

General Descriptions:

Product Name	Starlight II-2nd Edition OSD Camera*		
Model No.	Bullet Camera	Dome Camera	Box Camera
Video System	NTSC System		PAL System
Sensor	1/3" SONY Super HAD II CCD (440K Pixels) with Customized DSP		
Pixel	811 (H) x 508 (V)	795 (H) x 596 (V)	
Scanning	2:1 Interlace 525 Lines / 60 Fields / 30 Frames		
Sync. Mode	Internal, Line Lock		
Horizontal Frequency	15.734kHz	15.625 kHz	
Vertical Frequency	59.94Hz	50.00 Hz	
Resolution	Color: 600TV Lines /650TV Lines (B/W, Signal Enhancement)		
Video Output	1.0Vp-p/75Ω Video, 0.714Vp-p Composite, 0.286Vp-p		
Burst Level	0.286Vp-p		
S/N Ratio	50dB Min. (γ, Aperture, AGC Correct Off)		
Minimum Illumination	0.00025 Lux at F1.2 (Sense Up Mode)		
Sense Up	Max x256 times		
Gamma Correction	0.45		
AGC	+26dB Max.		
DRC	On / Off		
Eclipse	On / Off		
Lens	Aspherical Auto Iris lens Tamron™ 2.8~10.5mm (Also other lens available)		NO
True Day & Night	YES (Removable IR-Cut)		
Electronical Shutter	1/60(1/50)~1/120000 sec.		
Communication	RS485, PELCO-D Protocol		
Power Supply	12Vdc or 24Vac (±10%) MAX	12V/24V or AC230V	
Power Consumption	190mA	190mA	130mA
Storage Temperature	-40℃~60℃		
Operation Temperature	-10℃~50℃		
Humidity Range	20%~90% RH		
Weight	750g	900g	400g

* Available with or without OSD.

CE RoHS **4**

“A New STAR Is Born” STARLIGHT II 2nd Edition

This camera series features super high resolution of 600 TV lines and can see in the dark with no distance limitations without IR LEDs.

Even at the toughest dark situations, it amplifies and maximizes existing light to generate pictures where other traditional cameras cannot.

.... The Professional Choice
for Every Installation

1**Starlight II -2nd Edition Camera****FEATURES:**

- “State-of the Art” Sony Super HAD 440K pixels CCD with Customized DSP
- I VISION Light Compensation: WDR adjustability for toughest back lit situations
- IDN: Reduces video noise and snow in low light situations coupled with the virtual 3D filter
- Digital Image Stabilization and Advanced Noise Reduction Circuitry
- Full OSD operation Controlled Using on-board pushbuttons or Remotely by keypad/DVR
- Day/Night Setting: Camera can always remain in color or automatically shift into B/W in low light conditions
- No problem caused by objects that reflects or absorb IR light sources
- Dual Voltage Operation: 12V DC or 24V AC to suit any applications
- DC Auto Iris Aspherical Lens 2.8~10.5mm F/1.2 (other lens available) for Bullet and Dome
- IP67 Weatherproof marine grade aluminum case and bracket (Bullet)

2**INSTALLATION:**

Please read this manual thoroughly before installation.

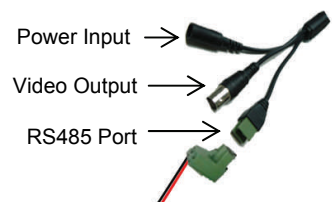
- Installation should be performed by qualified personnel
- To prevent damage to the camera, fire or electrical shock use appropriate low voltage power cable.
- Use approved REGULATED 24 volt AC or 12 volt DC power supply without exciding the given voltage (see camera specifications)
- Do NOT point the camera to direct sun, The sun could damage the camera even when not in use.
- Do NOT mount the camera in areas exposed to radiation, strong magnetic fields, or strong electrical signals without the appropriate precautions.
- Do NOT drop the camera or subject it to strong vibrations.

NOTICE

The warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, repair, or alteration, improper or abnormal usage, or faulty installation.

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External OSD Operation
-- Communication Setting of Keyboard and Camera:



Mini Keyboard

The Camera has built-in Pelco-D/ Pelco-P Protocol. It can be connected and controlled by the keypad.

How to connect:

Step 1:

Power up the camera and keypad, connect them through RS485 port.

Caution: RS485 has Negative and Positive port, please connect properly. Otherwise the connection will be failed.

Step 2:

Select the same protocol, baud rate and camera ID in both keypad/DVR and camera.

Shift+1: Select Protocol (Pelco-D for this camera)

Shift+2: Select baud rate (9600 for this camera)

(Use LEFT/ RIGHT arrows to select optional items, ENTER to confirm.)

Camera ID: Press the CAM ID/F4 to enter the camera ID and press ENTER to confirm after the ID is entered.

