

Specification

Model	NAC-HD-221F2.8
Image Sensor	1/2.9" SONY 2.4MP CMOS Sensor
Resolution	1080P
Signal System	PAL / NTSC
Minimum Illumination	0.001Lux/F1.2
S/N Ratio	More than 50dB
Synchronous System	Internal
IR Distance	20 Meters
IR Power On	Photodiode AUTO Control
Video Output	CVBS / CVI / TVI / AHD
Power/Current	DC12V(+/-10%)/400mA
Lens	Board Lens 2.8mm
Weather Proof	IP66
Dimension (mm)	Φ 95 x 63(H)
Weight (g)	400
Operating Conditions	-40~+50℃ RH95% MAX

Accessories list

Name	Number
Camera	1
User Guide	1

Notes:

Do not attempt to disassemble the camera. If the camera can not work, please contact local franchiser or our company.

NAC-HD-221F2.8

Fixed Dome Camera



Thank you for using our product.
Before providing power for the camera, please read this manual carefully before use.

We adopt the latest technical of sensor and driver. It owns the characters of high definition and stability, strong anti-jamming, rich and real color. Fixing and using this model are convenient too. It is very good for you to apply to your CCTV system.

Main Features

> Auto Gain Control (AGC)

Built-in auto gain control (**AGC**) circuit. The color camera can get high definition picture in low Lux condition.

> Auto Electronic Shutter (AES)

Built-in auto electronic shutter function. The color camera's AES speed can reach **1/100,000s**.

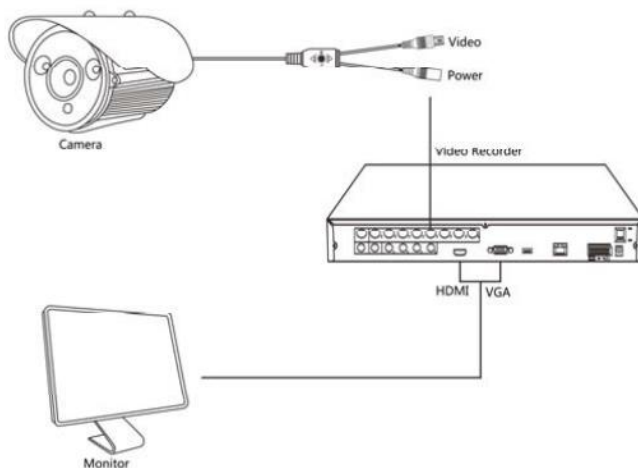
> Gama Characteristic

Camera Gama characteristic is **0.45**.

> Scanning Mode

NTSC or PAL mode.

Device connection



Safety instruction

1. Before using the camera, please read this manual carefully and keep it safely for later use.
2. Installation should be proceeded by professional service and follow manufacturer's instructions, do not dismantle without authorization.
3. In order to prevent sensor, do not expose lens to intense light source in long time.
4. Do not touch sensor directly. Please covers the dustproof cover when the camera is not being used.
5. Please use a dry soft cloth to clean the camera. If dirt difficult to clean, use detergent with water and wipe dry the camera.
6. Do not install camera under air conditioning's air gate, or else lens blur with condensation of moisture.
7. Please ensure that all electric power sources are turned off when not open, installation, clean, etc operation.
8. Please transporting, using and storing the camera in allowable temperature and humidity.
9. If the camera was broken, for example power cord or plug damaged, Splash liquid or foreign matter fall into camera, raining, wetting, etc can't work situation, please contact manufacturer or maintenance center (modify and maintenance without permission, you must be responsible for the problems).



Note:

- Power supply must pass safety certification, its output voltage, current, voltage polarity and operating temperature must match requirement of this equipment.
- Please install lightning protection devices or cut off the power in thunder and lightning conditions.
- To capture high-quality video and pictures, please make sure the network connection is stable and smooth.

Common Problems and Troubleshooting

> No Picture after providing power

May be the power supply voltage abnormality, please check the power supply voltage and pole whether exactitude. Please check all the connecting cable and monitors whether be connected correctly or not.

> The picture level direction have flowing interference ripples

May be caused by the power supply AC ripples, it need filter the wave of the power supply. Check the monitor and peripheral equipments used.

> The picture background color changes continuously

The fluorescent lamp's electromagnetic field cause color roll. This is proper phenomenon of the cameras. Reduce the fluorescent lamp numbers or increase the distance between the camera and the fluorescent lamps can improve it. Use power supply external sync. camera can solve it.

> The picture smear too mass

The power supply's voltage unstable. Connecting cables not connect correctly or have high impedance.



Note:

- Please note the camera's operating temperature and its using environment requirement. Avoid using the camera at too high or too low temperatures. The operating temperature is -30°C ~ $+60^{\circ}\text{C}$. (Recommendatory operating temperature is -10°C ~ $+50^{\circ}\text{C}$.)
- Do not mount the camera near by the radiator or heater.