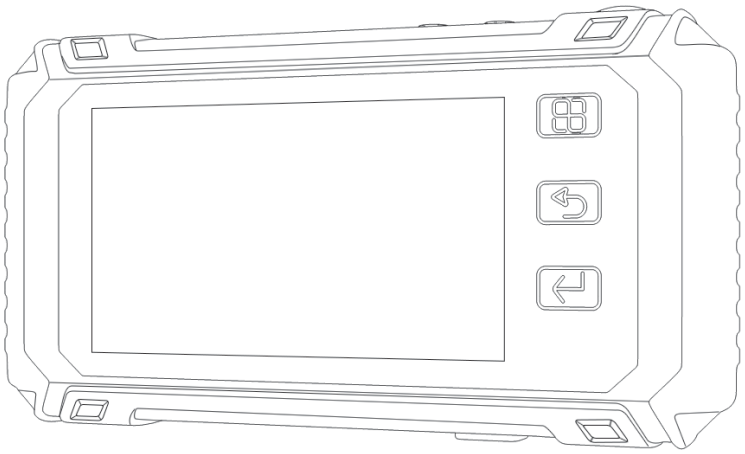
IPC-X550 SERIES CCTV TESTER



IPC-X550 SERIES

Quick Start Manual

Statements

About this manual

This Manual is used for user guiding. Pictures or illustrations in this manual are only used for explaining products and may be slightly different from the real instrument, please take the actual product as the criterion. For the purpose of upgrading products or other needs, the company may change the contents of this manual

Responsibility statement

- To the maximum extent permitted by law, the products described in this manual (including hardware, software, firmware, etc.) are provided by "present situation" which may be defective, incorrect or malfunctioning. The company does not provide any explicit or implied warranties such as guarantees of marketability, quality satisfaction, suitability for specific purposes, non-infringement of third-party rights, etc. Also, not make compensation for special, incidental or indirect damages caused by the use of this manual or our products, including but not limited to the loss of business profits, data or documents.
- All measurement tools of this instrument may have accuracy errors. The test results are for reference only. The company does not make any commitment to the final test results, and does not assume any legal responsibility for disputes arising from the test results.
- If you disassemble the product privately, you should bear the risk of accidental damage to the product all by yourself, but the company can provide technical support.
- When using this product, please strictly follow the applicable laws. If the product is used to infringe the rights of third parties or other improper uses, the company will not bear any responsibilities.
- If the contents of this manual conflict with applicable laws, please take the law as the criterion.

Preface

The purpose of this section is to ensure that users can use the product correctly through this manual in order to avoid danger or property loss in operation. Before using this product, please read the product manual carefully and keep it properly for future reference.

Symbolic convention

The meanings of symbols in this manual are as below:

Symbolic	Explication
Description	Descriptive text, represent the addition or interpretation content of main text
Caution	Reminding text, remind users of some important operations to avoid potential damages or property losses
Warning	Warning text, indicate potential risks which may cause accidents, equipment damages or business interruptions if not paid attention to
Danger	Danger warning text, represent high potential risks and may cause injury or death if not paid attention to

Cautions for safety use

Warning

- In the process of installation and use of the product, you must strictly observe local electrical safety regulations.
- Do not let the product get wet or rained.
- If the product doesn't work properly, please contact the store or service center where the product is purchased. Do not disassemble or change the product in any way (the company will not bear any responsibilities for problems caused by unauthorized change or repair).

Notice

- Avoid placing products in vibration or shock environments and keep products away from EMI sites.
- Do not use the product in extremely hot, cold or humid environment, detailed temperature and humidity requirements please refer to product parameter table.
- Equipment should be stored in dry and non-corrosive gas environment to avoid direct sunlight.
- This product is weak current equipment. All peripheral interfaces should not be connected to cables with strong current.
- UTP Cable tracking port cannot connect over DC 50V PoE switch.
- please do not use the instrument while charging or it may shorten the battery life.
- This instrument is designed for security projects debugging, please do not use for entertainment.
- It is recommended not to use the instrument in a charged state, so as not to reduce the battery life

Description

Quality requirements for operators: Basic knowledge and operation skills in low voltage cabling and low voltage electronic wiring and is able to understand the contents of this manual.

Table of Contents

Chapter 1 Product Description

The instrument adopts a smart operation system, mainly used for the installation and maintenance of network monitoring cameras, analog video monitor cameras and other security monitoring equipments, the instrument adopts a 5.5 inch HD IPS full view display screen, can clearly display the IP and analog camera video images. It is built in a variety of network tools including PING, IP address scan, and standard PoE power output, DC12V power output, cable tracer and network cable test etc. it is an essential tool for security monitoring projects and integrated wiring projects. RTSP Player

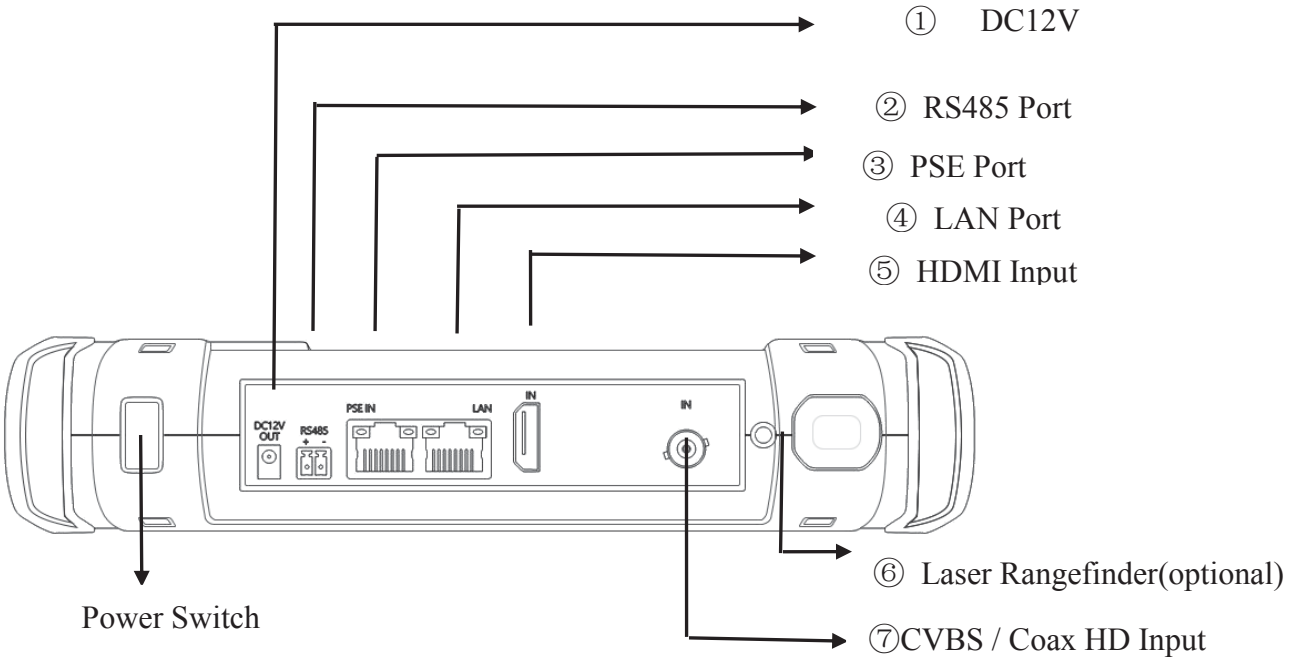
1.1 Parameter table

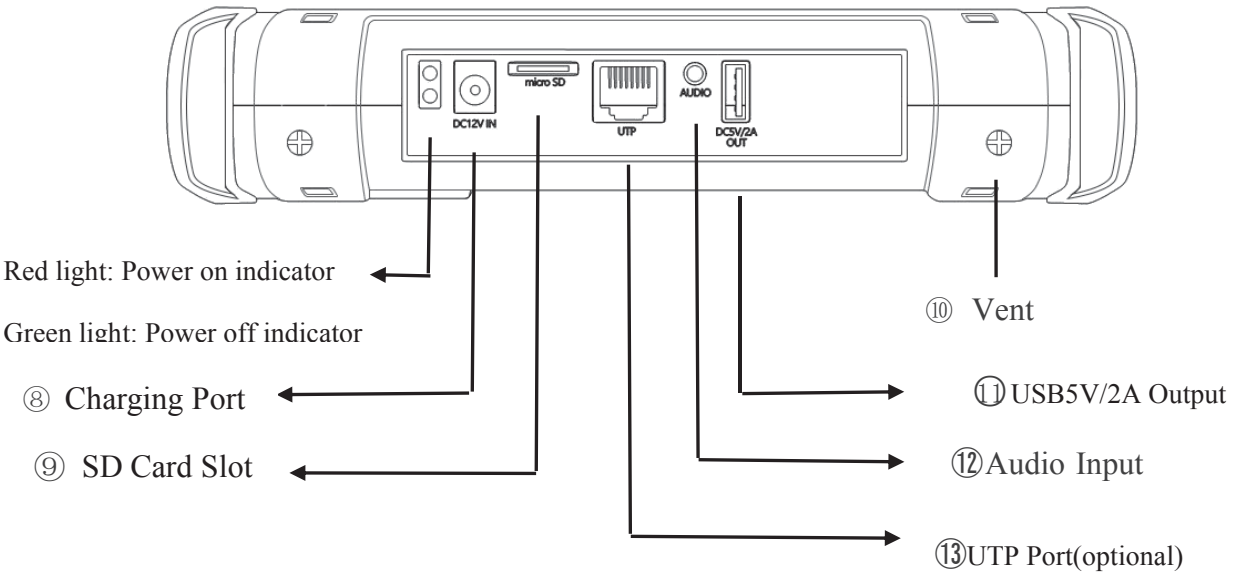
Product Model	IPC-X550 SERIES CCTV TESTER
Touch Screen	5.5 inch capacitive touch screen
LCD Screen	5.5 inch resolution 1920 × 1080 IPS HD full view
Ethernet Port	10/100/1000M adaptive
WIFI	Built-in wireless WIFI, speed 150M
IP Camera test	ONVIF (support PTZ operation), major camera brand IPC tool customization, display video by private protocols, almost support all brand cameras in the market, support to test up to 6K/12MP camera.
CVBS Analog Camera test	1 channel CVBS analog signal input, support PAL/NTSC format adaptation, support to test up to 8MP camera
PoE Power Output	48V standard PoE output
Photo, Video and Playback	Support all camera videos photo taking, video recording and stored as H264 format
Laser Rangefinder(optional)	With comprehensive integrated indoor laser rangefinder module
POE Voltage test	Display PoE power supply device voltage and circuit conditions
PTZ Control	Support Pelco-D/P, Samsung, Panasonic, etc. more than 30 protocols
DC12V Power Output	DC12V power output, max current 2A, provide temporary power for cameras

DC5 V Power Output	Provide temporary power for USB-powered camera or emergency power for mobile phones, max current 2A
Power Charger	DC 12V/2A input, about 4 hours to fully charge the battery
Battery	**Built-in detachable two 18650 batteries, capacity 3000mAh, can be used for about 5 hours. When replacing the battery, be sure to distinguish the positive and negative poles, otherwise it will easily cause equipment failure.**
Language	Chinese Simplified, Chinese Traditional, English, Russian, etc. more than 10 languages
Internal SD Storage	8G
Working Temperature	-10℃--+50℃
Working Humidity	30%--90%
External Size	210mm×110mm×45mm
Weight	0.6kg

1.2Appearance and port description

Notice: This instrument has optional function modules, only if a tester has specific modules, it has the corresponding ports.





