

1 Megapixel HD-AVS IR Vari-focal Waterproof Fixed Camera
User's Manual

Version 1.0.0

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Welcome

Thank you for purchasing our HD-AVS camera!

This user's manual is designed to be a reference tool for your system.

Please read the following safeguard and warnings carefully before you use this series product!

Please keep this user's manual well for future reference!

Important Safeguards and Warnings

1 . Electrical safety

All installation and operation here should conform to your local electrical safety codes.

The power shall conform to the requirement in the SELV (Safety Extra Low Voltage) and the Limited power source is rated 12V DC (24V AC) in the IEC60950-1.

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

2 . Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3 . Installation

Do not apply power to the camera before completing installation.

Please install the proper power cut-off device during the installation connection.

Always follow the instruction guide the manufacturer recommended.

If this product is installed in the ceiling, please make sure the installation position can sustain the min 50N.

4 . Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.

We are not liable for any problems caused by unauthorized modifications or attempted repair.

5 . Environment

This series camera should be installed in a cool, dry place away from direct sunlight or strong light, inflammable, explosive substances and etc.

This series camera shall work on the specified working temperature. Please keep it away from the electromagnetic radiation object and environment.

Please keep the sound ventilation.

Do not allow the water and other liquid falling into the camera.

6. Accessories

Be sure to use all the accessories recommended by manufacturer.

Before installation, please open the package and check all the components are included.

Contact your local retailer ASAP if something is broken in your package.

7. Daily Maintenance

Please shut down the device and then unplug the power cable before you begin daily maintenance work.

Use the dry soft cloth to clean the device.

If there is too much dust, please use the water to dilute the mild detergent first and then use it to clean the device. Finally use the dry cloth to clean the device.

Please put the dustproof cap to protect the CCD (CMOS) component when you do not use the camera.

1 General Introduction

1.1 Overview

This series megapixel HD camera conforms to the HD-AVS standard. It supports video signal high-speed long distance transmission without any delay. It can be controlled by the DVR conforming to the HD-AVS.

1.2 Features

- High-performance CMOS image sensor, megapixel definition.
- Support HD-AVS video output.
- Support 75-3 coaxial cable transmission without any loss. Transmission distance is over 500m.
- High speed, long distance real-time transmission.
- Support ICR switch to realize surveillance both in the daytime and at night.
- Support auto exposure, auto white balance, auto electronic shutter and auto gain function.
- High image color rendition, vivid image.
- Support manual adjustment of lens zoom and focus, conduct lens focus and zoom by opening the lower cover of the camera body, which is convenient to install for clients.
- Support DC12V power supplying.
- Support IP66 compliance
- Support intelligent IR function, max IR distance 30m.

1.3 Functions

HD-AVS Specification

HD-AVS is an over-coaxial –cable HD video transmission standard. The technology renders two HD video formats by progressive scanning.

ICR

The IR cut removal is to filter the IR light in the daytime and then auto switch to the general filter at night. This function allows the camera to output the high sensitivity and clear video.

Smart IR technology

The sensor controls the IR light on/off via the combination work of the hardware and software, which realizes the automatically IR light compensation according to the environment illumination.

Auto gain function

To output the standard video signal in the different illumination environments, the amplifier needs to adjust in a wide range. The system can enhance the camera sensitivity in low illumination and enhance the video signal output to get the clear and high definition video.

Auto white balance

The white balance refers to the camera to restore the white object color. It allows the camera to automatically adjust the color temperature in indoor and outdoor environment, just like our human eyes does.

Auto exposure

System can automatically set shutter speed and iris value according to the snapshot video exposure condition.

Auto electronic shutter

The system can automatically adjust the electronic shutter when the environment light changes.

