



## Mobile IR Wedge Camera Operation Instructions

Model No. **EMW330/EMW330T**

Please read this manual first for correct installation and operation. This manual should be retained for future reference. The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

### **PRECAUTIONS**

- 1. Do not install the camera near electric or magnetic fields.**  
Install the camera away from TV/radio transmitters, magnets, electric motors, transformers and audio speakers since the electromagnetic fields generated from these devices may distort the video image.
- 2. Never disassemble the camera beyond the recommendations in this manual nor introduce materials other than those recommended herein.**  
Improper disassembly or introduction of corrosive materials may result in equipment failure or other damage.
- 3. Try and avoid facing the camera toward the sun.**  
In some circumstances, direct sunlight may cause permanent damage to the sensor and/or internal circuits.
- 4. Keep the power cord away from water and other liquids and never touch the power cord with wet hands.**  
Touching a wet power cord with the hands or touching the power cord with wet hands may result in electric shock.
- 5. Never install the camera in areas exposed to water, oil or gas.**  
Water, oil or gas may result in equipment failure, electric shock or, in extreme cases, fire.
- 6. Cleaning**  
Use a damp soft cloth to remove any dirt from the camera body. Use lens tissue or a cotton tipped applicator and ethanol to clean the camera lens. Please do not use complex solvents, corrosive or abrasive agents for cleaning.
- 7. Do not operate the camera beyond the specified temperature, humidity or power source ratings.**  
Use the camera at temperatures within  $-40^{\circ}\text{C} \sim 60^{\circ}\text{C}$  ( $-40^{\circ}\text{F} \sim 15.5^{\circ}\text{F}$ ) and humidity between 20~80%. The input power source is 12VDC.

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## **1. PRODUCT OVERVIEW**

EMW330 has a streamline wedge type chassis which is suitable for transit/school bus mounting. EMW330 fixed lens model is equipped with dual-position lens and IR illuminator enabling user to adjust the best viewing angle. The dual-position IR illuminators provide clear images up to 50 feet away. Moreover, EMW330 provides multiple mounting options to users, including side/rear/wall/ceiling. Simple installation allows user to mount the camera easily without using any bracket. The built-in visible light sensor can detect brightness in the same way as human eye.

## **2. FEATURES**

- 1/3" Sony Super HAD CCD
- Resolution: 520 TVL
- EMW330T vari-focal lens model with ICR
- EMW330 fixed lens model with dual-position lens and IR illuminator
- Vandal resistant, IP67 housing
- Side/Rear/Wall/Ceiling mounting options
- Built-in heater (optional)