Port description:

①. DC 12V Output: Output 12V/2A temporary power for camera use

②. RS485Serial Port: Receive, send and analyze data, used for PTZ protocol analysis, etc

③. PSE Test Port: Test PoE switch voltage or electrified cable sequence

④. LAN Port: Ethernet port, IPC camera connection port, POE power output port, PSE voltage input test port, used to connect Ethernet, camera and test POE power, etc

⑤. HDMI Output: DMI HD video output

⑥. Aim at the measured surface to emit laser red light to measure distance

⑦ . Coax HD/Analog Video input: Used to connect analog camera and coaxial HD camera

⑧ . Charging Port: DC 12V charging port

⑨ .SD Card Slot: Place SD card to extend storage

⑩ . Vent port

⑪ . USB Port:5V/2A power output, copy or transfer data connect to a mouse

⑫ . Audio Input: Audio input test

⑬. UTP Port: Cable length measurement or cable breakpoint locating (optional)

⚠ **Warning: Not allowed connections of this instrument are as below:**

1. All ports are not allowed to connect strong current devices, or the instrument may be burnt out.

2. When using UTP port to perform ‘Cable test’ function, the other end is only allowed to connect the blue cable test box or the port on cable tracker signal receiver.

3. All ports are not allowed to short circuit connect, or the instrument may be burnt out.

4. Do not use a non-original charger to charge the instrument.

Chapter 2 Operation Guide

2.1 System desktop

This instrument uses smart operation system, ensure that the lithium battery is installed correctly and has enough power, press the power button for 2 seconds to boot, waiting for system boot completion, then you enter the system desktop main menu, as shown in Figure 1

1) The upper right status bar icons represent the SD card status, network connection status, battery level, the upper left icons represent the current time and date, as shown in Figure 1

Figure 1 System Desktop

2) Directly touch the icon  in the lower left corner of Figure 1 to list all software in the system, slide left or right to view more applications, as shown in Figure 2

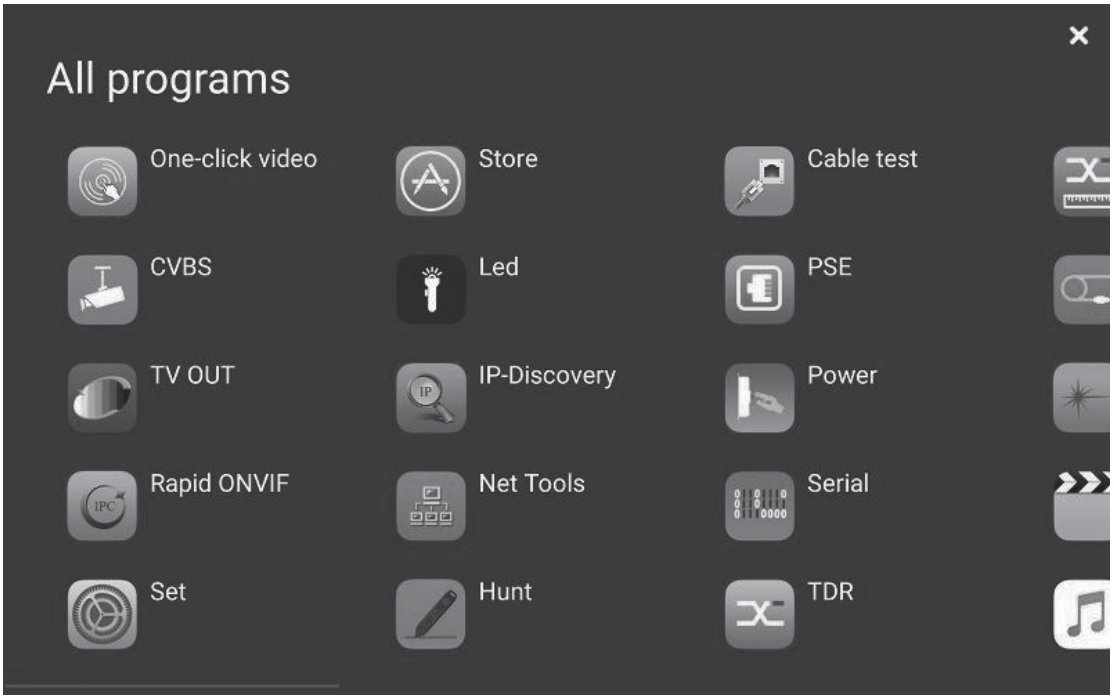


Figure 2

3) Long press common tool bar to drag the App icon in it to any other folder or to  icon to uninstall the App, when dragging an icon over a folder, the folder will turn grey, release to put it into the folder, drag an icon to common tool bar and release To put it in to the 6 dotted square  , you can also switch the position of Apps in common tool bar by dragging one icon over another icon, as shown in Figure 3.

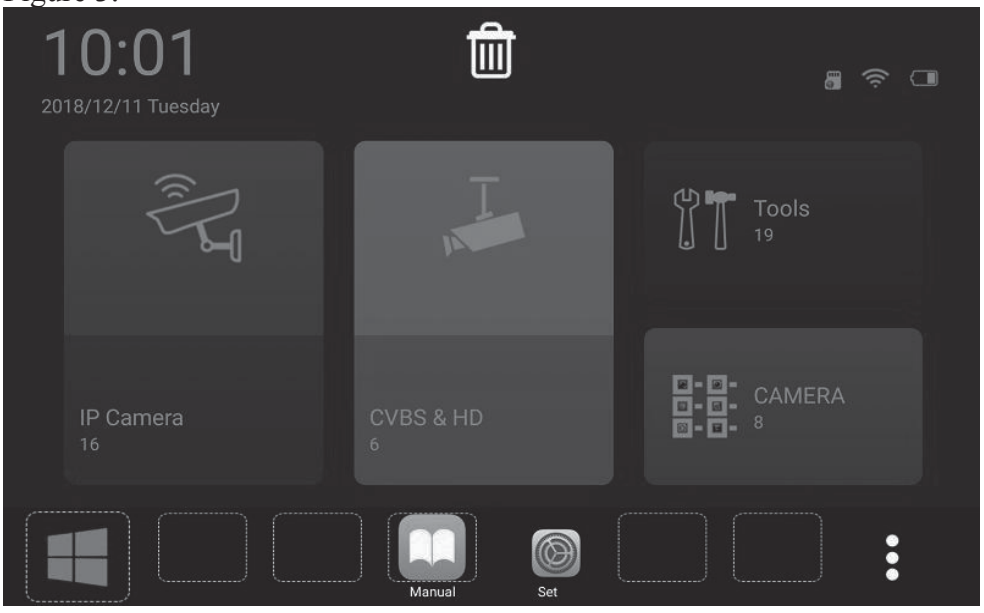


Figure 3

2.2 CVBS Analog Video, AHD, TVI, CVI, Coaxial HD Video Input Test

1) In the CVBS & HD main menu, touch CVBS icon to enter the application main interface, as shown in Figure 4

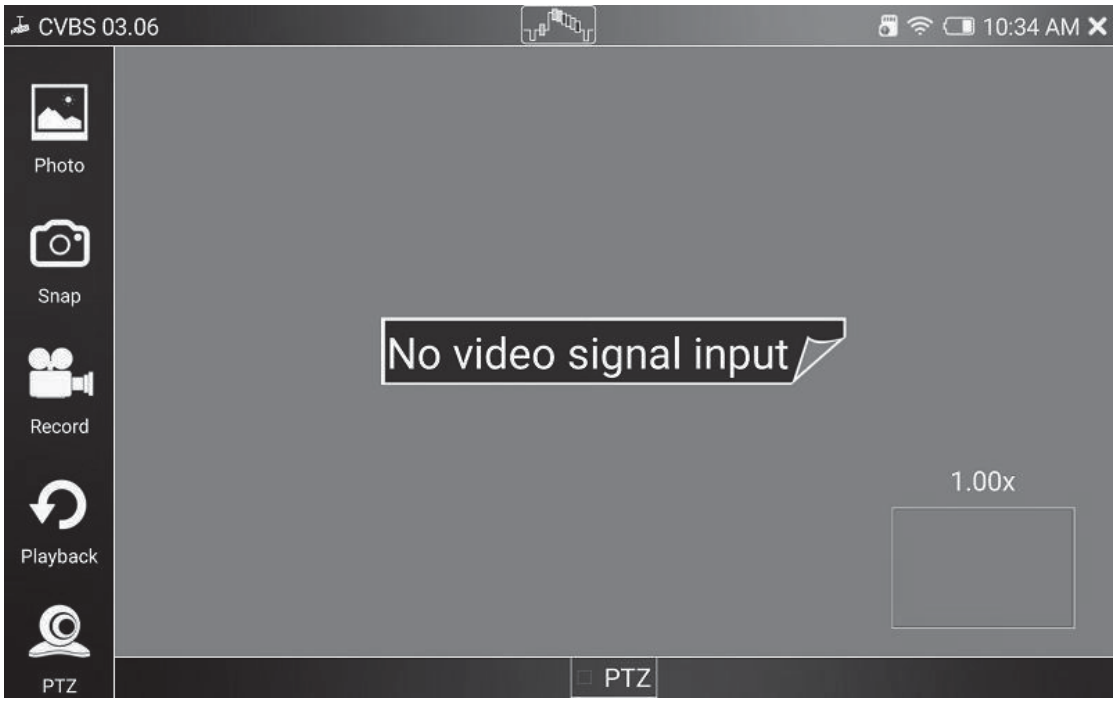


Figure 4 CVBS Analog Video Test Main Interface

2) When connecting analog video signal to CVBS input port, it can display analog video image and format directly, as shown in Figure 5.

