IC REALTIME

HD IR 4MP ANPR Varifocal Bullet Network Camera

Quick Start Guide

Table Of Contents

IMPORTANT SAFEGUARDS AND WARNINGS

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 / 24V AC. This series product supports PoE too. 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.

Transportation Security

Care must be given to avoid heavy stress, violent vibration or water damage during transportation, storage and installation.

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.

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.

Environment

This series network 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. Lightning-proof device is recommended to be adopted to better prevent lightning damage. The grounding studs of the product are recommended to be grounded to further enhance the reliability of the camera.

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

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.

IC REALTIME

1A. OVERVIEW

This series network camera integrates the traditional camera and network video technology. This series network camera uses standard H.264 and H.265 video compression technology, which maximizes the video storage and quality. It powers with either 12VDC, 24VAC or PoE.

This camera features Automatic number-plate recognition (ANPR). This technology utilizes optical character recognition on images to read vehicle license plates. It is highly recommended to be paired with an IC Realtime ANPR supported NVR for License plate and Motor Vehicle search and extraction.

Please note the Capture Parameters of the ANPR camera when considering an install location. For example, the specifications for a IPEL-B40V-LPR1 are shown below.

Capture Distance	26.25 ft–65.62 ft (8 m–20 m)
Detection Width	19.69 ft–26.25 ft (6 m–8 m)

1B. Camera Interface

See Figure 1-1. Picture may vary depending on camera model.

1. Audio Out: RCA port, provides audio signal to speaker, etc.
2. Alarm output: Connects to barriers and alarm output devices, such as alarm lights.
3. Alarm input: Connects to devices such as vehicle detector, IR detector, induction coil, and more
4. RS-485: Connects to displays and other external devices
5. Wiegand interface: Connects and sends number plates to access controller.
6. LAN- RJ45 Ethernet port for data. Also supports PoE.
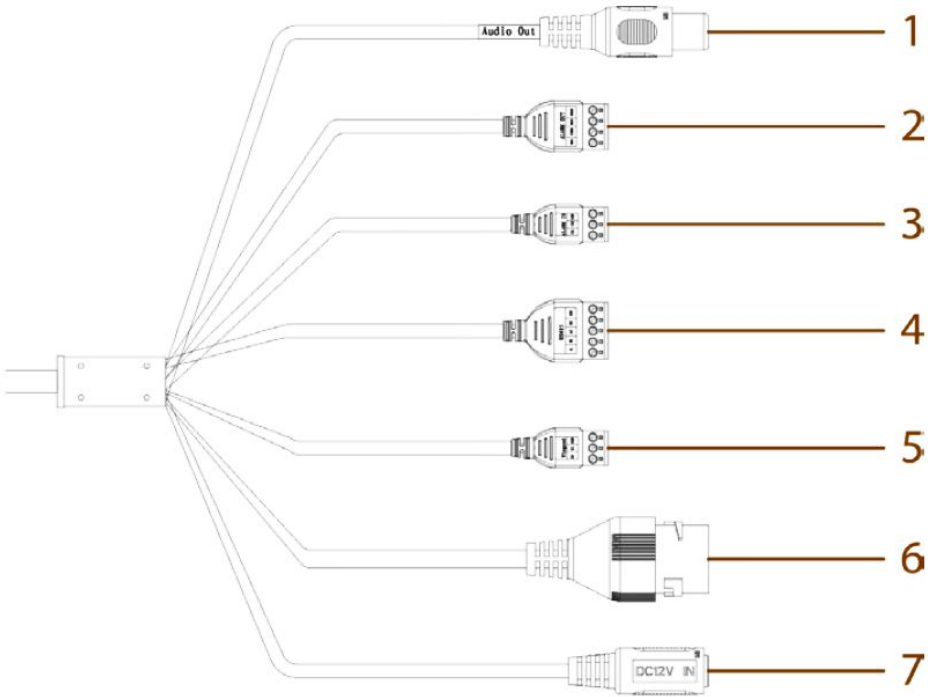7. 12V DC Power Input: Optional power source. Check camera specifications for power requirements.

Figure 1-1

IC REALTIME

2A. INSTALLATION STEPS

- *Install the camera between 3-19 feet high (1-6 meters) and no more than 65 feet from the target license plate.*
- *The optimal height is between 4-6 feet.*
- *The optimal distance is 30-50 feet.*
- *While the camera is capable of capturing plates up to 75 mph, the recommended speed is 15-25mph.*
- *The 4MP models feature an integrated junction box for an easy mounting solution.*

Step 1 Drill holes on the wall according to the holes on the junction box in Figure 2-1.

