

User Manual

FST-C50HD30-2

Digital Underwater Camera

(including brush)

Catalogue

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1. Pre-use instruction

1. This manual is designed for operators who are responsible for installing and using the equipment. This equipment must be connected and operated in full accordance with the rules. Wrong connection or incorrect use of the equipment may cause irreversible damage. If a part of the component does not function properly, the operator must check and verify that the equipment does not pose any threat to the surrounding environment.
2. Before each operation, the operator must carefully check and ensure that each part of the equipment is intact or connected properly.
3. Maintenance and repair of the equipment (except for routine maintenance and inspection items specified in the instruction manual), please entrust to the company or the dealer. General daily maintenance and inspections should be carried out via personnel trained by our company.

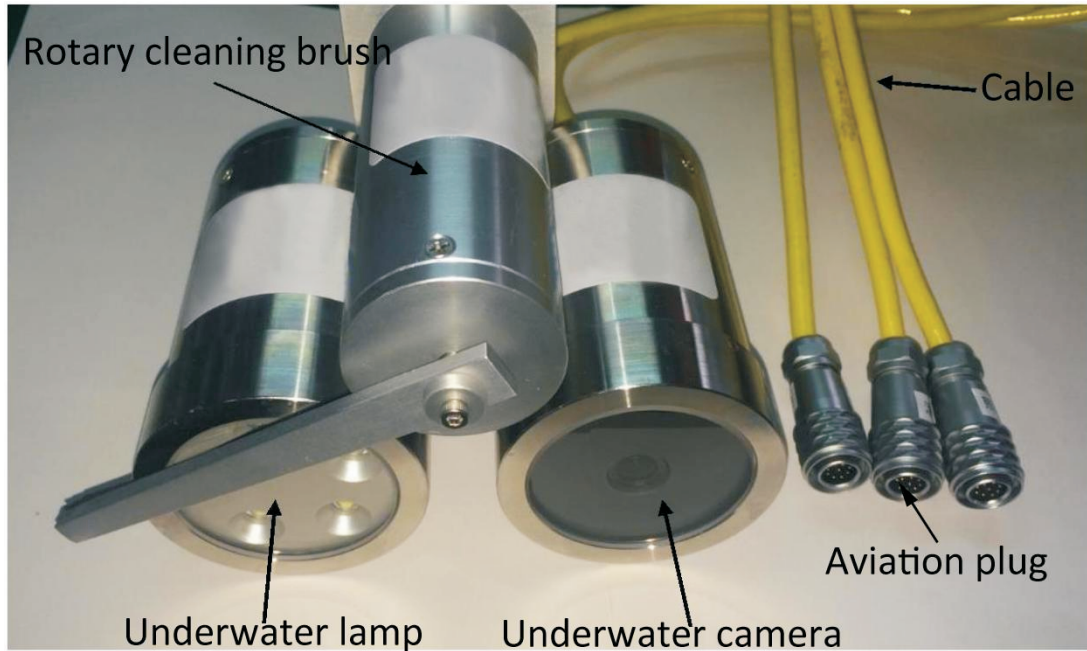


Note: When the equipment is running or not disconnected from power, such actions like inspection, repair, adjustment, etc. are prohibited. Before use, the operator must carefully check to ensure that each part of the equipment is intact or connected properly.

4. Do not look directly at the illumination position of the underwater lamp after its turn-on, to avoid any eye discomfort.
5. Do not use this equipment for any other purpose. We shall bear no liability resulting from this. Do not modify this equipment. We shall not be responsible for any accident caused by such modifications.
6. Use a stable DC 24V power supply for the system. Do not unplug the power during use. Turn off the equipment before switching off the power supply. When installing and unplugging power and equipment, hold the aviation plug instead of the cable. Do not unplug the power supply with a wet hand to avoid electric shock.
7. Do not tread, twist, squeeze the watertight cable, if the cable is found to be damaged, please stop using immediately.
8. Do not impact or shake the system to avoid damage to the glass. When handling, take the necessary safety measures to avoid falling or inverting accidents when the equipment is in movement.
9. When in use, avoid contact with water at the docking point of the aviation plug, please keep the aviation plug and socket dry.
10. Do not lift or move the equipment by lifting/pulling cable(s).

2. Equipment introduction

The underwater camera assembly is composed of a underwater camera, a underwater lamp, a cleaning brush and a connecting plate.



2.1 Underwater camera

Underwater camera is a underwater video shooting equipment. It mainly consists of cylinder and cables. Largely applied for underwater fixed point video monitoring, it can transmit high-definition videos from the fixed point to the connected computer to realize real-time monitoring and video recording.

| | |
|-------------------------|--------------------------------------|
| Depth of work | 50m |
| Size | Φ65×100mm (cables excluded) |
| Weight | 1Kg (in open air, cables excluded) |
| Photosensitive elements | 1/3" CMOS |
| Focal | 2.8mm f ixed focal |
| Maximum resolution | 1080P |
| FOV | 90° |
| Power | 24V DC |

2.2 Underwater Lamp

Underwater lamp is a lighting device, mainly consisting of cylinder and cables. It is designed to offer lighting support for camera shooting in low-light underwater environments.

| | |
|---------------|------------------------------------|
| Depth of work | 50m |
| Size | Φ65×110mm(cables excluded) |
| Weight | 1Kg(in open air, cables excluded) |
| Light color | 940nm infrared light |
| LED power | 3W*5 |
| Power | 24V DC |

2.3 Rotative cleaning brush

The rotative cleaning brush is used to clean the front-end windows of the underwater camera and underwater lamp. It can achieve fixed-angle rotative movement within a plane, and thus automatically brush the surfaces of the underwater optical instruments at the set time, satisfying the long-duration operation demand of the system.

