

# Network Camera

## Installation Manual

Before operating the unit please read this manual thoroughly and retain it for future reference.

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### Welcome

Thank you for purchasing our IP camera. This Quick Reference guide describes how to install and configure your RedLeaf IP camera. Before you start to install and use your new camera, please read these instructions carefully. Please keep this start guide well for future reference. Please open the accessory bag to check the items one by one in accordance with the list below. Contact your local retailer ASAP if something is missing or damaged in the bag. For the most up-to-date information about this product, visit the official RedLeaf website at [www.redleafsecurity.net](http://www.redleafsecurity.net)

**▲ Before your operation please read the following instructions carefully.**

#### 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.

**▲ Please note: Do not connect these two power supplying sources to the device at the same time; it may result in device damage!**

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

We are not liable for any problems caused by unauthorized modification or attempted repair.

#### 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.

#### 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 IP camera should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

Please keep it away from the electromagnetic radiation object and environment.

Please make sure the CCD (CMOS) component is out of the radiation of the laser beam device. Otherwise it may result in CCD (CMOS) optical component damage. Please keep the sound ventilation.

Do not allow the water and other liquid falling into the camera.

Thunder-proof device is recommended to be adopted to better prevent thunder.

The grounding studs of the product are recommended to be grounded to further enhance the reliability of the camera.

#### 6. Daily Maintenance

Please shut down the device and then unplug the power cable before you begin daily maintenance work.

Do not touch the CCD (CMOS) optic component. You can use the blower to clean the dust on the lens surface.

Always 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 dust proof cap to protect the CCD (CMOS) component when you do not use the camera.

#### 7. 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.

Accessory Name	Amount
IPC Unit	1
C/CS adapter	1
Quick Start Guide	1
CD	1

## Framework

### 1 FrameWork 1.1 Rear Panel

This series IP camera rear panel is shown as below. See -Figure 1-1.

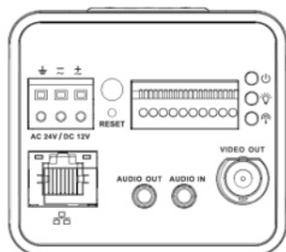


Figure 1-1 The rear panel with the network port

For fiber input See - Figure 1-2

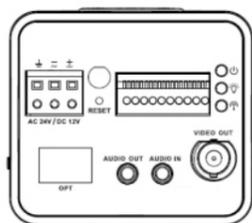


Figure 1-2 The rear panel with the 100M fiber port

Please refer to the following sheet for detailed information.

Interface Name / Description	Connector	Function
VIDEO OUT	Video output port	BNC Output analog video signal, can connect to TV monitor to view video
AC 24V/ DC 12V	Power Port	Power Port. Input 12V DC or AC 24V
STATUS indication light	Red light	System boot up-red light is on system upgrades-red light flashes System resets-red light flashes
	Green light	Normal working status-green light is on. Display record status: record -green light flashes
	Yellow light	Detect the wireless device-yellow light is on
IN	Alarm input port	I/O port Alarm input port to receive the signal from the external alarm device.
NO	Alarm	Alarm output port.
C	Output port	To output alarm signal to the alarm device. No: Normal open alarm output end. C: alarm output public end.
G	GND	Alarm input ground end
A	Rs485 port	RS485 A port, control external PTZ
b		RS485 B port, control external PTZ
RX	Rs232 port	RS232_RX, Rs232 receive end.
TX		RS232_TX, Rs232 COM send out end.
G	GND	Rs232 ground end
NA	IR light port	External IR light signal control port
RESET	RESET button	Restore factory default setup. when system is running normally press the RESET button for at least 5seconds, system can restore factory default setup.

## Framework

AUDIO OUT	Audio output port	Audio output 3.5mm JACK port.	output audio signal to the passive device such as earphone.
AUDIO IN	Audio input port	Audio input 3.5mm JACK port.	input audio signal from device such as pick-up.
LAN	Network port	Ethernet port	connect to standard Ethernet cable. support PoE function.
OPT	100M fiber port	155M signal fiber dual-direction	Transmit 100M Ethernet data.
SD	SD card port		Connect to SD card. Note: When you install the SD card, please make sure current card is not in write mode and then you can install it to the camera. When you remove the SD card, please make sure current card is not in write mode, otherwise it may result in data loss or card damage. Before hot swap, please stop record operation
	GND		please make sure the device is securely earthed to prevent the thunderstorm strike

### 1-3 Side panel

Please refer to the following interface for side panel dimension information. The unit is mm. See - Figure 1-3.