## **3. CONTENT LIST**

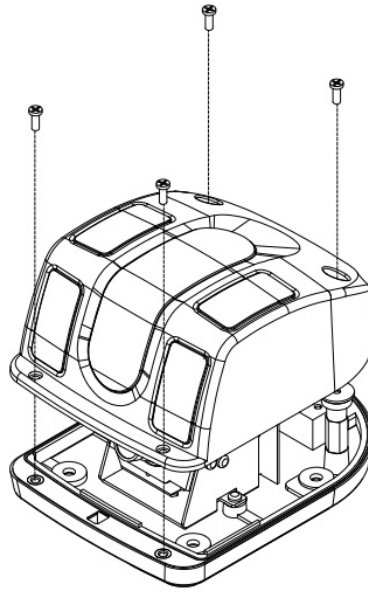
1. Camera unit
2. User's manual

## 4. SPECIFICATIONS

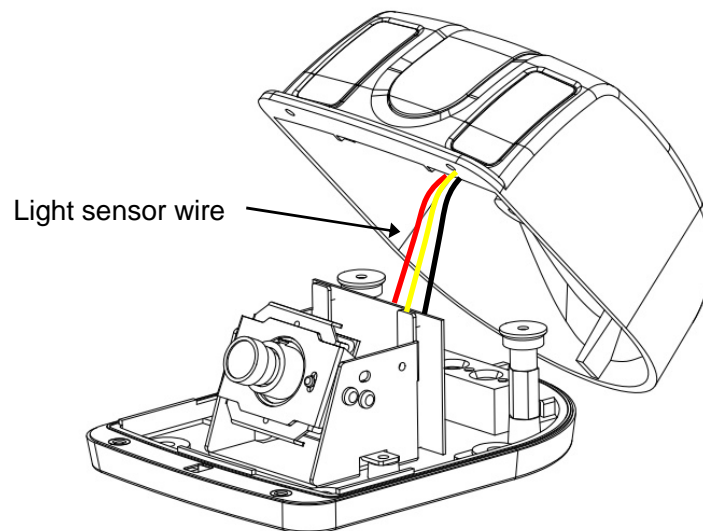
	EMW330	EMW330T
Pickup Device	1/3" SONY Super HAD CCD	
Video Format	NTSC or PAL	
Scanning System	NTSC: 525 TV lines, 60 fields/sec; PAL: 625 TV lines, 50 fields/sec.	
Picture Elements	768x494(NTSC)/752x582(PAL)	
Horizontal Resolution	520TVL	
Sensitivity	0.4 Lux / F=1.2(IR OFF) ; 0 Lux (IR ON)	
S/N Ratio	Over 48dB (AGC Off)	
Electronic Shutter	1/50(1/60)~1/100,000	
Video Output	BNC 1.0Vp-p , 75ohm	
Gamma Correction	0.45	
Lens Type	Fixed lens option f=3.6/4.3/6/8/12/16mm	Vari-Focal Lens, f=2.9~10mm/F=1.2, f=9~22mm/F=1.6
Back Light Comp.	Yes	
Auto Gain Control	Yes	
Auto White Balance	Yes (2500K~9000K)	
Sync. Mode	Internal sync	
Day/Night	IR Pass Filter	Auto IR Cut Removable
Day/Night Detection	Visible light sensor	
Built-in Heater	Yes	
IR LEDs	40pcs	
IR LED Lifespan	20,000 hours	
IR Distance	50 feet	
IE Wavelength	850nm	
Weather Proof	IP67	
Vandal Proof	Yes	
Power Source	12VDC	
Operating Temperature	-40℃~60℃/-40 °F~15.5°F	
Power Consumption	8.4W max at 12VDC (Heater ON & IR LED ON)	
Dimensions (WxDxH)	105mm x 140mm x 65mm / 4.2" x 5.6" x 2.6"	
Weight	600g / 1.32LBS	
Mounting Options	I Side/Rear/Wall/Ceiling mounting options, no bracket required	
Viewing Direction	Dual-Position (forward/downward)	Single-Position (forward)
IR LEDs Direction		
Certifications	CE/FCC	

## 5. INSTALLATION

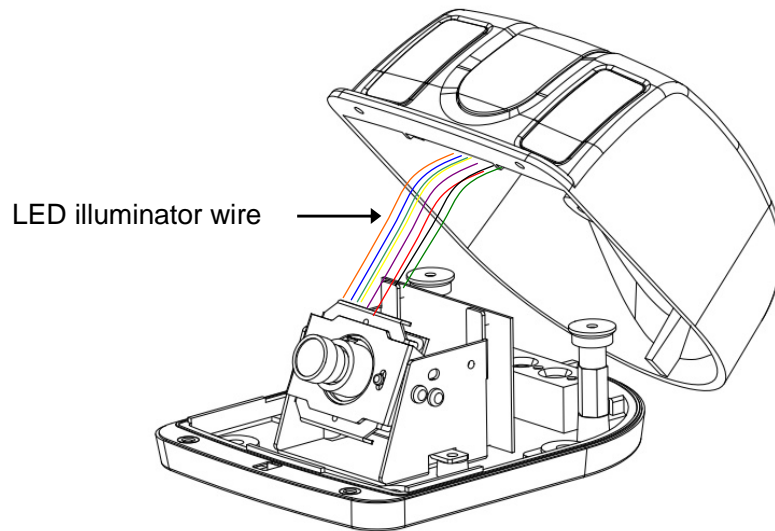
1. Loosen 4 screws to separate camera's base from its cover.