| | |
|--------------------|---|
| Depth of work | 50m |
| Size | Φ86×220mm (cables and cleaning brush swing arms are not included) |
| The range of clean | R30-95mm |
| Rotating angle | 140° |
| Weight | 700g (in air, cables excluded) |
| Power | 24V 5W |

3. System assembly

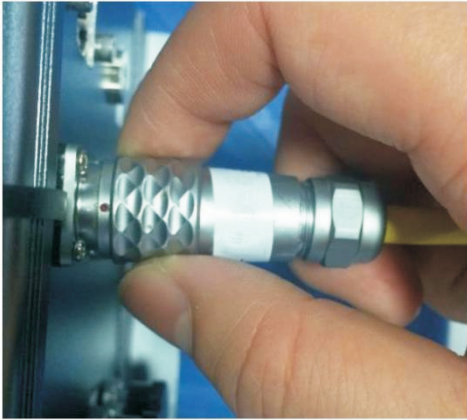
3.1 How to plug in the equipment

Match the red dot on the equipment plug to the red dot on the socket and press it hard to make the connection until a crisp sound is heard.

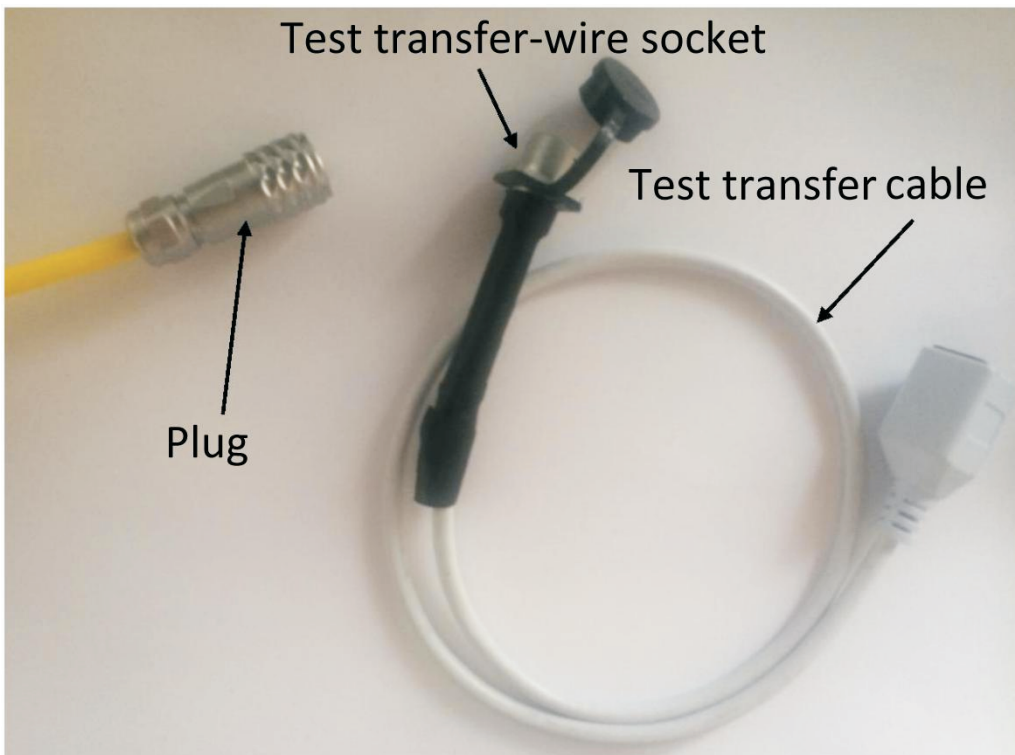


3.2 How to unplug the equipment

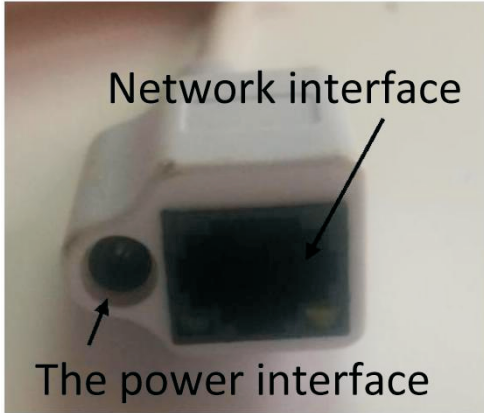
Hold the knurl area and pull backwards to release the locking and then pull the plug.



3.3 How to connect the equipment to the test transfer cable



Connect the equipment plug to the test transfer socket. Please refer to "3.1 How to plug in the equipment" for connection method above. Connect the other end of the test cable to the power adapter and the network cable respectively(see pics below). Now, the connection is completed.



3.4 How to connect the equipment to the control box

Ignore this step if you have not bought the control box.

Step 1: Connect the underwater camera equipment components to the control box.

Step 2: Connect the network cable to the control box ports.

Step 3: Connect the power cord to the DC power ports of the control box.

Ensure that each connection is reliable & fixed. Here's a user's real example:



Note: Use a stable DC 24V power supply to power the system.
Keep the control box away from water and keep the plugs and sockets dry.