Step 2 Use 3 ST6.3 expansion screws to fix junction box to the wall.

Step 3 Tighten the screws on the end of the camera to affix it to the junction box.

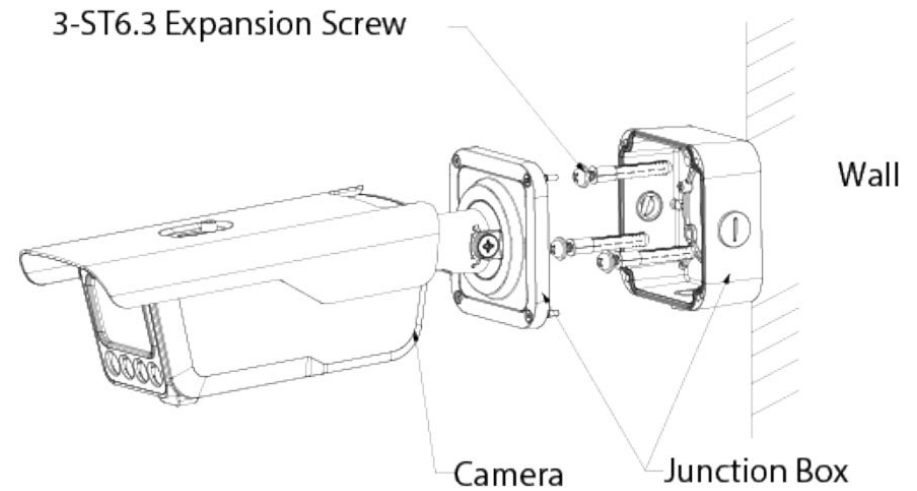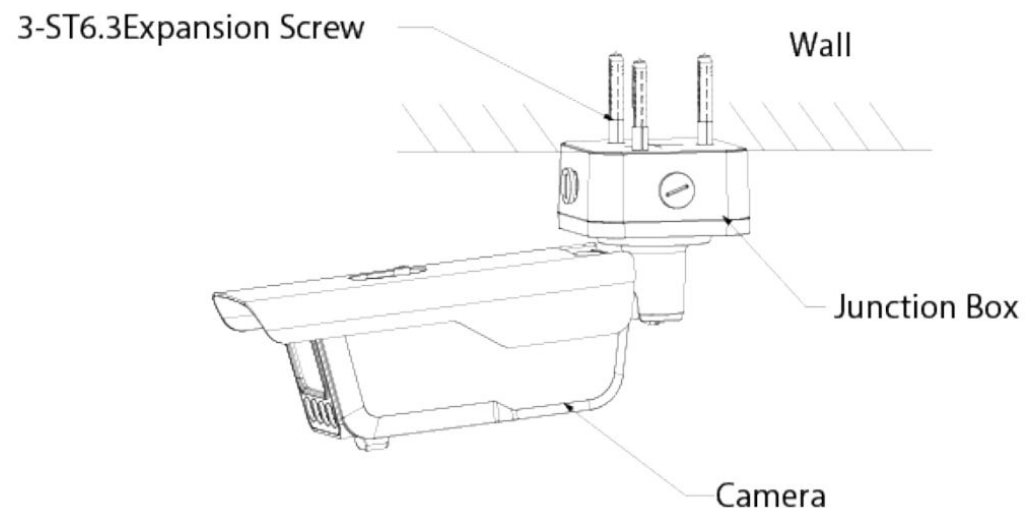For Ceiling Mount option, see Figure 2-2.

Figure 2-1

Figure 2-2

IC REALTIME

2B. RESTORE FACTORY DEFAULTS/ INSTALL SD CARD

Important: Make sure the device is powered when attempting to press RESET button.

Step 1 Use the supplied hex wrench to unscrew the access panel below the camera. Skip to Step 3 if only installing SD card.

Step 2 Slightly press the RESET button for 15-30 seconds to complete the reset function. (#2 on Figure 2-3). The camera will reboot when the reset process is complete.
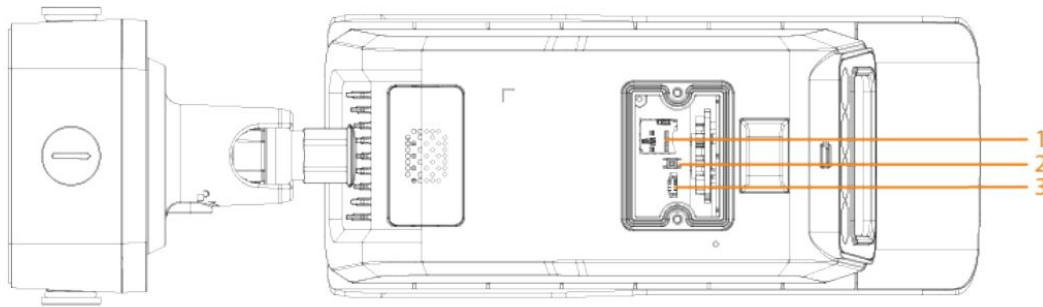

Figure 2-3

Step 3 (If installing SD Card) Adjust the Micro SD Card to the proper direction shown in as #1 on Figure 2-3. Close the access panel, tighten down the locking screw and reinstall camera.