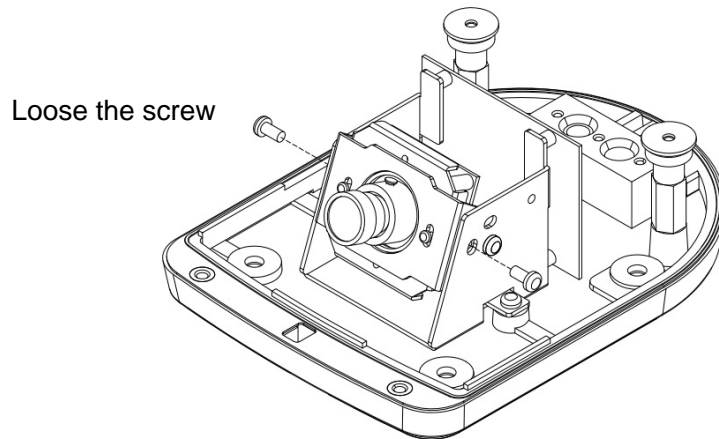
2. Detach light sensor wire from camera body.



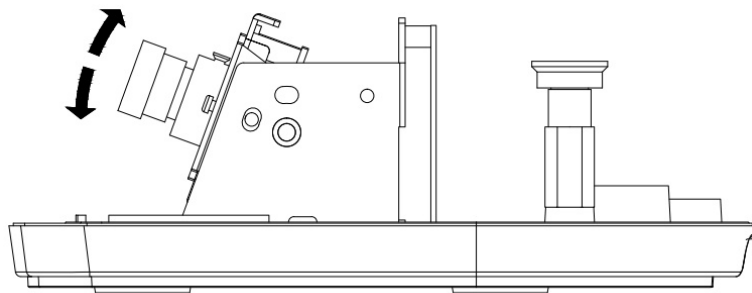
3. Detach LED illuminator wire from camera body.