4. System operation

4.1 Operation of Camera

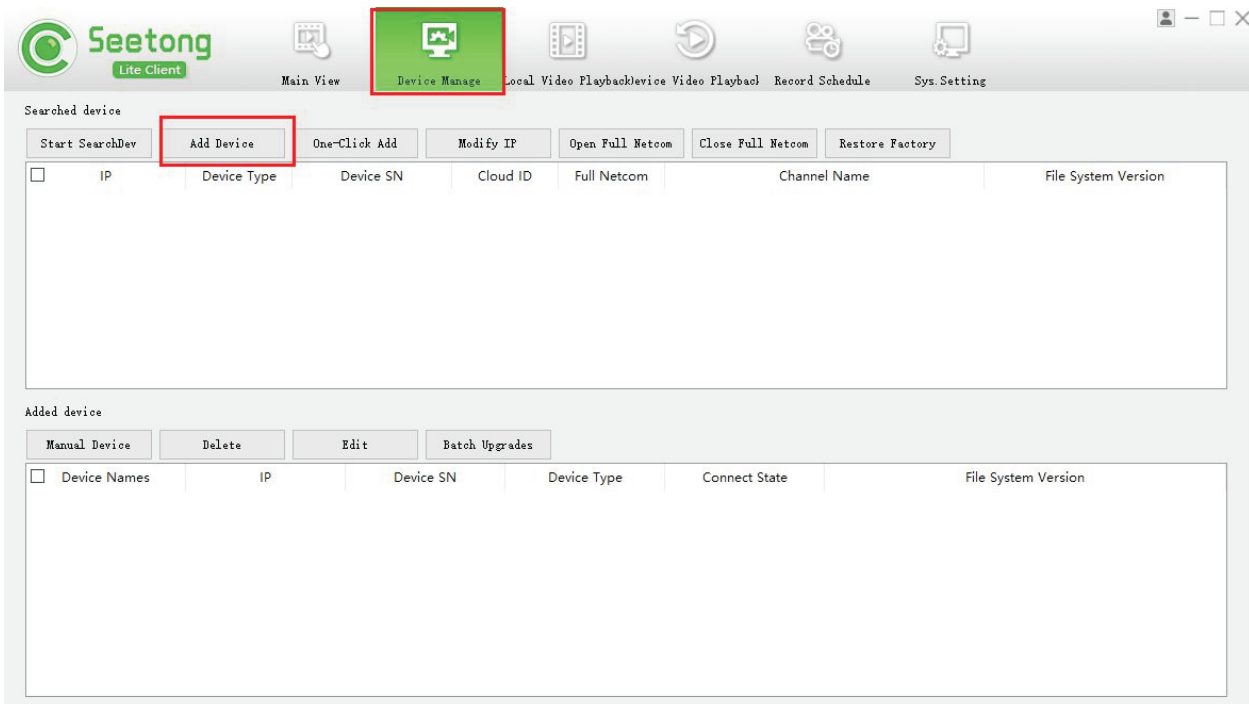
The computer IP needs to be in the same network segment as the camera, and factory IP setting is defaulted to: 192.168.0.123. You can modify the computer IP to the same network segment as the camera. Please refer to Appendix I. Or you can modify the camera IP address in accordance to the actual network operation environment.

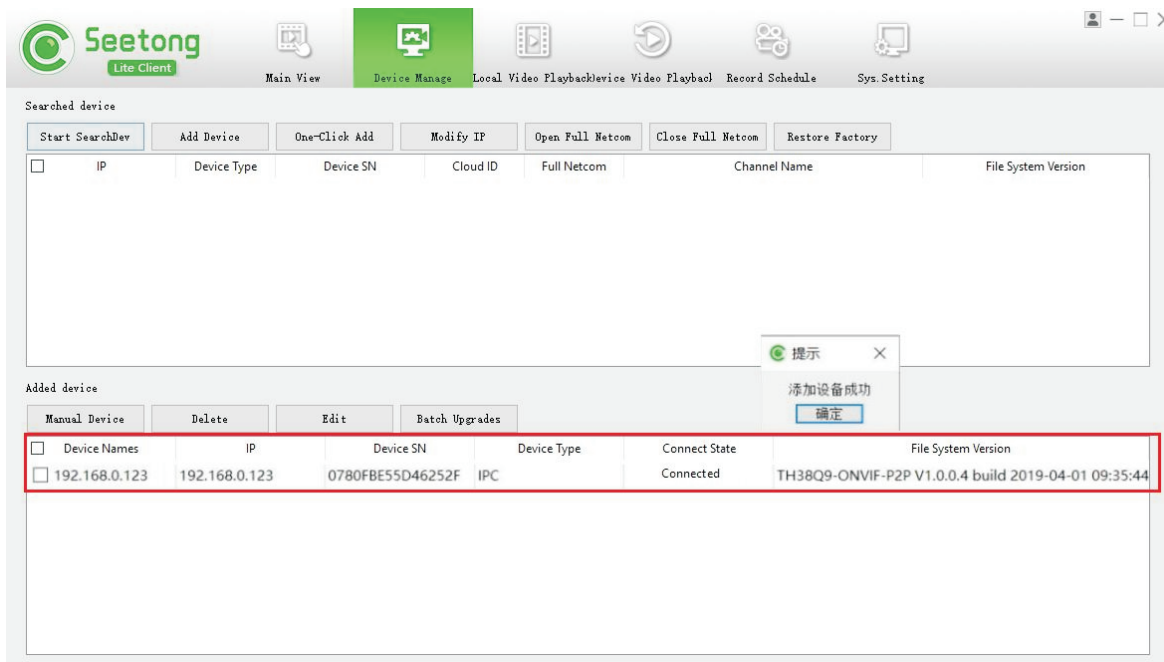
4.2 Configuration Management

1) Open Seetong video monitoring user-end software. (Initial login window will show the following. Account: admin, password: 123456. Tick "Auto Login "to save your password. This dialog box will not pop up when you run Seetong next time. Tick "Remember password" to save the password, and you won't have to enter the password next time.)



