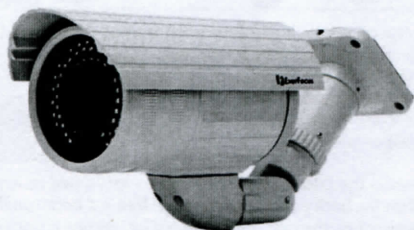


# EZ631e

## 700TVL High Resolution True Day/Night Weather Resistant Outdoor IR Bullet Camera

User's Manual



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Release Date: November, 2012

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### Cautions

1. Do not install the camera near electric or magnetic fields.
2. Never disassemble the camera beyond the recommendations in this manual nor introduce materials other than those recommended herein.
3. Try to avoid facing the camera toward the sun.
4. Keep the power cable away from water and other liquids and never touch the power cord with wet hands.
5. Never install the camera in areas exposed to oil, gas or solvents.
6. Do not operate the camera beyond the specified temperature or humidity. Use the camera at temperatures within -40°C~50°C (-40°F~122°F) and humidity between 20%~ 80%; this device is not rated as submersible.
7. Determine the **polarity** of the power adapter pigtail before connecting the camera to the power source. The input power source is **12V DC / 24V AC**.

### 1. INTRODUCTION

Benefitted from Sony Effio-E platform, the EZ631e delivers 700 TVL video by using a 1/3" Sony Exview HAD CCD II 960H sensor. The embedded 60 IR LEDs provide up to 50m / 160ft viewing range in low light or complete no light environment. The IP66 weather resistant and vandal resistant housing design satisfied both indoor and outdoor usage.

#### 1.1 FEATURES

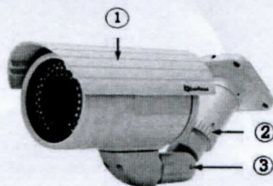
- SONY 1/3" Exview HAD CCD II 960H Sensor, 700 TVL resolution
- Sony Effio-E platform to provide advanced camera functions
- Vari-Focal DC Iris Lens 3.6~16mm with ICR
- High sensitivity, low smear, high anti-blooming and high S/N ratio for high performance video
- True Day/Night with ICR module and 60 IR LEDs reach up to 50m / 160ft. range
- Easy to use OSD Setup Menu
- D-WDR functions by Sony ATR technology
- Build-in Auto Electronic Shutter (AES), Auto Gain Control (AGC), Back Light Compensation (BLC) and Auto White Balance (AWB)
- Supports Motion detection and Privacy Mask functions
- Internal wire system with anti-cut bracket

- Auto Blemish compensation up to 32 points
- External manual Focus and Zoom adjustment
- Weather Resistant IP66, Vandal Resistant and built-in heater
- Supports Ceiling Mount and Wall mount

### 1.2 PACKAGE CONTENTS

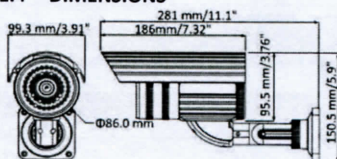
1. EZ631e Camera x 1
2. Mounting Template x 1
3. User Manual x 1
4. Screw Driver x 1
5. Extension Conduit x 1
6. Test Lead x 1
7. Accessory Kit x 1 (Hexagon Wrenches x 2, Mounting Screws x 4, Plastic Anchors x 4, Set Screws x 2 and Power Terminal Block x 1)

### 1.3 OVERVIEW



No.	Name	Description
1	Sunshield	Protect the camera from the direct rays of the sun.
2	Bracket Lock Knob	Loosen / tighten the bracket lock knob for adjusting camera angles.
3	2-Axis	For adjusting the camera angles.

### 1.4 DIMENSIONS



### 1.5 CABLE DEFINITIONS



Cable Name	Description
Power Cable	Connects to the 12V DC/ 24V AC power source. You can optionally use the supplied Power Terminal Block or a power adapter.
Video-Out Cable (BNC)	Connects to a DVR or a monitor.
Power Terminal Block	Connects one end to the Power Cable, and the other end to the 12V DC/ 24V AC power source.
Test Lead	Connects one end to spot monitor port on the back panel of the camera and the other end to a portable monitor.

