# CAM250 - 700TVL Covert NiteDevil Module Camera



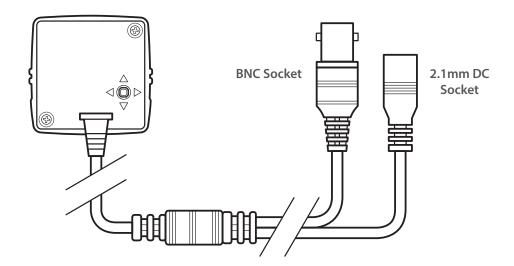


### **Miniature High Res Covert Modules**

NiteDevil high resolution covert camera module with on screen display for mirror, privacy & motion detect functions. The light sensitivity of the NiteDevil is so good that it can retain a colour picture in very low light conditions making it ideal for dark and low light applications.

### **Connecting The Camera**

The module cameras are supplied with a fly-lead which has moulded connections for video and power. There is a BNC socket for connecting the video and standard 2.1mm DC socket for connecting the power.



### **Powering The Camera**

The NiteDevil module cameras require a regulated 12V DC power supply providing 90mA. You should always allow additional headroom to account for any extra loads. As a rule of thumb you should add approximately 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 120mA.

**Features** 

- 700TVL Day / 800TVL Night
- 0.00019 Lux (Sens-up)
- NiteDevil Technology
- Up The Co-ax Telemetry
- Wide Dynamic Range
- Smart Digital Zoom
- Mounting Bracket Included
- Less Than 4cm Wide

#### **Specification**

FUNCTION	SPECIFICATION
CCD	Sony ICX-811
Resolution	700TVL Day / 800TVL Night
Lens	3.6mm Board
Min. Illumination	0.00019 Lux (Sens-up)
Video Output	1v p ~ p, 75Ω
Video Connection	BNC
Power	12vDC (± 10%)
Current	90mA
<b>Power Connection</b>	2.1mm Socket
S/N Ratio	More than 52dB (AGC Off)
Gain Control	Automatic
Dimensions	36.5 x 36.5 x 30mm

#### **Options Available**

PART CODE	DESCRIPTION
CAM250	3.6mm Board Module

#### **Other Products To Consider**



Up The Co-ax In-line Controller **REM088** 



1080pTVI 3.6mm

**Board Lens Camera SEE905** 

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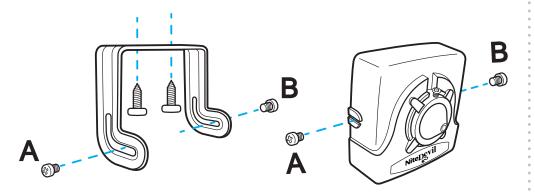


# **Mounting The Camera**

A small mounting bracket is provided with all of our module cameras.

To install the bracket secure the base of the bracket to the mounting surface using the two larger screws. Next screw through the openings in the side of the bracket and into the small holes on wither side of the camera housing.

The camera and bracket can both be manipulated after installation. Simply loosen the two screws in the base of the bracket or sides of the camera, re-position and then re-tighten the screws.



### Accessing The Camera's Menu

The camera's menu system can be accessed and controlled in two ways.

The first method is using the joystick on the rear of the camera. The joystick is moved up and down to navigate through the menu system and left and right to change values. Selections are confirmed by pressing the joystick down.

The second method is to use an up the Co-ax controller which can be done whilst next to the DVR. The up and down buttons are used to navigate through the menu system with the left and right buttons used to change variables. The centre button is used as the 'SET' key to confirm selections.

# Up The Co-ax Menu Control

Up the Co-ax otherwise known as UTC is a method of controlling the cameras OSD using the Co-ax cable. This is achieved using a REM088 in-line controller. The big benefit of configuring a camera via UTC is that it can be done next to the DVR and monitor. The Coax cable carrying the camera's video is simply connected to the controller which is then connected to the DVR. Once the camera has been setup, the controller can be removed and the camera is then connected to the DVR as normal.