1.4 Specifications

Model Parameter	1 Megapixel HD-AVS IR Vari-focal Waterproof Fixed Camera Series
	AVS-B2118VF
Video Processor	1/2.9" 1.0 Mega Pixels CMOS
Video Format	PAL/NTSC
Effective Pixel	1280 (H) * 720 (V)
Min Illumination	0.01Lux @ (F1.2,AGC ON) , 0Lux with IR
Electronic Shutter	PAL: 1/50s~1/100,000s NTSC: 1/60s~1/100,000s
Video Standard	HD-AVS compliance
Video Frame Rate	PAL: 1280x720@25 fps NTSC: 1280x720@30 fps
Lens Port	Φ14
Lens Type	2.7-12 mm @F1.4 fixed iris manual vari-focal lens
Day/Night Switch	ICR auto switch
Sync Mode	INT
Video Output	1-channel HD-AVS high definition video output
White Balance	Auto
Gain Control	Auto
BLC	Auto
Smart IR	Support
Transmission Distance	Over 500m via 75-3 coaxial cable without any loss
Max IR Distance	30m
Protection Level	IP66
Working Temperature /Humidity	-30℃~+60℃. Humidity is less than 95%(no condensation)
Power	DC 12V±10%
Power Consumption	2.8W MAX (Input: 12V == 0.23A)
Dimension(mm)	213×80.0×72.0
Weight	550g
Angle Adjustment	Pan: 0° ~360° : Tilt: 0° ~90° : Flip: 0° ~360°

Installation Mode	Wall mount
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2 Framework and Dimensions

Please refer to the following figures for dimension information. The unit is mm. See Figure 2-1 to Figure 2-3.

