

user's manual
instrukcja obsługi



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NVC-HC400VP
NVC-HC400VPH-2
NVC-HDN400VP
NVC-HDN400VPH-2
NVC-HDN400VP/IR
NVC-HDN400VPH/IR-2

NOVus[®]

user's manual



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INFORMATION

EMC (89/336/EEC) and LVD (73/23/EEC) Directives

CE Marking

 Our products are manufactured to comply with requirements of following directives and national regulations implementing the directives:

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

WEEE Directive 2002/96/EC

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) and further amendments. 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.

RoHS Directive 2002/95/EC



Concerning for human health protection and friendly environment, we assure that our products falling under RoHS Directive regulations, regarding the restriction of the use of hazardous substances in electrical and electronic equipment, were designed and manufactured in compliance with mentioned regulation. Simultaneously, we claim that our products were tested and do not contain hazardous substances exceeding limits which could have negative impact on human health or natural environment.

Information

The device, as a part of professional CCTV system used for surveillance and control, is not designed for self installation in households by individuals without technical knowledge.

The manufacturer is not responsible for defects and damages resulted from improper or inconsistent with user's manual installation of the device in the system.

IMPORTANT SAFEGUARDS

WARNING!

READ KEEP, AND FOLLOW THESE INSTRUCTIONS. ALL THE SAFETY AND OPERATING INSTRUCTIONS SHOULD BE READ BEFORE THE PRODUCT IS OPERATED.

THERE ARE NO USER-SERVICABLE PARTS INSIDE THIS UNIT. ONLY AUTHORIZED PERSONEL MAY SERVICE THIS UNIT.

IMPORTANT SAFEGUARDS

1. Installation and servicing should only be done by qualified service personnel and conform to all local codes
2. Do not use this unit if any of electrical or environmental condition is not fulfilled.
3. Unplug the unit from the outlet and refer servicing to qualified service personnel in case of water intrusion into camera interior.
4. Camera should be installed away from electromagnetic field sources like TV sets, electric motors, transformers. Electromagnetic fields may cause picture distortions.
5. Do not ever touch the surface of the CCD. If necessary clean the case of the camera by means moist cloth. Do not use any chemical cleaners.
6. Lead the cables properly to avoid risk of mechanical damaging in the future. Make sure all connections are made properly. Do not overload power sockets. It may cause the fire.
7. In order to prevent damaging of the camera video circuits should be protected by appropriate surge protection devices. Ground loop isolators are also recommended.
8. Connect video output (by means coaxial cable) with proper inputs of devices like monitors, DVR's etc. Connecting with improper connector e.g. other video output may cause damage of the camera.

Notice: Data included in the following user's manual is up to date at the time of printing. Novus Security Sp z o.o. holds exclusive rights to modify this manual. The producer reserves the rights for device specification modification and change in the design without prior notice.

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MAIN FEATURES

1. Main features

1. Vandal - resistant dome housing,
2. Color and day / night with mechanical IR cut filter cameras available,
3. Horizontal resolution 540/550 TVL in color mode and 600 TVL in day / night mode,
4. 3-axis adjusting the position camera available,
5. Power supply 12 V DC or 12 V DC / 24 V AC depends on camera type,
6. Heater inside available,
7. IR iluminator available.

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TECHNICAL SPECIFICATIONS

2. Technical specification

Model	NVC-HC400VP	NVC-HC400VPH-2
Pick up Element	1/3" SONY SuperHAD HQ1 DSP color CCD imager	
Horizontal Resolution	540 TVL	
Min. Illumination	0.5 lx / F=2.0	
S/N Ratio	> 48 dB (AGC off)	
Electronic shutter	Auto (AES): 1/50 s ~ 1/100 000 s	
White Balance	Auto	
Auto Gain Control (AGC)	Auto, On / Off (option)	
Back Light Compensation (BLC)	On / Off (with slide switch)	
Flickerless Function	On / Off (with slide switch)	
Synchronization	Internal	
Lens Type	Auto iris DC: f=4.0 ~ 9.0mm	
Angle of view (H)	62° ~ 29°	
Degree of protection	IP65	
Enclosure	Vandal proof, coated aluminium, impact resistant poly-carbonate bubble	
Video output	BNC, 1.0 V p-p / 75Ohm	
Power Supply	12 V DC (11 - 13.2 V DC)	12 V DC (11 - 13.2 V DC) 24 V AC (20 - 28 V AC)
Power Consumption	Max 3 W	Max. 5 W (with heater on 15W)
Operating temperature	-10°C ~ 50°C	-40°C ~ 50°C (with heater)
Dimensions (mm)	142.4 (Φ) x 101 (H)	142.4 (Φ) x 101 (H)
Weight	Approx. 844 g	Approx. 861 g

