



## Door Frame Camera With A 1080p Module For Covert Recording

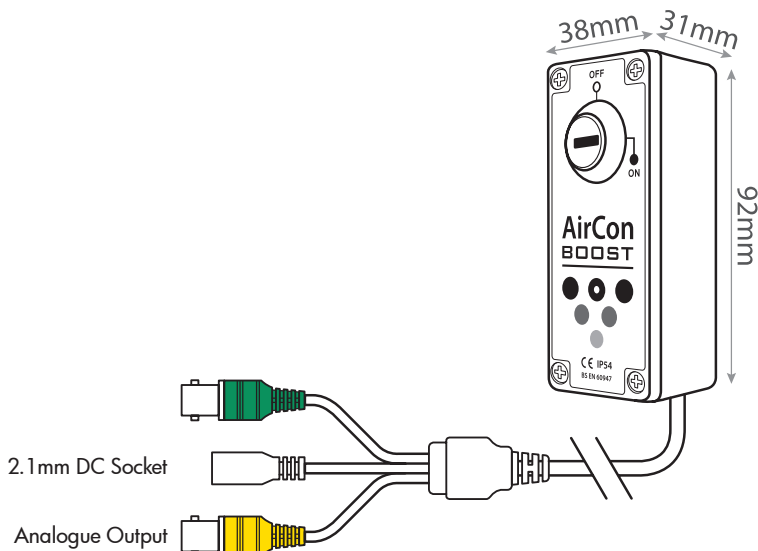
Disguised in an isolator switch box this high resolution dual output CCTV camera can be used with your existing legacy 'Analogue' CCTV systems using its 700TVL camera output or using the 1080p HD-TVI connector it will produce ultra high resolution 2MP (two Megapixel) video quality.

The metal casing hides a tiny HD module camera with a 3.7mm fixed pinhole lens. The unique connection lead has been designed specifically for this camera. The ultra thin 3m lead terminates into 2 BNC (1x TVI, 1x CVBS) and a 2.1mm DC socket. The extra long 3m lead enables the connections to be hidden far from the camera for a truly covert installation.

The SEE486 features an isolator switch design. Isolator (SEE486), alternative isolator (SEE486B) and aircon (SEE485C) designs are also available.

## 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.



## 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
- Tough Metal Casing

## 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
Cabling	3m Fly Lead Supplied
White Balance	Auto
Dimensions	92 x 38 x 31mm

## Options Available

PART CODE	DESCRIPTION
SEE486	Keyswitch Isolator
SEE486B	Isolator Alternative
SEE486C	Aircon Boost
SEE486D	Solar Control

## Other Products To Consider



TVI Covert Recessed Spotlight Camera  
**SEE496**



HD-TVI Covert 12" Retail Mirror Camera  
**SEE490**

All specifications are approximate. System Q Ltd reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, System Q Ltd cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.

This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.

WEE/CG078355

## 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.

## 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.

## OSD Menu

Default settings are highlighted in **Blue**.