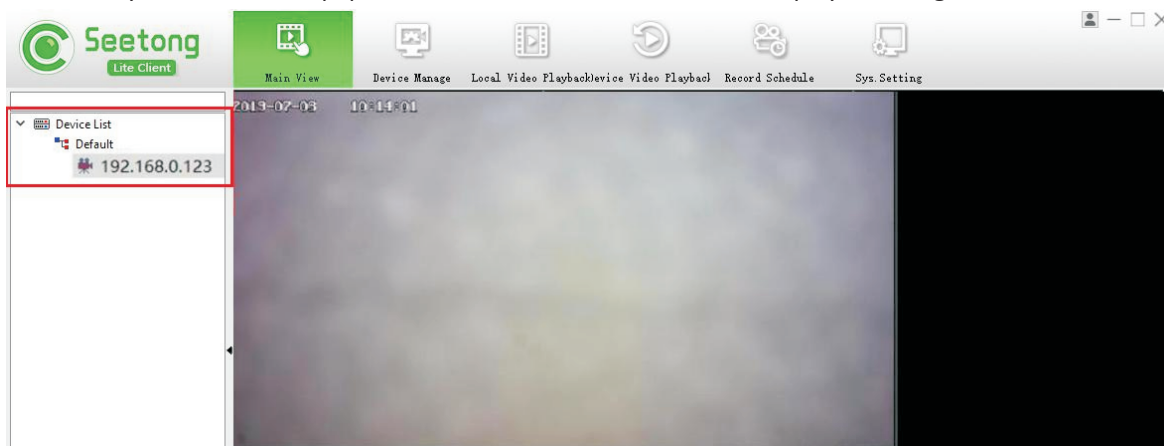
2) After opening the software,click"DeviceManage"and"StartSearchDevice" in turn As shown in the following image,you have searchedfor a camera Clickon the in frontofthecamera,makeitinto; . Thenclick"AddDevice" to successfullyaddthecamera.



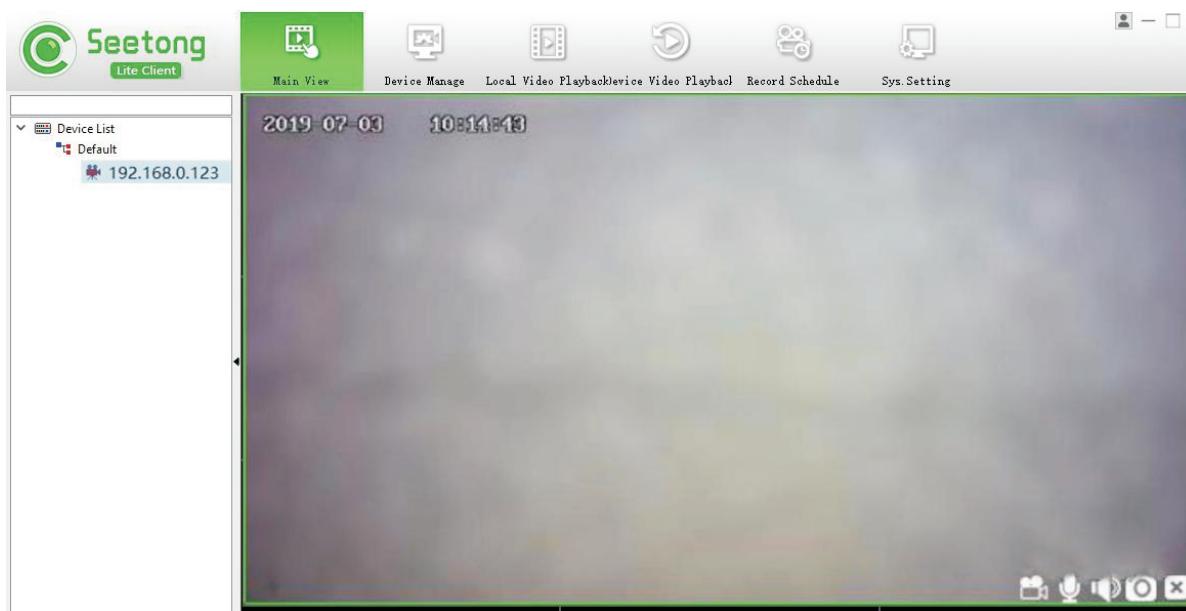


4.3 The display of video

Click the "Main View" tab on the tab bar to display the image as shown below, which means the camera has been successfully added to the equipment list. Double-click on the IP to display the image.

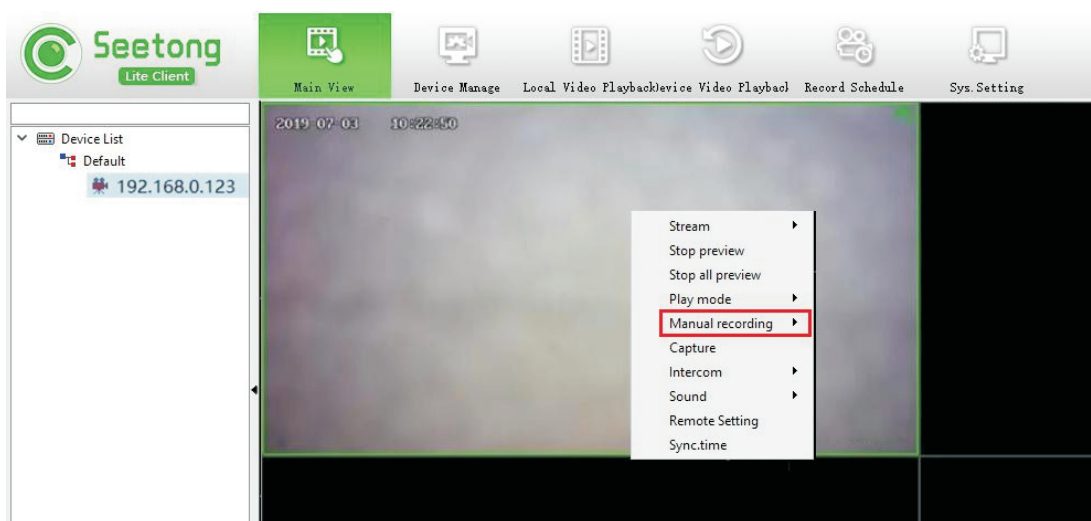


The following is the interface of successfully connecting the camera and displaying the video.

