



1080p HD-TVI 3.6mm Fixed Covert Camera

A high quality 1080P HD covert camera is hidden away in this attractive recessed spotlight case making it ideal for fitting into false ceilings in retail and office environments.

The white metal case blends effortlessly into most ceiling décor and the mirror finish prevent the camera from being visible whilst it still looks like a modern LED light.

A wide angle 3.6mm lens allows general surveillance and thanks to its spotlight disguise a number of these cameras can be fitted in a space without arousing suspicion.

With dual outputs of HD-TVI and standard analogue the camera is designed to work with both existing analogue equipment or the latest HD recording devices so cameras can be installed now and working safe in the knowledge that they will work with future upgrades.

This versatile unit is also packed with features such as Wide Dynamic Range, Motion Detection, 8x Digital Zoom, 8 Zone Privacy Masking, Mirror and Auto-Flip functions.

Mounting The Camera

The camera is designed to be ceiling mounted.

Powering The Camera

The SEE496 requires a regulated 12V DC power supply providing 110mA. You should always allow additional headroom to account for any extra loads such as auto iris lenses, heater kits or IR LEDs. As a rule of thumb you should add 30% on top of the minimum current consumption of the camera. Taking this into account **we recommend a regulated 12V DC PSU providing no less than 150mA.**

For more information on menu options and what they do see online tip 295 ▶▶▶



Features

- Dual HD-TVI & Analogue Outputs
- Wide Dynamic Range
- 3.6mm Board Lens
- Motion Detection
- Low Voltage 12V DC 110mA
- 8 Zone Privacy Masking
- 8x Digital Zoom
- Mirror & Flip Function

Specification

FUNCTION	SPECIFICATION
Image Sensor	1/2.8" Sony CMOS
Resolution	1080P
Lens	3.6mm Board
Day/Night	Electronic
Input Voltage	12V DC
Current	110mA
Video Connection	BNC (HD-TVI & Analogue)
Power Connection	2.1mm DC Socket
WDR	Yes
Backlight Comp	BLC & HLC
Privacy Masking	8 Zone
Noise Reduction	DNR
Digital Zoom	8x
Bracket	Recessed Ceiling Mount
Build	Metal
Dimensions	111 (D) x 70mm (H)

Options Available

PART CODE	DESCRIPTION
SEE496	HD-TVI Covert Spotlight Camera

Other Products To Consider



700TVL Analogue Covert Recessed Spotlight Camera
CAM496



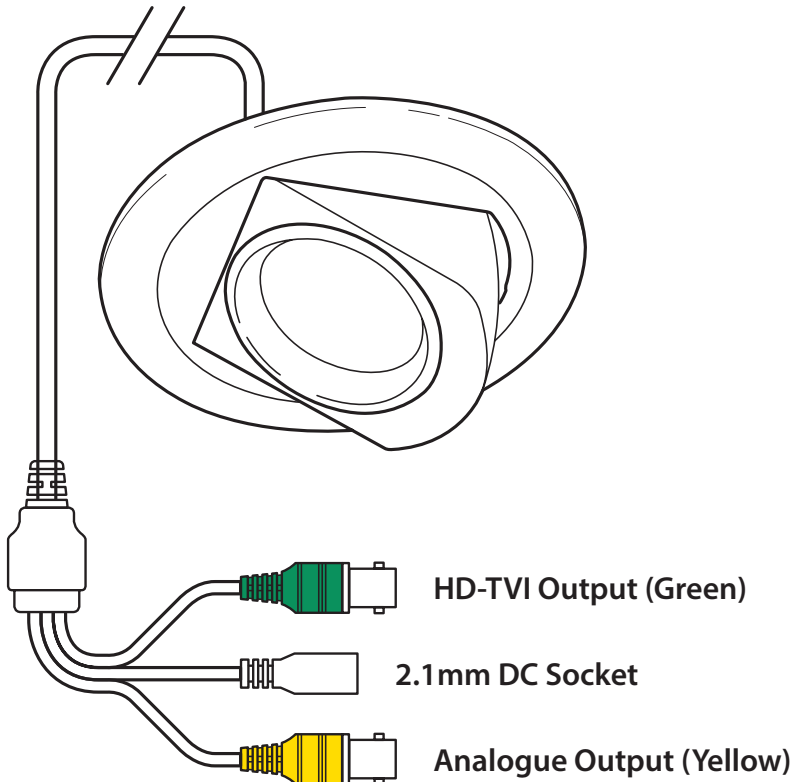
1080p HD-TVI Covert 12" Retail Mirror Camera
SEE490

