

SEE360(B/W) External HD 2.8~12mm Camera with IRs

The SEE360 has multi format HD modes for TVI, AHD, CVI and CVBS and a separate BNC for CVBS* (analogue) use.

In addition the SEE360 comes in two colours, Glossy Black & Glossy White with the following features:

- Multi format TVI/AHD/CVI/CVBS plus separate BNC for CVBS*
- 2.1 MegaPixel 1080P/700TVL (CVBS)
- 2.8 ~ 12mm vari-focal lens
- 35x IR LEDs 30~35m range
- Privacy masking & Motion Detection
- IR reflection Protection
- All metal construction
- Internal/External use IP68 rated
- Wide Dynamic Range
- Sens-Up for improved night vision

**Special Features**

The SEE360 cameras produce exceptional quality images using a 1/3" CCD providing HD 1080P resolution.

The SEE360 is a multi-format HD camera with TVI, AHD, CVI and CVBS mode selection and in addition a separate analogue output (CVBS) on a separate BNC lead.

* Additional CVBS output available if using HD, but only one CVBS if not.

In HD-TVI mode the cameras have the Coaxitron Control facility for changing the OSD menu specifications via the DVR or remote network connection, or via the camera.

This camera has the Sens-Up menu feature for reducing shutter speed for improving light capture at night.

Deep base allowing both BNC connectors, 2.1 power jack and menu control button to be stored in, if required.

Special brackets available BKT360B (black) and BKT360W (white).

Mounting the Camera

The camera is for outdoor mounting on a wall, building or under a lintel, but could also be used inside, in an appropriate position. The camera must be first opened up by removing the three anti tamper torx screws using the special tool provided. To remove the base from the camera you will need to release the small anti vandal locking screw using the Allen key provided and twisting the camera assembly in the base, a quarter of a turn clockwise. Feed the cables through the base and secure the base to the wall, building or lintel. There are screws and plugs provided with the camera for this that may be suitable. There is room in the camera base that allows for cable management, and menu access is via the cable joystick controller or via coaxitron, if using TVI format. Alternatively the connections can be stored in the wall void or in a waterproof box close to the camera if access to the manual controller is required. If using an external connection, you can connect the camera via the cut-out in the base or via the side conduit port blanking plug that must be adequately sealed to restrict water ingress. This camera has a 3D gimbal for wall mounting.

Powering the Camera

The SEE360 draws 12V DC 450mA when IRs are on, and power consumption is rated at 5.4 watts. It should be noted that extra headroom is required when the camera is first powered up so we recommend connecting it to a 12v DC regulated minimum 600mA power supply. The camera is provided with a fly lead with a mini power 2.1mm DC socket. The camera is polarity sensitive so connections must be correctly made.

Connecting the camera to control equipment

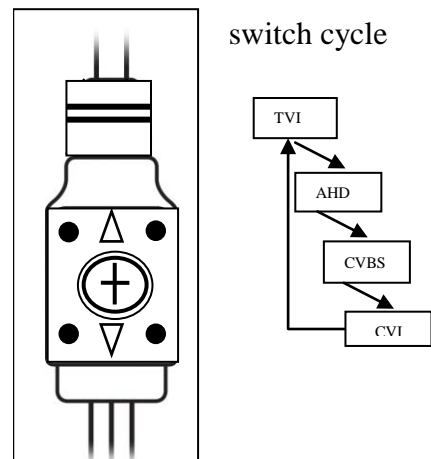
The dome camera comes with a fly lead for power, TVI/AHD/CVI/CVBS selected BNC video output plus a second analogue (CVBS) video output on a separate BNC lead. Connect the HD camera to control equipment via a female BNC-BNC lead. When using a co-ax type cable such as RG59 or similar, the outer braid of the co-ax provides the “0V GROUND” connection and the inner core provides the “Video” connection. The separate analogue (CVBS) output is primarily available for setup purposes but can be used for viewing via an analogue monitor. Note that you cannot use both analogue outputs together but can view one analogue and one HD.

These cameras can be viewed in TVI, AHD, CVI and CVBS. First power the camera up when it is connected to a monitor or DVR and monitor, and see if the required format displays a colour picture. If not, press the joystick button in and not down, for 3 seconds. Repeat until picture displays in colour and is sharp. (Note that picture may be in b/w in low light levels or the cellophane lens cover has not been removed). Alternatively if you use the menu, you can change the camera format in the menu:

Example - Change camera format to TVI:

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<System> <Output> <MAIN OUTPUT ANALOG OUT0
<System> <Output> <ANALOG OUT0 TVI ↵
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Once format is set, press the joystick button in momentarily, if you wish to access the menu.