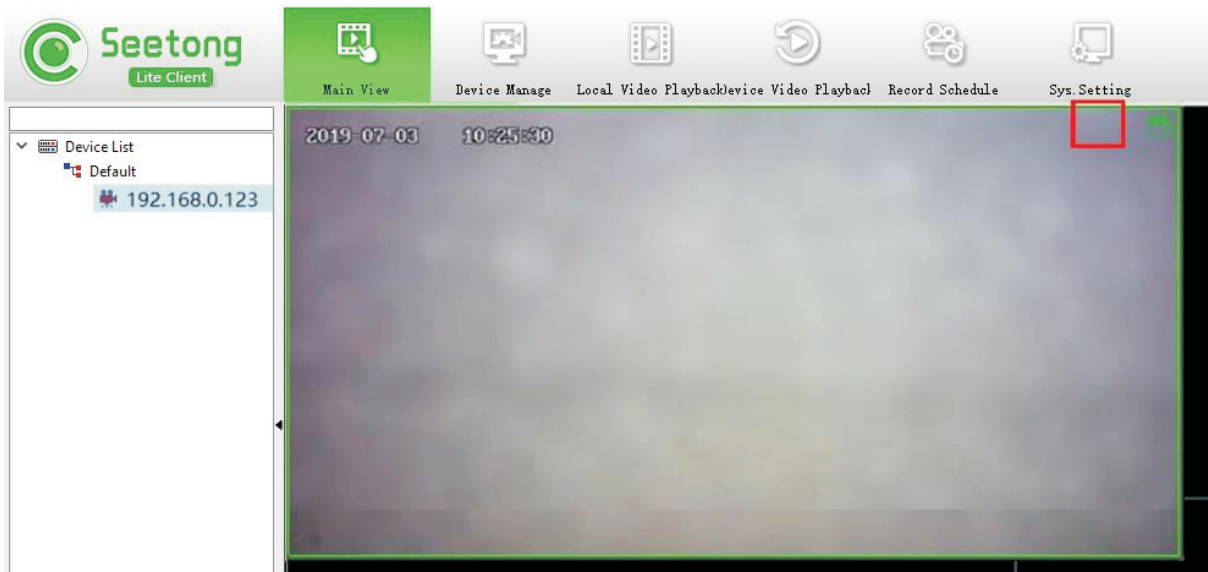


4.4 The recording of video

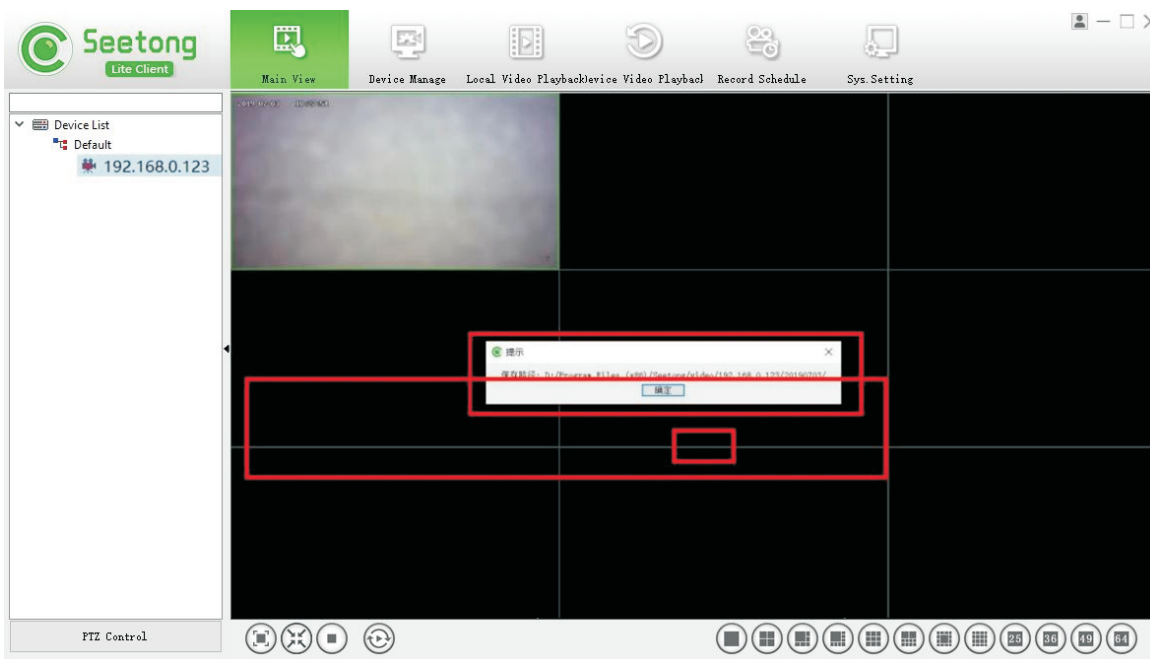
Right click on the video window and the following list will appear, select "Manual Recording" and left click.



A green VCR appears in the upper right corner of the video, as shown, indicating that recording begins.



When you need to stop recording, right click and then left click "ManualRecording Off". When the following window appears, the recording is saved successfully, and the save path displayed in the window is the save path of the video, reading the video according to the path.



4.5 The usage of lamp

Turn the lights on and off by powering on and off the lighting adapter.

4.6 The usage of the cleaning brush

The cleaning brush conducts left and right cleaning movements for 6 times by default after being switched on, and then goes into standby. Turn off the power to turn it off.

5. System use and maintenance

5.1 Precautions

For safety, do not use a water-carrying hand to plug and pull the plug. Keep the equipment cable, control box and plugs dry as they are non-water-resistant components.

Do not squeeze, tread and bend the cable. Do not collision the equipment to avoid damaging the glass.