4. Loosen the screw to make Z-axis adjustment

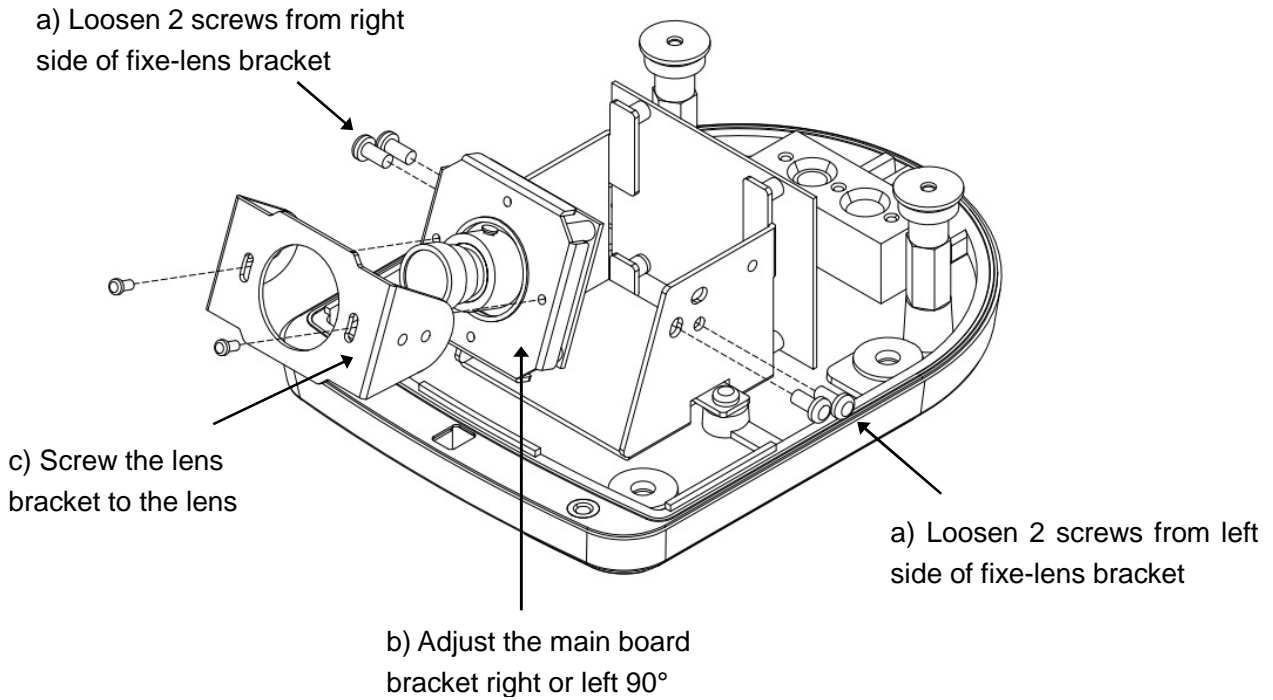


5. Make Z-axis adjustment

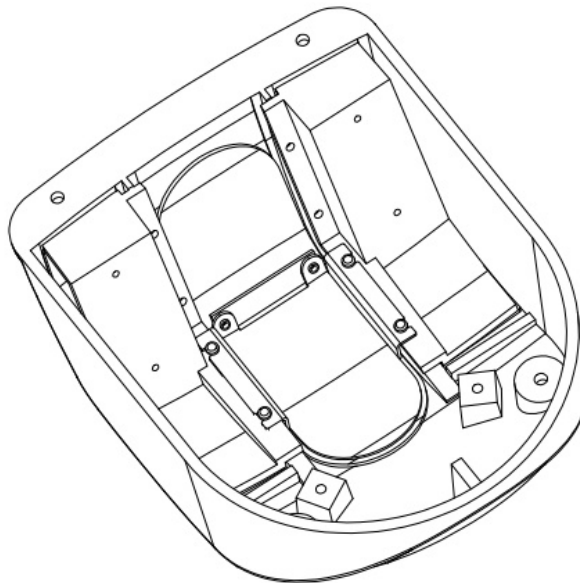


6.

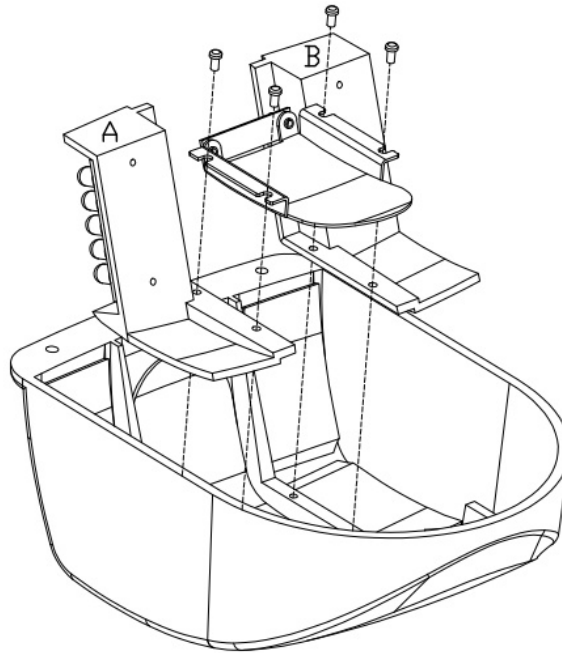
- a) Loosen the 4 screws from fixe-lens bracket (or vari-focal lens bracket). Remove the fixe-lens bracket (or vari-focal lens bracket).
- b) Adjust the main board bracket right or left 90°, so that the lens can be positioned to the correct direction.
- c) Screw the lens bracket to the lens to fixe it.



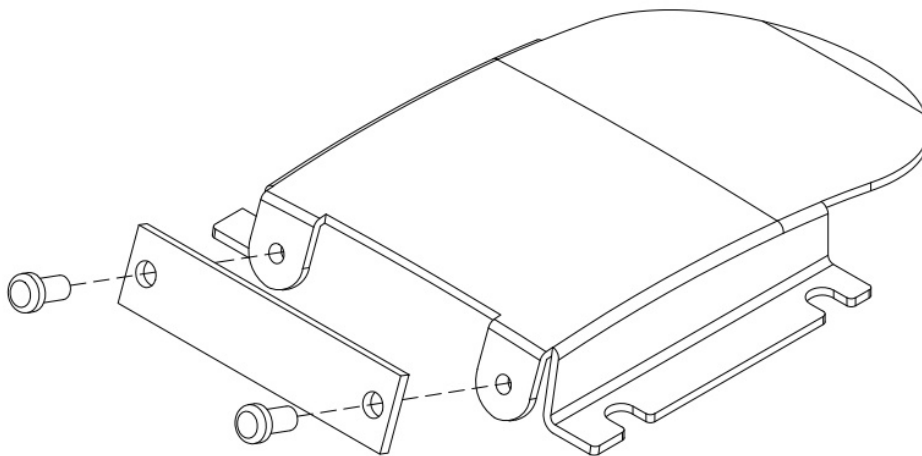
7. Now, the IR LEDs are at upper position. It is feasible to change them to the front position.