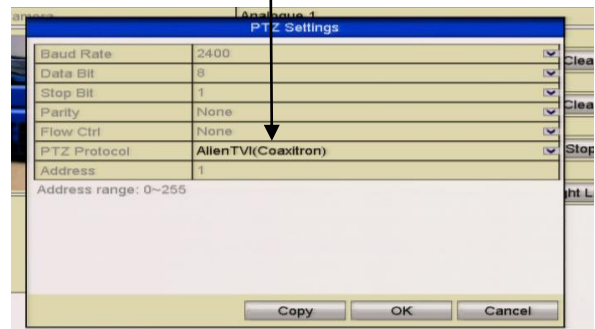
Manual Zoom and Focus

This camera has a zoom and focus. To adjust, slide off IR assembly taking care not to pull on wiring and adjust the manual zoom and focus controls by loosening the two securing screws. When adjusted tighten securing screws and replace IR assembly.

Menu Access via TVI DVR using Coaxitron

Access to the camera menu is via the menu buttons on the camera or via the Up the Co-ax connection. Access by the menu buttons is described below. To use the **Up The Coax** connection, this can be accessed using the PTZ menu in the MEGA TVI or MAX TVI DVRs using the AlienTVI(Coaxitron) protocol. This protocol is generally set in the PTZ Settings menu as default but if not, select using the following:

Enter the **DVR Menu**, click on **Video**, **PTZ** and select the **channel** number of the TVI camera connected to the DVR. Then click on **PTZ Settings** and select **AlienTVI(Coaxitron)** and click **OK**.



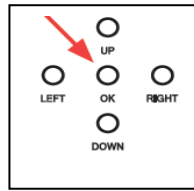
Now click on the **PTZ** button at the bottom of the screen and a full screen picture will be displayed with the PTZ control menu. Click on the **IRIS+** button to display menu



Use the directional arrows to move up and down or left or right to select options.

OSD Menu

The SEE360 has an on screen display menu. This can be accessed using the joystick on the camera.



Press the centre button straight down (see arrow) to enter the menu and use Left, Right, Up and Down to move through and amend menu settings.

Alternatively use the TVI DVR PTZ menu as detailed in “Menu Access via DVR” above.

The following menu display is shown:

<p>IRIS</p>	<p>ELC ALC</p>	<p>Electronic Light Control – overall brightness of picture Auto light compensation – measures peak light levels</p>
<p>FOCUS ADJ</p>	<p>OFF ON ↙</p>	<p>Focus Area Wide / Narrow / Middle (Def Wide) Disp Tone (Display Tone 0 Low, 1 Medium , 2 High) Disp H_Pos 0 ~ 60 Horizontal Position (Def 2) Disp V_Pos 0 ~ 34 Vertical Position (Def 12) Disp H_Size 0 ~ 60 Horizontal Size (Def 2) Disp V_Size 0 ~ 34 Vertical Size (Def 14) Return</p>
<p>EXPOSURE ↙</p>	<p>BRIGHTNESS SHUTTER SENS-UP AGC RETURN</p>	<p>0 ~ 20 (Def 10) Auto ↙ / Manual ↙ / Flicker Normal / Deblur (Def Auto) Manual- 1/25,1/50,1/100,1/200,1/400,1/800,1/1600,1/3200, 1/6400,1/12800,1/25600 (Def 1/25) Flicker Off /x2/x4/x8/x16/x32 (Def Off) 0 ~ 10 (Def 10)</p>
<p>BACKLIGHT</p>	<p>OFF HLC ↙ BLC ↙ WDR ↙ SPECIAL NOTE: IF USING WDR YOU WILL LOSE ANY CVBS CONNECTION</p>	<p>Level 1 ~ 20 / Color – BLK/Customise/WHT/YEL/CYN/GRN/MAG/RED/BLU H-Pos – V-Pos – H-Size – V-Size - Return Normal / ROI ↙ (Region of Interest) ROI – Window Zone 0 ~ 3 Window Use ON / OFF H-POS 320 V-POS 180 H-SIZE 512 V-SIZE 432 Return ↙ Weight – Low / Middle / High (Def Middle) Return</p>