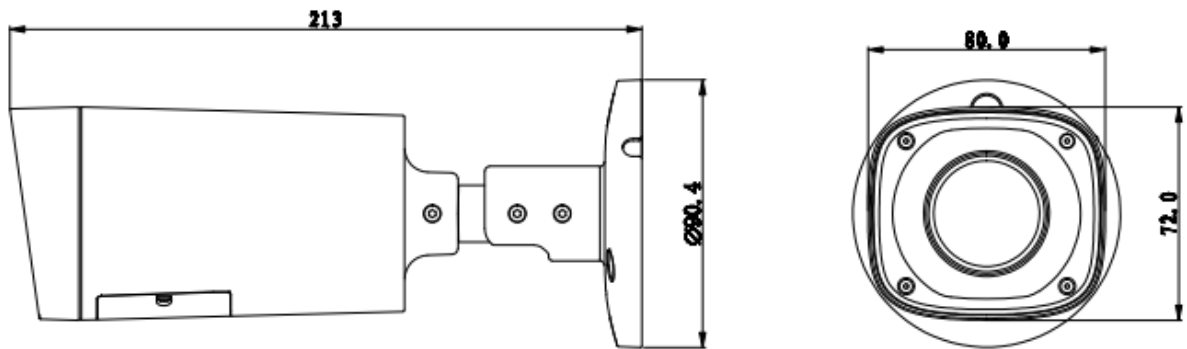


Figure 2-1

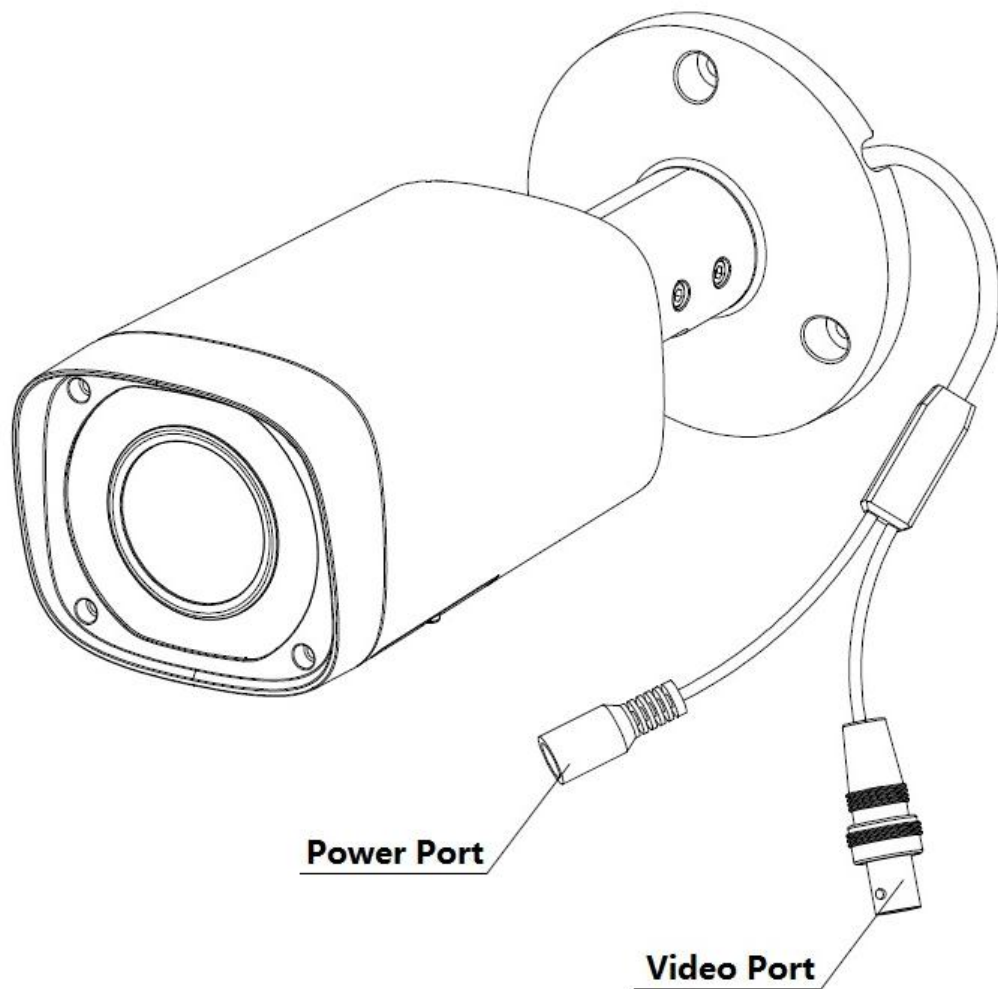


Figure 2-2

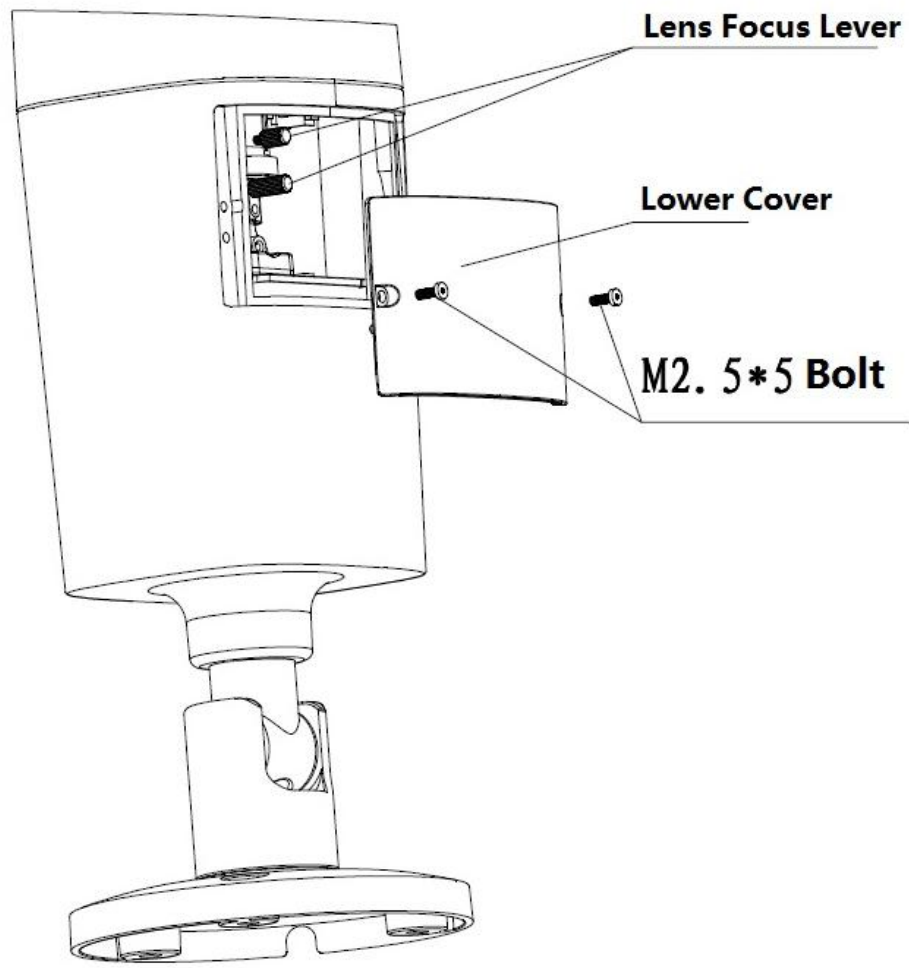


Figure 2-3

3 Installation

Important

Please make sure the installation surface can min support the 3X weight of the camera and the bracket.

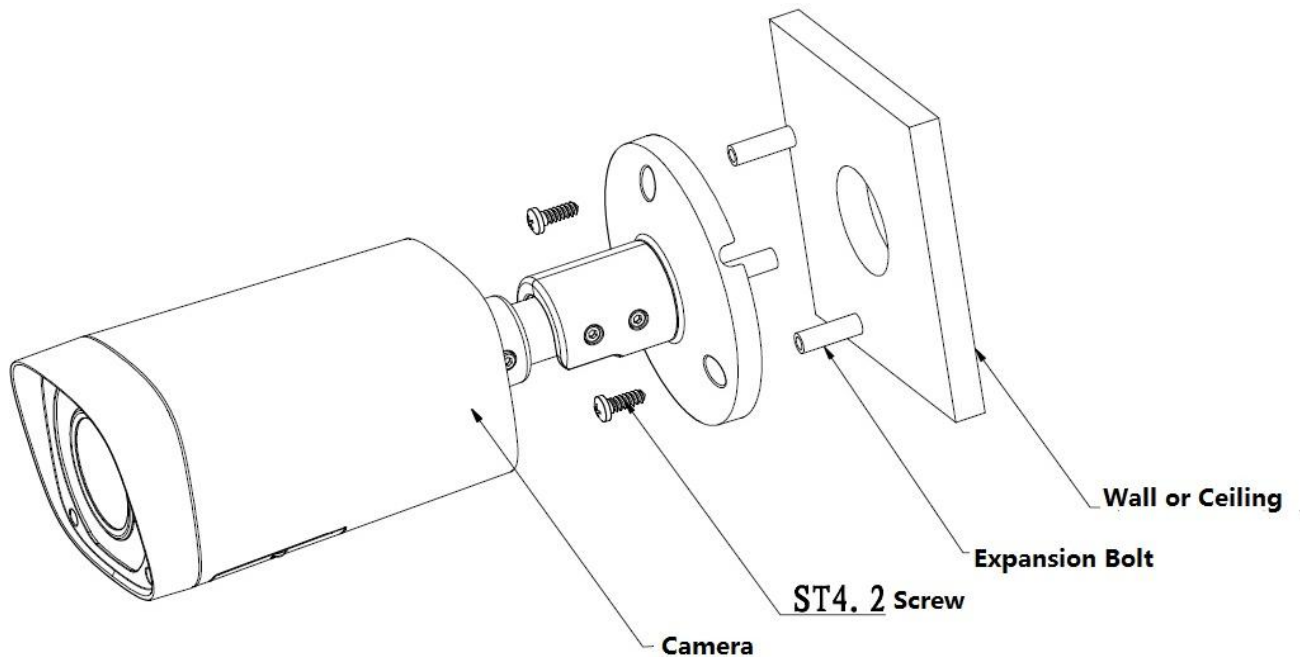


Figure 3-1

Step 1

Take out the camera cable through cable exit of the bracket chassis and install camera bracket.

If it is cement wall, you need to install expansion bolt first (the installation hole of expansion bolt need to be in accordance with the bracket), then use self-tapping bolt to install bracket, which is shown in Figure 3-1.

If it is wooden wall, you can skip the first step and use self-tapping bolt to install bracket directly.