MENU ITEM	FEATURE
FOCUS ADJ	ON / <b>OFF</b>
LENS	<b>ELC</b> / ALC
	ELC:           MODE: <b>NORMAL</b> / DEBLUR
	ALC:           MODE: <b>INDOOR</b> / OUTDOOR / DEBLUR
EXPOSURE	BRIGHTNESS: 0 ~ 20 ( <b>10</b> )
	SHUTTER: <b>AUTO</b> / MANUAL / FLICKER
	MANUAL:     SPEED: 1/25 ~ 1/16000 ( <b>1/25</b> )
	SENS-UP:    X2 ~ X8 / OFF ( <b>X2</b> )
	AGC:         0 ~ 20 ( <b>16</b> )
BACKLIGHT	<b>OFF</b> / HLC / BLC / WDR
	HLC:         LEVEL: 0 ~ 20 ( <b>10</b> )           MODE: <b>ALL DAY</b> / NIGHT ONLY
	BLC:         H POS: 0 ~ 20 ( <b>6</b> )           H-SIZE: 0 ~ 20 ( <b>5</b> ) V POS: 0 ~ 20 ( <b>4</b> )           V-SIZE: 0 ~ 20 ( <b>3</b> )
	WDR:         WEIGHT: LOW / <b>MIDDLE</b> / HIGH
	MODE: <b>EXTERN</b> / AUTO / COLOR / B&W
DAY&NIGHT	ANTI-SAT:   0 ~ 20 ( <b>7</b> )
	EXTERN S/W: <b>LOW</b> / HIGH
	AGC THRES:  0 ~ 20 ( <b>11</b> )
	AGC MARGIN: 0 ~ 20 ( <b>8</b> )
	DELAY:       LOW / <b>MIDDLE</b> / HIGH
WHITE BAL	<b>AUTO</b> / AUTOext / PRESET / MANUAL
	PRESET:     PUSHING
	MANUAL:    KELVIN: LOW / <b>MIDDLE</b> / HIGH   B-GAIN: 0 ~ 20 ( <b>10</b> ) R-GAIN: 0 ~ 20 ( <b>10</b> )
DNR	OFF / <b>LOW</b> / MIDDLE / HIGH

## 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
- Tough Metal Casing

## 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
Cabling	3m Fly Lead Supplied
White Balance	Auto
Dimensions	92 x 38 x 31mm

## Options Available

PART CODE	DESCRIPTION
<b>SEE486</b>	Keyswitch Isolator
<b>SEE486B</b>	Isolator Alternative
<b>SEE486C</b>	Aircon Boost
<b>SEE486D</b>	Solar Control

## Other Products To Consider



TVI Covert Recessed  
Spotlight Camera  
**SEE496**



HD-TVI Covert 12"  
Retail Mirror Camera  
**SEE490**

All specifications are approximate. System Q Ltd reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, System Q Ltd cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.



WEE/CG078355

This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.

## OSD Menu Continued

Default settings are highlighted in **Blue**.

MENU ITEM	FEATURE	
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	
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
SYSTEM	COM:	CAM ID: 0 ~ 255 (1)      BAUDRATE: 2400 ~ 115200 (115200)
	IMAGE RANGE:	USER / FULL / COMP
	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	

## 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
- Tough Metal Casing

## 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
Cabling	3m Fly Lead Supplied
White Balance	Auto
Dimensions	92 x 38 x 31mm

## Options Available

PART CODE	DESCRIPTION
SEE486	Keyswitch Isolator
SEE486B	Isolator Alternative
SEE486C	Aircon Boost
SEE486D	Solar Control

## Other Products To Consider



TVI Covert Recessed  
Spotlight Camera  
**SEE496**



HD-TVI Covert 12"  
Retail Mirror Camera  
**SEE490**

All specifications are approximate. System Q Ltd reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, System Q Ltd cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.



WEE/CG078355

This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.

Continued on next page ►►►

## 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.

- A. 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.
- B. 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:

- A. Video loss in composite cable as the run is too long. Usually you would get a picture up to around 500m with HD-TVI.
- B. 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.
- 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'.

## 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
- Tough Metal Casing

## 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
Cabling	3m Fly Lead Supplied
White Balance	Auto
Dimensions	92 x 38 x 31mm

## Options Available

PART CODE	DESCRIPTION
<a href="#">SEE486</a>	Keyswitch Isolator
<a href="#">SEE486B</a>	Isolator Alternative
<a href="#">SEE486C</a>	Aircon Boost
<a href="#">SEE486D</a>	Solar Control

## Other Products To Consider



TVI Covert Recessed Spotlight Camera  
[SEE496](#)



HD-TVI Covert 12" Retail Mirror Camera  
[SEE490](#)

All specifications are approximate. System Q Ltd reserves the right to change any product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, System Q Ltd cannot be held responsible in any way for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment that these instructions refer to.



WEE/CG078355

This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.