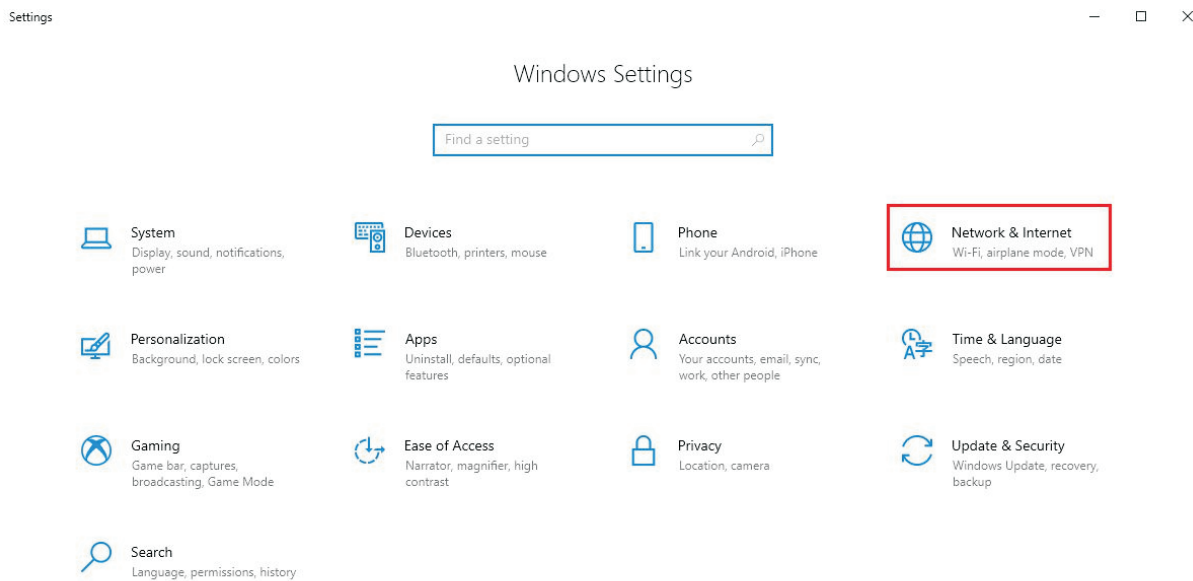
5.2 Rinse after use

After each use of the underwater camera in seawater, rinse with fresh water to prevent possible erosion damage to the system caused by seawater. After rinsing, it can be stored by drying or wiping with a soft cloth.

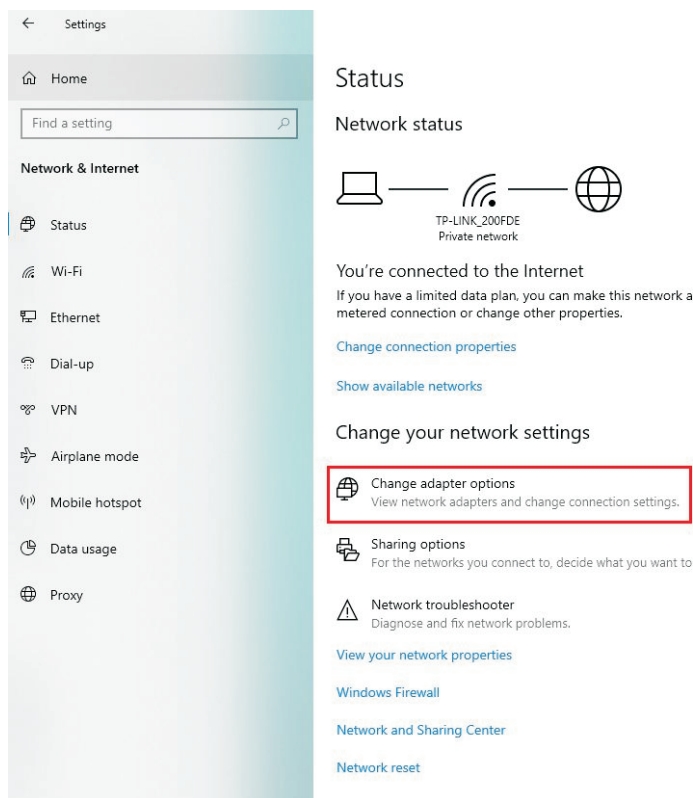
Appendix I Description of how to modify a computer IP

This note uses the WINDOWS 10 system as the primary target.

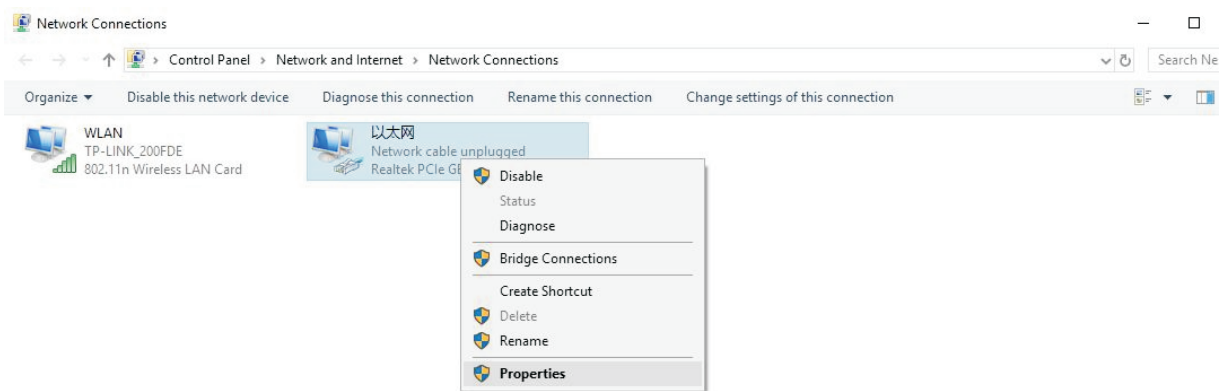
Step 1 : Click "Control Panel" in the Start menu.