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



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#### Features

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- 0.00019 Lux (Sens-up)
- NiteDevil Technology
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- Wide Dynamic Range
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S/N Ratio	More than 52dB (AGC Off)
Gain Control	Automatic
Dimensions	36.5 x 36.5 x 30mm

#### **Options Available**

PART CODE	DESCRIPTION
CAM250	3.6mm Board Module

#### **Other Products To Consider**



Up The Co-ax In-line Controller **REM088**  1080pTVI 3.6mm Board Lens Camera SEE905

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# **OSD** Menu

**NOTE** Default settings are shown in blue.

MAIN MENU	SUB MENU		OPTION	
LENS			MANUAL	
		MANUAL:	1. BRIGHTNESS: 1 ~ 100 (50)	
EXPOSURE	SHUTTER		AUTO / FLK / MANUAL / 1/50	
		MANUAL:	1. LEVEL: X2 ~ X256 / FLK / 1/50 ~	100000 ( <mark>1/50</mark> )
	AGC		OFF (DAY & NIGHT COLOUR) / LOV	V / MIDDLE / <mark>HIGH</mark>
	SENSUP		AUTO / OFF	
		AUTO:	1. SENSUP: X2 ~ X256 (8)	
BACKLIGHT			OFF / DWDR / BLC / HSBLC	
		DWDR:	1. LOW LEVEL: 0 ~ 5 (5)	2. HIGH LEVEL: 0 ~ 15 (3)
		BLC:	<ol> <li>VALUE: LOW / MIDDLE / HIGH</li> <li>AREA: SINGLE / DOUBLE (POSITION, SIZE)</li> </ol>	3. DEFAULT
		HSBLC:	<ol> <li>GAIN: 0 ~ 100 (50)</li> <li>MODE: NIGHT ONLY / ALL DAY</li> <li>MASK LEVEL: 0 ~ 100 (70)</li> </ol>	<ol> <li>DEFAULT</li> <li>M.SKIP AREA: OFF / ON (ON: POSITION, SIZE)</li> </ol>
WHITE BAL			ATW / AWB / AWC $\rightarrow$ SET / MANUAL	
		MANUAL:	1. BLUE: 0 ~ 100 (30)	3. RED: 0 ~ 100 (20)
DAY & NIGHT			AUTO / EXT / B/W / COLOUR	
		AUTO:	<ol> <li>DELAY: 0 ~ 15 (5)</li> <li>D → N (AGC): 16 ~ 255 (210)</li> </ol>	3. N → D (AGC): 0 ~ 239 (130)
		EXT:	1. DELAY: 0 ~ 15 (0)	
		B/W:	<ol> <li>BURST: OFF / ON</li> <li>IR SMART: OFF / ON</li> </ol>	3. IR LED: ON / OFF
			ON: 1. VALUE: 0 ~ 100 (50) 2. AREA: (POSITION, SIZE) 3. IR DWDR: OFF / 1 ~ 15	
SMART 3D NR			ON / OFF	
		ON:	1. VALUE: 1~ 200 (80) 2. SMART NR: OFF / ON	<ol> <li>3. SMART LEVEL: 1 ~ 200 (200)</li> <li>4. SENSITIVITY: 0 ~ 100 (40)</li> </ol>
F-DNR			OFF / MANUAL / AUTO	
		MANUAL:	1. LEVEL: 0 ~ 31 (10) 2. COLOUR GAIN: 0 ~ 10 (3)	<ol> <li>3. EDGE GAIN: 0 ~ 10 (3)</li> <li>4. GAMMA: 0.05 ~ 1.00 (0.55)</li> </ol>
		AUTO:	1. DETECT LEVEL: 0 ~ 5 (3)	
FUNCTION			FOR THE FUNCTION MENU SEE PAGE 4	
EXIT			SAVE / RESET / CANCEL	

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<b>Options Available</b>	
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	-

PART CODE	DESCRIPTION	
CAM250	3.6mm Board Module	

#### **Other Products To Consider**





Up The Co-ax In-line Controller **REM088**  1080pTVI 3.6mm Board Lens Camera SEE905