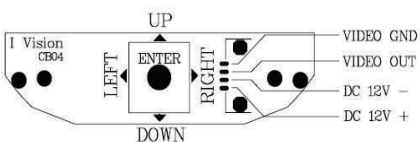
Step 3:

After all the settings are done properly, the keypad shall be able to control the camera.

Press MENU or combine CALL/F1+9+5+ENTER to enter the OSD menu.

Press UP/DOWN/LEFT/RIGHT to select the menu item.

Rear OSD Operation – Joystick Control:



UP: OSD Option Upward
 LEFT: OSD Option Leftward
 ENTER: OSD Option Confirm
 RIGHT: OSD Option Rightward
 DOWN: OSD Option Downward

MENU OPERATION:

MENU	
EXPOSURE	+....
WHITE BAL	+....
DAY/NIGHT	+....
MOTION	+....
PRIVACY	+....
OPTION	+....
DISPLAY	+....
SYNC	AUTO
INITIAL	NOT USE
EXIT	

Press **MENU** to open the main menu. Use left or right arrows to operate the submenu of each item listed as the picture on left.

EXPOSURE	
LENS	DC
BRIGHTNESS	20
BACKLIGHT	+...
SHUTTER	1/50
AGC	MID
SENSE UP	X32
ECL IPSE	OFF
DNR	MID
DRC	MID
RETURN	

EXPOSURE	
LENS	: ELC/DC
BRIGHTNESS	: Adjustable between 0 to 60
BACKLIGHT	: ON/OFF
SHUTTER	: (Accessible only in DC mode of LENS)
AGC	: HIGH/MID/LOW/OFF Optional
SENSE UP	: OFF/*2/*4/*8/*16/*32/X64/X128/X256 Optional
ECL IPSE	: ON/OFF Optional
DNR	: HIGH/MID/LOW/OFF Optional
DRC	: HIGH/MID/LOW.OFF Optional
RETURN	

WHITE BAL	
WB MODE	ATW1
RED CONT	NOT USE
BLUE CONT	NOT USE
PUSH AUTO	NOT USE
RETURN	

WHITE BAL	
WB MODE	: ATW1/ATW2/ AWC/ MANUAL /INDOOR/ OUTDOOR Optional
RED CONT	: NOT USE (Accessible only in MANUAL mode)
BLUE CONT	: NOT USE (Accessible only in MANUAL mode)
PUSH AUTO	: NOT USE (Accessible only in AWC mode)
RETURN	

DAY/NIGHT	
D/N MODE	AUTO
SENSOR IN	NOT USE
BURST	ON
RETURN	

DAY/NIGHT	
D/N MODE	: AUTO /DAY/ NIGHT/ EXT
SENSOR IN	: NOT USE/NC/NO
BURST	: NOT USE/ON/OFF
RETURN	

MOTION	
DETECT MODE	OFF
DETECT AREA	+...
SENSITIVITY	4
ALARM TIME	1 SEC
RETURN	

MOTION (This function is unavailable in this version)	
DETECT MODE	: ON/ OFF
DETECT AREA	: Press left or right arrows to enter and draw the area
SENSITIVITY	: Adjustable between 0 to 8
ALARM TIME	: 1-60 SEC Optional
RETURN	

PRIVACY	
AREA	1
MASK	OFF
MODE	BW
LEVEL	0
TOP	34
DOWN	54
LEFT	20
RIGHT	40
RETURN	

PRIVACY	
AREA	: 1-24 Optional
MASK	: ON/ OFF
MODE	: BW/COLOR /MOSAIC
LEVEL	: Adjustable from 0 to 15 when MASK ON
TOP	: Area adjust to top
DOWN	: Area adjust to down
LEFT	: Area adjust to left
RIGHT	: Area adjust to right
RETURN	

OPTION	
TITLE	+...
NEGA/POSI	POSI
SHARPNESS	7
MIRROR	NORMAL
ZOOM	OFF
PAN/TILT	OFF
PHASE	0
RETURN	

OPTION	
TITLE	: Press left or right arrows to enter submenu
NEGA/POSI	: NEGA / POSI Optional
SHARPNESS	: 0-15 Adjustable
MIRROR	: NORMAL/ MIRROR/ VERTICAL/ ROTATE
ZOOM	: OFF/ ON, zoom level adjustable between 1-8
PAN/TILT	: ON/ OFF
PHASE	: Adjustable between 0-624
RETURN	

DISPLAY	
TITLE	OFF
MOTLON DET	OFF
CAMERA ID	0
RETURN	

DISPLAY	
TITLE	: ON/ OFF
MOTION	: ON/ OFF
CAMERA ID	: 0-255 Optional
RETURN	

SYNC	AUTO
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SYNC	AUTO/INT
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INITIAL	NOT USE
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INITIAL	NOT USE/USE
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EXIT	
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EXIT	
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