Operation Instructions:

1. Connect analog camera to the instrument CVBS port via BNC video cable

2. Connect analog camera power

3. Touch 'CVBS' icon to enter the App to view video image

Figure 5

Operation Options:

1) Photo taking: touch the Snap icon on the left to take photos, click Photo icon on the left to view the photo you just took.

2) Video recording: touch the Record icon on the left to start recording, click it again to end the recording, click Playback icon to watch the video.

3) PTZ operation: select the PTZ button on the bottom center to turn on touch PTZ control, click the PTZ icon on the left, PTZ setting menu will popup, as shown in Figure

Figure 6

You can set the PTZ protocols, port, baud rate, address, horizontal speed, vertical speed and preset position by this menu, after setting, touch OK button to finish. After setting, you can operate PTZ control by physical buttons, moving gestures or zooming operations. Coaxial control: switch to coaxial control by setting port, coaxial control enables you to set camera menu and coaxial PTZ control, as shown in Figure 7, 8

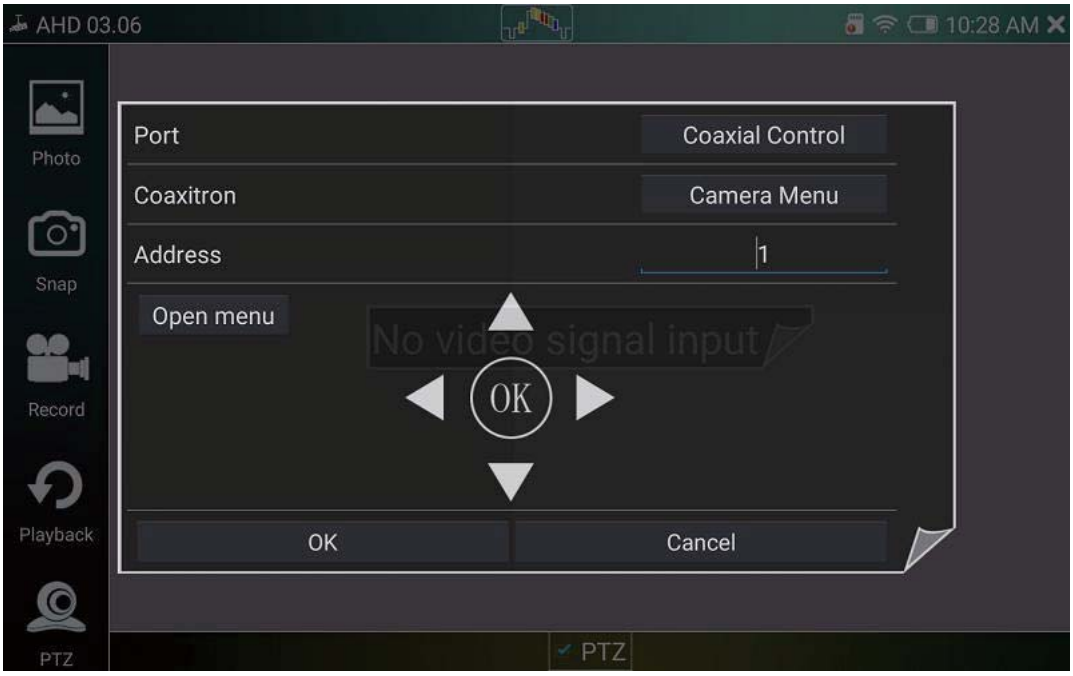


Figure 7

Figure 8

4）Image zooming operation:

Select the PTZ icon on the bottom to enable PTZ function, disable PTZ function to zoom or move image freely through gestures, the image magnification times and current display area will be shown on the lower right hand corner, as shown in Figure 9

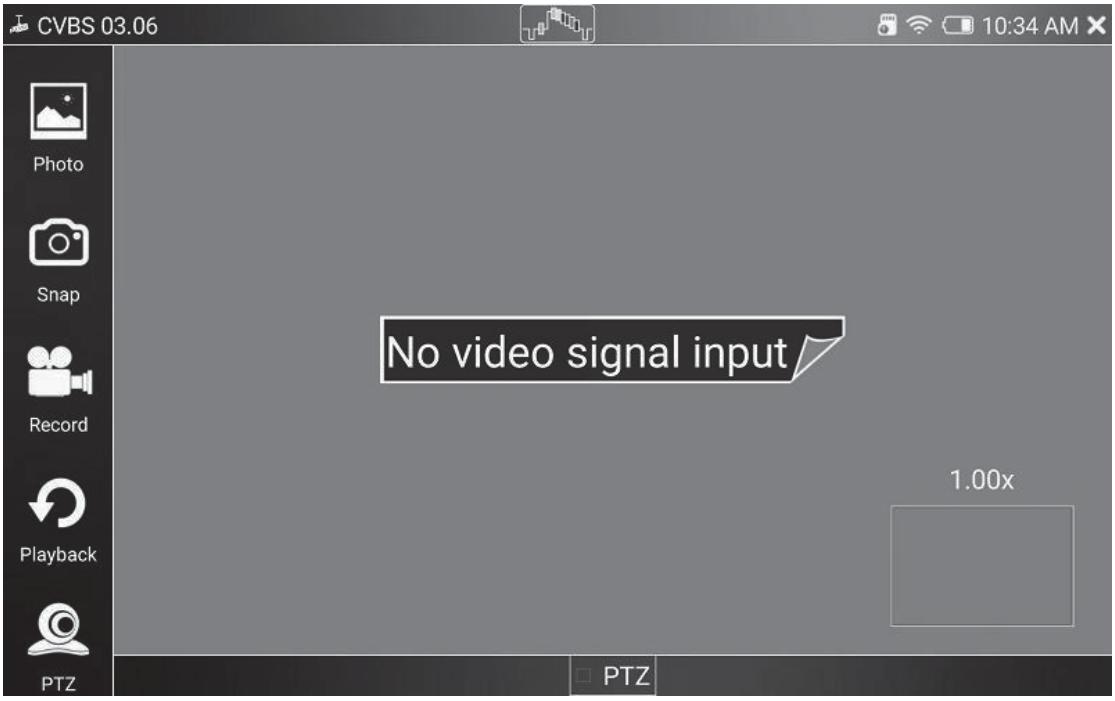


Figure 9

5) Full screen operation:

In the image display area, quickly touch the screen twice to enter full-screen mode, touch the screen twice again to exit full-screen mode.

6）Image quality test:

Touch the icon  on the top to display the image quality data, touch again to disable, as shown in Figure10

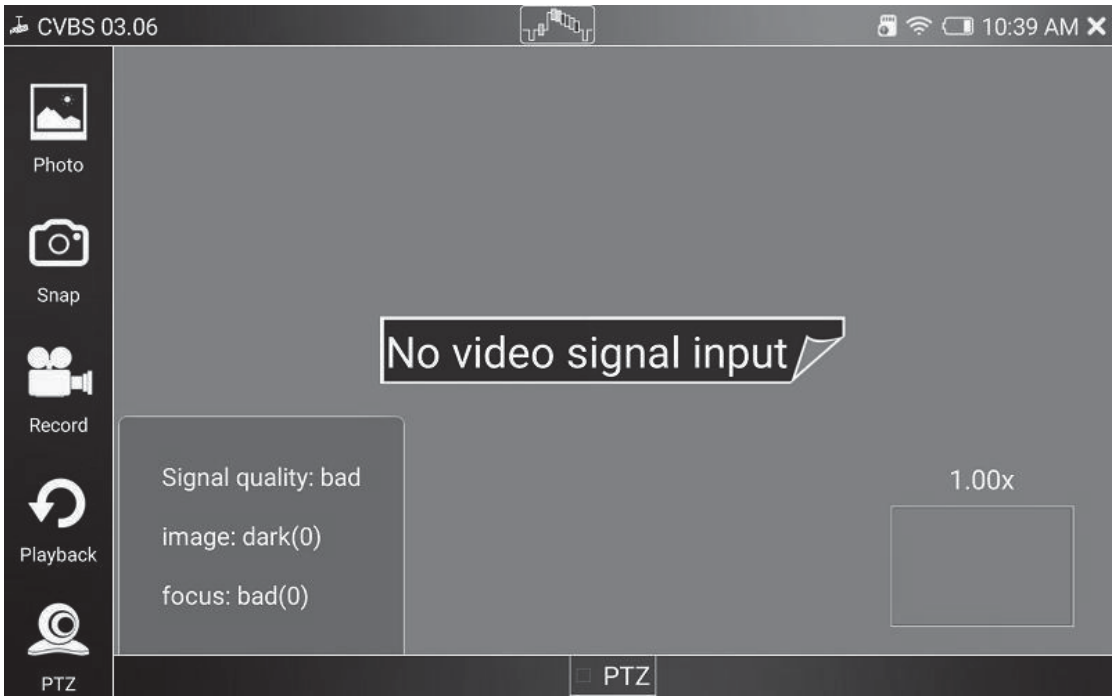


Figure 10

7）AHD, TVI, CVI coaxial HD max resolution: (HD module is optional) **HIKVISION TVI coaxial HD max 8MP resolution 3840X2156 15P**

DAHUA CVI coaxial HD max 8MPresolution 3840X2156 15P

AHD coaxial HD max 8MP resolution 3840X2156 15P

8）Advanced settings:

Touch the Set icon on the lower left hand corner to enter advanced settings, you can set the screen auto sleep time, photo watermarking and testing report, view instructions and set the hardware version number **(warning: be careful to set)**, as shown in Figure 11