### 2. SPECIFICATIONS

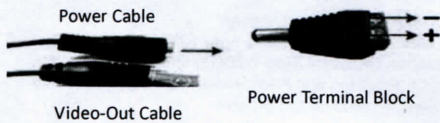
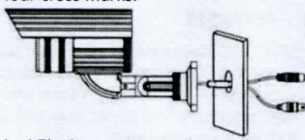
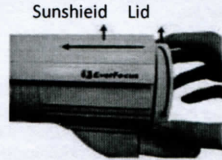
Pickup Device	1/3" SONY Exview HAD CCD II (960H)
Video Format	NTSC / PAL (depends on model selected)
Picture Elements	976 x 494 (NTSC), 976 x 582 (PAL)
Horizontal Resolution	700 TVL
Sensitivity	0.03Lux/F=1.2 ; 0 Lux (IR LED On)
S/N Ratio	Over 48dB (AGC off)
Electronic Shutter	1/60 (1/50) ~ 1/100,000s
Video Output	BNC 1.0V p-p , 75ohm
Gamma Correction	0.45
Lens Type	Vari-Focal DC Iris Lens 3.6~16mm / F1.6 with ICR
Auto Gain Control	Yes
White Balance	Auto / Indoor / Outdoor / Manual / Push Auto
Sync. Mode	Internal
Day & Night	True Day/Night with ICR control module
OSD Menu	Yes, (English / Japanese / German / French / Russian / Portuguese / Spanish / Simplified Chinese)
DNR	On/Off
Back Light	On/Off
D-WDR	On/Off
Mirror	On/Off



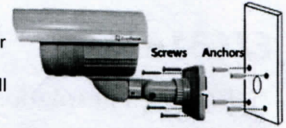
<b>Motion Detection</b>	On/Off for 24x16 Detection Blocks
<b>Privacy Mask</b>	On/Off for 8 Areas (Size Adjustable)
<b>IR LED</b>	60 Units IR LED
<b>IR Wavelength</b>	850nm
<b>IR Distance</b>	50m (160ft.) max.
<b>Weather Proof</b>	IP66 rated
<b>Heater</b>	Yes, built-in
<b>Vandal Resistant</b>	Yes
<b>Power Source</b>	12V DC / 24V AC
<b>Power Consumption</b>	12V DC : 190 mA min.680mA Max . 24V AC: 90 mA min.260mA Max.
<b>Operating</b>	-40°C~50°C / -40°F~122°F (built-in heater)
<b>Dimensions (O.D x H x W)</b>	99.3 x 150.5 x 281mm / 3.91" x 5.9" x 11.1"
<b>Weight</b>	1,250g / 2.76lbs
<b>Certifications</b>	CE / FCC / ROHS

**3. INSTALLATION**

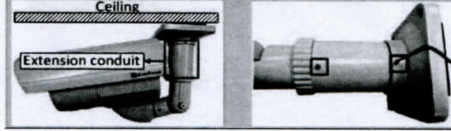
1. Push the rear of the sunshield to the front and open the lid on the back of the camera by twisting the lid counterclockwise.
2. Paste the supplied mounting template onto a desired location on the wall / ceiling and then drill the four cross marks.
3. Drill a hole on the wall /ceiling if you want to wire the cables through the wall/ceiling.
4. Connect the camera to the 12V DC /24V AC power source using the supplied Power Terminal Block or a power adapter. Connect the camera to a DVR or a monitor using the Video-Out cable.



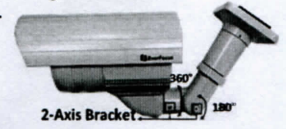
5. Screw the camera to the wall /ceiling. Plug the supplied anchors into the four holes, attach the camera to the wall and then screw the camera to the wall using the four supplied screws.



**Note:** When mounting the camera on the ceiling, you must extend the bracket by using the supplied Extension Conduit. Use the smaller hexagon wrench to screw the set screws on the conduit.

