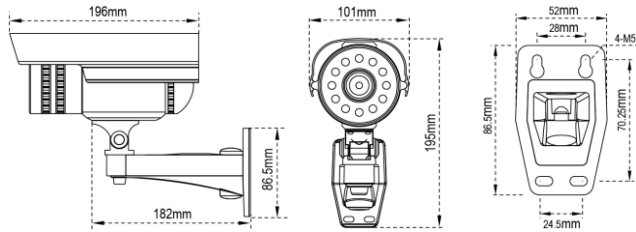
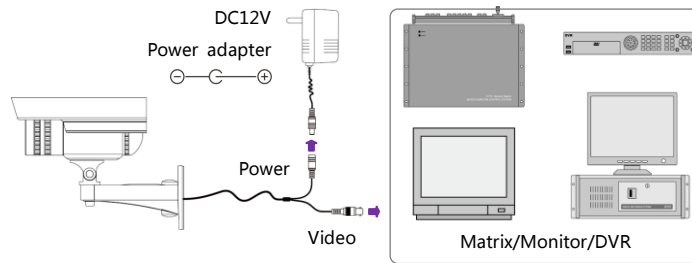


## DIMENSION



## CONNECTION



## 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 horizontal direction has up and down 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' 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 voltage of power supply is unstable.
  - Connecting cables not connect correctly or have high

impedance.

- Night vision picture poor
  - This case is usually caused by the dust on front-cap glass, please wipe with clean soft cloth

## SPECIFICATIONS

<b>Model</b>	<b>BN-133QLPR</b>
Image Sensor	1/3" Sony Super HAD II CCD
Pixel	PAL: 52x582(HxV), NTSC: 768x494(H xV)
Horizontal Resolution	540 TV Lines
Day/Nigh Function	Manual/Auto(IR Cut Removable Filter)
Min. illumination	0.01Lux
S/N Ratio	> 48dB
Electronic Shutter	PAL=1/50 ~ 1/100,000s NTSC=1/60 ~ 1/100,000s
Lens	9~22mm varifocal fixed iris lens
IR Distance	10 meters
IR Status	Light below 3 Lux, CDS automatically turn on
BLC	ON
AGC	OFF
White Balance	Auto
Video Output	1.0Vp-p,75Ω
Sync System	Internal sync
Power Supply	DC12V
Power Consumption	<170mA
Dimension	270x101x95mm ( LxWxH )
Weight	1.25kg
Working Temperature	-10°C ~ 50°C (Relative Humidity: 95% max.)

## PACKING LIST

No.	NAME	Model	Number
1	Camera	BN-133QLPR	1
2	User manual		1
3	Certificate		1
4	Warranty Card		1

# License Plate Recognition Camera



- ✦ 1/3"SONY Super HAD II CCD
- ✦ Horizontal Resolution: 540TVL
- ✦ 9-22mm varifocal fixed iris lens
- ✦ Day/Night with Mechanically removed IR cut filter
- ✦ IR distance: 10 meters, IR LED brightness adjustable
- ✦ Catch the number on the license plate clearly
- ✦ Suitable for catching license plate at car park or underground garage entrance/exit



## BN-133QLPR



## PRECAUTIONS

### Safety-----

- If any liquid or solid object falls into the cabinet, please unplug the unit and have it checked by the qualified personnel before operating it any further.
- Keep adequate air circulation to prevent internal heat built up. Do not place the unit on unaired surfaces of objects (rugs, blankets, etc), or near to materials (curtains, draperies) that may block the ventilation holes.
- Working in lightning environment, please install lightning-proof device or unplug power plug & line, in order to prevent camera from being damaged by lightning or electric surge.
- Please care about camera's operating temperature and operating environment, not using in over-hot or over-cold environment. The common operating temperature is -10°C~50°C, but our suggestion is -5°C~40°C.

### Installation-----

- Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.
- The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.
- Camera's power supply must be certificated safe, and voltage output, current, voltage direction as well as operating temperature must meet requirements of camera
- To keep camera stably working and getting good picture, please make power line and video line not beyond certain length, otherwise picture may be impacted by the weakness of camera voltage & video signal, which is caused by loss increasing in line.

### Cleaning-----

- Clean the unit with a slightly damp soft cloth.
- Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the unit.
- Retain the original carton and packing materials for safe transport of this unit in the future.

## IMPORTANT SAFEGUARDS

1. Before installing, please carefully read all safety and operating instructions
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. To avoid fire or electric shock, please use certificated power supply
6. Before installing, please carefully check whether voltage input

complies with voltage labeled on body

7. Avoid being struck directly by sun or other strong lights, otherwise CCD will be damaged
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that product heat.
9. Handle with care! Avoid intensive hit or shake
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where cable exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. To avoid electric shock or other dangers, please do not disassemble body, no component repaired by customer
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. **Caution - these servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.**

## FEATURES

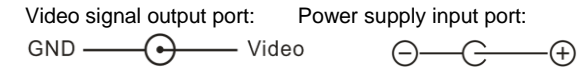
- 1/3"SONY Super HAD II CCD
- Horizontal resolution: 540 TV Lines
- 9~22mm varifocal fixed iris lens
- External adjustment for zoom and focus
- Day/Night with Mechanically removed IR cut filter
- IR LED: Φ8×12PCS, IR distance: 10 meters
- IR LED brightness adjustable
- Waterproof, dust proof up to IP66 standard
- Catch the number on the license plate clearly
- Suitable for catching license plate at car park or underground garage entrance/exit

## INSTALLATION

1. Choose best position for camera, and then fix it on the wall.  
Suggest 1: Installing camera in front of the vehicle with 6-8 meters distance and 2-3 meters height.  
Suggest 2: Installing camera in side-front of the vehicle (about 30° included angle) with 4-8 meters distance and 2 meters height to the ground (or keep same height with vehicle lamp)  
Note: Because of the difference between application environment and monitored object, it is recommended that the user do actual test according to the actual situation of the scene in order to choose the best

installation location and obtain the best effect of license plate recognition.

2. Connect BNC of camera's video out with BNC of video line and connect DC12V with DC JACK of the camera



3. Adjust the camera to aim at the plate of vehicles.
4. Power to the camera, to observe the image on the monitor.
5. Adjust the camera zoom and focus:
  - 1) Open back-cap (Figure 1)
  - 2) Flathead Screwdriver turns both knobs of zoom and focus: adjusting zoom to the wanted, then adjusting focus until picture is clear. (Figure 1 and Figure 2)
  - 3) Tighten back-cap. (Figure 5)



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

6. Adjust brightness of IR LED
  - 1) Open back-cap (Figure 1)
  - 2) Cross Screwdriver turns potentiometer to proper brightness of IR lamp. (Figure 4)
  - 3) Tighten back-cap. (Figure 5)

**Note: focus or IR brightness adjustment finished, please fasten back-cap to avoid burning camera by water input**