3A. OVERVIEW

The IP Config tool is used to search the local network for IC Realtime devices as well as modify the IP addresses and upgrading firmware.

This software can be downloaded at:
https://icrealtime.com/downloads under *Desktop Utility Apps*

3B. OPERATION

Double click the "ConfigTools.exe" icon to run. The interface will be displayed as shown in Figure 3-1. Click on the blue circle icon with the two arrows to refresh and scan the network.
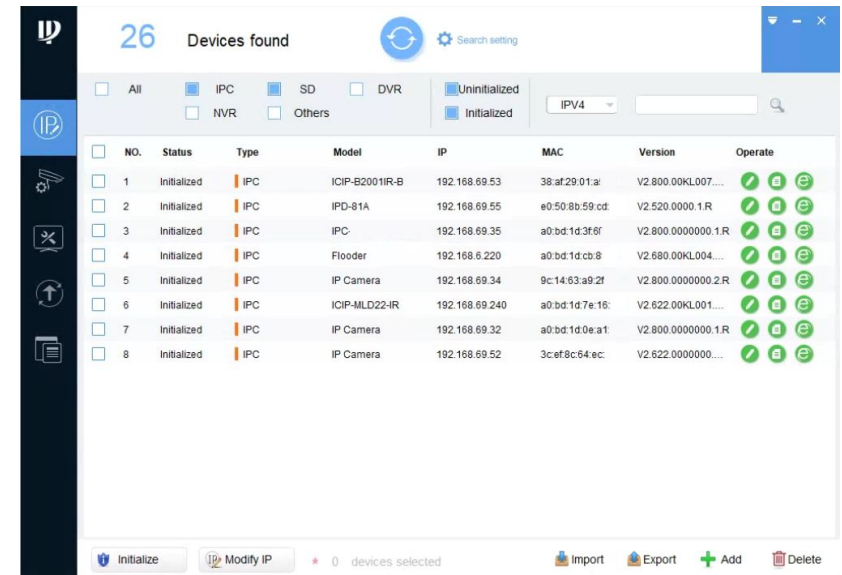

Figure 3-1

IC REALTIME

4A. Web Operation: ANPR Setup

- **Make sure the ANPR camera is powered and installed as per the requirements noted on 2A.**
- **Have a PC on the same network as the ANPR camera.**

Step 1 Login to the ANPR Camera via web browser and initialize the camera if you have not done so yet. (The camera is set to DHCP by default. If the camera is not plugged into a network with a DHCP pool, the IP will be 192.168.1.108)See Figure 4-1.
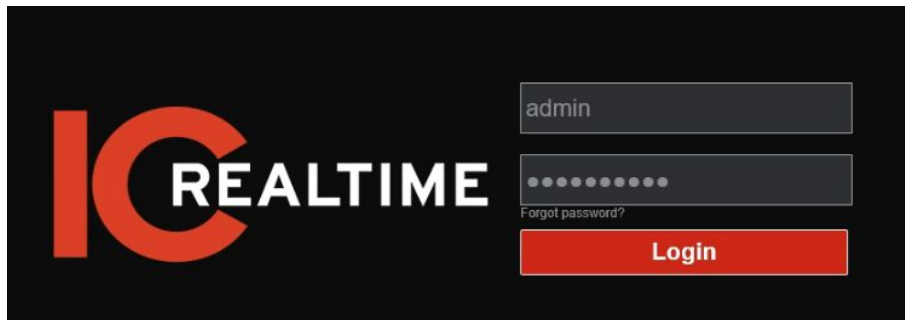

Figure 4-1

Step 2 Click on the LPR Setup tab at the top section

Step 3 Set the time and date if it is incorrect. Under "Plate Algorithm", make sure "North American ALG" is selected then click confirm.