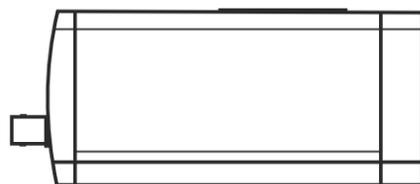


Figure 1-3

### 1-4 Front Panel

Please refer to the following interface for the front panel information. The unit is mm. See -Figure 1-4.

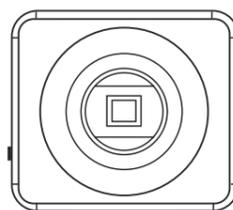


Figure 1-4

## Installation

### 2-1 Lens installation

#### 2-1-1 Auto Aperture Lens

Please follow the steps listed below for auto aperture lens installation. See figure 2-1 and 2-2.

- Remove the CCD protection cap of the device, and then line up the lens to the proper installation position. Turn clockwise until the lens is fixed firmly.
- Insert the lens cable socket to the auto lens connector in the side panel.

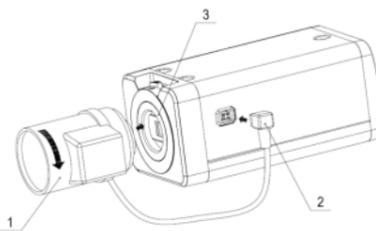


Figure 2-1

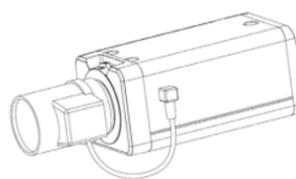


Figure 2-2

#### 2-1-2 Manual Lens

##### Install C type lens:

- Remove the CCD protection cap from the device.
- Install the C/CS adapter to the camera. Turn clockwise to secure against the focusing ring firmly.
- Line up the C lens to the installation position of the C/CS adapter. Turn clockwise to fix the lens.

## Installation

- Use slotted screwdriver to fasten the screw near the focusing ring and then turn counter clockwise to move the focusing ring out for several millimeters. Now you can focus manually and check the video is clear or not. If you can not see the clear video, you can adjust via the flange-back.
- After you completed the focus setup, use the slotted screwdriver to fix the screw firmly. Fasten the focusing ring. Now the installation completed.

### 2-1-3 Install CS type lens

- Remove the image sensor protection cap from the device.
- Line up the CS lens to the lens installation position of camera focusing ring. Turn clockwise to fix the lens.
- Use slotted screwdriver to fasten the screw near the focusing ring and then turn counter clockwise to move the focusing ring out for several millimeters. Now you can focus manually and check the video is clear or not. If you can not see the clear video, you can adjust via the flange-back.
- After you completed the focus setup, use the slotted screwdriver to fix the screw firmly. Fasten the focusing ring. Now the installation completed.

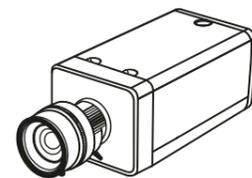


Figure 2-3

### 2-1-4 Remove Lens

Please follow the steps listed below to remove lens. The interface is shown as in -Figure 2-1.

- Turn the lens counter clockwise and then remove it from the camera.
- Unplug the auto lens cable socket from the auto lens connector. If you are using the manual aperture lens, please skip to the following step.
- If there is no lens, please put the image sensor protection cap back to protect the image sensor.

### 2-2 SD Card

#### 2-2-1 Installation

Please follow the steps listed below to install SD card. The interface is shown as in -Figure 2-4 and -Figure 2-5.

- Use the screwdriver to loosen the SD card protection screw in the rear panel, and then remove the SD card protection cap from the camera.
- Install the SD card to the camera according to the proper installation position.
- Put the SD card protection cap back.
- Use the screwdriver to fix the SD card protection cap screw firmly to secure the SD card protection cap in the camera.