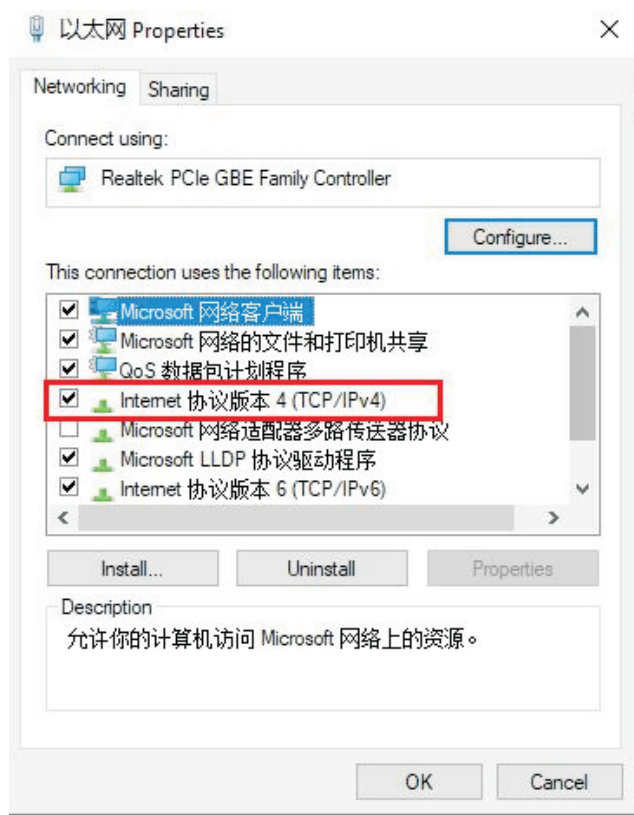
Step 2: Click “Network & Internet”, and click “change adapter options”.



Step 3: Right click on the “Ethernet”, then click “Properties”.

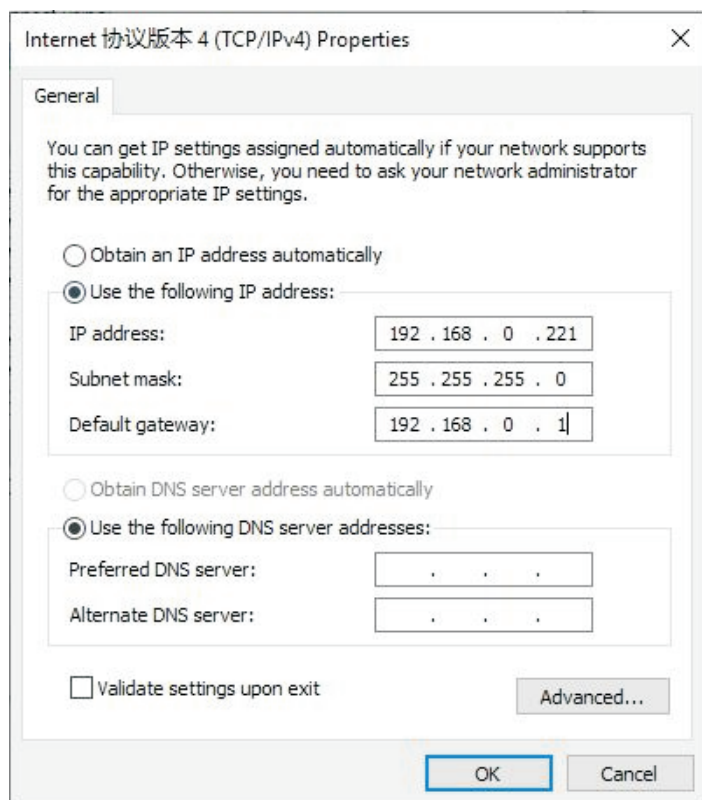


Step 4: Double click "Internet Protocol Version 4 (TCP/IPv4)"



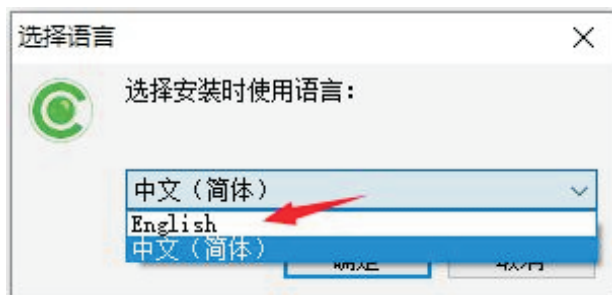
Step 5: Configure the IP address to 192.168.0.221 and the default gateway to 192.168.0.1.

Then click "OK"