SEE360 Multi-Format HD Camera (TVI/AHD/CVI) & Analogue with IRs

<p>DAY&NIGHT</p>	<p>EXTERNAL ↵</p> <p>AUTO ↵</p> <p>COLOUR</p> <p>B&W ↵</p>	<p>IR LED Off / On Anti-Sat. 1 ~ 20 Default 10 (Not used when IRs off) Extern S/W Low / High D->N Level 1 ~ 20 Default 13 N->D Level 1 ~ 20 Default 7 Delay – Low / Middle / High - Return</p> <p>IR LED Off / On Anti-Sat. 1 ~ 20 Default 10 (Not used when IRs off) AGC Threshold 1 ~ 20 AGC Margin 1 ~ 20 Delay – Low / Middle / High - Return</p> <p>IR LED Off / On Anti-Sat. 1 ~ 20 Default 10 (Not used when IRs off) Return</p>
<p>COLOR ↵</p>	<p>AWB Auto Color Gain 1 ~ 20 (Default 13) Return</p>	<p>AUTOext / Preset (Push) Color Gain 1 ~ 20 Default 13 Return</p> <p>MANUAL ↵ C-Temp 5000K / 8000K / 3000K R-Gain 1 ~ 20 (Default 10) B-Gain 1 ~ 20 (Default 10) Return</p>
<p>DIGITAL NOISE REDUCTION</p>	<p>DNR</p>	<p>Off / Low / Middle / High</p>
<p>IMAGE</p>	<p>SHARPNESS ↵</p> <p>GAMMA</p> <p>MIRROR</p> <p>FLIP</p> <p>ACE</p> <p>DEFOG</p> <p>PRIVACY</p> <p>RETURN ↵</p>	<p>CVBS / CVI / TVI / AHD - 1 ~ 10 TVI Default 4 0.55 / 0.65 / 0.75 / 0.45</p> <p>Off / On</p> <p>Off / On</p> <p>Off / Low / Middle / High (Adaptive Colour & Contrast Enhancement)</p> <p>Off / On ↵ Mode – Auto / Manual Level - Low / Middle / High</p> <p>Off / On ↵ Zone Num (0 ~ 15) / Zone Disp Off / On H-Pos / V-Pos / H-Size / V-Size / Y-Level (1 ~ 20) / CR Level (1 ~ 20) CB Level (1 ~ 20) / Return TRANS (0 ~ 3) Return</p>

SEE360 Multi-Format HD Camera (TVI/AHD/CVI) & Analogue with IRs

<p>MOTION</p>	<p>OFF / ON ↵</p>	<p>Det Window ↵ Window Zone 0 ~ 3 Window Use On/Off Det H-Pos <nn> <nn> value = position Det V-Pos <nn> <nn> value = position Det H-Size <nn> <nn> value = size Det V-Size <nn> <nn> value = size Return Det Tone 0 ~ 4 MDRect Fill On/Off Sensitivity 0 ~ 10 (Default 5) Motion OSD On/Off Text Alarm On/Off Signal Out Off/On Return</p>
<p>SYSTEM</p>	<p>OUTPUT ↵</p> <p>FRAME RATE FREQUENCY COM. ↵</p> <p>IMAGE RANGE FULL / COMP / USER ↵</p> <p>COLOR SPACE AUDIO MIC COLOR BAR LANGUAGE CAM TITLE</p> <p>RESET ON(Push) Return</p>	<p>Main Output Analog Out 0 ↵ / Out 1 ↵ Analog Out 0 TVI/AHD/CVI / Analog Out1 CVBS Y Gain 0 ~ 32 Def 16 / Y Gain not used CB Gain 0 ~ 32 Def 12 / CB Gain not used CR Gain 0 ~ 32 Def 12 / CR Gain not used Position 0 ~ 256 Def 128 / Position not used Burst Freq 0 ~ 256 Def 128 / Burst Freq not used Burst Gain 0 ~ 128 Def 69 / Burst Gain not used UCC Select0 8 Byte (Do not change this) 720 EX Off/ On UCC Select1 not used Exit 1080 25P 50Hz / 60Hz COM Cam ID 0 ~ 255 Default 0 Baudrate 2400 / 4800 / 9600 / 57600 / 115200 Set Done On (push) Return FULL / COMP / USER ↵ Offset 0 ~ 32 (Default 16) Return</p> <p>IMAGE RANGE Offset 0 ~ 32 (Default 16) Return</p> <p>HD-CbCr / YUV / SD-CbCr (Not Used) Off / On ENG / CHN / CHN(S) / JPN / KOR Off / Right Up ↵ / Left Down ↵ (Use up or down to select character and left or right to select position) Hold down Iris+ button for 3 seconds</p>
<p>EXIT</p>	<p>Press IRIS + to exit</p>	

Menu Description

The following menu description gives more in depth information about the menu options. In some instances recommendations are made to hopefully enhance the results. However every installation will be different and there will occasions when alternative solutions may be more suitable.

