User Manual

FST-C50HD30-2

Digital Underwater Camera

(including brush)

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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	Ø65×110mm(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

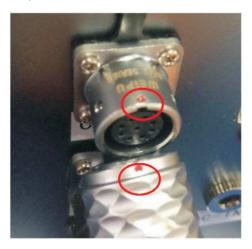
The rotative cleaning brush is used to clean the front-end windows of the underwater camera and underwater lamp. It can achieve fixed-angle rotative movement within a plane, and thus automatically brush the surfaces of the underwater optical instruments at the set time, satisfying the long-duration operation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

Depth of work	50m
Size	Ø86×220mm(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.

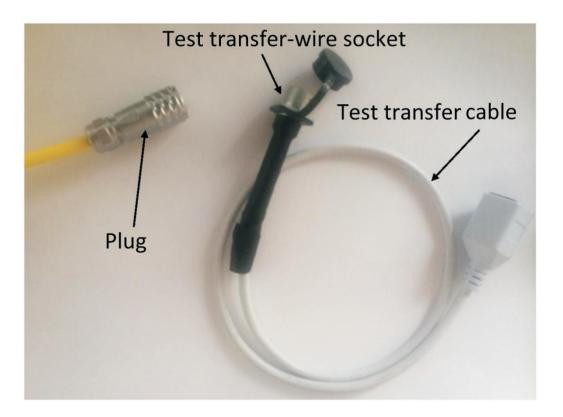


3.2 How to unplug the equipment

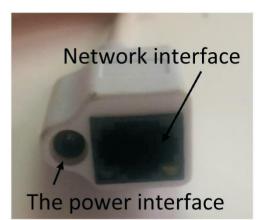
Hold the knurl area and pull backwards to release the locking and then pull the plug.

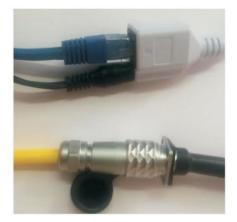


3.3 How to connect the equipment to the test transfer cable



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.)

15	Sectong Lite Client	
L.	P sands	
R.	Local user login Platform user login	
A	UserName admin ~	
6	Password .	D
	🗹 Remember password 🛛 Auto Login	
	Login Cancel	
	Login Cancel	

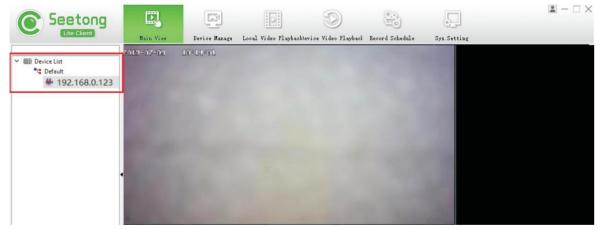
2) After opening the software click "Device Manage and "Start Search Device" in turn As shown in the following mage, you have searchedora camera Clickon the infront of the camera make it into; . Then click "Add Device" to successfull add the camera.

Seeta Lite Clie			e Manage Local V	ideo Playback)evice Vi	deo Flavback Record S	chedule Sys. Se	
Searched device				·			
Start SearchDev	Add Device	One-Click Add	Modify IP	Open Full Netcom	Close Full Netcom	Restore Factory	
IP	Device Type	Device SN	Cloud ID	Full Netcom	Channe	l Name	File System Version
Added device							
Manual Device	Delete	Edit	Batch Upgrades				
Device Names	Ρ	Device	∍ SN	Device Type	Connect State		File System Version

		Device SN	Cloud ID	Full Netcom	Chann	el Name	File System Version
ed device						提示 × X X	
Manual Device	Delete	Edi t	Batch Upgrades			添加设备成功 确定	
Device Names	IP 192.168.0.123	Device 0780FBE55E		Device Type	Connect State Connected		ile System Version V1.0.0.4 build 2019-04-01 09:35:4

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.

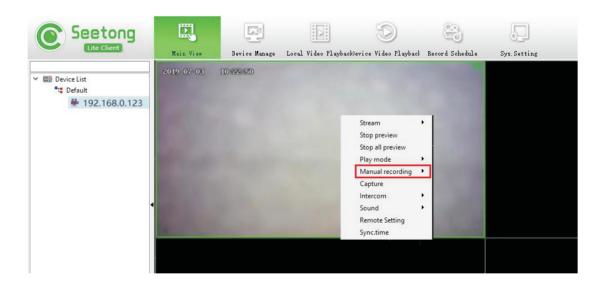


The following is the interface of successfully connecting the camera and displaying the video.

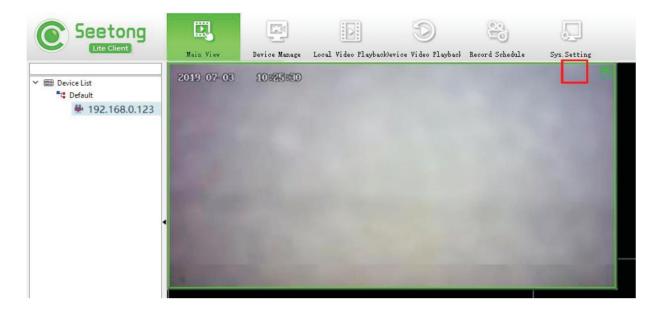


4.4 The recording of video

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.