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



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# **Function Menu**

**NOTE** Default settings are shown in blue.

MAIN MENU	SUB MENU	OPTION		
MOTION			OFF / ON	
		ON:	<ol> <li>AREA: 1 ~ 4 (1)</li> <li>AREA DISPLAY: ON / OFF (ON: POSITION, SIZE)</li> </ol>	<ol> <li>VALUE: 0 ~ 100 (95)</li> <li>MOTION VIEW: ON / OFF</li> </ol>
PRIVACY			OFF / ON	
		ON:	<ol> <li>AREA: 1 ~ 8 (1)</li> <li>AREA DISPLAY: ON / OFF (ON: TOP LEFT, TOP RIGHT, BTM LEFT, BTM RIGHT, POSITION)</li> </ol>	3. COLOUR: 0 ~ 15 (10) 4. TRANSPAR: 0 ~ 3 (3)
D-EFFECT	D-ZOOM		OFF / ON	
		ON:	1. RANGE: X1.0 ~ X32.0 (X2.0) 2. PAN: -100 ~ 100 (0)	3. TILT: -100 ~ 100 (0)
	SMART D-ZOOM		OFF / ON	
		ON:	<ol> <li>RANGE: X2.0 ~ X5.0 (X2.0)</li> <li>POSITION: POSITION</li> </ol>	4. TIME: 0 ~ 15 (3) 5. SENSITIVITY: 0 ~ 100 (80)
	DIS		OFF / ON	
	FREEZE		OFF / ON	
	MIRROR		OFF / MIRROR / V-FLIP / ROTATE	
	NEG. IMAGE		OFF / ON	
IMAGE ADJ	SHARPNESS		1. 0 ~ 31 ( <mark>20</mark> )	
	MONITOR		CRT / LCD	
		CRT	1. PED LEVEL: 0 ~ 63 (28)	2. COLOUR GAIN: 0 ~ 255 (128)
		LCD	<ol> <li>GAMMA: 0.05 ~ 1.00 (0.65)</li> <li>PED LEVEL: 0 ~ 63 (28)</li> </ol>	3. COLOUR GAIN: 0 ~ 255 (128)
	LENS SHADING		OFF / ON	
		ON	1. LEVEL: 0 ~ 60 (40) 2. H-CENTER: 0 ~ 255 (128)	3. V-CENTER: 0 ~ 255 (128)
	DEFECT		1. SENSUP: X4 ~ X128 (X16) 2. DIFF: 0 ~ 3 (1)	3. THRESHOLD: 0 ~ 4 (2) 4. START
COMM ADJ	CAMTITLE		OFF / ON	
		ON :	SET CAM TITLE	
	PROTOCOL		PELCO-D / PELCO-P / SPD-S / DONG YANG / NIC P	
	RS485		<ol> <li>CAM ID: 1 ~ 255 (1)</li> <li>ID DISPLAY: OFF / ON ON: POSITION</li> </ol>	4. BAUDRATE: 2400 / 4800 / 9600 / 19200 / 38400 / 57600
SYNC			1. INT	
LANGUAGE		ENGLISH / KOREAN / JAPANESE / CHINESE / CHINESE2 / RUSSIAN / FRENCH / SPANISH / ITALIAN / PORTUGUESE / DUTCH / GERMAN / POLISH / TURKISH / HEBREW / ARABIC		

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Dimensions	36.5 x 36.5 x 30mm

#### **Options Available**

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CAM250	3.6mm Board Module	

#### **Other Products To Consider**





Up The Co-ax In-line Controller B REM088

1080pTVI 3.6mm Board Lens Camera SEE905

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# **Fault Finding**

The table below describes common problems and possible solutions.

Fault	Possible Cause	Possible Solution	
Interference On The Camera Picture	Poor or inadequate cabling or an unregulated or poorly regulated power supply.	Make sure you are using a regulated 12V DC power supply.	
No Picture	The camera cannot function without the correct working power supply.	Step 1 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. The camera should have at least 10.5V DC connected to it.	
		Step 2 Check there is and image at the camera end with a test monitor. 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 run too long usually you would get a picture up to aroun120mtrs (Remedied by fitting a video amp).	
		B. 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.	
		C. No Video signal down CAT5 or CAT5+2. Check you have used a "pair of cores" not individual cores from different pairs.	
One Camera Picture Overlaid On Another Using CAT5	Camera cores and pairs mixed up.	Check you have used a "pair of cores" not individual cores from different pairs.	
The Picture's Colour Changes Constantly	Fluorescent lighting omits an electromagnetic field which can cause colour roll.	Move the camera further away form any fluorescent lighting.	

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