IRIS	ELC	Electronic Light Control – measures overall brightness
	ALC	Auto light compensation – measures peak light levels

ELC Electronic Light Control – measures overall brightness of picture and applies to manual iris lens

ALC Auto light compensation – measures peak light levels and applies to auto iris lens which this camera has.

Recommendation is to set ELC

FOCUS ADJ	OFF	Focus Area Wide / Narrow / Middle (Def Wide) Disp Tone (Display Tone 0 Low, 1 Medium , 2 High) Disp H_Pos 0 ~ 60 Horizontal Position (Def 2) Disp V_Pos 0 ~ 34 Vertical Position (Def 12) Disp H_Size 0 ~ 60 Horizontal Size (Def 2) Disp V_Size 0 ~ 34 Vertical Size (Def 14) Return
	ON ↩	

This camera has a fixed lens and therefore focus is not adjustable. This option is N/A.

Focus Area Middle / Wide / Narrow Select to create a focus box

In the camera menu you can enter the Focus Adjustment option and select an area for best focus result by creating a box (Wide, Middle or Narrow) to select the required area for focusing. These 3 bars means sharpness, from left to right means from low frequency to high frequency, or from wide range to narrow range sharpness. Green stands for the former highest sharpness, Yellow stands for the present highest sharpness. Note that this is a setup aid for manual focusing and only applies when manual vari-focal lenses are used. Ensure option is switched off after setup.

Disp Tone 0 / 1 / 2 (Alter brightness of focus aid)

Disp H _ Pos (Set horizontal position of Focus Box)

Disp V _ Pos (Set vertical position of Focus Box)

Disp H _ Size (Set horizontal size of Focus Box)

Disp V _ Size (Set vertical size of Focus Box)

RETURN

Return to Main Menu

EXPOSURE ↵	BRIGHTNESS SHUTTER SENS-UP AGC RETURN	0 ~ 20 (Def 10) Auto ↵ / Manual ↵ / Flicker Normal /Deblur (Def Auto) Manual- 1/25,1/50,1/100,1/200,1/400,1/800,1/1600,1/3200, 1/6400,1/12800,1/25600 (Def 1/25) Flicker Off /x2/x4/x8/x16/x32 (Def Off) 0 ~ 10 (Def 10)
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BRIGHTNESS **1 ~ 20** (Default = 10)

Use this setting to increase brightness by opening camera iris. Useful for improving night time viewing by using in conjunction with the Sens-Up option. However be aware to consider possible effects when there is strong sunlight in summer that if setting brightness to high it may cause the picture to white out.

Recommendation is to set brightness to 15.

SHUTTER **Auto / Manual**

1/25,1/50,1/100,1/200,1/400,1/800,1/1600,1/3200,1/6400,1/12800,1/25600,
Flicker

Shutter speed changes allow you to freeze moving objects without ghosting but reduce the amount of available light the faster the shutter operates. At night the slower the shutter speed the more light is available. The Flicker option sets the shutter speed at 1/250 that synchronises with fluorescent tubes so that the pulsing effect is minimised.

Recommendation is to leave this in Auto.

SENSUP **Off /x2/x4/x8/x16/x32**

The SensUp option allows the shutter speed to be reduced allowing additional light to be captured. Increasing brightness helps night time viewing (see BRIGHTNESS setting above). If set too high and SensUp is slowing shutter speed down to a lower speed than any movement speed, ghosting can occur.

Recommend that SensUp is switched to x2 or greater but higher settings can cause ghosting.

AGC **1 ~ 20** (Default = 10)

For better performance in low light conditions the AGC (Automatic Gain Control) can be increased. This has the effect of making the picture brighter but it may also add more noise as it amplifies all aspects of the video signal. Snowy pictures can be caused when SensUp levels are increased.

Recommend AGC is decreased below 10 if Sensup is set. Set to 9 if SensUp x2.

RETURN

Return to main menu.

