



SEM-7540LPDN SEM-7540LPDNP

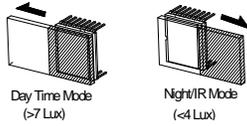
Operational Manual License Plate Recognition Series True Day & Night License Plate Capture Camera



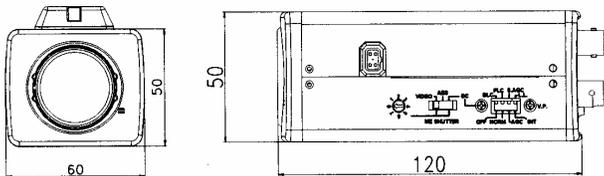
! Please read the Operational Manual before attempting to use this product.

FEATURES

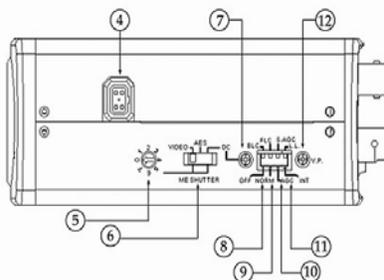
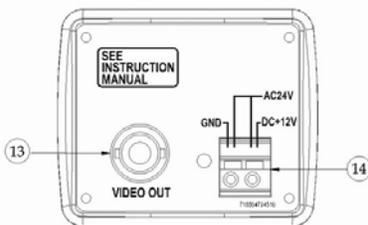
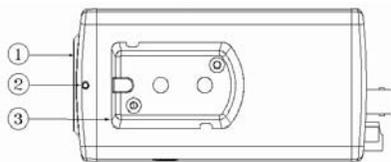
- 1/3" Sony Exview CCD
- Sony HQ-1 DSP
- 540 TV Lines
- 0.05 Lux @ F1.0
- Mechanical IR Cut Filter (ICR)
- Advanced 8-step manual shutter to obtain clear images of moving vehicles license plates
- Dual Power 12V DC / 24V AC



DIMENSIONS (Unit: mm)

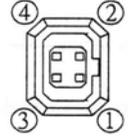


NOMENCLATURE AND FUNCTION

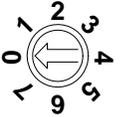


- Lens mount**
This mount is used to install a CS-mount lens.
CS-adaptor ring is required if using a C mount lens.
- CS Mount Fixing Screw**
Screw for fixing mount and adjusting back focus if needed.
- Mount adaptor**
This adaptor can be attached to either the top or bottom of unit.
- Auto iris lens connector (4-pin type)**
The lens connector supplies the auto-iris lens (not supplied) with DC power and a video signal or DC control signal.

PIN NO.	VIDEO	DC
1	DC + 12V	CONTROL -
2	NC	CONTROL +
3	VIDEO SIG	DRIVE +
4	GND	DRIVE -



- ME/AES Shutter Control**
(0) 1/50 (60) sec. (1) FL: 1/120(100) sec.
(2) 1/250 sec. (3) 1/500 sec.
(4) 1/1000 sec. (5) 1/2000 sec.
(6) 1/4000 sec. (7) 1/10,000 sec.



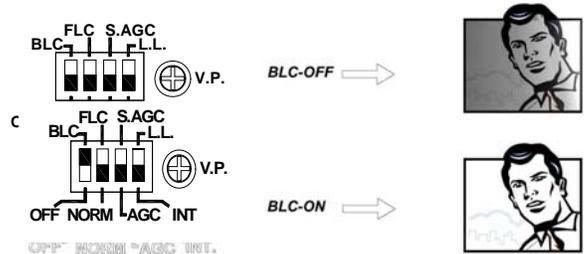
The fixed shutter speed modes can be applied to capturing moving objects. Suggestion setting shutter speed is from either 1/250 or 1/500 according to object moving speed and object distance from camera.

Shutter Speed	Camera to object moving speed		
	15~20M (45~60ft)	20~35M (60~100ft)	35~60M (100~180ft)
1/250 sec.	30~60 Km/hr	50~80 Km/hr	80~100 Km/hr
1/500 sec.	50~80 Km/hr	80~100 Km/hr	80~100 Km/hr

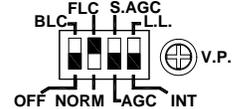
* Aspherical lenses with the aperture of F1.4 or the larger are recommended.

* The image of the moving object is better to occupy the 80% of the picture at least.

- Auto Iris mode selection switch**
For switching the output from the auto-iris connector (5). Shutter speed is fixed at 1/50 sec. when switch is set to DC or VIDEO position.
DC: To be set when using a non-amp auto-iris lens.
AES: To be set when using AES (Auto Electronic Shutter).
Video: To be set when using an auto-iris lens with build-in amp.
- DC Level adjustment V.R**
Used to adjust video output level of DC driven auto iris lens.
- B.L.C. (Back light compensation) mode switch**
When strong light is present behind the object being photographed, the object will appear dark. In this case, turn on the BLC.