Step 2

Unscrew the M3×20 and M3×5 screws on the bracket in the direction shown in Figure 3-2, adjust the camera to an exact location which needs to be monitored by rotating the bracket and camera body, then secure the bolts.

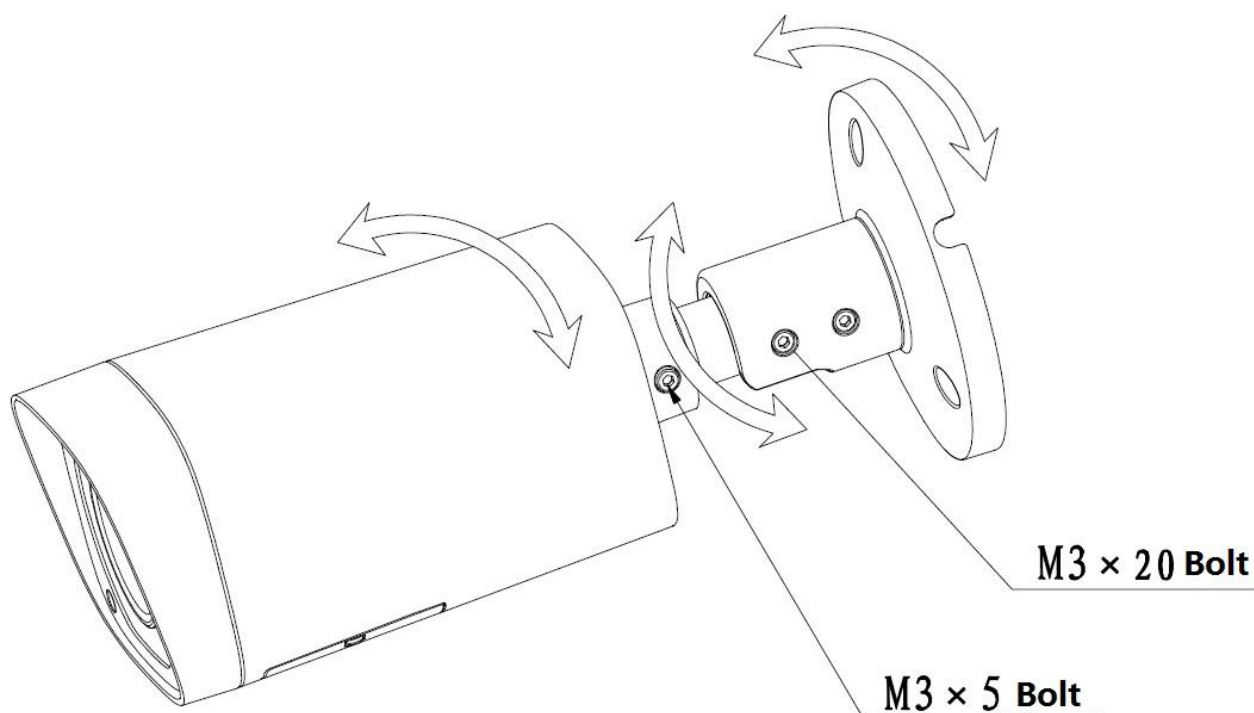


Figure 3-2

Step 3

Connect the video output port of the device cable to the HD-AVS DVR, and connect the power port of the device cable to the power.

Step 4

After the image is shown on the HD-AVS DVR, open the lower cover of the camera and adjust lens focal length by focus/zoom lever to make the image clear and secure the lever. Retighten the camera lower cover and complete the installation.

Appendix Toxic or Hazardous Materials or Elements

Component Name	Toxic or Hazardous Materials or Elements					
	Pb	Hg	Cd	Cr VI	PBB	PBDE
Circuit Board Component	○	○	○	○	○	○
Device Construction Material	○	○	○	○	○	○
Wire and Cable	○	○	○	○	○	○
Packing Components	○	○	○	○	○	○
Accessories	○	○	○	○	○	○

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

Note

- **This manual is for reference only. Slight difference may be found in the user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks mentioned are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website or contact your local service engineer for more information.**