

Full HD AVS CAMERA

2MP NIGHT VISION OUTDOOR CAMERA



· AVS-1000B

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Use only attachments / accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. The power plug must be readily accessible so that the equipment can be easily disconnected from the AC power.
15. The product is still connected to the AC power whenever it is plugged in to a live power outlet, even if the receiver is turned off using the remote control or front panel buttons.
16. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

CAUTION

- **These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.**

Warning and Attention Symbols

You must remember certain safety issues during installation and use of this equipment. This guide provides various procedures and instructions. Some of these procedures could result in injury or property damage if they are improperly performed. Other procedures require additional attention.

In this guide, we use the following notation to inform you when you need to pay attention to a safety or operational issue.



Designates a potential situation where the following may happen:

- Personal injury or death may occur.
- Equipment or property may be damaged.



Designates the following operational issues:

- Important operation or maintenance instructions follow.
- Additional attention is required.

For Your Safety



Do not attempt to open the case of the receiver. There is a risk of electrical shock, which may result in damage to the equipment and/or personal injury or death to you. There are no user-serviceable parts inside the receiver. Opening the receiver case or unauthorized modification will void your warranty.



WARNING: To reduce the risk of fire or electrical shock, do not expose this apparatus to rain or moisture.



The Class II equipment symbol means the equipment has additional insulation and does not need to be grounded.

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1. Precautions

- Please read the manual carefully before the installation in order to make use the camera to be set up correctly and to have the best picture quality.
- Please keep the manual in good condition for your future reference and service application.
- Installation and services should only be carried out by an authorized personnel according to local safety regulations.
- If any liquid or solid matter gets into the housing, immediately disconnect the camera from power supply and have it checked by your authorized dealer before reusing.
- Avoid installing the camera at extremely hot or cold places.
- If you are not a certified person, never try to dismantle the camera. To avoid electric shock, never remove the screws or covers. There are no parts inside that need maintenance by the user. All maintenance should be carried by qualified personnel.
- Avoid installing the camera at a place of high humidity.
- Avoid installing the camera at the place exposed to gas or oil.
- Keep the top glass of the lens always clean in order to obtain the best picture quality all the time. Be careful not to be stained by fingerprint.
- Don't face the camera directly toward sunlight or sunlight reflecting area. CCD may go defective at this condition.
- Please give a special attention to keep the unit from dangerous drop or external shock during the process of transportation or handling.
- Never try to touch the camera in wet hand. It may cause an electric shock.
- Do not expose the camera to radioactivity. It causes a serious damage on the CCD.

2. Limitation of liability

This publication is provided "AS IS" without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for any particular purpose, or noninfringement of the third party's right. This publication could include technical inaccuracies or typographical errors. Changes are added to the information herein, at any time, for the improvements of this publication and/or the corresponding product(s).

3. Disclaimer of warranty

In no event shall seller be liable to any party or any person, except for replacement or reasonable maintenance of the product, for the cases, including but not limited to below :

- (1) Any damage and loss, including without limitation, direct or indirect, special, consequential or exemplary, arising out of or relating to the product;
- (2) Personal injury or any damage caused by inappropriate use or negligent operation of the user;
- (3) unauthorized disassemble, repair or modification of the product by the user;
- (4) Inconvenience or any loss arising when images are not displayed, due to any reason or cause including any failure or problem of the product;
- (5) Any problem, consequential inconvenience, or loss or damage, arising out of the system combined by the devices of third party.
- (6) Any claim or action for damages, brought by any person or organization being photogenic subject, due to violation of privacy with the result of that surveillance-camera's picture, including saved data, for some reason, becomes public or is used for the purpose other than surveillance.

4. Package



Camera x1



Manual x1



L- Wrench x1
Ø3.0



Tapping screw x3



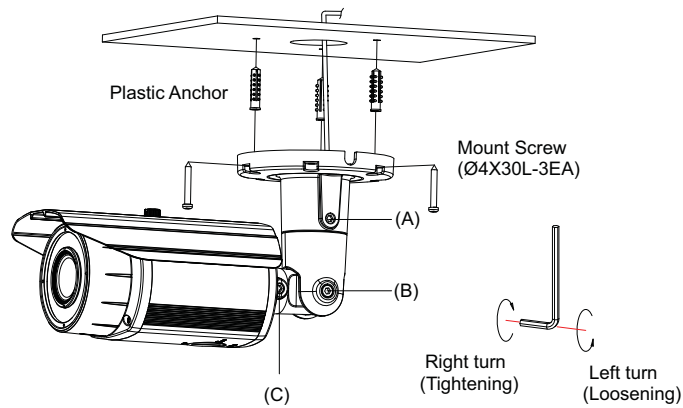
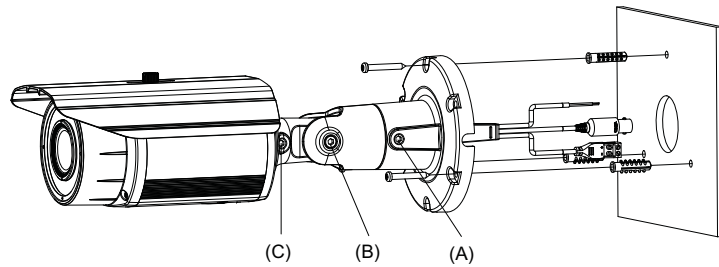
Plastic anchor x3