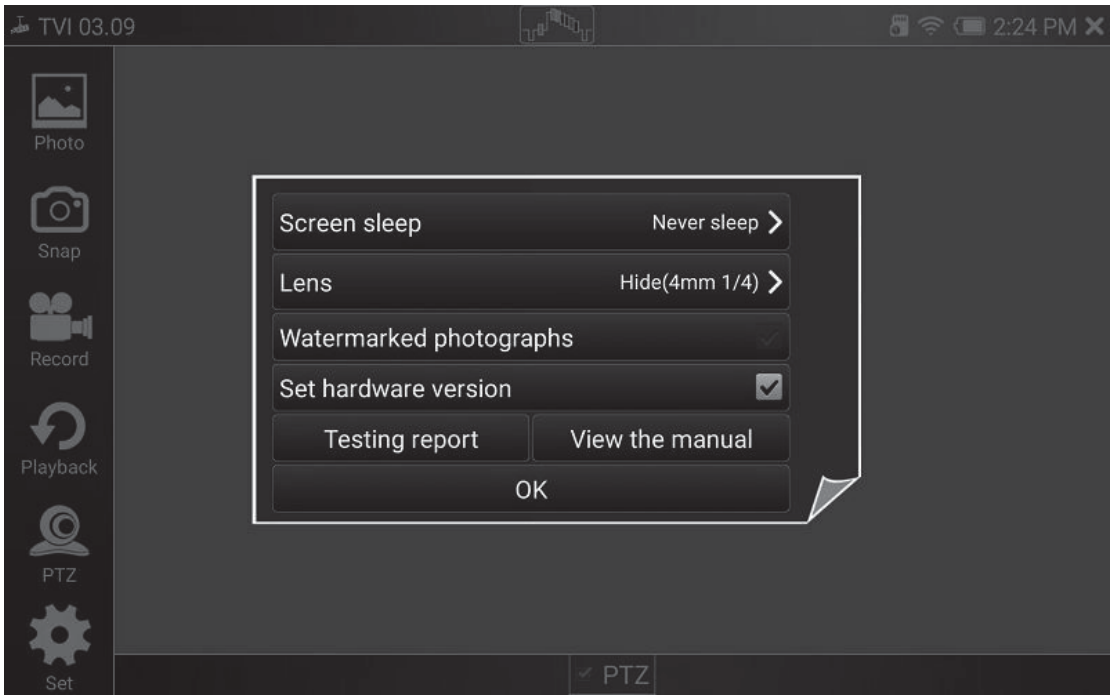


Figure 11

2.3 IPC Network Camera, IP-Discovery, Rapid ONVIF

IP-Discovery adopts whole network segment searching technology, it changes the instrument IP to the same network segment as IP camera automatically, no need to operate manually. It can check if the camera has started completely, PING directly to check network status and jump to rapid ONVIF (you can disable it) to view camera video automatically, automatically log in and save username password, support violent password cracking for some cameras, it can identify HIKVISION inactivated camera automatically and add ONVIF protocol automatically for new HIKVISION cameras, support one key activation and generate testing reports and so on, as shown in Figure12

Operation Instructions:

1. Connect IP camera to LAN port via network cable, then supply power for camera

2. For POE cameras, after connecting camera to LAN port, open PoE power output switch, no need to connect power adapter cable (there are follow-up instructions for PoE, please refer to ‘power management’)

3. Touch ‘IP-Discovery’ or ‘One-click video’ App icon to view camera video

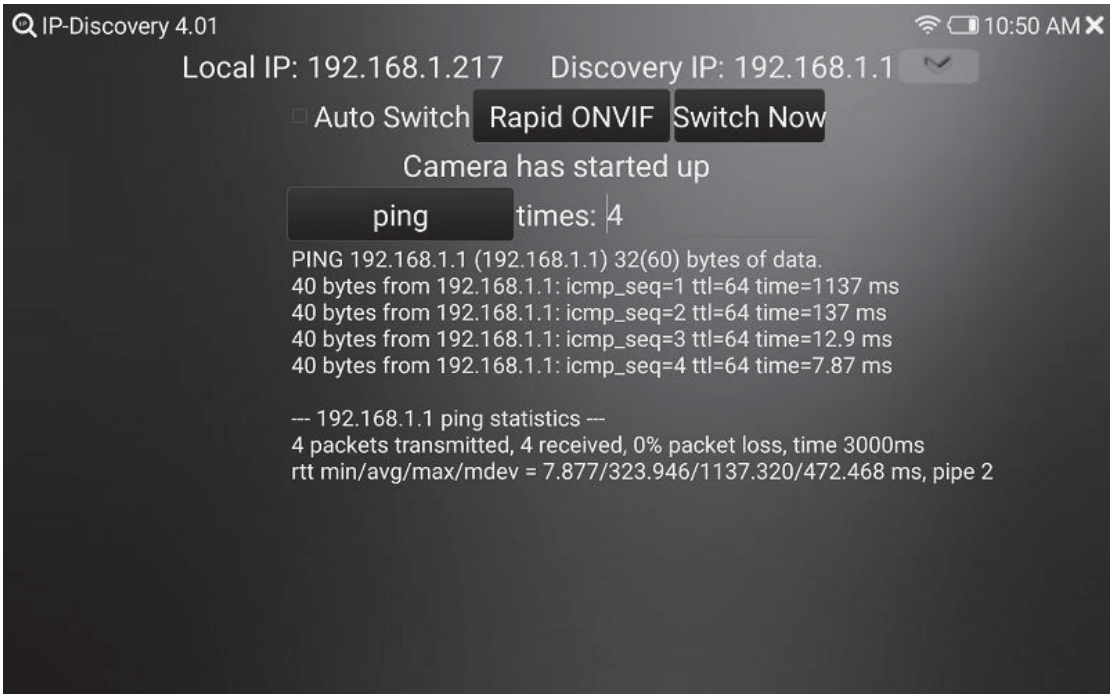


Figure 12

2.4 Rapid ONVIF, ONVIF-XVR

Touch the Rapid ONVIF icon to enter this App function, in the state of connecting to network, the instrument will scan ONVIF cameras in LAN automatically, after scanning for 1-2 seconds, Scanned ONVIF IP cameras will be listed on the left, for cameras do not require authentication, you can view the video image by touching the camera directly, for cameras that require authentication, input username and password to log in and view the image, as shown in Figure 17

1) Input the username and password in the second column, touch the login button, by default, username and password are both ‘admin’, if it prompts error username or password,touchlogouttoeditthevalue.Bydefault,itloginsautomatically,youcan disable it in advanced setting menu. Click the small icon on the right of username and password to view or delete the history username and password records, as shown in Figure13.

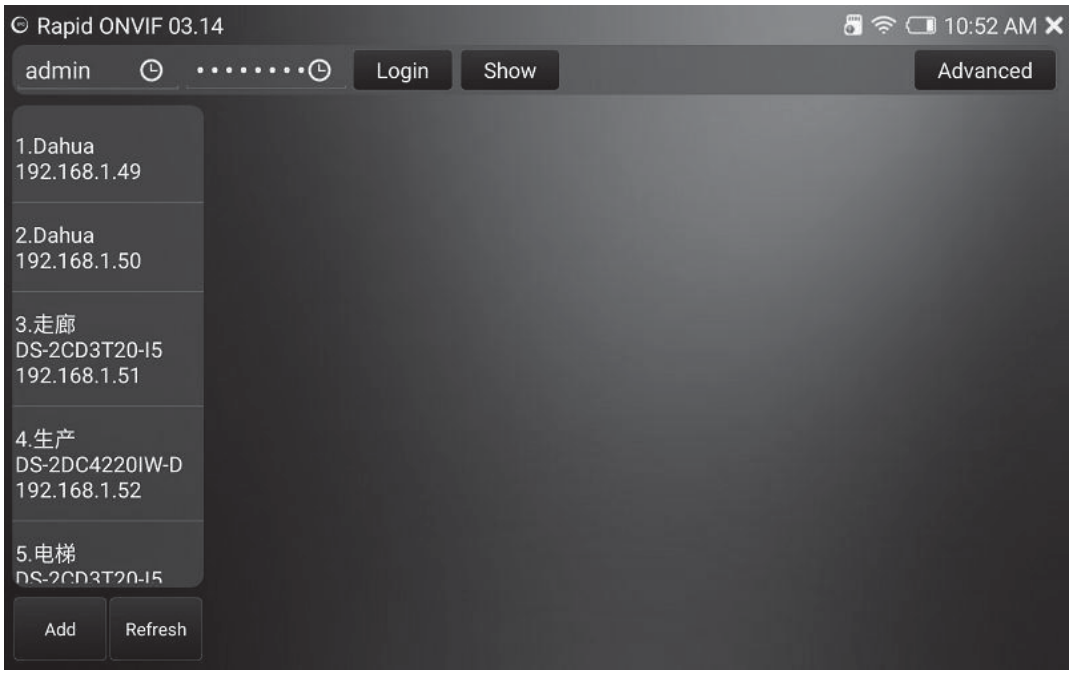


Figure 13

2) Select the camera to be operated, touch it on the left to display image directly, it can display 4K H265, H264, MPEG4 format video, as shown in Figure14.

Figure 14

3) Photo taking, video recording, playback, full screen operation and image zooming functions please refer to CVBS analog video operation part.

2.4.1 ONIVF-XVR multiple cameras batch display

1) CCTV testers in the market support only single camera image viewing by now, YIAN Electronics developed multiple cameras batch preview function which support max 32-channel HIKVISION, DAHUA, etc. IP cameras, as shown in Figure15

Operation Instructions:

1. When all cameras are in the same Ethernet and use the same username and password, this tester can display at most 32 camera videos in one screen, there are different combinations.

2. Support reload IP cameras, support cache history playing record to display again rapidly next time, you can also clean the cache.

