

# HD Analog Camera User's Manual

Model No. CV-CFW101L  
CV-CFW101LN

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## **Welcome**

Thank you for purchasing our HD analog 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 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 HD analog 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 make sure the CMOS component is out of the radiation of the laser beam device. Otherwise it may result in CMOS optical component damage.

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 CMOS component when you do not use the camera.

# 1 General Introduction

## 1.1 Overview

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

## 1.2 Features

- High-performance CMOS image sensor.
- Support 720p@25fps(PAL) /30fps (NTSC)
- Support HDCVI video output.
- Support 75-3 coaxial cable transmission over 800m.
- 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 adjusting the focusing nut on the upper part of the dome body, which is convenient for users to install.
- Support DC12V power supplying.
- Support IP66 compliance.
- Support intelligent IR function, max IR distance 30m.

## 1.3 Functions

### HDCVI Specification

HDCVI (High Definition Composite Video Interface) 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

Parameter	CV-CFW101L	CV-CFW101LN
<b>Camera</b>		
Image Sensor	1/2.9" 1.0 Mega Pixels CMOS	
Effective Pixels	1280 (H) x 720 (V)	
Min Illumination	0.05Lux/ F1.4, 0Lux IR on	
Electronic Shutter	1/50s~1/100,000s	1/60s~1/100,000s
Video Frame Rate	25fps	30fps
Synchronization	Internal	
Day & Night	Auto (ICR)/ Color/ B/W	
Max IR Distance	30m	
Digital Noise Reduction	2D	
White Balance	Auto	
AGC	Auto	
BLC	Auto	
<b>Lens</b>		
Focal Length	2.7-12 mm @ Manual/ Fixed Iris	
Angular Field of View	H: 35°(Tele) ~ 93°(Wide) V: 21°(Tele) ~ 50°(Wide)	
Lens Type	Φ14	
<b>Input / Output</b>		
Video Output	1 CH BNC HD-CVI video output	
<b>General</b>		
Power	DC 12V±25%	
Power Consumption	2.8W MAX	
Working Temperature	-30°C~+60°C. Less than 95% RH (no condensation)	
Dimensions	Φ119 mm × 97.4 mm	
Weight (approx.)	550g	
Installation Mode	Wall mount/ In-ceiling mount	
External Case	Metal	

## 2 Framework and Dimensions

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

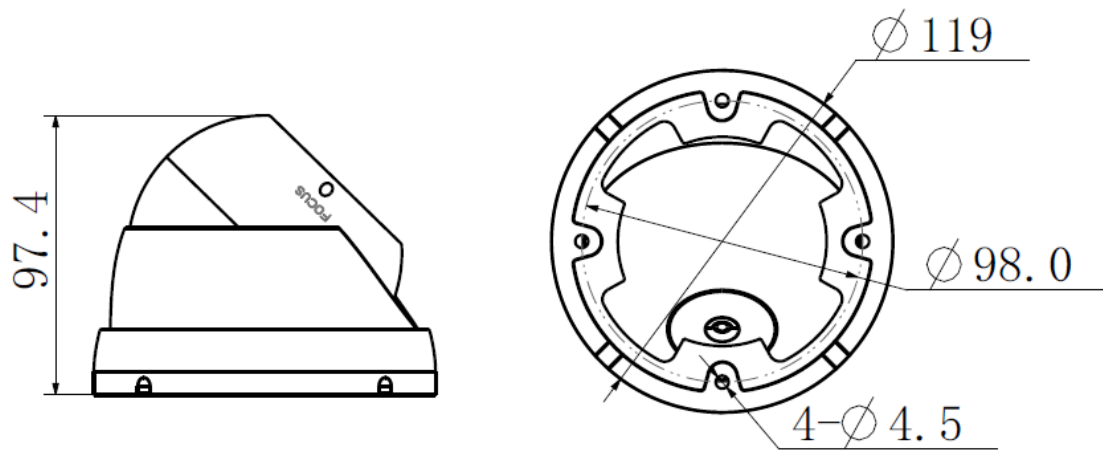


Figure 2-1

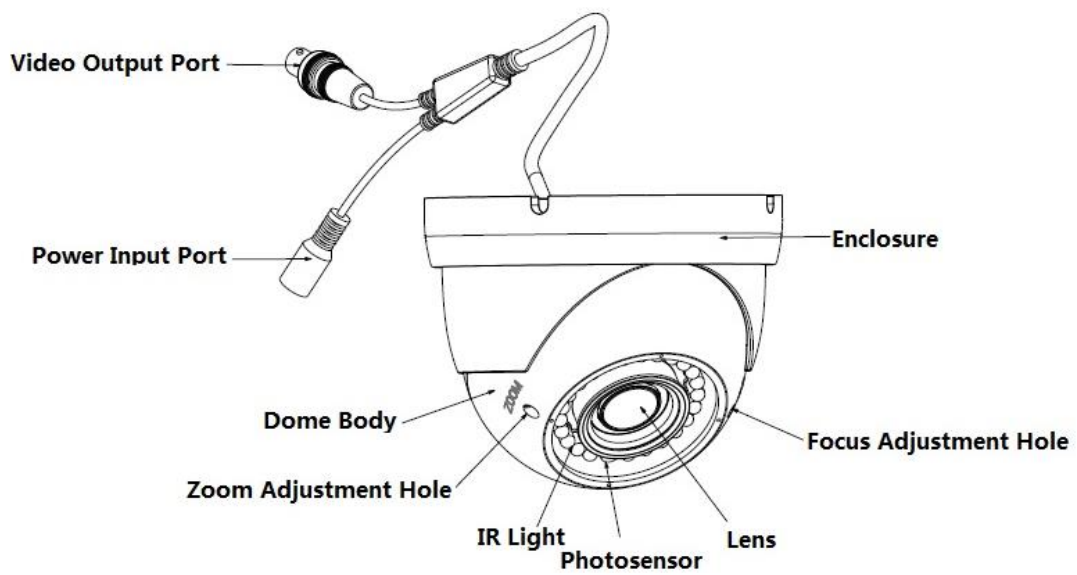


Figure 2-2



### 3 Installation

#### Important

- Before the installation, please make sure the installation surface can sustain at least 3X weight of the bracket and the camera.