BACKLIGHT	OFF HLC ↵ BLC ↵ WDR ↵ SPECIAL NOTE: IF USING WDR YOU WILL LOSE ANY CVBS CONNECTION	Level 1 ~ 20 / Color – BLK/Customise/WHT/YEL/CYN/GRN/MAG/RED/BLU H-Pos – V-Pos – H-Size – V-Size - Return Normal / ROI ↵ (Region of Interest) ROI – Window Zone 0 ~ 3 Window Use ON / OFF H-POS 320 V-POS 180 H-SIZE 512 V-SIZE 432 Return ↵ Weight – Low / Middle / High (Def Middle) Return
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Backlight Compensation when set, can balance light levels during day and night so that light hitting objects viewed, is evenly spread across the picture. There are three options HLC, BLC and WDR that can be selected.

HLC ↵

(High Level Backlight Compensation)

Level 1 ~ 20 / Mode – All Day / Night Only

HLC is high level backlight compensation that will darken a bright area e.g car headlights. This can be set for all day or night only. The lower the level the more compensation is applied. Note that using the night option may be best as daytime pictures generally give a more even spread of light apart from sunlight issues.

Recommend only to use on Night Only if bright lights are causing complete video loss.

BLC ↵

(Backlight Compensation)

H-Pos – V-Pos – H-Size – V-Size

BLC is the standard setting for low level light differences. Select an area where BLC is required. Using the H-Pos (Horizontal Position) and V-Pos (Vertical Position) followed by H-Size (Horizontal Size) and V-Size (Vertical Size) create a box where light balancing is required.

WDR ↵

(Wide Dynamic Range) Normal / ROI (Region of Interest) / Weight – Low / Middle / High

WDR is used for surveillance applications where there is a large difference in foreground and background light levels. Without the option switched on, views by cameras looking through windows may not give good reproduction outside. Also where there are areas of shadow and bright sunlight, the WDR option helps to balance light levels. ROI provides an option to create up to 4 areas using WDR rather than applying to the whole picture.

Recommend using WDR where balancing light levels in warehouses or large buildings is difficult. Also helps when light is entering a window or door entrance.

Return

Return to main menu

SEE360 Multi-Format HD Camera (TVI/AHD/CVI) & Analogue with IRs

DAY&NIGHT	EXTERNAL ↩	IR LED Off / On Anti-Sat. 1 ~ 20 (Not used when IRs off) Extern S/W Low / High D->N Level 1 ~ 20 Default 13 N->D Level 1 ~ 20 Default 7 Delay – Low / Middle / High - Return
	AUTO ↩	IR LED Off / On Anti-Sat. 1 ~ 20 (Not used when IRs off) AGC Threshold 1 ~ 20 AGC Margin 1 ~ 20 Delay – Low / Middle / High - Return
	COLOUR	
	B&W ↩	IR LED Off / On Anti-Sat. 1 ~ 20 (Not used when IRs off) Return

Day & Night menu controls light settings and predominantly provides options for using the cameras’ Infra-Red facilities. There are four sub-options namely External, Auto, Colour and Black & White.

EXTERNAL ↩

This option does not use the internal CDS sensor to measure the available light. With cameras using their own IR light source, this option can give the best results. Note that this option has a manual adjustment for setting IR switch on according to lux level from day to night and from night to day, plus an option for applying a delay factor. This stops switching until a pre-determined lux level remains constant. There is also the option to switch off the IRs.

Recommend to try this option if Auto does not give required results.

AUTO ↩

The standard Auto function uses the internal CDS to measure available light. This uses AGC (Automatic Gain Control) and Anti Saturation to measure picture quality before switching which is used in conjunction with a pre-determined time interval when lux levels remain constant. There is also the option to switch off the camera IRs.

COLOUR

This option will remain in colour mode day and night. There are no sub menu settings. This will only be applicable when light levels at night allow the camera to continue working at 4 lux or higher.

B&W ↩

When this option is selected the camera will remain in black and white mode, day and night. The only sub menus available are Anti Saturation and the option to switch off the camera IRs.

Return

Return to main menu.

COLOR ↵	AWB Auto Color Gain 1 ~ 20 (Default 13) Return	AUTOext / Preset (Push) Color Gain 1 ~ 20 Default 13 Return MANUAL ↵ C-Temp 5000K / 8000K / 3000K R-Gain 1 ~ 20 (Default 10) B-Gain 1 ~ 20 (Default 10) Return
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This feature automatically adjusts the colour settings in the camera to match the type of light available, so that white and other colours appear as natural as possible.

