

**Operational Manual**

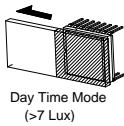
**True Day & Night MICF Camera**



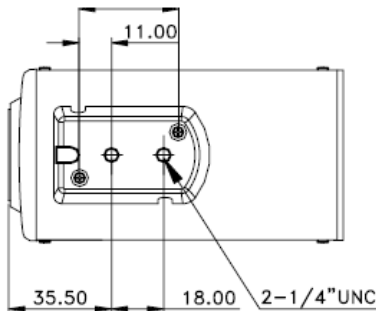
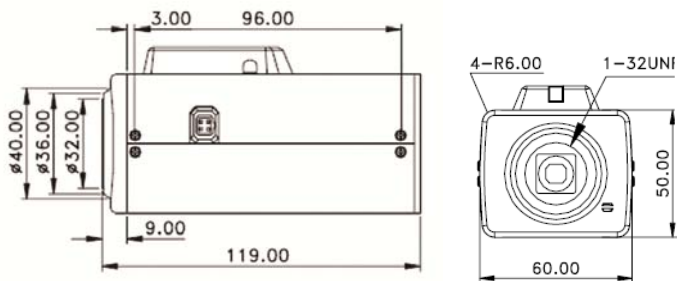
**!** Please read the Operational Manual before attempting to use this product.

**FEATURES**

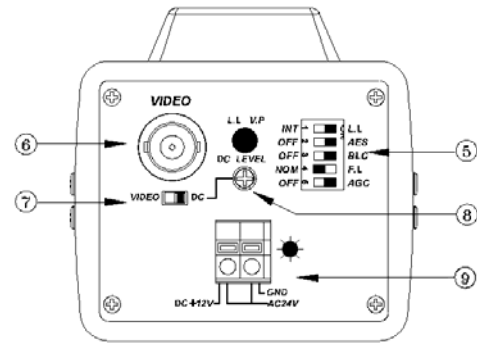
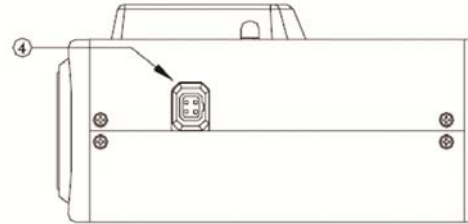
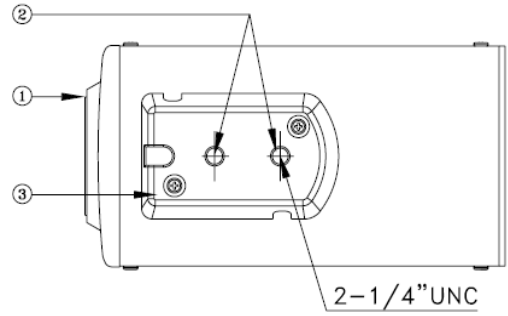
- 1/3" Sony Super HAD CCD
- 550 TV Lines, HQ-1 DSP
- 0.15 Lux @ F1.0
- **Mechanical IR Cut Filter (ICR):** As the amount of illumination decreases, the Mechanical IR Cut Filter automatically switches to B/W mode to increase light sensitivity for a brighter image. After illumination regains brightness, the Mechanical IR Cut Filter will automatically switch from B/W mode to color mode.
- Lead (Pb) Free RoHS Compliance
- Relatively no interference from magnetic or electrostatic fields.
- Dual Power 12V DC / 24V AC



**DIMENSIONS (Unit: mm)**



**NOMENCLATURE AND FUNCTION**



**1. Lens mount**

This mount is used to install a CS-mount lens. CS-adaptor ring is required if use a C mount lens.

**2. Camera mounting screw holes**

Screw hole for fixing camera.

**3. Mount Adaptor**

This adaptor can be attached to either the top or bottom of the unit.