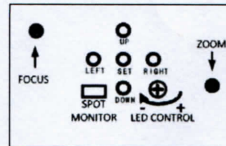


6. Connect the camera to a portable monitor using the test lead for accessing and adjusting the camera view.
7. Adjust the 2-Axis Bracket to get the desired viewing angle, and screw the 2-Axis bracket using the larger hexagon wrench.
8. You can setup the OSD menu, adjust zoom / focus, and control the LED light on the back panel of the camera (see 4.1 Back Panel.)
9. Put the lid back on the rear of the camera by twisting it clockwise.
10. Adjust the sunshield to an appropriate position. You can also refer to the image in Step 9.



**4. CAMERA SETUP in the OSD MENU**

**4.1 BACK PANEL**



- Connect the supplied Test Lead to the Spot Monitor port.
- Use the screw driver to adjust focus / zoom.
- Use the screw driver to control the LED brightness.
- Press the Set button to enter the OSD setup menu.
- Press Up / Down / Left / Right button to select among OSD setup menu items.

**4.2 OSD MENU STRUCTURE**

The default value is marked with a star "\*".

No.	Main	Sub Menu	Sub Menu / Function		
1	Lens	Auto*	Type	DC*, Video	
			Mode	AUTO*, Open, Close	
		Speed	0-255 (default=40)		
		Manual			
2	Shutter AGC	Auto*	High Luminance	Mode Shut + Auto Iris*, Auto Iris Brightness 0-255 (default=24)	
			Low Luminance	Mode AGC*, Off Brightness x0.25, x0.50*, x0.75, x1.00	
		Manual	Mode	Shut+AGC	
			Shutter	1/60*, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	
			AGC	6.00*, 12.00, 18.00, 24.00, 30.00, 36.00, 42.00, 44.80	
3	White Balance	ATW	Speed	0-255 (default=239)	
			Delay CNT	0-255 (default=16)	
			ATW Frame	x0.50, x1.0*, x1.5, x2.0	
			Environment	Indoor*, Outdoor	
			Push*		
		User1	B-Gain	0-255 (default=29)	
	R-Gain		0-255 (default=77)		
		User2	B-Gain	0-255 (default=43)	
	R-Gain		0-255 (default=47)		
			Anti CR		
		Manual Level	24-90 (default=58)		
		Push lock			
4	Back Light	Off* / BLC / HLC			
5	Picture Adjust	Mirror	Off* / On		
		Brightness	0-255 (default=0)		
		Contrast	0-255 (default=128)		
		Sharpness	0-255 (default=160)		
		Hue	0-255 (default=128)		
		Gain	0-255 (default=128)		
6	D-WDR	Off*			
		On	Luminance	Low, Mid*, High	
		Contrast	Low, Mid-low, Mid*, Mid-high, High		

7	Motion Detection	Off*				
		On	Detect Sense	0-127 (default=111)		
			Block Display	Off*, On, Enable		
			Motion Area	Off*, On		
		Area Select	1/4*, 2/4, 3/4, 4/4			
		Top / Bottom	0-244 (default=0)			
		Left / Right	0-474 (default=0)			
8	Privacy	Off*				
		On	Area Select	1/4*, 2/4, 3/4, 4/4		
			Top / Bottom	0-244 (default=0)		
			Left / Right	0-474 (default=0)		
			Color	1-8 (default=1)		
		Transparent	0.00, 0.50, 0.75, *1.00			
		Mosaic	*Off / On			
9	Day/Night	EXT1*				
		EXT2				
		Auto	Burst	Off*/On		
			Delay CNT	0-255 (default=003)		
			Day→Night	0-255 (default=001)		
				Night→Day	0-255 (default=015)	
		Color	Burst	Off / On		
			IR Optimizer	Off*		
B / W	On	Mode	Auto*/Center			
		Level	0-31 (default=015)			
10	NR	NR Mode	Off			
		Y/C	Y Level	000-015 (default=002)		
			C Level	000-015 (default=002)		
11	Camera ID	Off*				
		On	English letters, numbers and 28 symbols			
12	Sync.	Int.				
13	Language	English*, Japanese, German, French, Russian, Portuguese, Spanish Simplified Chinese				
14	Camera Reset					
15	Save all					