5. Main Features

- Sensor - 1/2.8" 2Megapixel SONY CMOS Sensor
- Effective pixels - 1944(H) x 1104(V) 2.14 Megapixel
- Resolution - 25/30fps@1080P
- Long distance real-time transmission
- Day/Night(ICR), Real WDR,AWB, AGC, BLC, 3D-DNR,
- High power LED Adopted.
- 2.8~12mm Manual Vari-Focal Lens
- IP67 Weatherproof
- 12VDC Power Input

6. Installation

6-1. Installation overview

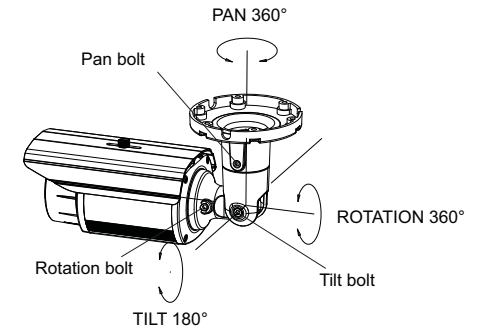


- ① Drill three screw holes on the ceiling or wall to fix three anchors (supplied) in the holes.
- ② Fix the plastic anchors in the holes.
- ③ Position the mounting bracket on the screw points.
- ④ Fix the mounting bracket by tightening the screws.
- ⑤ Slightly loosen bolt (A), (B) then adjust TILT (180°) and PAN (360°) of the camera using a serration on the bracket and tighten the bolt firmly.
- ⑥ Slightly loosen bolt (C) then adjust ROTATION (360°) of the camera and tighten the bolt firmly.

6. Installation

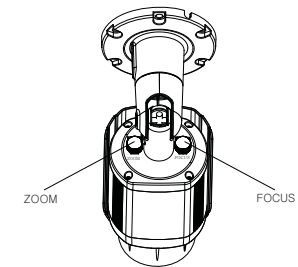
6-2. 3-Axis Adjustment

1. PAN 360°
Slightly loosen a Pan bolt then adjust pan of the camera using a serration on the bracket and tighten the bolt firmly.
2. TILT 180°
Slightly loosen a Tilt bolt then adjust tilt of the camera using a serration on the bracket and tighten the bolt firmly.
3. ROTATION 360°
Slightly loosen a Rotation bolt then adjust rotation of the camera using a serration on the bracket and tighten the bolt firmly.



6-3. Zoom & Focus External Adjustment

User can Adjust Zoom & Focus with easy by the knobs of Zoom and focus.

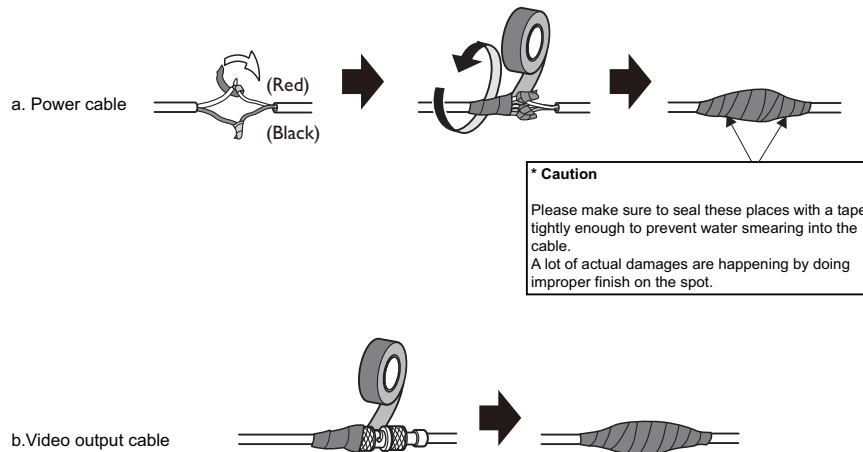


6. Installation

6-4. Waterproof processing of cable end connection

Make sure to use a butyl tape. (Do not use a sealing material on those parts)

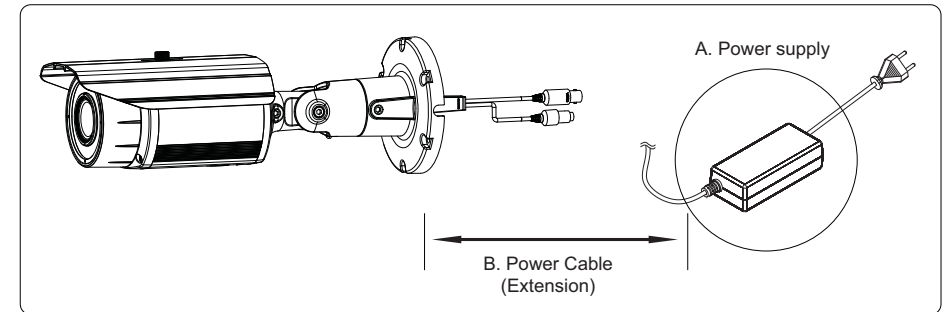
- ① It is useful to connect the cable ends from camera to the extension cable for waterproof.
- ② Connect and tape the power cables (Power-Power/Ground-Ground).
- ③ Bind the power cables together with the tape. When DC-Jack is used, tape the DC-DC joint.
- ④ Tape the BNC-BNC joint.