8. Loosen the 4 screws as shown in figure to detach IR LED panel and light sensor upper bracket from camera base.

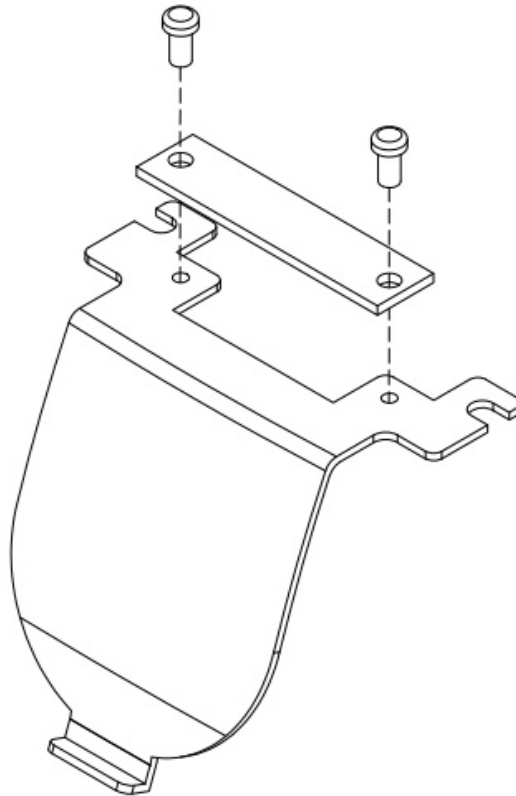


9. Replace light sensor upper bracket by the light sensor front bracket. Loosen the 2 screws of light sensor upper bracket.

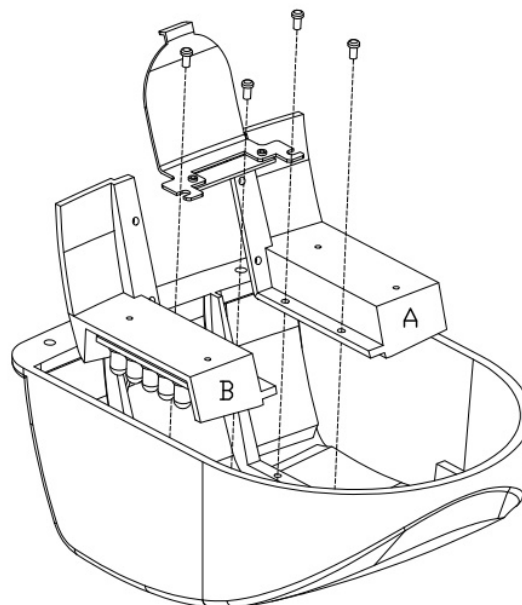




10. Replace it by the light sensor front bracket and fixe it with the same screws.



11. Change position for IR LED panels by making them crossed. Using 4 screws to fixe the IR LEDs panel and light sensor front bracket to the camera base.



# ***EverFocus Electronics Corp.***

## **Headquarters Office**

12F, No.79 Sec.1 Shin-Tai Wu Road,  
Hsi-Chi, Taipei, Taiwan  
Tel: +886-2-26982334  
Fax: +886-2-26982380

## **Beijing office**

Room 609, Technology Trade Building.  
Shangdi Information Industry Base,  
Haidian District, Beijing China  
Tel: +86-10-62971096  
Fax: +86-10-62971423

## **European Office**

Albert-Einstein-Strasse 1,  
D-46446 Emmerich, Germany  
Tel: +49-2822-9394-0  
Fax: +49-2822-939495

## **Japan Office**

5F Kinshicho City Building, 2-13-4  
Koto-bashi, Sumida-Ku, Tokyo, 130-0022,  
Japan  
Tel: +81-3-5625-8188  
Fax: +81-3-5625-8189

## **USA California Office**

1801 Highland Ave. Unit A  
Duarte, CA 91010 ,U.S.A  
Tel: +1-626-844-8888  
Fax: +1-626-844-8838

## **USA New York Office**

415 Oser Ave Unit S  
Hauppauge, NY 11788  
Sales: +1-631-436-5070  
Fax: +1-631-436-5027



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