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Connecting The Camera

The covert camera comes with a fly lead for connecting HD-TVI video out, analogue video out and power. To reduce installation time the video out leads are terminated into female BNC socket connectors. This allows the installer to effortlessly connect the camera to control equipment via a male BNC-BNC lead. Remember that the Video out from the camera is like any other electrical circuit and requires two wires to complete the circuit. When using a co-ax type cable such as RG59 or similar, the outer braid of the co-ax provides the "0V GROUND" connection and the inner core provides the "Video" connection. The camera's power lead is terminated into a standard 2.1mm DC socket.



Up The Co-ax Menu Control

Every camera in the TVision range features up the Co-ax telemetry. This allows you to configure the camera by sending signals down the video Co-ax cable from the DVR. This method has the huge benefit of being able to setup the camera whilst next to DVR. This eliminates the time consuming process of climbing up and down ladders setting up cameras one at a time. It also enables you to instantly see on-screen the effects of any changes made.

This feature is only supported by newer DVRs such the AlienDVR TVI range.

To access the OSD menu via a DVR you will first need to view the camera you wish to configure. You then need to display the PTZ controls and press the "Iris +" button to enter the OSD menu. The direction buttons are then used for navigation and changing parameters. To confirm selections use the "Iris +" button. You can also adjust the **Zoom** and **Focus** on motorised zoom cameras using the zoom and focus buttons.

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Other Products To Consider



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OSD Menu

Default settings are highlighted in **Blue**.

MENU ITEM	FEATURE	
FOCUS ADJ	ON / OFF	
LENS	ELC / ALC	
	ELC:	MODE: NORMAL / DEBLUR
	ALC:	MODE: INDOOR / OUTDOOR / DEBLUR
EXPOSURE	BRIGHTNESS: 0 ~ 20 (10)	
	SHUTTER: AUTO / MANUAL / FLICKER	
	MANUAL:	SPEED: 1/25 ~ 1/16000 (1/25)
	SENS-UP:	X2 ~ X8 / OFF (X2)
	AGC:	0 ~ 20 (16)
BACKLIGHT	OFF / HLC / BLC / WDR	
	HLC:	LEVEL: 0 ~ 20 (10) MODE: ALL DAY / NIGHT ONLY
	BLC:	H POS: 0 ~ 20 (6) H-SIZE: 0 ~ 20 (5) V POS: 0 ~ 20 (4) V-SIZE: 0 ~ 20 (3)
	WDR:	WEIGHT: LOW / MIDDLE / HIGH
	MODE:	EXTERN / AUTO / COLOR / B&W
DAY&NIGHT	ANTI-SAT:	0 ~ 20 (7)
	EXTERN S/W:	LOW / HIGH
	AGC THRES:	0 ~ 20 (11)
	AGC MARGIN:	0 ~ 20 (8)
	DELAY:	LOW / MIDDLE / HIGH
	MODE:	AUTO / AUTOext / PRESET / MANUAL
WHITE BAL	PRESET:	PUSHING
	MANUAL:	KELVIN: LOW / MIDDLE / HIGH B-GAIN: 0 ~ 20 (10) R-GAIN: 0 ~ 20 (10)
	DNR	OFF / LOW / MIDDLE / HIGH
IMAGE	SHARPNESS:	0 ~ 10 (5)
	GAMMA:	0.45 ~ 0.65 (0.55)
	COLOR GAIN:	0 ~ 20 (12)
	MIRROR:	OFF / ON
	FLIP:	OFF / ON
	D-ZOOM:	1.0X ~ 8.0X (1.0X)
	ACE:	OFF / LOW / MIDDLE / HIGH
	DEFOG:	OFF / ON
	ON:	MODE: AUTO / MANUAL LEVEL: LOW / MIDDLE / HIGH
	SHADING:	OFF / ON
	ON:	WEIGHT: 0 ~ 100% (100%)
	PRIVACY:	OFF / ON
	ON:	ZONE NUM: 0 ~ 15 (0) V-SIZE: 0 ~ 40 ZONE DISP: ON / OFF Y LEVEL: 0 ~ 20 (10) H-POS: 0 ~ 60 CR LEVEL: 0 ~ 20 (10) V-POS: 0 ~ 40 CB LEVEL: 0 ~ 20 (10) H-SIZE: 0 ~ 40