3. Support to add new cameras manually in this screen.

4. Double press to full screen view video, you can take photos, edit OSD channel name or date time, etc.

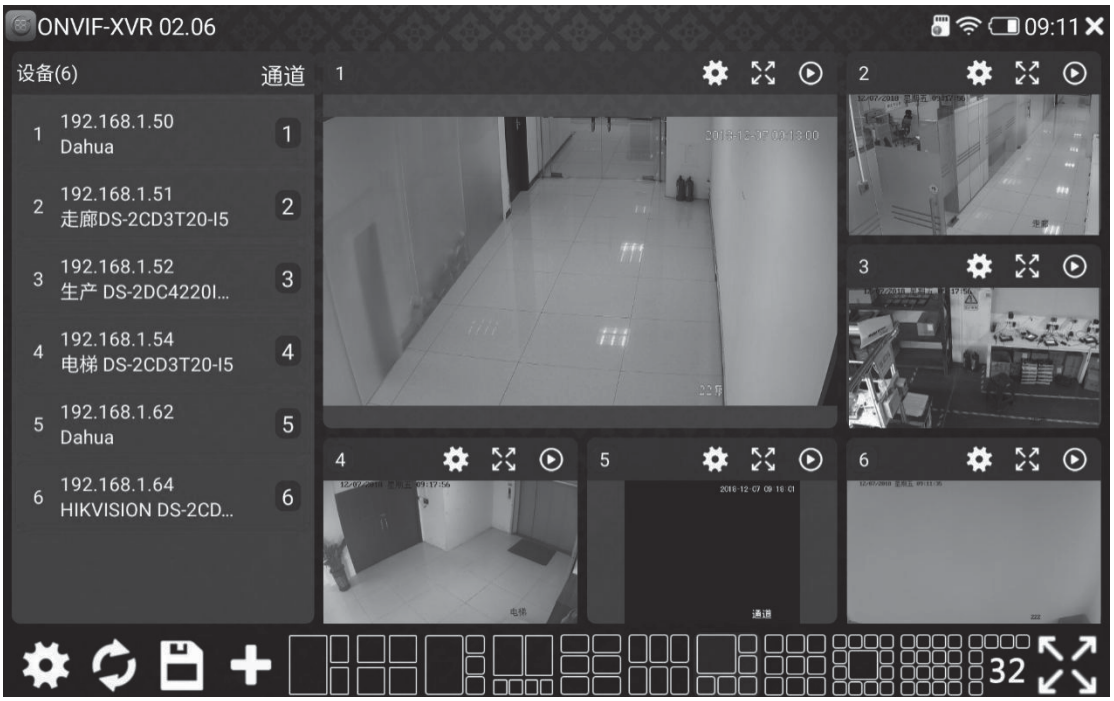


Figure 15

2.4.2 ONVIF Parameter Setting:

ONVIF function can operate cameras which support ONIVF protocol as below:

1) Device information viewing, touch the ‘device information’ button to view the camera information, touch the item to edit value then touch OK to apply, as shown in Figure 16

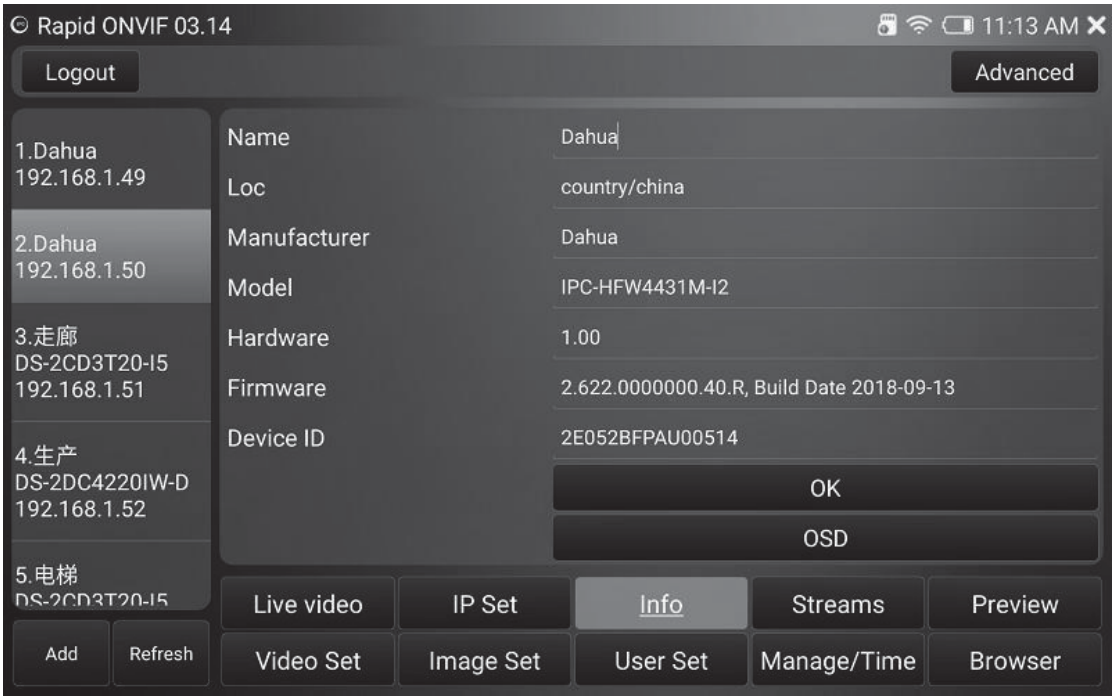


Figure 16

2) Maintenance / time, touch the Manage / Time setting button to reboot camera, reset configuration or change Time zone, as shown in Figure17

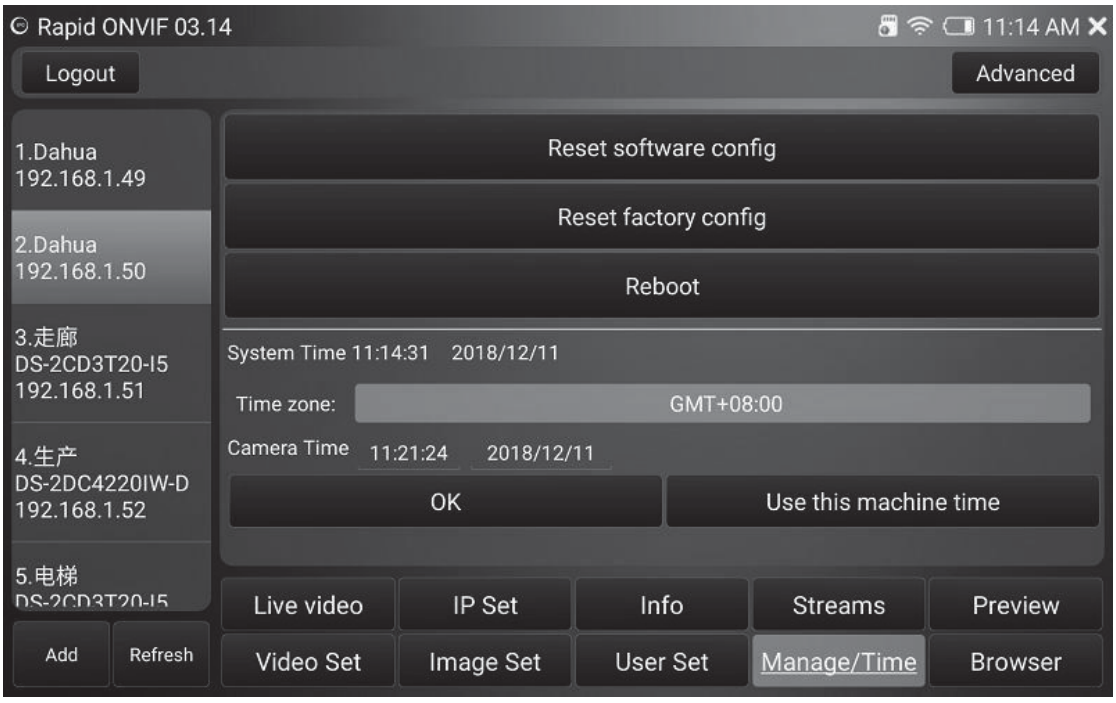


Figure 17

3) IP set, touch the IP Set button in the main interface to enter the camera parameter setting function, as shown in Figure 18,19