AUTO

This option automatically sets white balance.

AUTOext

This option is generally used to set white balance when camera is used externally.

PRESET(Push) Press IRIS+ or joystick centre button down

This option allows you to set white balance using current light levels. Settings will only change when you press IRIS+ or joystick centre button down.

MANUAL ↵

Use this option to manually balance light levels. Note that the manual option is used for a static light environment and generally suitable for cameras installed indoors using constant artificial light.

- C-Temp 5000K / 8000K / 3000K
- R-Gain 1 ~ 20 (Default 10) Sets Red Gain
- B-Gain 1 ~ 20 (Default 10) Sets Blue Gain
- Return

RETURN

Return to main menu

DIGITAL NOISE REDUCTION	DNR	Off / Low / Middle / High
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DNR Off / Low / Middle / High

Digital Noise Reduction is generally applied when the Sens-Up feature is used to improve night time views in low light conditions. Using the Sens-Up option slows the shutter speed but this increases noise and causes grainy picture effects. DNR helps to minimise this effect. The options low, medium and high, apply different levels of noise reduction and therefore have to be tested to gain the best result as light levels will be different at every site and location.

Recommend to leave off even when Sense-Up is on and if grainy picture is created then test starting at low, and leave camera on the best setting.

SEE360 Multi-Format HD Camera (TVI/AHD/CVI) & Analogue with IRs

IMAGE	SHARPNESS ↵ GAMMA MIRROR FLIP ACE DEFOG PRIVACY RETURN ↵	CVBS / CVI / TVI / AHD - 1 ~ 10 TVI Default 4 0.55 / 0.65 / 0.75 / 0.45 Off / On Off / On Off / Low / Middle / High (Adaptive Colour & Contrast Enhancement) Off / On ↵ Mode – Auto / Manual Level - Low / Middle / High Off / On ↵ Zone Num (0 ~ 15) / Zone Disp Off / On H-Pos / V-Pos / H-Size / V-Size / Y-Level (1 ~ 20) / CR Level (1 ~ 20) CB Level (1 ~ 20) / Return TRANS (0 ~ 3) Return
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IMAGE ↵

The Image menu covers a variety of options including sharpness, mirror, defog, shading and privacy masking facilities.

Sharpness ↵ (1~ 10 for CVBS / CVI / TVI / AHD)

Depending on the camera format selected, the format/s will be in dark type for adjustment. The sharpness control is done by digital correction and the best way to set this option is to set level to maximum of 10, then flick back to 1, to see the difference. Then adjust to display sharpest picture without displaying heavy black lines around subjects.

Gamma 0.55 / 0.65 / 0.75 / 0.45 (Default 0.55)

Gamma correction controls and adjusts the overall brightness of an image.

Recommend trying each option and select best quality picture

Mirror Off / On

This option changes a left handed view to a right handed view if switched on.

Flip Off / On

This option turns a view upside down. This option is generally used with the Mirror function.

ACE Off / Low / Middle / High

Adaptive Colour & Contrast Enhancement (ACE) is an automated option for adjusting colour and contrast as light levels changes through the day. Low, middle or high options are available.

Recommend setting option to Low

DEFOG Off / On ↵
 Mode – Auto - Level - Low / Middle / High
 Manual - Level - Low / Middle / High

The defog option can be used to improve the captured image in poor weather conditions such as smog, fog or smoke. Three levels of optimisation can be applied, low, middle or high. This option is useful to stabilise rapid fluctuating light levels.

Recommend setting this option to On

PRIVACY

Off / On ↵

Zone Num (0 ~ 15) This function allows the creation of up to 16 coloured areas to be created to provide privacy masking.

Zone Disp Off /On The Zone Display allows you to switch on and off the zone number.

H-Pos / V-Pos / H-Size / V-Size

Each area can be positioned using the H-Pos (horizontal position), VPos (vertical position) and sized using the H-Size (horizontal size) and V-Size (vertical size) options. The Zone Display allows you to switch on and off the zone number.