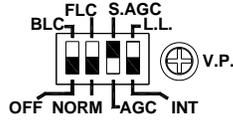
- F.L. (Flickerless) mode switch**
F.L.: Fixes shutter speed at NTCS: 1/100Sec.; PAL: 1/120Sec.
NOM: Normal position.



⑩ **S.A.G.C./A.G.C. mode switch**

S.A.G.C.: When camera has installed at low light condition. The sensitivity of the camera rises (26dB).

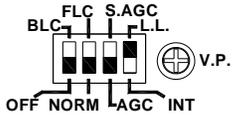
A.G.C.: 26dB



⑪ **SYNC MODE: switch**

L.L. MODE: It synchronizes the video signal between cameras using the frequency of the power supply without external synchronous generator.

INT MODE: The camera maybe operated independently with the internal crystal control.



⑫ **V.P (Vertical Phase adjuster)**

This is used to adjust the vertical phase of the video output signal.

⑬ **VIDEO connector**

This is an output for connecting to a video monitor, etc (75Ω).

⑭ **Power input terminal**

Connect the power supply of 12V DC or 24V AC.

SPECIFICATIONS

Model	SEM-7540LPDN	SEM-7540LPDNP
TV System	NTSC	PAL
Image Sensor	1/3" Sony Exview CCD	
DSP	Sony HQ-1	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Video Output	1.0Vp-p Composite / 75ohms	
Resolution	540 TV Lines	
Minimum Illumination	0.05 Lux @ F1.0 w/out IR light 0 Lux with IR light	
Day & Night Switching	Mechanical IR Cut Filter (ICR) Auto Switching Color/Monochrome	
Infrared Sensitivity	700~110nm	
Scan System	2:1 Interlace	
Signal to Noise Ratio	More than 50dB (ACG OFF)	
Electronic Shutter Speed	AES ON, AES OFF, 1/60sec	AES ON, AES OFF, 1/50sec
	FL:1/120(100)sec.,1/250sec.,1/500sec., 1/1000sec., 1/2000sec., 1/4000sec., 1/10000sec.	
Back Light Compensation	ON/OFF Switchable	
Auto Gain Control	ON/OFF Switchable	
White Balance	AWB	
Lens	Not Included	
Lens Mount	CS/C (with Adaptor)	
Auto Iris Control	DC/Video Switchable	
Power Supply	12V DC / 24V AC	
Power Consumption	210mA / 2.5W	
Operation Temperature	-10°C ~ +50°C	
Storage Humidity	RH 85% or less	
Storage Temperature	-20°C ~ +60°C	
Dimension	60mm(W) x 50mm(H) x 120mm(L)	
Weight	400g	

*Specifications are subject to change without notice

LIST OF COMPONENTS

- One (1) SEM-7540LPDN/SEM-7540LPDNP Camera
- One (1) Allen Wrench
- One (1) CS Adaptor Ring
- One (1) Operational Manual

* For any returns, please include all components listed above with original packaging in **Resalable Condition**. **Absolutely No Returns** will be accepted if any component is missing/damaged or if any cable is cut or tampered with.



CAUTION

1. Never point the camera toward the sun

Do not expose the lens directly to the sun or to strong light as this may damage the pick-up device.

2. Handle this camera with care

Avoid any shock or bumping of the camera. Improper handling could damage the camera.

3. Requires a proper operating environment

This camera is designed for outdoor or indoor use. The allowable temperature range for operation of this camera is between -10°C ~ 50°C and the allowable humidity is 85%RH maximum.

4. Clean the front face to the pick-up device

It is recommended that the pick-up device surface be cleaned before lens installation or whenever the lens is changed. Cleaning should be done by using a chamois, a very fine soft cloth, lens tissue, or cotton tipped applicator and ethanol to carefully remove any fingerprint or dust.

5. Check the power source voltage

The power source voltage should be within the specified range. (Camera must meet the specifications). Camera must be connected to a surge protector at all times.

6. Objects and liquid entry

Never push objects of any kind into this camera as this may touch dangerous voltage points of short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the video product.

7. Servicing

Do not attempt to service this video product by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all service to qualified servicing personnel.

8. Damage requiring service

Unplug this video product from the wall outlet and refer service to qualified servicing personnel under the following conditions:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the video product.
- If the video product has been dropped or the cabinet has been damaged.
- When the video product exhibits a distinct change in performance.



WARRANTY

O.K.I.USA Products are covered under warranty for one year from the date of purchase. The warranty will automatically be voided if any of the following occurs:

1. Camera sticker is removed

If the camera sticker is removed, we will not be able to confirm any information regarding when and where the product was purchased. We have no other way to verify the purchase record without the serial number on the camera sticker; therefore, it should not be removed.

2. Camera is modified in any way

If the camera is scratched, damaged, or modified in a manner not described in this manual, the warranty will be voided immediately. It is the customer's responsibility to keep the camera in good condition.

3. Video or power cable is cut

The video cable and the power cable should not be tampered with. Cutting or modifying of the cables will result in termination of the warranty.