

## TROUBLE AND SOLUTION

### 1. 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.

### 2. 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.

### 3. 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.

### 4. The picture smear too mass

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



#### Notes:

- 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 -10°C-50°C. (Recommendatory operating temperature is -5°C--40°C.)
- Never make the camera face the sun or bright object. Otherwise, it will damage the CCD.
- Do not mount the camera near by the radiator or heater.

## Packing List

| No | Name                 | Model | Number |
|----|----------------------|-------|--------|
| 1. | Waterproof IR Camera |       | 1      |
| 2. | User Guide           |       | 1      |

FC CE  
RoHS



Franchiser:

## 20m-IR Waterproof Camera

Berneer®

BN-1320/1420 Series



( Shape C )

#### NOTES

Before providing power for the camera, please read this User Guide in detail!

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

## INTRODUCTION

Congratulations on your purchase of this product. We adopt the latest SONY technical of sensor and driver. In addition, 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 yours CCTV system.

Please read this instruction manual carefully to ensure proper use of the product.

## BRIEF OF PRODUCT


- \* **SONY/SHARP CCD is optional**
- \* **Horizontal resolution 540/480/450/420 TV Lines**
- \* **Board mount lens 3.6/6/8/12mm**
- \* **Φ5×23PCS IR LED, IR distance: 20 meters**
- \* **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.
- \* **Night-time Vision**  
Light below 10 Lux, CDS automatically turn on. Adopt TaiWan high quality IR LED, having very good night-vision effect.

## Model


|                      |   |
|----------------------|---|
| <b>BN-1320Q/SN-C</b> | 540 TV Line, 1/3" SONY Super HAD CCD, 01Lux, NEXTCHIP DSP |
| <b>BN-1320H/SS-C</b> | 480 TV Line, 1/3" SONY Super HAD CCD, 01Lux, SONY DSP     |
| <b>BN-1320H/SN-C</b> | 480 TV Line, 1/3" SONY Super HAD CCD, 01Lux, NEXTCHIP DSP |
| <b>BN-1320E/SN-C</b> | 450 TV Line, 1/3" SONY Super HAD CCD, 01Lux, NEXTCHIP DSP |
| <b>BN-1320D/SS-C</b> | 420 TV Line, 1/3" SONY Super HAD CCD, 01Lux               |
| <b>BN-1420D/SS-C</b> | 420 TV Line, 1/4" SONY Super HAD CCD, 05Lux               |
| <b>BN-1320D/HH-C</b> | 420 TV Line, 1/3" SHARP CCD, 05Lux                        |
| <b>BN-1420D/HH-C</b> | 420 TV Line, 1/4" SHARP CCD, 05Lux                        |

## Specification

|                              |                         |   |
|------------------------------|-------------------------|---|
| <b>Horizontal Resolution</b> |                         | 540/480/450/420 TV Lines Available                  |
| <b>Electronic Shutter</b>    |                         | PAL=1/50 ~ 1/100,000 sec, NTSC=1/60 ~ 1/100,000 sec |
| <b>Pixel</b>                 | <b>540/480 TV Lines</b> | PAL: 752×582, NTSC: 768×494 (H×V)                   |
|                              | <b>450/420 TV Lines</b> | PAL: 500×582, NTSC: 510×492 (H×V)                   |
| <b>Lens</b>                  |                         | 3.6mm(6mm,8mm,12mm) board lens                      |
| <b>IR LED Wave</b>           |                         | 850nm   |
| <b>IR Distance</b>           |                         | 20 meters   |
| <b>Gama Characteristic</b>   |                         | 0.45  |
| <b>Power Supply</b>          |                         | DC 12V  |
| <b>Power Consumption</b>     |                         | 225~295mA   |
| <b>Dimension</b>             |                         | 115×55×59.5mm (L×W×H)                               |
| <b>Net Weight</b>            |                         | 0.305 kg  |
| <b>Operating Temperature</b> |                         | -10~ +50℃ (Relative Humidity:95% max)               |



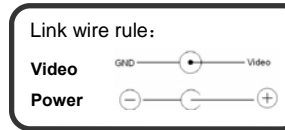
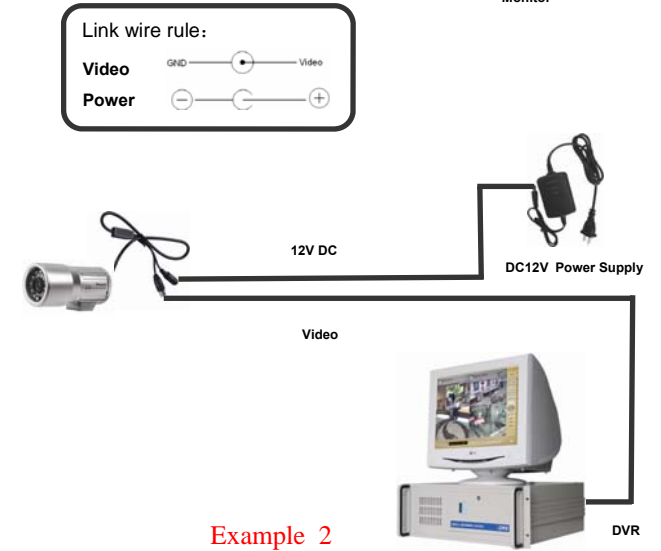
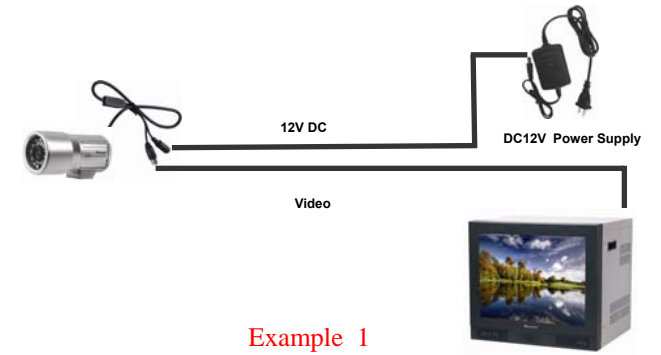
**CAUTION:**  
**RISK OF ELECTRIC. DO NOT OPEN**



**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER OR BANCK NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO OUALIFIED SERVICE PERSONNEL.**

**CAUTION: To prevent electric shocks and risk of fire hazards, do NOT use other than specified power source.**

## CONNECTING



### Notes:

- The power supply must through safe attestation. Its output voltage、current、voltage polarity and operating temperature must match the camera's requirement.
- When using the camera in the thunderbolt condition, please note to mount Anti-thunder device or put off the power supply plug and cable.
- In order to capture high quality pictures, the power supply's cable and video output cable should not be too long.