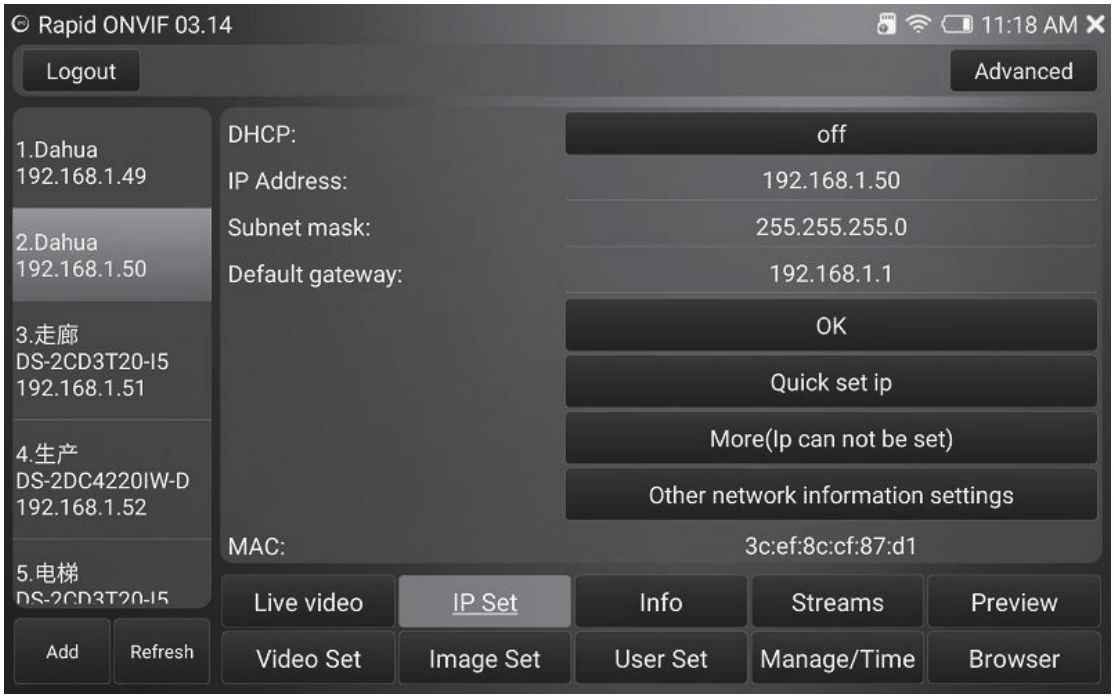


Figure 18

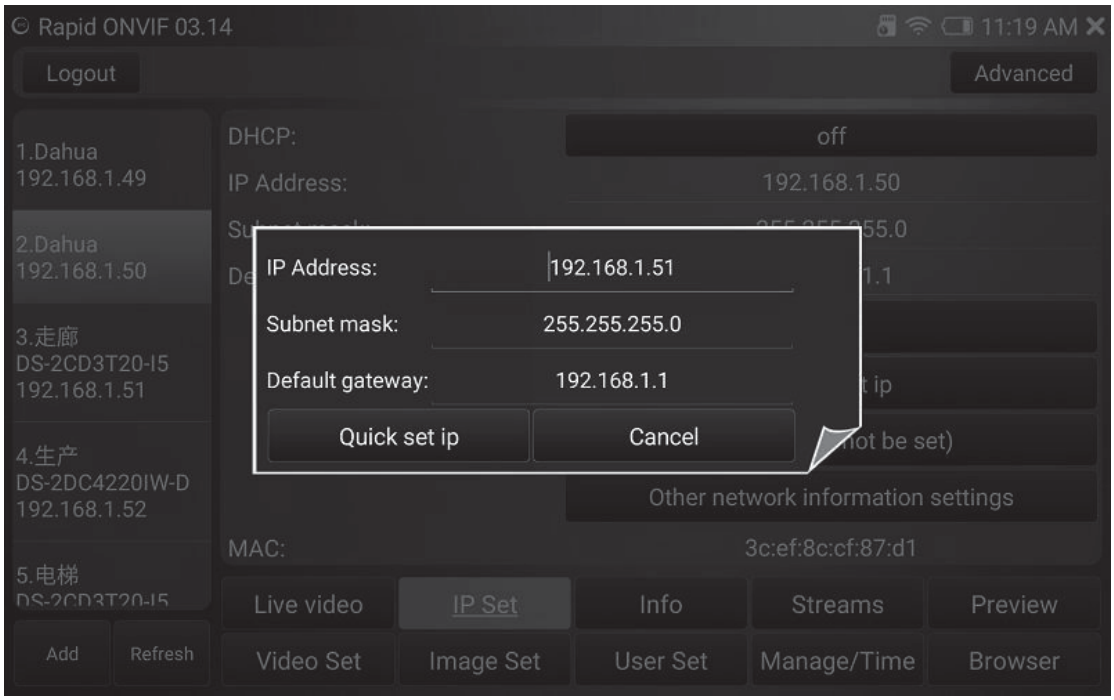


Figure 19

4) For cameras unable to edit IP: in rapid ONVIF App, touch IP Set button to set IP, if it cannot be set, touch ‘More’ button in the middle, it will list out all camera clients and recommend you to use the corresponding client software, touch to enter client and finish setting, as shown in Figure20

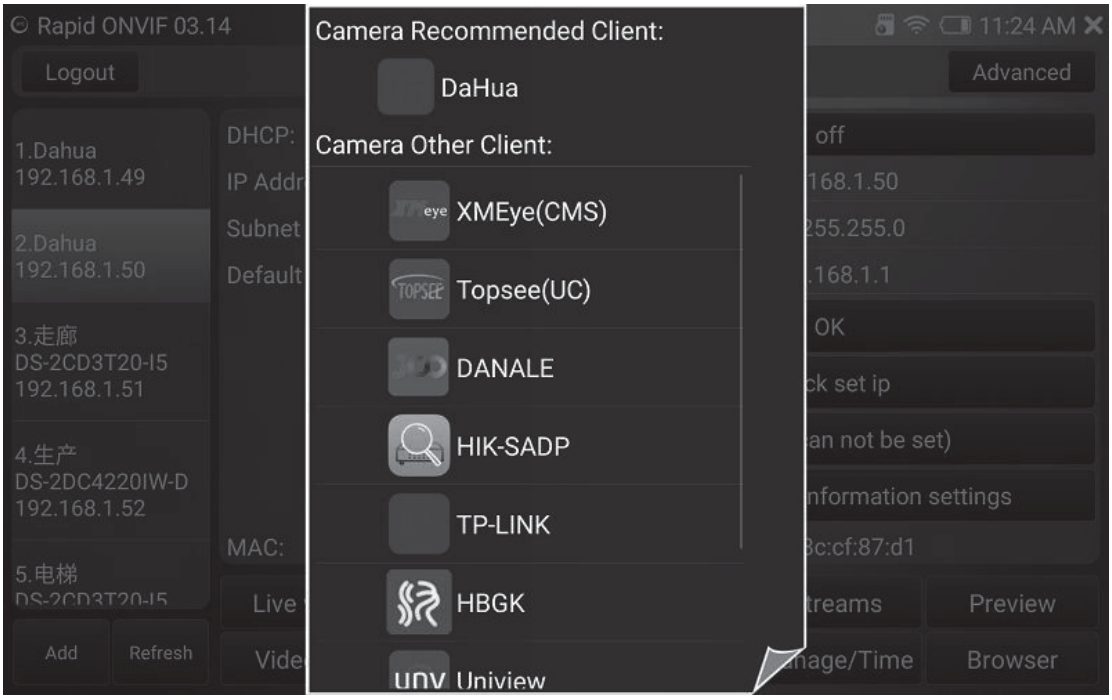


Figure 20

5) Video setting, touch ‘Video Set’ button to enter video stream setting interface, you can set ‘Encoder and resolution’, ‘Encoder interval’, ‘Quality’, ‘Frame rate’, ‘bit rate limit’, ‘GOV length’ parameters, after setting touch OK to apply settings, as shown in Figure21

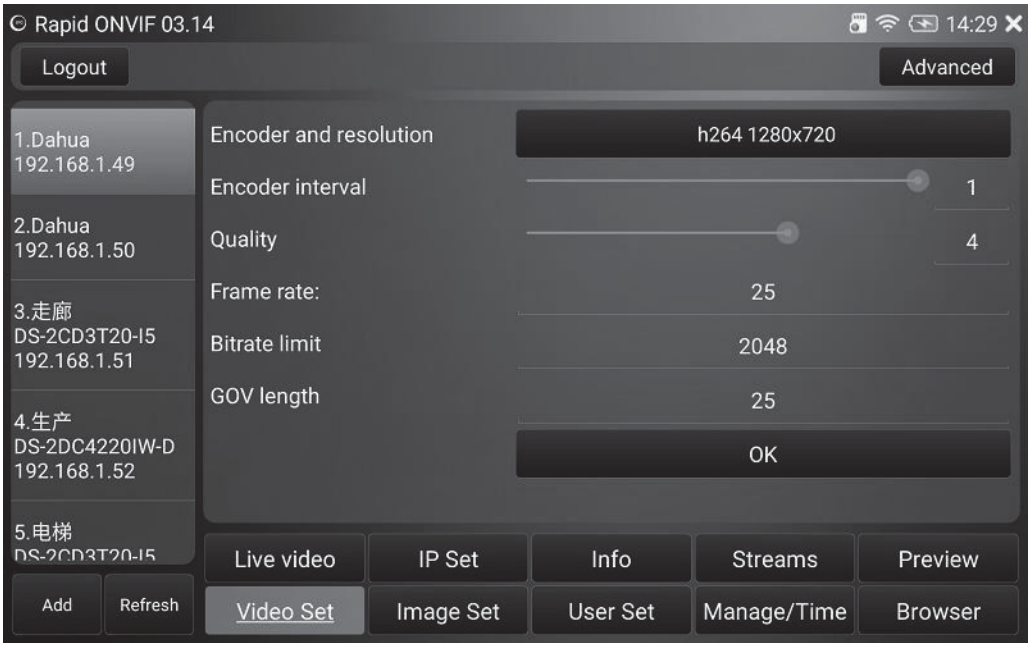


Figure 21

6) Image setting, touch ‘Image Set’ button to enter image setting interface, you can set the image parameters including brightness, saturation, contrast ratio, sharpness, etc, after setting touch ‘OK’ button to apply settings, as shown in Figure 22

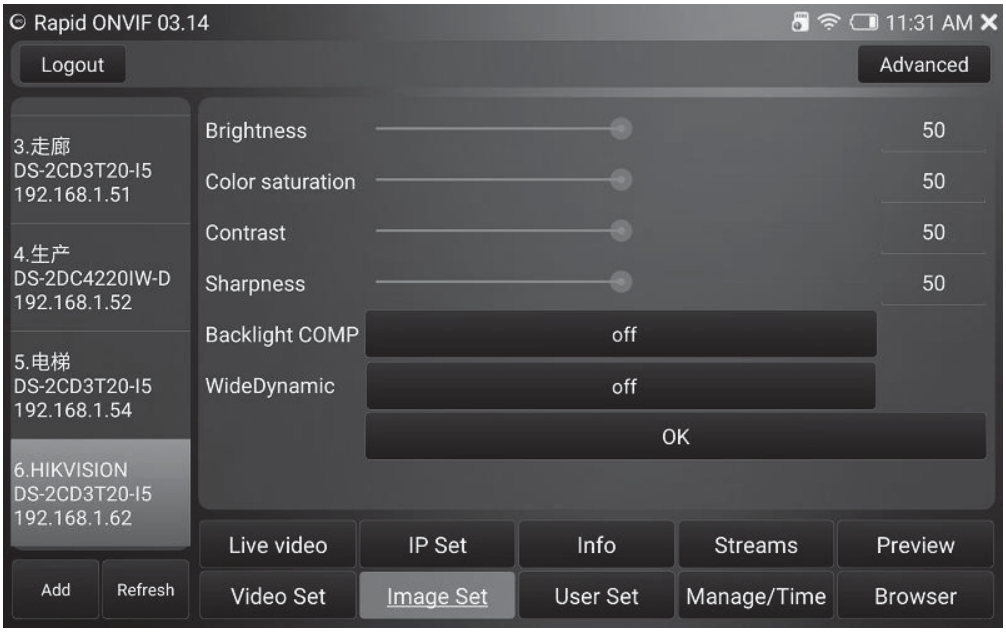


Figure 22

7) Stream selection, touch the ‘Streams’ button to view the current stream configuration file, you can switch between main stream and auxiliary stream, as shown in Figure23

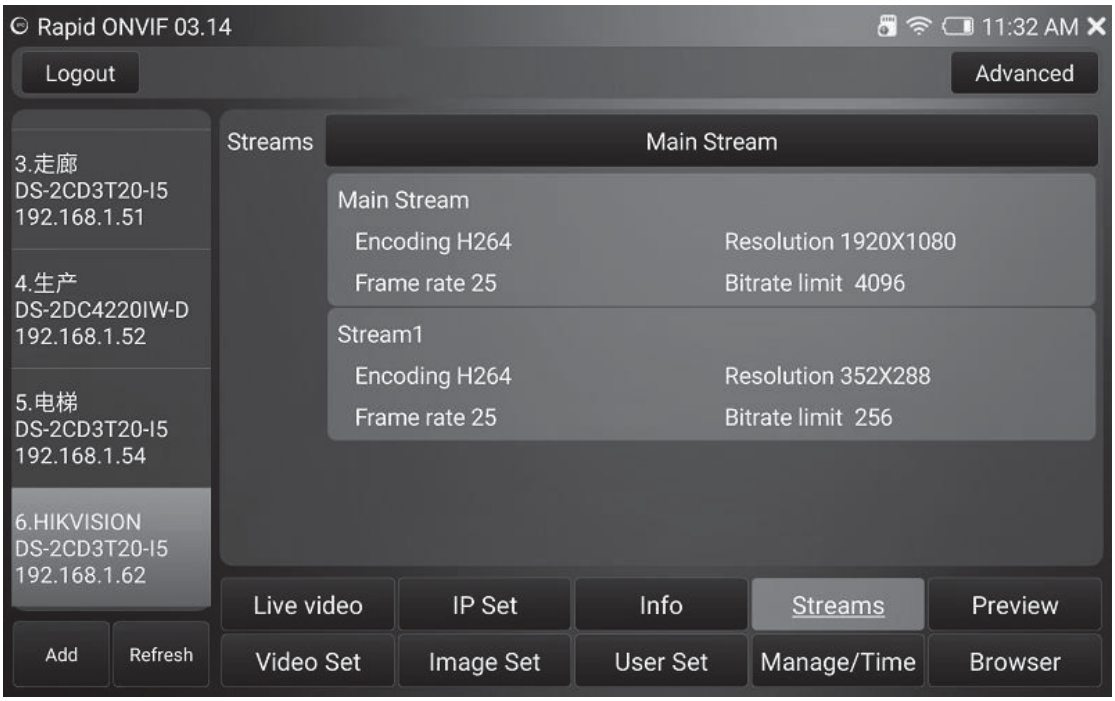


Figure 23

8) ‘Add’ button: touch the ‘Add’ button on the lower left hand corner to add ONVIF camera address manually.