Step 4 For best results, make sure the plates to be captured are in the center of the screen. The vehicle should take up most of the FOV to acquire the highest resolution capture of the License Plate. You can use the zoom and focus controls as needed. See Figure 4-2 for reference in the following steps.
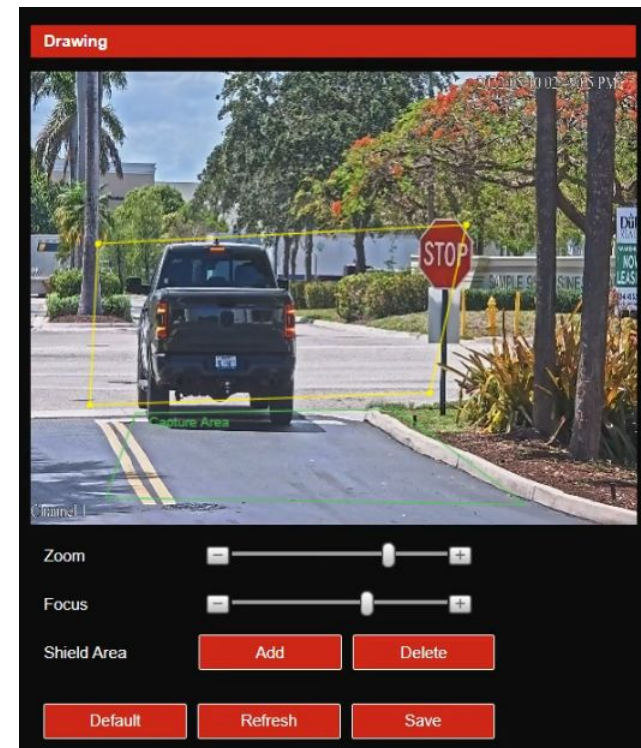

Figure 4-2

Step 5 In the drawing section, a green box will be shown. This is the capture area, in which license plates entering this zone will be captured. Click and drag the four corners until you have created an appropriate capture zone. You can also move the area by clicking and holding one of the lines and dragging the box to the desired location

Step 6 You can also set ignore areas to help eliminate false positives from captures outside of your point of interest. For example, if there is traffic from a road perpendicular to the plate capture direction, a phone number on the side of a commercial vehicle may be captured as a plate. To enable the ignore area, click "Add" on the Shield area and draw a box in the image as desired (This box is colored white). Make sure the shield area does not overlap with a capture area.

2A. ANPR Setup (Continued)

Step 8 Any vehicle which has triggered the ANPR will show up under "Realtime Display" (Figure 4-3) section. This will help you configure the rules so that the passing vehicles can be captured reliably.

* When using an HTML5 browser, any passing cars that are captured under Realtime Display will be automatically downloaded. We recommend you open this picture using software such as Paint. From there, you can sure the selection tool to create a box around the plate. The minimum width for the license plate should be 140 pixels. See the Figure 4- 4 for an example
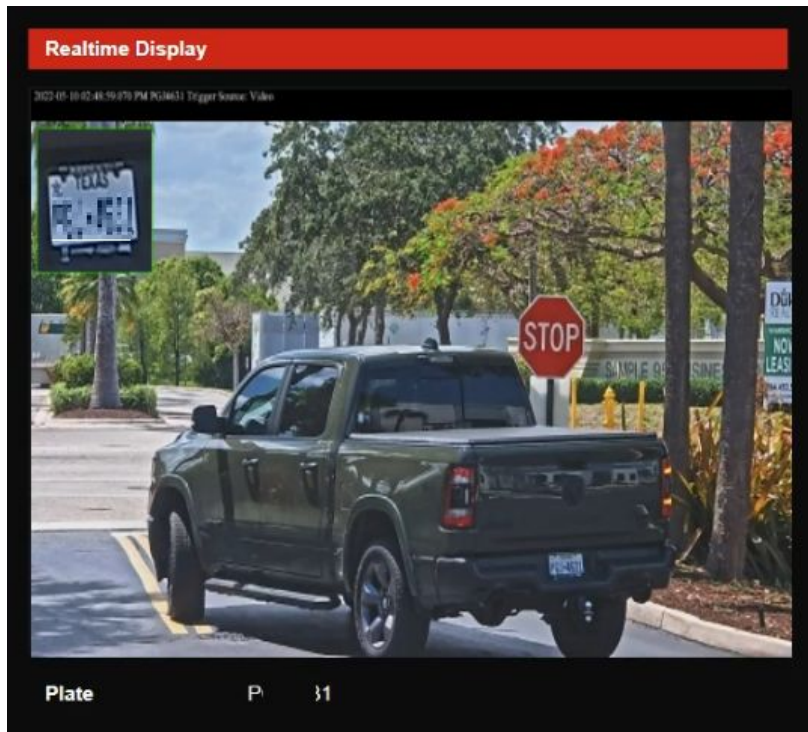