**4. 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 SIGNAL	DRIVE +
4	GND	DRIVE -

**5. Control Switch**

- SW1. SYNC MODE: SYNC Mode Selection INT/L.L. switch.
- SW2. AES: Automatic Electronic Shutter OFF/AES switch.
- SW3. BLC: Back Light Compensation OFF/BLC switch.
- SW4. F.L: Flickerless NOM/F.L switch.
- SW5. AGC: Automatic Gain Control OFF/AGC switch.

**6. VIDEO connector**

This is an output for connection to a video monitor, etc (75ohms).

**7. Iris mode selection switch**

Used to choose DC or VIDEO mode according to the type of your lens.

**8. DC Level adjustment V.R.**

Used to adjust video output level of DC driven auto iris lens.

**9. Power input terminal**

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

## CONTROL SWITCH OPERATION

- SW1. SYNC MODE:** INT MODE: The camera may be operated independently with its internal crystal control. L.L. MODE: This version w/o L.L. function.
- SW2. A.E.S. (Auto Electronic Shutter):** AES: The automatic electronic shutter control 1/60(1/50) ~ 1/100.000 sec. is employed for using a manual Iris Lens.
- SW3. Example of B.L.C. (Back Light Compensation):** When the object is dark by strong light (sun illumination etc) as (Fig 3-1). Please turn on BLC switch. The object becomes as (Fig 3-2).
- INT → [ ] L.L.  
OFF → [ ] AES  
OFF → [ ] BLC  
NOM → [ ] F.L.  
OFF → [ ] AGC

AES-ON  
BLC-OFF →




Fig3-1
- INT → [ ] L.L.  
OFF → [ ] AES  
OFF → [ ] BLC  
NOM → [ ] F.L.  
OFF → [ ] AGC

AES-ON  
BLC-ON →




Fig3-2
- SW4. F.L. (Flickerless):** F.L: Fixes shutter speed at NTSC: 1/100 Sec.; PAL: 1/120 Sec. When using this switch, set "AES" OFF. NOM: Normal position.
- SW5. A.G.C. (Auto Gain Control):** AGC: level varies from 0 to 26dB. OFF: AGC level is fixed at 0 dB.

## SPECIFICATION

Model	SHM-7550DN	SHM-7550DNP
TV System	NTSC	PAL
Image Sensor	1/3" Sony Super HAD CCD	
DSP	Sony HQ-1	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Synchronization	Internal	
Video Output	1.0Vp-p Composite / 75ohms	
Resolution	550 TV Lines	
Minimum Illumination	0.15 Lux @ F1.0 Color mode automatically switches to B/W mode under 2.0 Lux	
Day/Night Switching	Mechanical IR Cut Filter (ICR) Auto/Manual; Color/Monochrome	
Electronic Shutter Speed	1/60~1/100,000sec	1/50~1/100,000sec
Signal to Noise Ratio	More than 50dB (AGC OFF)	
Auto Electronic Shutter	ON/OFF Switchable	
Back Light Compensation	ON/OFF Switchable	
Flickerless	ON/OFF Switchable	
Auto Gain Control	ON/OFF Switchable	
Lens	Not Included	
Lens Mount	C/CS (With Adaptor)	
Lead Free	Yes	
Power Supply	12V DC / 24V AC	
Power Consumption	3.0W / 250mA	
Operation Temperature	-10°C ~ +50°C	
Storage Humidity	RH85% or less	
Storage Temperature	-20°C ~ +60°C	
Dimension	60mm(W) x 50mm(H) x 119mm(L)	
Weight	400g	

\*Specifications are subject to change without notice

## PACKAGE CONTENTS

- One (1) SHM-7550DN/SHM-7550DNP Camera
- One (1) Allen Wrench
- One (1) CS Adaptor Ring
- One (1) Auto Iris Lens Connector
- 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 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:
  - a. When the power supply cord or plug is damaged.
  - b. If liquid has been spilled, or objects have fallen into the video product.
  - c. If the video product has been exposed to rain or water.
  - d. If the video product has been dropped or the cabinet has been damaged.
  - e. When the video product exhibits a distinct change in performance.



## WARRANTY

OKINA 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.