9) ‘Refresh’ button: touch ‘refresh’ button to reload all ONVIF camera list in the same network segment.

10) Advanced settings, you can set Auto-login, Play sub-stream, Watermarked photographs, Video tensile, Lens, etc, as shown in Figure24

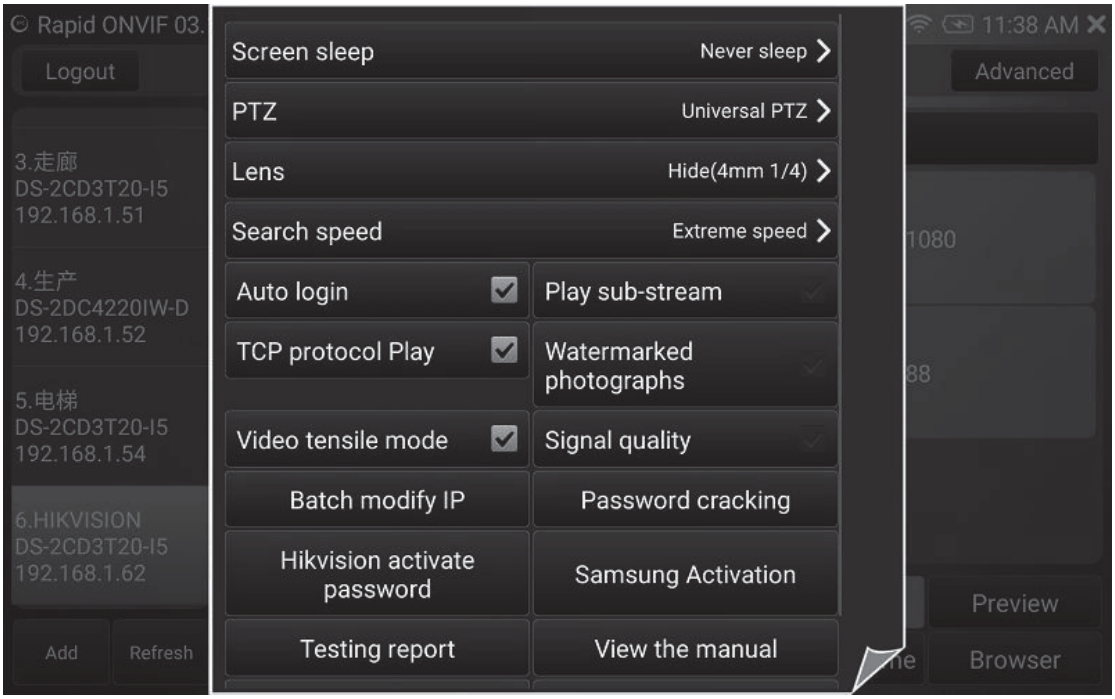


Figure 24

11) Channel name setting, Touch ‘info’ button under the ONVIF interface, touch ‘OSD’ button at the bottom of this page to popup channel name, date time editing dialog, if you cannot edit on this page, please go to corresponding camera client to operate, if there are no corresponding client, please use the browser to login camera configuration page to edit the value.

2.5 HIKVISION SADP

HIKVISION SADP can scan the network full segment for HIKVISION camera IP, if there are no cameras found, you can add IP manually. It can identify if a camera is activated automatically, set the camera IP or series number. It can activate or batch activate cameras, set or batch set IP, edit password or channel name, restore factory settings, jump to browser and view camera video through different ways, as shown in Figure 25

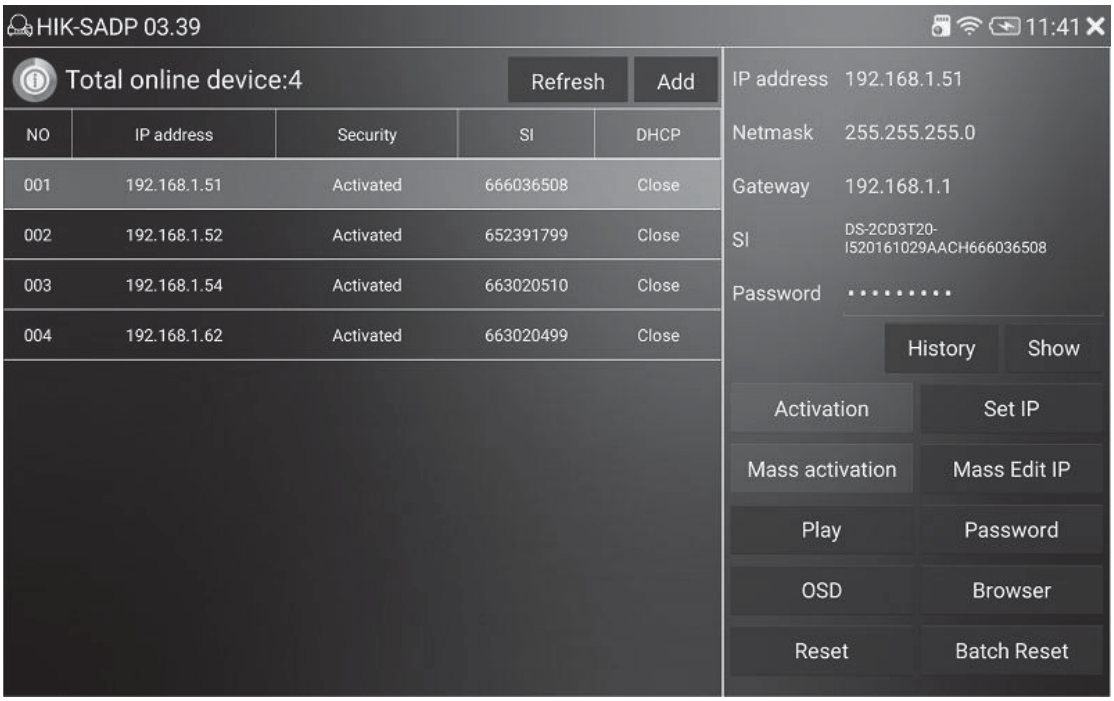


Figure 2

2.6 RTSP Player

RTSP player enables you to input RTSP address manually to play video. You can input IP and scan IP to search RTSP address automatically; you can choose a camera brand to find RTSP addresses to play. The device supports almost all brand cameras in the market by default, as shown in Figure26, 27.