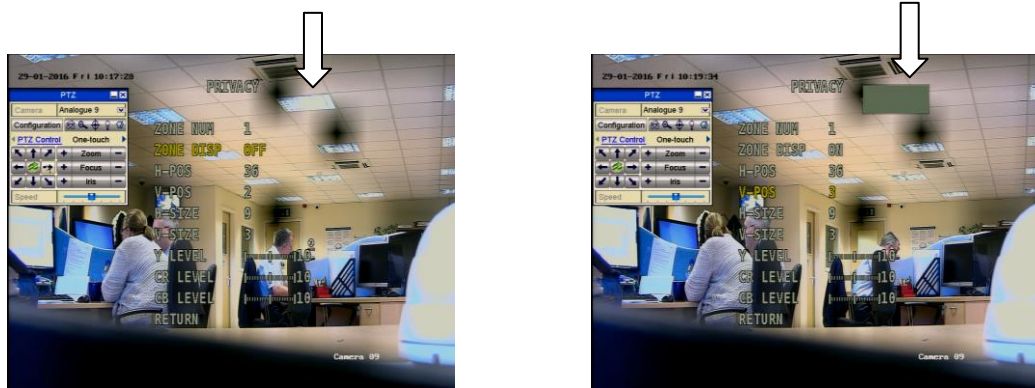
Y-Level (1 ~ 20)

CR Level (1 ~ 20)

CB Level (1 ~ 20)

The Y-Level is the colour hue for privacy masking and the CR Level (Chrominance Red) and CB Level (Chrominance Blue) are used to create the required colour.

The pictures below show an area that has been masked, before and after.



TRANS (0 ~ 3) Set the transparency level of the masked areas.

RETURN

Return to main menu

MOTION	OFF / ON ↵	Det Window ↵ Window Zone 0 ~ 3 Window Use On/Off Det H-Pos <nn> <nn> value = position Det V-Pos <nn> <nn> value = position Det H-Size <nn> <nn> value = size Det V-Size <nn> <nn> value = size Return Det Tone 0 ~ 4 MDRect Fill On/Off Sensitivity 0 ~ 10 (Default 5) Motion OSD On/Off Text Alarm On/Off Signal Out Off/On Return
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MOTION Off / On ↵

The motion option when switched on allows you to create up to four areas in the picture and as motion is detected in these areas, the areas will be displayed with red moving boxes.

DET WINDOW ↵ Enter to select window number

Window Zone 0 ~3
Window Use On / Off
Det H-Pos <nn> Set horizontal position
Det V-Pos <nn> Set vertical position
Det H-Size <nn> Set horizontal size
Det V-Size <nn> Set vertical size
 Each area can be positioned using the H-Pos (horizontal position), VPos (vertical position) and sized using the H-Size (horizontal size) and V-Size (vertical size) options.
Return

DET TONE 0 ~ 4 Sets the background tone to enable the motion detect area to be more or less prominent.

MDRECT FILL On / Off Allows the switching on or off of the selected zone

SENSITIVITY 0 ~ 10 Sets the sensitivity of the motion detection

MOTION OSD On / Off Switch Motion On Screen Display on or off

TEXT ALARM On / Off Switch Motion Text Alarm on or off.

Return

SEE360 Multi-Format HD Camera (TVI/AHD/CVI) & Analogue with IRs

<p>SYSTEM</p>	<p>OUTPUT ↵</p> <p>FRAME RATE FREQUENCY COM. ↵</p> <p>IMAGE RANGE FULL / COMP / USER ↵</p> <p>COLOR SPACE AUDIO MIC COLOR BAR LANGUAGE CAM TITLE</p> <p>RESET ON(Push) Return</p>	<p>Main Output Analog Out 0 ↵ / Out 1 ↵ Analog Out 0 TVI/AHD/CVI / Analog Out1 CVBS Y Gain 0 ~ 32 Def 16 / Y Gain not used CB Gain 0 ~ 32 Def 12 / CB Gain not used CR Gain 0 ~ 32 Def 12 / CR Gain not used Position 0 ~ 256 Def 128 / Position not used Burst Freq 0 ~ 256 Def 128 / Burst Freq not used Burst Gain 0 ~ 128 Def 69 / Burst Gain not used UCC Select0 8 Byte (Do not change this) 720 EX Off/ On UCC Select1 not used Exit 1080 25P 50Hz / 60Hz COM Cam ID 0 ~ 255 Default 0 Baudrate 2400 / 4800 / 9600 / 57600 / 115200 Set Done On (push) Return FULL / COMP / USER ↵ Offset 0 ~ 32 (Default 16) Return</p> <p>IMAGE RANGE Offset 0 ~ 32 (Default 16) Return</p> <p>HD-CbCr / YUV / SD-CbCr (Not Used) Off / On ENG / CHN / CHN(S) / JPN / KOR Off / Right Up ↵ / Left Down ↵ (Use up or down to select character and left or right to select position) Hold down Iris+ button for 3 seconds</p>
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The SYSTEM menu provides a number of general facilities. These include selecting the correct camera format, setting a camera identification number and baud rate for RS485 connection, resolution mode, frame rate and colour standard, language, test colour bar, camera title and camera reset option.