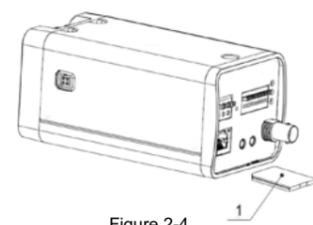


Figure 2-4



Figure 2-5

#### 2-2-2 Remove

Please follow the steps listed below to remove SD card. The interface is shown as -Figure 2-6

- Use the screwdriver to loosen the screw of SD card protection cap in the rear panel. Remove the cap from the camera.
- Follow the SD card direction to remove the SD card.
- Insert the SD card protection cap.
- Use the screwdriver to fix the screw to secure the protection cap. and -Figure 2-6.

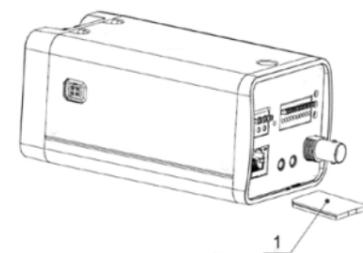


Figure 2-6

## Installation

### 2-3 I/O Port

#### 2-3-1 Install and Remove Cable

Please follow the steps listed below to install the cable. See -Figure 2-7.

Use the small slotted screwdriver to press the corresponding button of cable groove. Insert the cable into the groove and then release the screwdriver.

#### 2-3-2 Remove Cable

Please follow the steps listed below to remove the cable.

Use the small slotted screwdriver to press the corresponding button of cable groove. Remove the cable out of the groove and then release the screwdriver.

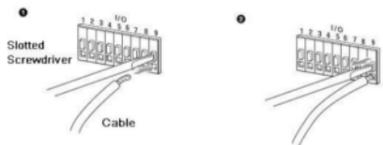


Figure 2-7

#### 2-3-3 Alarm Input and Output

Please refer to the following figure for alarm input information. See -Figure 2-8

Alarm input: When the input signal is idle or grounded, the device can collect the different statuses of the alarm input port. When the input signal is connected to the 5V or is idle, the device collects the logic "1". When the input signal is grounded, the device collects the logic "0".

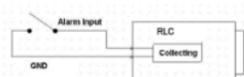


Figure 2-8

Please refer to the following figure for alarm output information. See -Figure 2-9

Port NO and Port C composes an on-off button to provide the alarm output.

If the type is NO, this button is normal open. The button becomes on when there is an alarm output. If the type is NC, this button is normal off. The button becomes off when there is an alarm output.

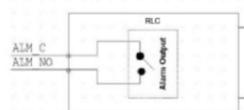


Figure 2-9

Please refer to the following figure for external IR light information. See -Figure 2-10

IR synchronization input signal. When the external IR light is on, the signal cable from the board outputs the 3.3V/1mA. It outputs the 0V when the IR light is off.

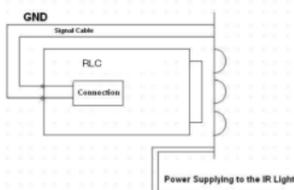


Figure 2-10

## Quick Configuration Tool

### 3-1 Overview

Quick configuration tool can search current IP address, modify IP address. At the same time, you can use it to upgrade the device. Please note the tool only applies to the IP addresses in the same segment.

### 3-2 Operation

Double click the "ConfigTools.exe" icon; you can see an interface is shown as in -Figure 3-1. In the device list interface, you can view device IP address, port number, subnet mask, default gateway, MAC address and etc.



Figure 3-1

Select one IP address and then right click mouse, you can see an interface is shown as in -Figure 3-2.

#### Note:

You can set the IP address, subnet mask and gateway for the RLC and PC. Please note RLC IP address and PC IP address shall be in the same network segment if there is no router. RLC default IP address is 192.168.1.108. If there is a router, please set the corresponding gateway and subnet mask.

The factory default user name is admin and password is admin. For security reasons, please modify your password after you first login.

For detailed WEB operation, please refer to the RLC Web Operation Manual in the resource CD.