Seetong				D	200	Ţ	■ – □ ×
Lite Client	Main View	Device Manage	Local Video Play	back)evice Video Playback	Record Schedule	Sys. Setting	
Y I Device List "© Default ♣ 192.168.0.123	CON 220 COMME		1				
			 第示 第2時間 	Truera Biles (1891)/Restore/vid	o/162 188 0 123/2018/20	×	
				ià 3			
PTZ Control							

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.

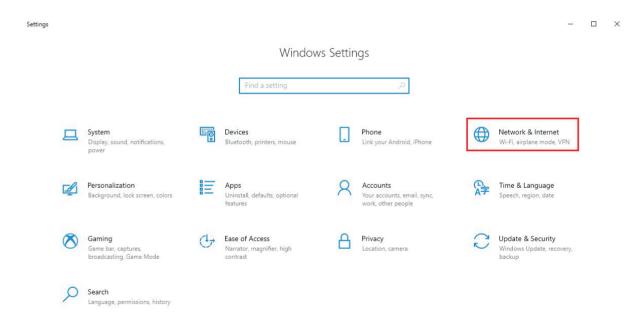
Do not squeeze, tread and bend the cable. Do not collision the equipment to avoid damaging the glass.

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

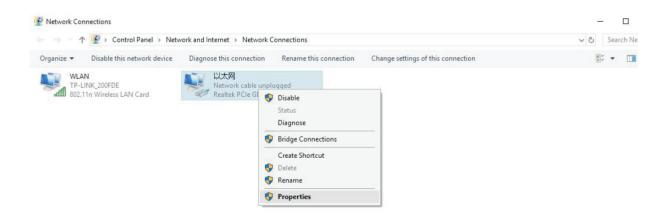
This note uses the WINDOWS 10 system as the primary target. Step 1 : Click"Control Panel" in the Start menu.



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

← Settings	
යි Home	Status
Find a setting	Network status
Network & Internet	TP-LINK_200FDE Private network
🦟 Wi-Fi	You're connected to the Internet If you have a limited data plan, you can make this network a
記 Ethernet	metered connection or change other properties.
ි Dial-up	Change connection properties Show available networks
% VPN	Change your network settings
r∯≻ Airplane mode	
⁽ⁱ µ ⁱ⁾ Mobile hotspot	Change adapter options View network adapters and change connection settings.
🕒 Data usage	Sharing options For the networks you connect to, decide what you want to share.
Proxy	A Network troubleshooter Diagnose and fix network problems.
	View your network properties
	Windows Firewall
	Network and Sharing Center
	Network reset

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



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

Connect using:		
🚽 Realtek PCIe G	BE Family Controller	
		Configure
This connection uses t	he following items:	
 QoS 数据包; Internet 协议 Microsoft 网络 Microsoft LLE Internet 协议 	备的文件和打印机共享 计划程序 版本 4 (TCP/IPv4) 都道配器多路传送器机 IP 协议驱动程序 版本 6 (TCP/IPv6)	,
Install	Uninstall	Properties
Description 允许你的计算机说	前可Microsoft网络上的	资源。

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

eneral					
You can get IP settings a this capability. Otherwise for the appropriate IP se	e, you need to				
Obtain an IP addres	ss automatical	ly			
• Use the following IP	address:				
IP address:		192 . 16	58.0	. 221	
Subnet mask:		255 . 25	55 . 255	. 0	
Default gateway:		192 . 16	58.0	. 1	
Obtain DNS server a	address autor	natically			
• Use the following DI					
Preferred DNS server:	:		1.42		
Alternate DNS server:	e.		1.0		
Validate settings u	pon exit		Ĩ	Advanc	od.
				Auvanu	.eu

Appendix II How to install the SEETONG video surveillance software

Doubleclick to run "Seetong_1.0.0.8-2018092719085771d the system will display the corresponding election interface according to the operating system language used by the current computer. The following figure shows the language selection interface that appears in the Chinese version of the operating system. The specific peration is 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:

elect Destination Location Where should Seetong be installed	
Setup will install Seetong i	into the following folder.
To continue, click Next. If you wou	Id like to select a different folder, click Browse.
C:\Program Files (x86)\Seetong	Browse
At least 95.2 MB of free disk space	: is required.
	< Back Next > Cancel
etup - Seetona	- 7
	gram's shortcuts?
elect Start Menu Folder Where should Setup place the prog	gram's shortcuts?
elect Start Menu Folder Where should Setup place the prog	
Setup will create the prog	gram's shortcuts in the following Start Menu folder.
elect Start Menu Folder Where should Setup place the prog Setup will create the prog To continue, click Next. If you wou	gram's shortcuts in the following Start Menu folder. Ild like to select a different folder, click Browse.
elect Start Menu Folder Where should Setup place the prog Setup will create the prog To continue, click Next. If you wou	gram's shortcuts in the following Start Menu folder. Ild like to select a different folder, click Browse.
elect Start Menu Folder Where should Setup place the prog Setup will create the prog To continue, click Next. If you wou	gram's shortcuts in the following Start Menu folder. Ild like to select a different folder, click Browse.
elect Start Menu Folder Where should Setup place the prog Setup will create the prog To continue, click Next. If you wou	gram's shortcuts in the following Start Menu folder. Ild like to select a different folder, click Browse.
elect Start Menu Folder Where should Setup place the prog	gram's shortcuts in the following Start Menu folder. Ild like to select a different folder, click Browse.

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

