

# Specifications

Model	CB-2020IR
Pick Up Element	1/3" CMOS High Resolution
Effective Picture Elements ( H*V )	NTSC:768(H) × 494(V)
Horizontal Resolution	600 TV Lines
S/N Ratio	More than 48dB
Clock Frequency (MHZ)	NTSC:19.0699
Scanning System	2:1 interlace
Minimum Illumination	0 Lux (with IR LED ON)
Synchronous System	Internal, Negative sync.
Auto Electronic Shutter	NTSC:1/60s~1/100,000s
Gamma Characteristic	0.45
IR Project Distance	13 Meters ( with 20 Units Infrared LED)
IR Status	Under 10 LUX by CDS
IR Power On	CDS Auto Control
Video Output	1Vpp,75 Ω
Auto Gain Control	Auto
Power/Current	12V DC(±10%) / 500mA
Lens	3.6 mm
Dimension (mm)	55(W) × 55(H) x 160(D)
Water Resistance	IP66
Weight (g)	330
Storage Temperature	-30°C ~ +60°C
Operating Temperature	-10°C ~ +45°C

# Packing List

No.	Name	Model	Number
1	Aluminum Bullet Night Vision IR Color Camera	CB-2020IR	1
2	User Guide	CB-2020IR	1

DISTRIBUTED BY :



**CB-2020IR**  
Bullet Camera

- ▶ 600 TV Lines Resolution
- ▶ Fix Lens 3.6 mm
- ▶ Outdoor - Weatherproof
- ▶ Night Vision 20 LED Infrared
- ▶ Anti-cutting Bracket



**Notes:** Before providing power for the camera, please read this User Guide carefully!

**⚠ DO NOT** attempt to disassemble the camera if is not working, please contact your local franchiser or our company. This will void the warranty of the product.

## Brief of the product

### ► Sensor (CMOS)

Adopt 1/3" CMOS High Resolution Sensor.

### ► 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.

### ► Gamma Characteristic

Camera Gamma characteristic is 0.45.

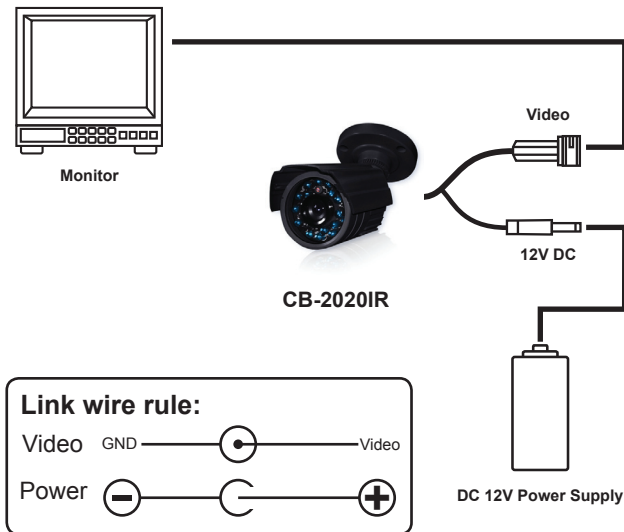
### ► Scanning Mode

NTSC mode.

### ► Night-time Vision

0 LUX with IR LEDs ON. High quality IR LED, having very good night-vision effect.

## Connecting



## 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 lamps 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.

## Introduction

Congratulations on your purchase of this product. This User Guide suits **CB-2020IR** series product. We adopt the latest SONY technical of sensor and driver. The most attractive characteristics are vandal-proof and ratable, and widely applicable to day & night, indoor & outdoor. 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.



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



**CAUTION:**  
TO REDUCE THE RISK OF ELECTRIC SHOCK  
DO NOT REMOVE COVER OR BACK. **DO NOT REPLACE**  
DAMAGE PARTS BY YOURSELF. REFER SERVICING.

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



### 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.



### 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 to 50°C. (Recommendatory operating temperature is -5°C to 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.