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TECHNICAL SPECIFICATIONS

Model	NVC-HDN400VP	NVC-HDN400VPH-2
Pick up Element	1/3" SONY SuperHAD HQ1 DSP color CCD imager	
Horizontal Resolution	550 TVL / 600 TVL	
Min. Illumination	0.3 lx (color mode), 0.1 lx (B/W mode), 0.008 lx (DSS x32) /F=1.2	
S/N Ratio	> 50 dB (AGC off)	
Electronic shutter	Auto (AES): 1/50 s ~ 1/120 000 s	
White Balance	Auto	
DNR	Auto	
Day/Night Switching	On / Off (with slide switch)	
Digital Slow Shutter (DSS)	On / Off (with slide switch), x32	
Digital zoom	On / Off (with slide switch), x2	
Auto Gain Control (AGC)	On / Off (option)	
Back Light Compensation (BLC)	On / Off (with slide switch)	
Flickerless Function	On / Off (with slide switch)	
Synchronization	Internal	
Lens Type	Auto iris DC: f=3.8 ~ 9.5mm	
Angle of view (H)	62° ~ 29°	
Degree of protection	IP65	
Enclosure	Vandal proof, coated aluminium, impact resistant poly-carbonate bubble	
Video output	BNC, 1.0 V p-p / 75Ohm	
Power Supply	12 V DC (11 - 13.2 V DC)	12 V DC (11 - 13.2 V DC) 24 V AC (20 - 28 V AC)
Power Consumption	Max. 1.8 W	Max. 3 W (with heater on 13W)
Operating temperature	-10°C ~ 50°C	-40°C ~ 50°C (with heater)
Dimensions (mm)	142.4 (Φ) x 101 (H)	142.4 (Φ) x 101 (H)
Weight	Approx. 844 g	Approx. 861 g

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TECHNICAL SPECIFICATIONS

Model	NVC-HDN400VP/IR	NVC-HDN400VPH/IR-2
Pick up Element	1/3" SONY SuperHAD HQ1 DSP color CCD imager	
Horizontal Resolution	550 TVL / 600 TVL	
Min. Illumination	0.3 lx (color mode), 0.1 lx (B/W mode), 0.008 lx (DSS x32) 0 lx (IR on) / F=1.2	
S/N Ratio	> 50 dB (AGC off)	
Electronic shutter	Auto (AES): 1/50 s ~ 1/120 000 s	
White Balance	Auto	
DNR	Auto	
Day/Night Switching	On / Off (with slide switch)	
Digital Slow Shutter (DSS)	On / Off (with slide switch), x32	
Digital zoom	On / Off (with slide switch), x2	
Auto Gain Control (AGC)	On / Off (option)	
Back Light Compensation (BLC)	On / Off (with slide switch)	
Flickerless Function	On / Off (with slide switch)	
Synchronization	Internal	
Lens Type	Auto iris DC: f=3.8 ~ 9.5mm	
Angle of view (H)	62° ~ 29°	
IR LED	20 pcs., 850 nm	
IR Effective range	15 m, 30°	
Degree of protection	IP65	
Enclosure	Vandal proof, coated aluminium, impact resistant poly-carbonate bubble	
Video output	BNC, 1.0 V p-p / 75Ohm	
Power Supply	12 V DC (11 - 13.2 V DC)	12 V DC (11 - 13.2 V DC) 24 V AC (20 - 28 V AC)
Power Consumption	Max 4.3 W (with IR iluminator on 9.3 W)	Max. 5 W (with heater on 15W, with heater and IR iluminator on 20 W)
Operating temperature	-10°C ~ 50°C	-40°C ~ 50°C (with heater)
Dimensions (mm)	142.4 (Φ) x 101 (H)	142.4 (Φ) x 101 (H)
Weight	Approx. 874 g	Approx. 884 g

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INSTALLATION

3. Package of contents

Please take extra caution when unpacking the device.

Please ensure that following items are included in the package:

- User's manual
- Camera set
- Mounting screws
- Guide pattern
- Service monitor cable

If the equipment has been damaged during transport, the contents of package should be packed back to the original box. Contact the supplier for further assistance.

4. Installation

Before installation, make sure you are familiar with this product's special features and proper operating technique.

- Stick the guide pattern on the wall or ceiling.
- Drill 4 holes according to the guide pattern then insert anchors into the drilled holes
- Draw out power / video wires to the connecting place.
- Fix the camera to a ceiling using 4 screws.
- Adjust desired focus and scene by turning and moving the 3 axis camera bracket by hand.
- Put the dome cover over the base.
- Fix the dome cover on the base by covering.



Ceiling



Guide Pattern



Dome base



Tapping Screw

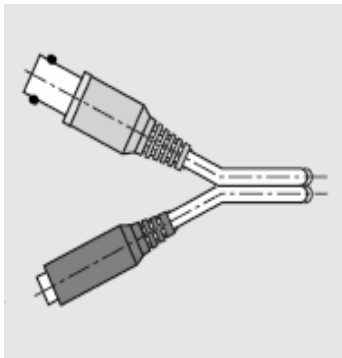


Dome cover

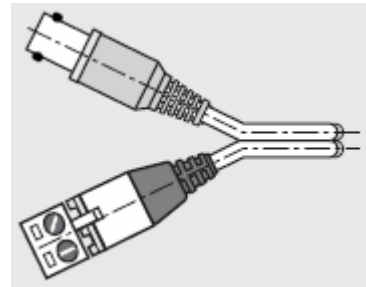
Mounting Screw

CONNECTION / NAME AND FUNCTION

4. Connection

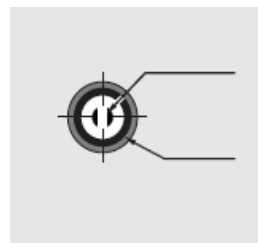


Power supply connector 12 V DC



Power supply connector 24 V AC

Notice: 12 V DC Power Type is polarized as below. 24 V AC Power type is not polarized.

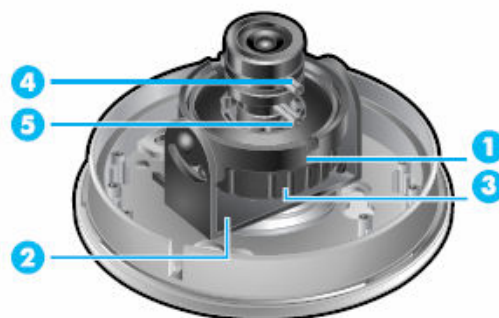


Power +12 V DC

GND

5. Name and function

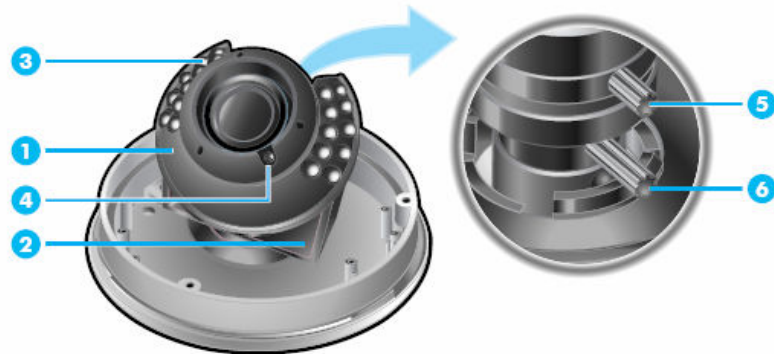
It refers models: NVC-HC400VP, NVC-HC400VPH-2, NVC-HDN400VP,
NVC-HDN400VPH-2



1. Tilt rotation: Adjusting the vertical angle.
2. Pan rotation: Adjusting the horizontal angle.
3. Horizontal rotation: Adjusting the horizontal position of the screen.
4. Focus handle: Focus (Far or Near).
5. Focal handle: Tele or Wide.

CAMERA SET-UP

It refers models: NVC-HDN400VP/IR, NVC-HDN400VPH/IR-2

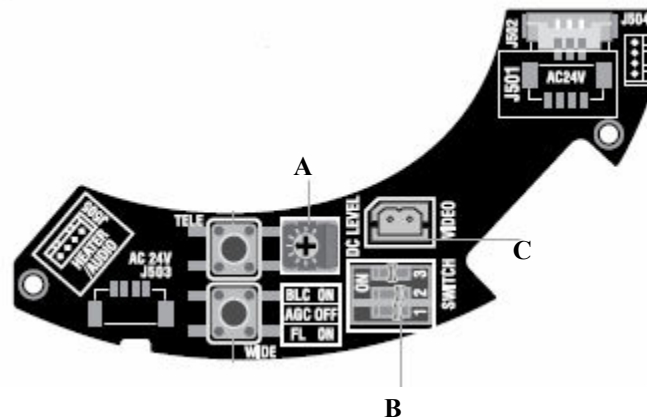


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1. Tilt rotation: Adjusting the vertical angle.
2. Pan rotation: Adjusting the horizontal angle.
3. IR LED.
4. Dusk sensor.
5. Focus handle: Focus (Far or Near).
6. Focal handle: Tele or Wide.

7. Camera set-up

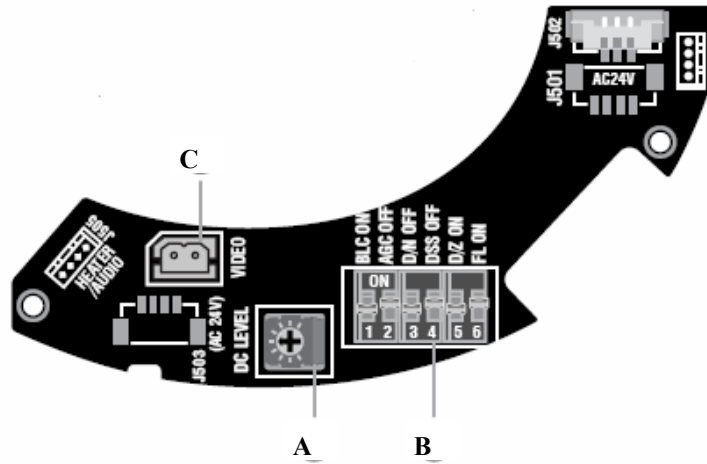
It refers models: NVC-HC400VP, NVC-HC400VPH-2:



- A. Auto Iris DC level adjustment;
- B. Function selection switch:
 - FL (Flickerless) On/Off;
 - AGC (Auto Gain Control) On/Off;
 - BLC (Black Light Compensation) On/Off;
- C. Service monitor connector.

EXTERNAL DIMENSIONS

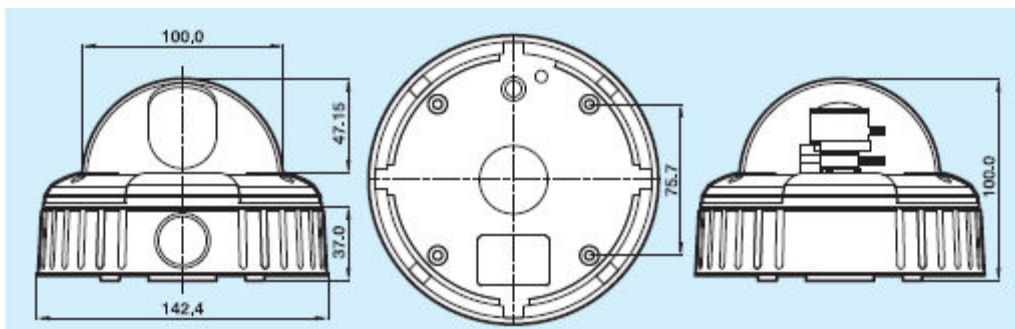
It refers models: NVC-HDN400VP/IR, NVC-HDN400VPH/IR-2, NVC-HDN400VP,
NVC-HDN400VPH-2



- A. Auto Iris DC level adjustment;
B. Function selection switch:
• BLC (Black Light Compensation) On/Off;
• AGC (Auto Gain Control) On/Off;
• D/N (Day/Night) On/Off;
• DSS (Digital Slow Shutter) On/Off;
• D/Z (Digital Zoom) On/Off;
• FL (Flickerless) On/Off;
C. Service monitor connector.

8. External dimensions

Notice: It refers all models.



NOTES

8. Notes

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