

user's manual
instrukcja obsługi



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NVC-HC510
NVC-HC510-3

NOVusTM

user's manual



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NVC-HC510
NVC-HC510-3

noVusTM

TABLE OF CONTENTS

| | | |
|----|---|----|
| 1. | IMPORTANT SAFEGUARDS AND WARNINGS..... | 5 |
| 2. | SPECIFICATION..... | 6 |
| 3. | MAJOR OPERATING CONTROLS AND FUNCTIONS..... | 7 |
| 4. | CONNECTION..... | 9 |
| 5. | OPERATION AND ADJUSTMENT | 10 |
| 6. | LINE LOCK..... | 11 |
| 7. | COMPOSITION..... | 11 |

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Technical modification are subject to change without prior notice. Misprints reserved.

1. Important Safeguards and warnings:

1. Read, keep, and follow these instructions.
2. Heed all warnings.
3. There are no user-serviceable parts inside this unit. Only authorized service personnel may open the unit.
4. Installation and servicing should only be done by qualified service personnel and conform to all local codes.
5. Unplug the unit from the outlet and refer servicing to qualified service 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 unit.
 - c. If the unit has been submerged under water.
 - d. If the unit does not operate normally by following the operating instructions.
 - e. If the unit has been dropped or the cabinet has been damaged.
 - f. When the unit exhibits a distinct change in performance.
6. Unplug the unit from the power outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning purposes.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat source or near water (any wet area).
9. Only use attachments / accessories specified by the manufacturer.

The product and / or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

IMPORTANT



This product is manufactured to comply with requirements of following directives and national regulations implementing the directives:

- Electromagnetic compatibility EMC 89/336/EEC with amendments
- Low voltage LVD 73/23/EEC with amendment, in case of electrical equipment designed for use with a voltage rating of between 50VAC and 1000VAC as well as 75VDC and 1500VDC.

Information on Disposal for Users of Waste Electrical and Electronic Equipment

This appliance is marked according to the European Directive on Waste Electrical and Electronic Equipment (2002/96/EC).



By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol on the product, or the documents accompanying the product, indicates that this appliance may not be treated as household waste. It shall be handed over to the applicable collection point for the waste electrical and electronic equipment for recycling purpose. For more information about recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

2. Specifications:

FEATURES:

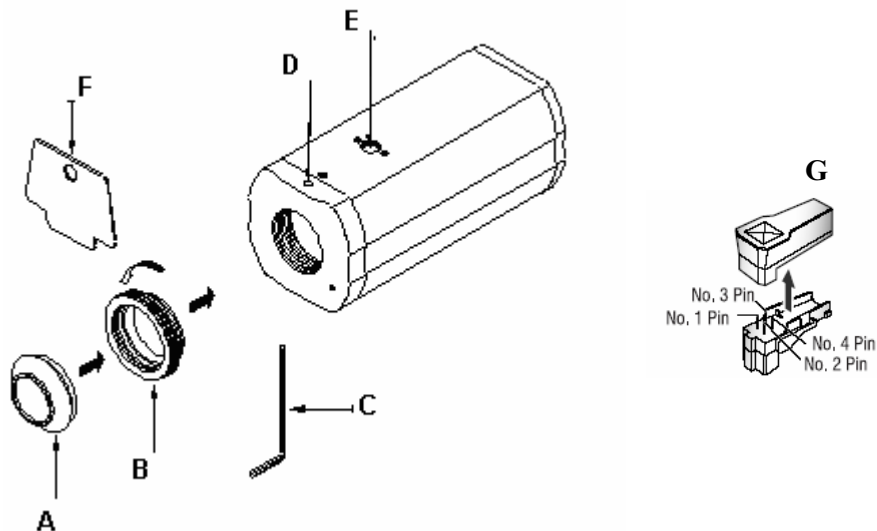
1. Color camera with electronic Day/Night mode
2. Horizontal resolution of 520 TVL
3. Minimum illumination of 0.1 lx / F=1.2
4. Indoor/outdoor, with camera housing
5. Power supply: 12 VDC / 230 VAC

| Model | NVC-HC510 | NVC-HC510-3 |
|-------------------------|---|-------------|
| Pick up element | 1/3" color CDD imager SONY SuperHAD HQ1 DSP | |
| Number of Pixels | 752 (H) x 582 (V) | |
| Resolution | 520 TVL | |
| Min. Illumination | 0.1 lx/F=1.2 | |
| S/N Ratio | > 50 dB (AGC off) | |
| Electronic Shutter | auto: 1/50 s ~ 1/100 000 s | |
| Back Light Compensation | on/off selectable | |
| Sync. System | internal | |
| Day&Night | on/off selectable | |
| Iris Mode | V or D Selectable | |
| Lens Mount | C/CS | |
| Video Output | BNC, 1.0 V _{p-p} , 75 Ohm | |
| Power Supply | 12 VDC | 230 VAC |
| Power Consumption | 2.4 W | 4 W |
| Operating Temperature | -10°C ~ 50°C | |
| Dimensions (mm) | 58.5 (W) x 53 (H) x 128.5 (L) | |
| Wright | 220 g | 550 g |

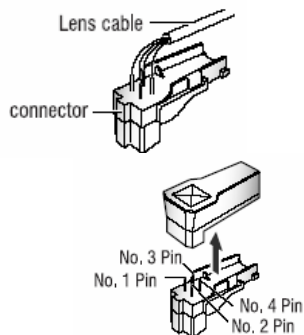
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3. Major operating controls and function:

FRONT



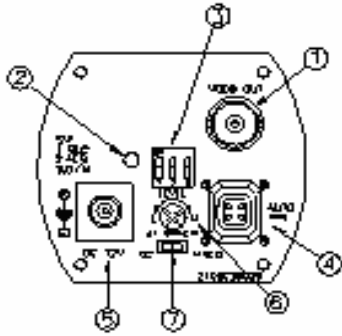
- A. Lens mount CAP
- B. CS-C Conversion ring
- C. L Shape wrench
- D. CS Mount fixing screw
- E. Mount bracket
- F. Iron plate for focus adjusted
- G. Miniatur plug terminal



| | Video type | DC type |
|-----------|----------------------|-----------|
| No. 1 Pin | Red (Power source) | Damping - |
| No. 2 Pin | N.C. | Damping + |
| No. 3 Pin | White (Video signal) | Drive + |
| No. 4 Pin | Black (GND) | Drive - |

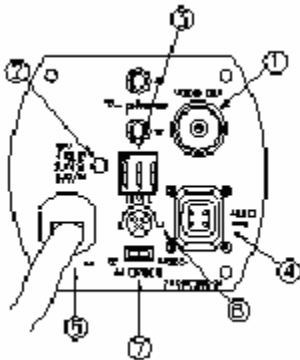
BACK

NVC-HC510, 12 VDC



1. Video out BNC (F) Jack
2. Power indicator LED
3. DIP Switch
4. 4-pin socket for auto Iris or DC driver lens
5. Power supply
6. DC driver level
7. DC/Video driver switch

NVC-HC510-3, 230 VAC



1. Video out BNC (F) Jack
2. Power indicator LED
3. DIP Switch
4. 4-pin socket for auto Iris or DC driver lens
5. Power supply
6. DC driver level
7. DC/Video driver switch

DIP SWITCH

1. BLC (BACK LIGHT COMPENSATION)

As you take a picture with strong light behind the subject, the picture would be looked very dim on the subject. In this case, you should select BLC ON to get a clear image.

NOTE:

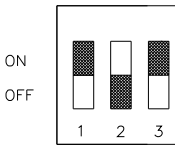
When you select BLC ON than the SHUTTER should be in ON position or use Auto Iris Lens.

2. AES

By setting the AES switch to ON, the AES mode (Up to 1/100 000 sec) is available. For shooting fast-moving objects or high brightness environment, the various electronic shutter speed can change automatically.

3. D/N

Color image will change to b/w under low light condition

|  | SWITCH (ON) | ON | OFF | USAGE |
|---|--------------------|-------------|---|--------------|
| | 1. BLC | YES | NO | BACK LIGHT |
| 2. AES | YES | NO | WHEN NOT USE | |
| 3. D/N | NORMAL | DAY & NIGHT | COLOR IMAGE WILL CHANGE TO B/W UNDER LOW LIGHT CONDITION. | |

4. Connection:

1. Before connection, make sure that powers of all units are OFF and cords are unplugged.
2. Mount a lens onto the camera.
3. Connect a video terminal of the camera and the video input terminal of a monitor TV with a 75 Ω coaxial cable.
4. Connect the power terminal of the camera to a power supply.

NOTES:

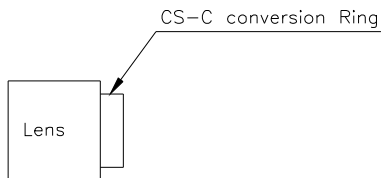
- Installation should conform to all local codes.
- Lens, coaxial cable for video signal and power supply are not supplied with the camera.

5. Operation and Adjustment:

1. Connect the power cord and turn the power ON.
2. Adjust the iris and focus of the lens to obtain the optimum image.

Using normal lenses

CS-mount lens mode is the standard type. When use C-mount lens, Please use the CS-C conversion Ring.



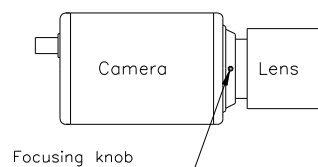
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Using the zoom lens (adjustment of the back focus)

The camera is set at the standard back focus position when shipped from factory. Depending on types of zoom lenses, however slight adjustment may be necessary.

Adjust the lens back-focus by turning the focusing knob in either direction.

- A) Place an object at any fixed distance and set the focus ring of the zoom lens to be used with.
- B) Set the zoom lens to fully TELE position and obtain the best focus position by turning the focus ring of the zoom.
- C) Then set the zoom lens to fully WIDE position and obtain the best focus position by turning the focusing knob.
- D) Repeat the procedures 2 and 3 until focus remains in constant among the zoom range



Using an auto iris lens

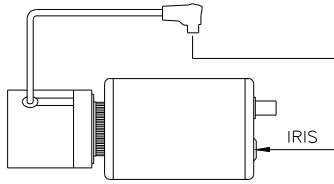
NOTE:

Don't use both SHUTTER ON & AUTO IRIS lens at the same time

DC driver lens

When auto iris lens is used, set AI DRIVER switch to DC position and connect the plug of the lens (for iris terminal) to the IRIS terminal on the back of camera..

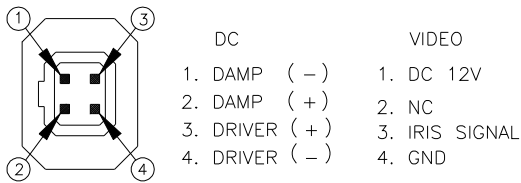
When you use an DC Driver Lens you can adjust the DC Drive Level for the bright of video output.









Auto iris lens Camera

Video Driver lens

When auto iris is used. AI DRIVER switch to VIDEO position and to connect the plug of the lens (for iris terminal) to the IRIS terminal on the back of the camera.



6. Composition:

- 1. Camera..... 
- 2. Auto Iris Lens Plug..... 
- 3. L-Wrench..... 
- 4. CS-C Conversion ring..... 
- 5. Instruction Manual..... 
- 6. Iron plate for focus adjustment..... 

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