◆ Connecting to POWER

A. Power connection (Power supply: (DC12V)

The recommended adapter specification for EL-1000 is DC12V/1.5A.
Please check the standard power requirement before connecting the power.



B. Power Cable (Extension)

As the table below, voltage drops as the wire is longer so that the use of an excessively long power cable (or extension cable use) to the camera may affect the camera's performance.

Copper wire Size (AWG)	1.3mm ² (#16)	0.83mm ² (#18)	0.52mm ² (#20)	0.33mm ² (#22)	0.22mm ² (#24)
Resistance (Ω/m)	0.01	0.03	0.04	0.06	0.1
Voltage Drop(V/m)	0.019	0.03	0.049	0.068	0.113

The resistance value of Copper Wire : 25' C (77' F)

- Standard Voltage for proper camera operation is DC12V +/- 10%
- AWG #24 : 10M is the maximum cable distance for proper operation.
Longer than 10 Meters, it may cause a damage to the product.
The manufacturer is not liable for problems caused by unauthorized installation.
- AWG26, AWG28: It is not recommended. It causes a severe damage to the camera.

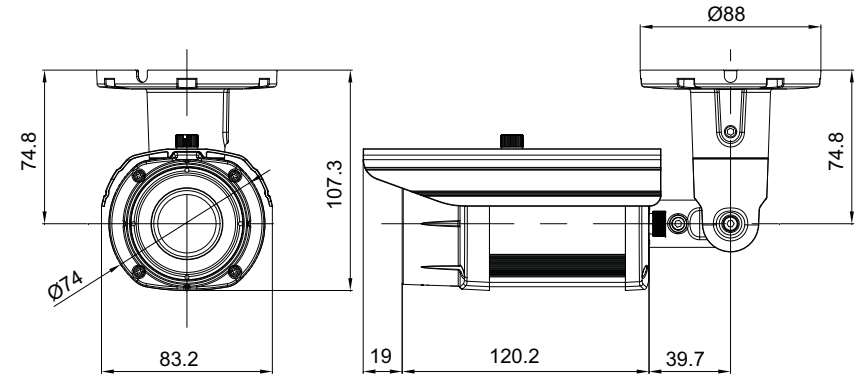
*Caution

- a. There may be a deviation in voltage drop depending on the type of wire and its manufacture.
- b. Please Do connect one camera by the input power! No other devices!
- c. Please power on after installation finished.


7. Troubleshooting

Problems	Troubleshooting
Nothing appears on the screen.	<ul style="list-style-type: none"> • Please check that the power cord and line connection between the camera and the monitor are fixed properly. • Please check that you have properly connected VIDEO cable to the camera. • VIDEO output jack. Check DC Iris cable on Lens is properly connected.
The image on the screen is dim.	<ul style="list-style-type: none"> • Is lens stained with dirt? Clean your lens with soft, clean cloth. • Set the monitor to proper condition. • If the camera is exposed to too strong light, change the camera position.
The image on the screen is dark.	<ul style="list-style-type: none"> • Adjust the contrast feature of the monitor. • If you have an intermediate device, set the 75Ω / Hi-Z properly (Please check the impedance)
The camera is not working properly, and the surface of the camera is hot.	<ul style="list-style-type: none"> • Please check that you have properly connected the camera to an appropriate power source.
The screen flickers continually.	<ul style="list-style-type: none"> • Please check that direction of camera is turned toward the Sun.

8. Dimension (mm)



9. Specifications

Model	AVS-1000B
Image sensor	1/2.8" 2Megapixel SONY CMOS
Effective Pixels	1944(H) x 1104(V)
Synchronization	Internal
Video output	1-channel BNC HDCVI high definition video output
S/N Ratio	50dB (AGC OFF, Weight ON)
Min.Illumination	0.05Lux @F1.2 (0Lux IR LED on)
Shutter speed	1/3s~1/100,000s
Power source	12VDC 
LENS	2.8~12mm Manual Vari-Focal Lens
IR spectrum	850nm
Viewable distance	Up to 20M at moonless night
Iris control	DC
Operation Temperature	-10°C to +50°C
Humidity	0% to 90% RH
Measurement(mm)	83.2(W) x 107.3(H) x 253.7(D)
Weight(Approx.g)	1,000
Function	
	ATW (OUTDOOR MODE), AWB, AGC, WDR, AE, BLC
	NR (2D,3D-NR)
	D-WDR
	DAY&NIGHT MODE

* Specifications are subject to change without prior notice for improvement.

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