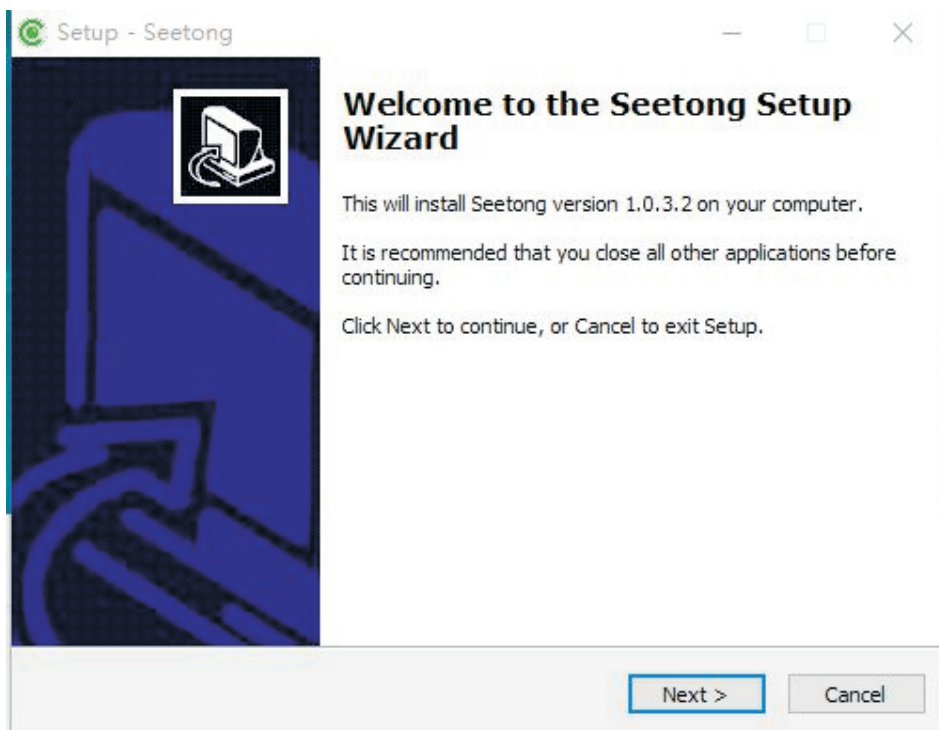


Appendix II How to install the SEETONG video surveillance software

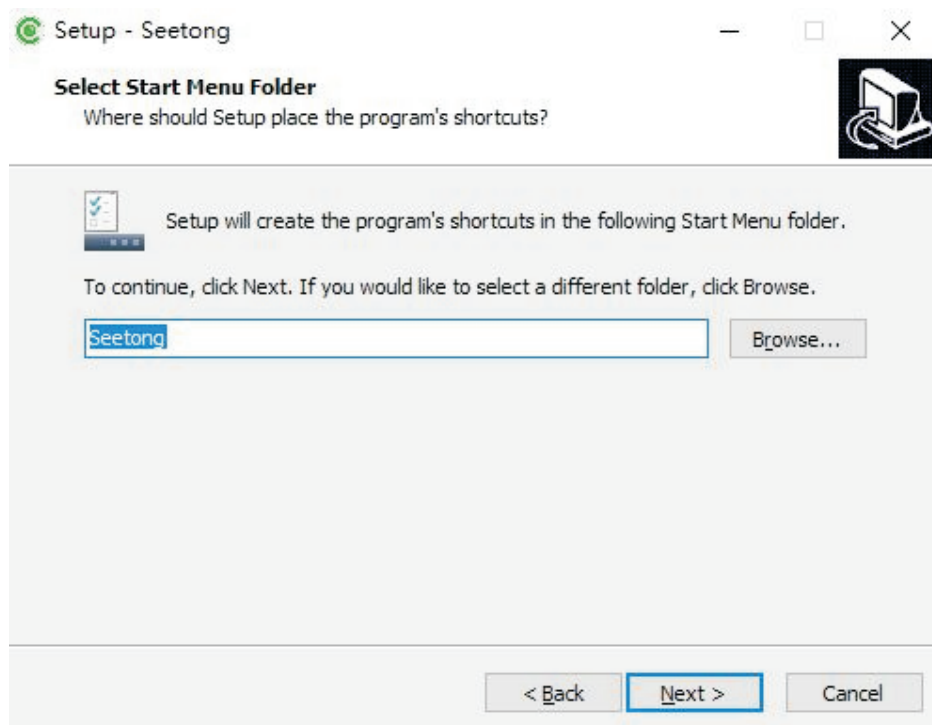
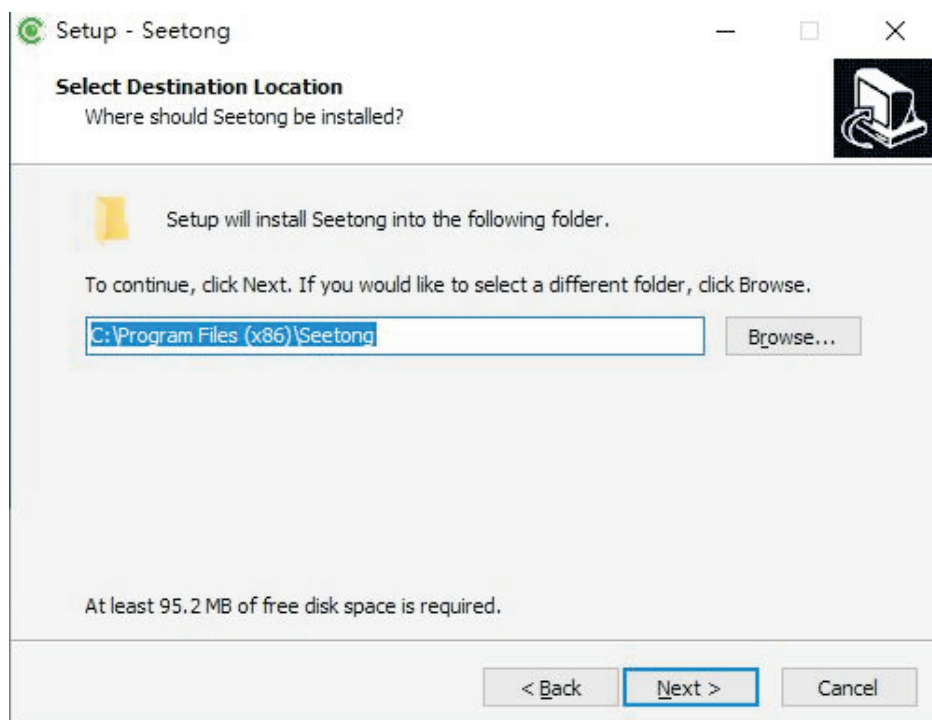
Doubleclickto run "Seetong_1.0.0.8-20180927190857" and the system will displaythe correspondingselectioninterfaceaccording to the operatingsystem languageused by the currentcomputer The followingfigureshows the languageselectioninterfacethat appearsin the Chineseversionof the operatingsystem.The specificoperationis as follows



Step 1: Select the installation language "English" . Then the welcome wizard interface appears. As shown in the following image:



Step 2: Click "Next" to select the installation directory. As shown in the figure below:



Step 3: Click "Install" and the installation is complete as shown in the figure:

