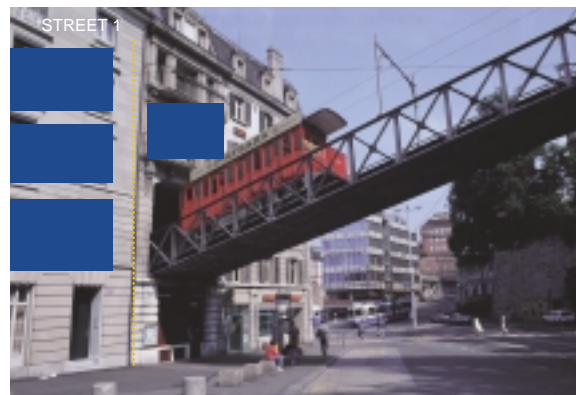
The aim of backlight compensation technology is to allow the camera to find the best picture conditions in any environment and automatically give the necessary light level compensation, so that users can always obtain a clear picture, the finest detail and perfect light contrast. Most cameras only sense 20% of the picture at the centre of the screen, on an area preset by the manufacturer, which often gives a clear image in this portion of the screen but can cause the bright background to "white out".

Samsung Techwin's SVII^{PLUS} WDR technology helps to get detailed information from the dark part without saturation from the 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.



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.





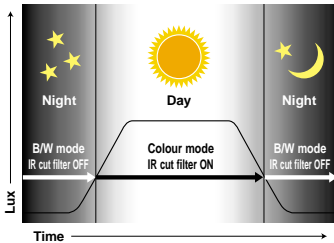
24-Hour Surveillance with ICR

High Sensitivity Minimum 0.003 Lux
Day & Night Switch

The SHC-721A are high sensitive cameras which require minimum illumination of 0.003 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-721A 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.



Day



Night

- Auto 1 : Sensitivity priority
- Auto 2 : Color function priority

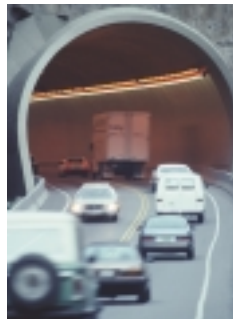
Powerful Automatic White Balance

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
IRIS	LEVEL ↓
SHUTTER	OFF
SENSE UP	OFF
GAIN	AGC-L
SSNR	MIDDLE
SPECIAL	
EXIT	

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.



Low Light, WDR, Day & Night
Color Camera

SVII PLUS SSNR



Actual Size

Main Features

- 1/3" 410,000 Pixels, Double Scan Color CCD
- WDR Function (SVII_{plus}) : Wide dynamic range
- Clear & Crisp Image with SSNR
- ICR (Infrared Cut Filter Removable)
 - Automatic or manual switch from color mode to monochrome
- High Resol. of 500 TV Lines (Color), 550 TV Lines (Monochrome)
- Min. Illumination
 - Color : 0.2 Lux at F1.2 (AGC ON) / Min. 0.003 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
- OSD (On Screen Display)
- RS-232C Remote Control
- Signal to noise ratio of 50dB
- Dual Voltage AC 24V / DC 12

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Color Camera

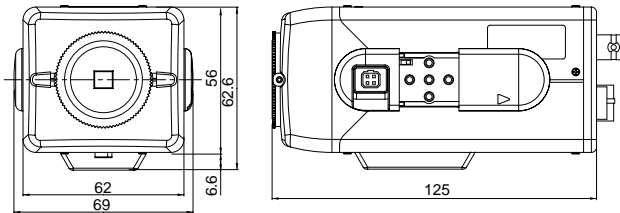
SHC-721A



Specifications

Mode	SHC-721AN	SHC-721AP	SHC-721APH
Power Source	Dual Power, DC 12V / AC 24V compatible		AC 230V / 50Hz
Power Consumption	330mA (DC) / 4.0W (AC)		4.2W
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	
Effective Pixels	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	
Synchronization	Internal / Line Lock		
Video Output	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)		
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 : 0.2 Lux at F1.2 (AGC ON) / Min. 0.003 Lux at F1.2 (Sens-up Mode), B/W: 0.01lux (50 IRE) at F1.2 (AGC ON)		
S/N (Y signal)	50dB (Weight ON)		
RS-232C	Built-in		
Motion Detection	MD1 / MD2 / OFF (Built-in Alarm Output Connector)		
O.S.D	Built-in		
SSNR	Built-in (Low / Middle / High)		
Privacy Function	ON / OFF (4 Programmable Zone)		
Lens Mount	C / CS 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)

Dimension



Rear Panel



SHC-721AN/P



SHC-721APH



The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Design and specifications are subject to change without notice.



SAMSUNG TECHWIN CO., LTD.
145-3, Sangdaewon 1-dong, Jungwon-gu,
Seongnam-si, Gyeonggi-do Korea 462-703
Tel : +82-31-740-8137-8139 Fax : +82-31-740-8145
www.samsungcctv.com

TIANJIN SAMSUNG OPTO-ELECTRONICS CO., LTD.
7 Pingchang Rd., Nankai Dist. Tianjin 300190, P.R.China
Tel : +86-22-2761-4724(33821) Fax : +86-22-2761-6514

SAMSUNG OPTO-ELECTRONICS UK, LTD.
Samsung House, 1000 Hillwood Drive,
Hillwood Business Park Chertsey, Surrey KT16 0PS
Tel : +44-1932-45-5308 Fax : +44-1932-45-5325

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