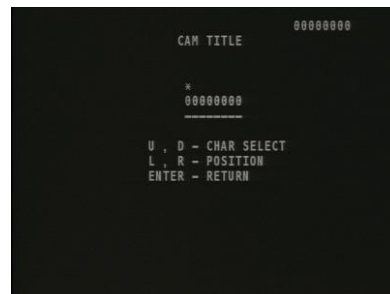
OUTPUT ↵

Main Output Analog Out 0 / 1 (Out 0 = HD Out 1 = CVBS)
 Analog Out 0 TVI ↵ (Select TVI / AHD / CVI)
 Y Gain 0 ~ 32 Default 16 Yellow Gain
 CB Gain 0 ~ 32 Default 12 Blue Gain
 CR Gain 0 ~ 32 Default 12 Red Gain
 Position 0 ~ 256 Default 128 Position
 Burst Freq 0 ~ 256 Default 128 Burst Frequency
 Burst Gain 0 ~ 128 Default 69 Burst Gain
 UCC Select0 8 Byte **(Do not change this)**
 720 EX Off/ On
 UCC Select1 not used
 Exit

SEE360 Multi-Format HD Camera (TVI/AHD/CVI) & Analogue with IRs

- Analog Out1 CVBS / TVI↵ / Off
- Analog Out1 CVBS
- Return
- FRAME RATE** 1080 25P / 720 25P / 720 (Crop) 50P (Select camera frame rate)
Sets the camera output mode. 1080P is default.
- FREQ** 50Hz / 60Hz (Cycles per second)
- COM. ↵** Cam ID 1 (Set ID number in camera between 0 and 255)
Baud Rate 2400 / 4800 / 9600 / 57600 / 115200
Set Done (Press Iris+ button)
Return
- IMAGE RANGE** Full / Comp / User ↵
Offset 1 ~ 32 (Default = 16)
Return
- COLOR SPACE** HD-CbCr (High Definition Chrominance Blue and Red)
YUV (Allows grayscale adjustment (Y= luminance UV= colour))
SD-CbCr (Standard Definition Chrominance Blue and Red)
- AUDIO MIC** Not used
- COLOR BAR** Off / On (Useful for testing camera colour quality)
- LANGUAGE** ENG / CHN / CHN(S) / JPN / KOR (Select language required)
- CAM TITLE** Off / Right Up↵ / Left Down ↵ (Enter camera title)

(Use up or down to select character and left or right to select position) Hold down Iris+ button for 3 seconds



RESET ON(Push)↵ Press IRIS+ or joystick centre button down

Return

EXIT	SAVE ↵ CANCEL ↵	Press IRIS + to exit Press IRIS + to cancel and exit without saving
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SEE360 Camera Specifications

Sensor	1/3" CCD	Video Outputs	TVI, AHD, CVI & Analogue
Resolution 1080p	1920(H) x 1080(V) @ 30fps	Independent CVBS	CVBS 700TVL separate output *
HD distance	Std BNC 75ohm cable up to 500m	IR Power	35 IR LEDs <35m
Lens	2.8 ~ 12mm varifocal	Operating Temp.	-10°C ~ +50°C
Min.Illumination	Colour 0.5 Lux @ F2.0, AGC On	Power/Current	12vDC 450mA IRs On
Mounting	Ceiling and Wall mounting	Mirror/Flip	Off / On
Menu	OSD direct and via coaxitron	Backlight	HLC, BLC, WDR, Off
WDR	True WDR with ROI on 4 areas	Dimensions	150mm diameter x 123mm height
S/N Ratio	≥ 52dB (AGC Off)	Build	Cast Alloy Body
Colour	SEE360W White / SEE360B Black	IP Rating	IP68
NiteDevil	Sens-Up option included	Extra Deepbase	Deepbase standard fitting
Privacy Masking	16 areas for Privacy Masking	Noise Reduction	2DNR and 3DNR low/mid/high
IR Reflection	IR reflection preventiob	AGC	Automatic/Selectable
ACE	Auto Colour Enhancement option	Motion Detection	On/Off 4 detection zones

* ONLY ONE ANALOGUE OUPUT DISPLAYS AT ANY TIME



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.

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