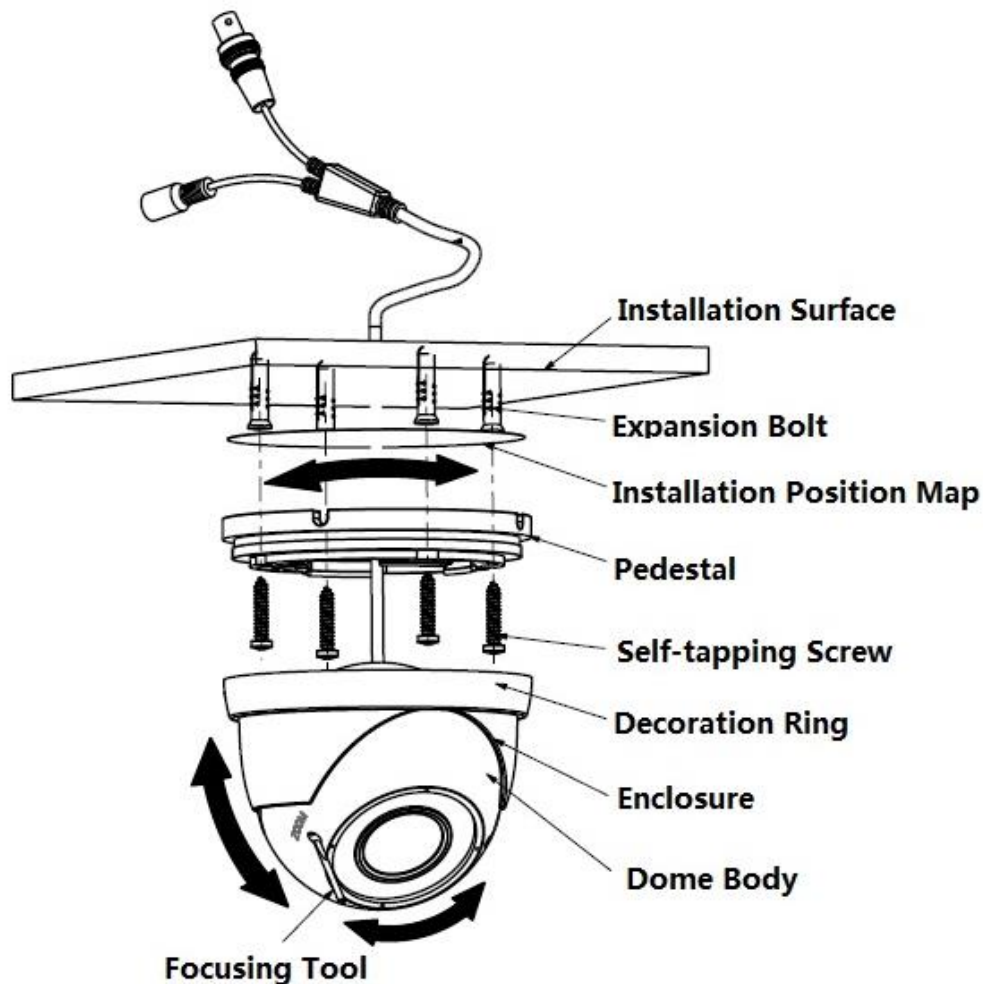


Figure 3-1

#### Step 1

Take the installation position map from the accessories bag, and stick it on the ceiling or wall according to the cable exit, dig four holes according to the instruction on the installation position map, then take out four expansion bolts from accessories bag and put them into the installation holes and fix them.

#### Step 2

Open decoration ring and take down enclosure and dome body

#### Step 3

Adjust the pedestal position according to the cable exit mode (ceiling/side), Pull the cable through the cable side exit at the installation surface and the pedestal (Please skip this step if you want to use ceiling exit mode). Line up the screw holes at the bottom of the pedestal to the holes of plastic expansion bolts in the installation surface. Put four self-tapping screws to expansion bolts and then secure firmly, and fix the pedestal on the installation surface, see

Figure 3-1 for the details.

#### Step 4

Aim the decoration ring together with enclosure and dome body up to the pedestal, pull the cable through the cable exit on the installation surface (Please skip this step if you want to use side exit mode), screw the decoration ring and fix the enclosure and dome body on the pedestal. Adjust the camera to an appropriate angle for monitoring according to the direction which is shown in Figure 3-1.

#### Step 5

Connect the video output port of the device cable to the back-end encoding device, and connect the power port of the device to power supply.

#### Step 6

After the image is displayed on the back-end encoding device, adjust the focusing nut which is inside of zoom adjustment hole and focus adjustment hole by focusing tool to make the image clear.

Now you have completed the device installation and cable connection.

You can use the terminal encode device to view the monitor video.

#### **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.**