Figure 3-2

Select the "Open Device Web" item; you can go to the corresponding web login interface. See - Figure 3-3



Figure 3-3

If you want to modify the device IP address without logging in the device web interface, you can go to the configuration tool main interface to set.

In the configuration tool search interface (Figure 3-3), please select a device IP address and then double click it to open the login interface. Or you can select an IP address and then click the Login button to go to the login interface. See -Figure 3-4.

In -Figure 3-5, you can view device IP address, user name, password and port.

Please modify the corresponding information to login. Please note the port information here shall be identical with the port value you set in TCP port in Web Network interface. Otherwise, you can not login the device.

If you are using device background upgrade port 3800 to login, other setups are all invalid.

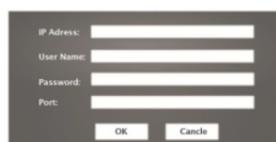


Figure 3-5

After you logged in, the configuration tool main interface is shown as below. See 3-6

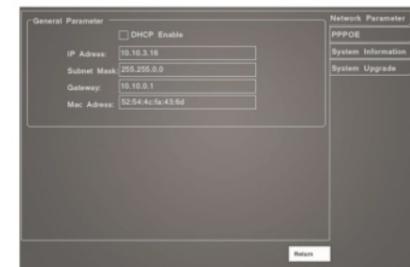


Figure 3-6

For detailed information and operation instruction of the quick configuration tool, please refer to the Quick Configuration Tool User's Manual included in the resources CD.

## Web operation

### 4 Web Operation

This series IPC product support the Web access and management via PC. Web includes several modules: monitor channel preview, system configuration, alarm and etc.

#### 4-1 Network Connection

Please follow the steps listed below for network connection.

- Make sure the IPC has connected to the network properly.
- IPC IP address and PC IP address shall be in the same network segment. IPC default IP address is 192.168.1.108. If there is router, please set the corresponding gateway and subnet mask.
- Use order ping \*\*\*.\*\*\*.\*\*\*.\*\*\*(\* IP camera address) to check connection is OK or not.

#### 4-2 Login and Logout

Open IE and input IP camera address in the address bar.

For example, if your camera IP is 192.168.1.108, then please input http:// 192.168.1.108 in IE address bar. See -Figure 4-1



Figure 4-1

The login interface is shown as below.

See -Figure 4-1

Please input your user name and password. Default factory name is admin and password is admin.

#### Note:

For security reasons, please modify your password after you first login. see - Figure 4-2



Figure 4-2

If it is your first time to login in, system pops up warning information to ask you whether install control web rec. cab or not after you logged in for one minute. Please click OK button, system can automatically install the control. When system is upgrading, it can overwrite the previous Web too. If you can't download the ActiveX file, please check whether you have installed the plug-in to disable the control download. Or you can lower the IE security level. See -Figure 4-3 and 4-4.

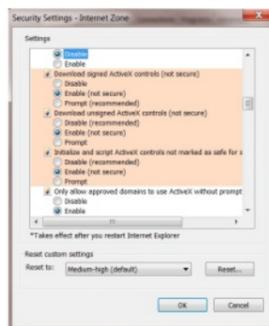


Figure 4-3



Figure 4-4

After you logged in, you can see the main window. See - figure 4-5.

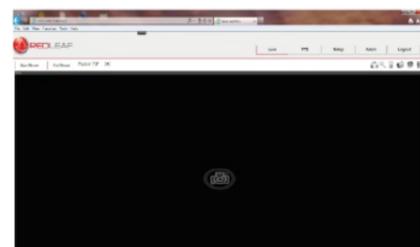


Figure 4-5

Please refer to the Web Operation Manual included in the resource CD for detailed operation instruction.

## Appendix Toxic or Hazardous Materials or Elements

Component Name	Toxic or Hazardous Materials or Elements					
	Pb	Hg	Cd	CrVI	PBB	PBDE
Circuit Board Component	○	○	○	○	○	○
Device Construction Material	○	○	○	○	○	○
Wire and Cable	○	○	○	○	○	○
Packing Components	○	○	○	○	○	○
Accessories	○	○	○	○	○	○

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

#### Note:

- This quick start guide is for reference only. Slight difference may be found in user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks 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.