Figure 4-3

Step 9 Click "Save" when finished to complete the setup. Click the icon on the upper right to exit the setup.
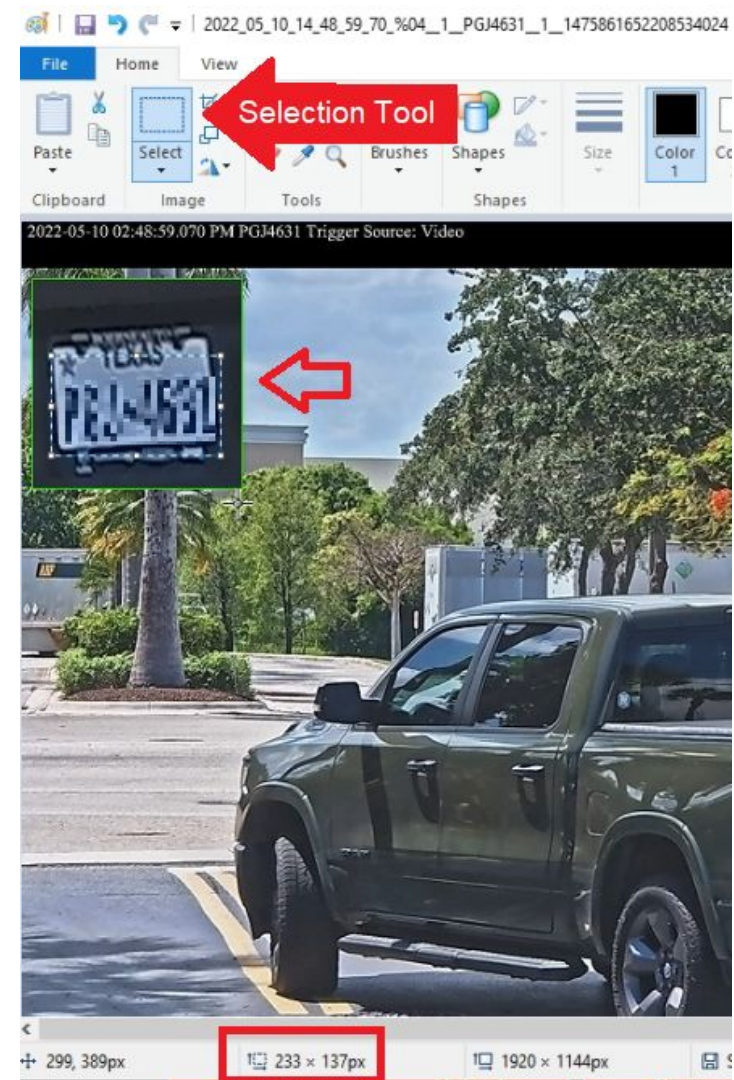

Figure 4-4

IC REALTIME

5A. FAQ

Device does not operate properly/ lost password.	Please refer to section 2B for factory reset process. Cam will need to be Initialized after factory reset.
The water leakage.	The front or rear cap if damaged or removed can result in water leakage. The glass dome may also have been compromised from heavy strikes or heavy pressure. The waterproof plug of the rear cap may also have loosened.
IR video is poor/ does not turn on.	Verify the camera is supplied with the recommended amount of power. You may need to test voltage/ amperage of the camera while under load. Enough visible light at the location can also cause IRs to not switch on.
I can not upgrade the device via network.	Contact technical support to request firmware.
I cannot login to the client-end or the WEB.	If the Camera HTTP port is changed, you will need to specify the port number after the IP. (ex: http://192.168.1.108:8080) Ensure the correct login credentials are being used. The Smart ICRSS software will use the TCP port. Make sure you input the correct TCP port number.
The account is locked	Reboot the camera to clear lock out. Verify the login to make sure it is correct.

P2P status is "not connected/ offline"	You may need to set device IP to DHCP. After acquiring a different IP address, verify P2P status and set camera back to static IP if successful.
Camera does not show up on local network.	Verify the camera is supplied with the recommended power supply. Change network cable or use short patch cable to troubleshoot.

5B. APPENDIX TOXIC OR HAZARDOUS MATERIALS OR ELEMENTS

Component Name	Pb	Hg	Cd	Cr VI	PBB	PBDE
Circuit Board Component	●	●	●	●	●	●
Device Case	●	●	●	●	●	●
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.

IC REALTIME

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 user's manual 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 mentioned 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 for more information.

IC REALTIME