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OSD Menu Continued

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MENU ITEM	FEATURE
MOTION	OFF / ON
	ON: SENSITIVITY: 0 ~ 20 (0) DET H-SIZE: 0 ~ 60 (60) WINDOW: 0 ~ 6 (6) DET V-SIZE: 0 ~ 40 (34) DET H-POS: 0 ~ 60 (0) MOTION OSD: OFF / ON DET V-POS: 0 ~ 40 (0) ALARM: OFF / ON
	COM: CAM ID: 0 ~ 255 (1) BAUDRATE: 2400 ~ 115200 (115200)
	IMAGE RANGE: USER / FULL / COMP
SYSTEM	USER: OFFSET: 0 ~ 20 (8)
	OUTPUT MODE: 1080P / 720P / 720P CROP
	MONITOR: 0 / 1 / 2 / 3
	FRAME RATE: 25 FPS / 30 FPS
	CVBS: PAL / NTSC
	LANGUAGE: ENG / CHN / CHN(S) / KOR / JPN / DEU / FRA / NLD / ESP / ITA
	COLOR BAR: OFF / ON
	RESET: PUSH TO RESET CAMERA BACK TO FACTORY DEFAULTS

Fault Finding

Every TVision camera is built to the highest standards and fully tested prior to packing. If you experience an problems you need to investigate your cabling, connections, power supply and monitor.

No Picture From The HD-TVI

There are a number of potential problems that could cause this.

1. Power Supply

The camera can not function without the correct power supply.

- Test that the camera has the correct voltage supplying it, you must do this with the camera connected so that there is load on the PSU. A 12V DC camera should have at least 10.5V DC connected to it.
- For 12V DC cameras only ever use regulated power supplies so that you can be sure that the camera is always receiving the correct voltage.

2. Cabling

Check there is a picture coming out of the CVBS test output at the camera. If there is a picture here but not at the DVR it could be one of the following:

- Video loss in composite cable as the run is too long. Usually you would get a picture up to around 500m with HD-TVI.
- Check the quality of the cable used. For best results, especially with HD-TVI, use a cable with a solid copper core such as our **AntiHum branded cable**. Cable with a solid copper core suffers far less signal loss than cheaper, inferior cable which only has a copper coated core.

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- C. Ensure that the BNC - BNC lead that you connect between the camera and monitor has no shorts or open circuits. If you are making your own lead, don't forget the lead must have two wires connected to complete the circuit, Video and Ground.
- D. Ensure all connections to both the camera and DVR are firm and secure.
- E. Make sure that there are no tight bends or loops in the cable. The minimum bend radius for RG59 co-ax cable is 60mm.

Test Monitor Does Not Display An Image

Make sure the test monitor is connected to the camera's CVBS (analogue) output and not the HD-TVI output. Most test monitors do not accept HD-TVI signals.

Up The Co-ax Control Does Not Work

To setup the camera using up the Co-ax control you need to display the PTZ controls during live view mode on the DVR ([See page 2](#)).

If you can not access the camera's menu using the PTZ controls, the PTZ protocol may be set incorrectly on the DVR.

From the DVR's menu system enter the PTZ settings and change the protocol of the channel(s) required to 'TVI Coaxitron'.

For example on an alienDVR enter the 'Video' menu, select the 'PTZ' tab and click 'PTZ Settings'. Click the protocol dropdown list and select 'AlienTVI Coaxitron'.

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