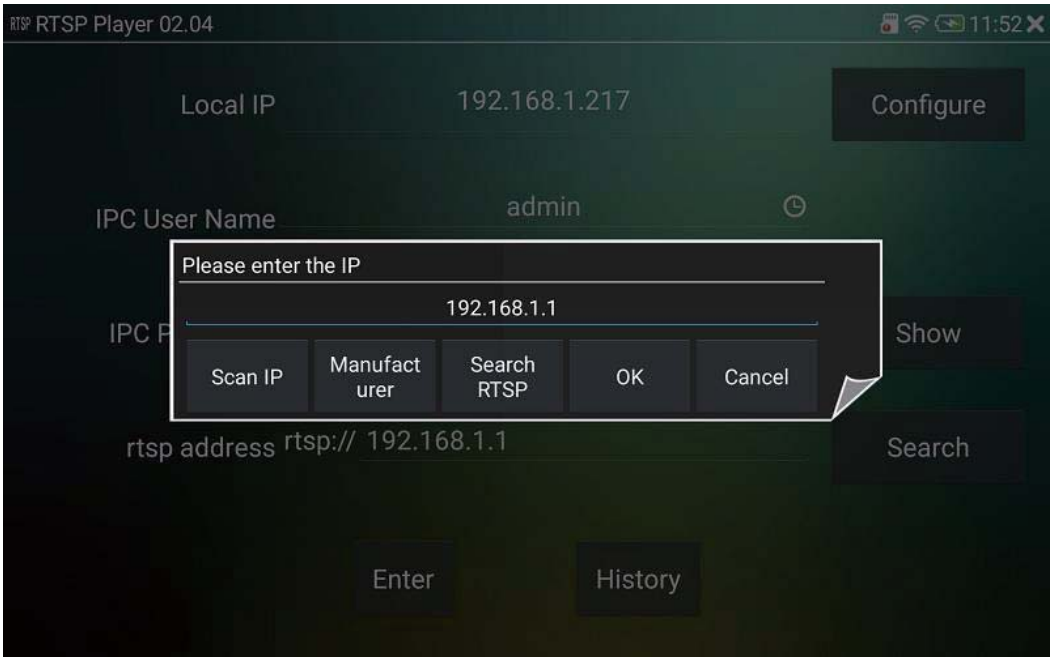


Figure 26

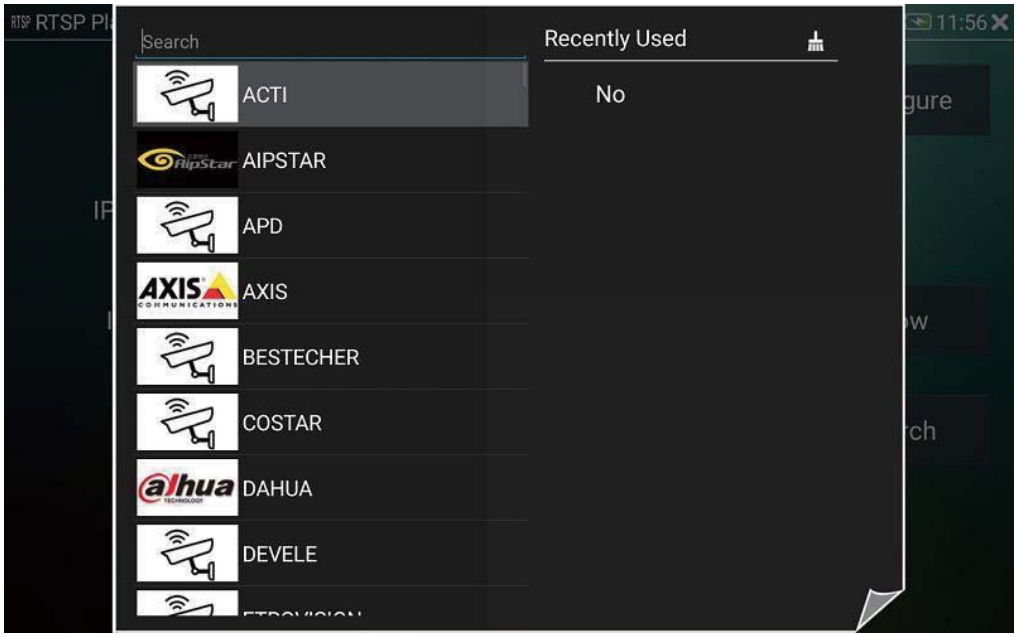


Figure 27

2.7 Network tools

IP address scan function: IP address scan function can scan out all IP addresses in LAN, and identify whether it is a camera IP address, touch the ‘Scan’ icon on the left bar and wait for a few seconds to scan out all IP addresses in this range, if it shows the listed IP is a camera, you can touch ‘Watch camera’ to jump to ‘Rapid ONVIF’ App to view the camera video, as shown in Figure 28

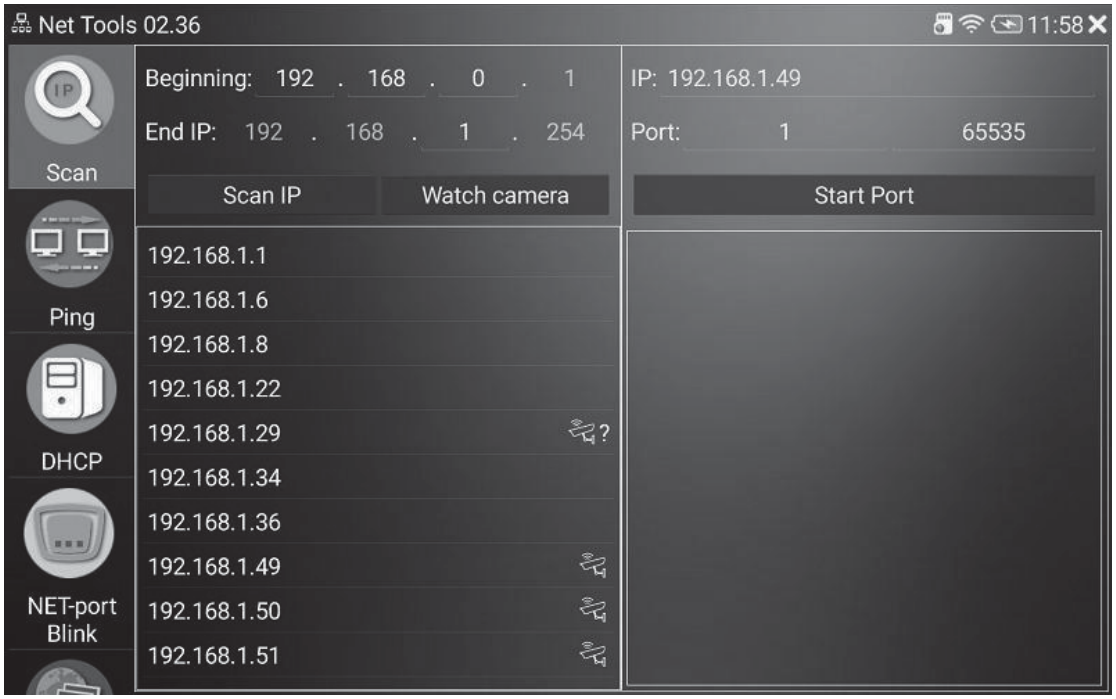


Figure 28

2)PING Tool: Touch ‘Ping’ icon on the left bar to perform network debugging conveniently, input ‘Remote IP’, ‘Send Num’ and ‘Send size’ can use default value, you can test current network condition and PING value, touch ‘Start’ button to perform this operation, as shown in Figure29

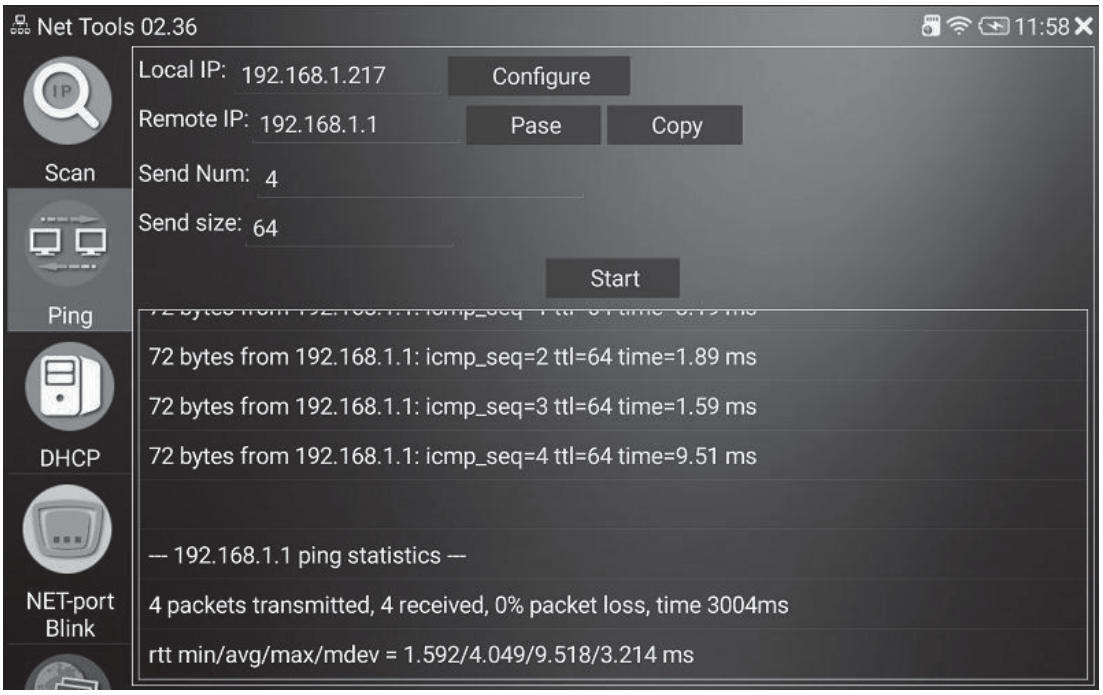


Figure 29

3)NET-port Blink function: Connect one end of the cable to LAN port, touch 'Start' button then you can see the port on network device blink regularly, it's easy to find the other end of a cable by this function, port blink period is 2 seconds, as shown in Figure30

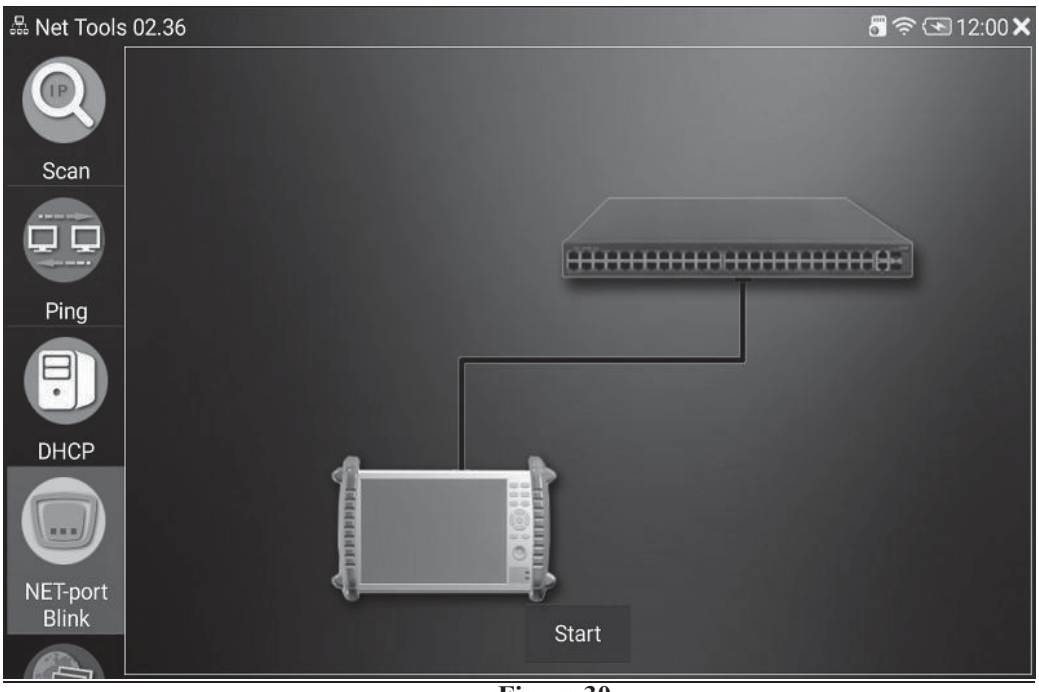


Figure 30

2.8 PSE voltage test

PSE voltage test enables you to test the POE network cable port power voltage and power supply cable sequence, touch ‘PSE’ icon to enter this App function, as shown in Figure 31

Operation Instructions:

1. Use one network cable to connect switch with instrument PSE IN port, be careful do not turn on instrument POE power.

2. Use another network cable to connect instrument LAN port with a camera which support POE power, notice that the camera must support POE power or it will cause test failure (if you are testing a non-standard PSE, skip this step).

3. Touch ’PSE’ App icon then you can see the power supply voltage of cable 1,2 is 46V

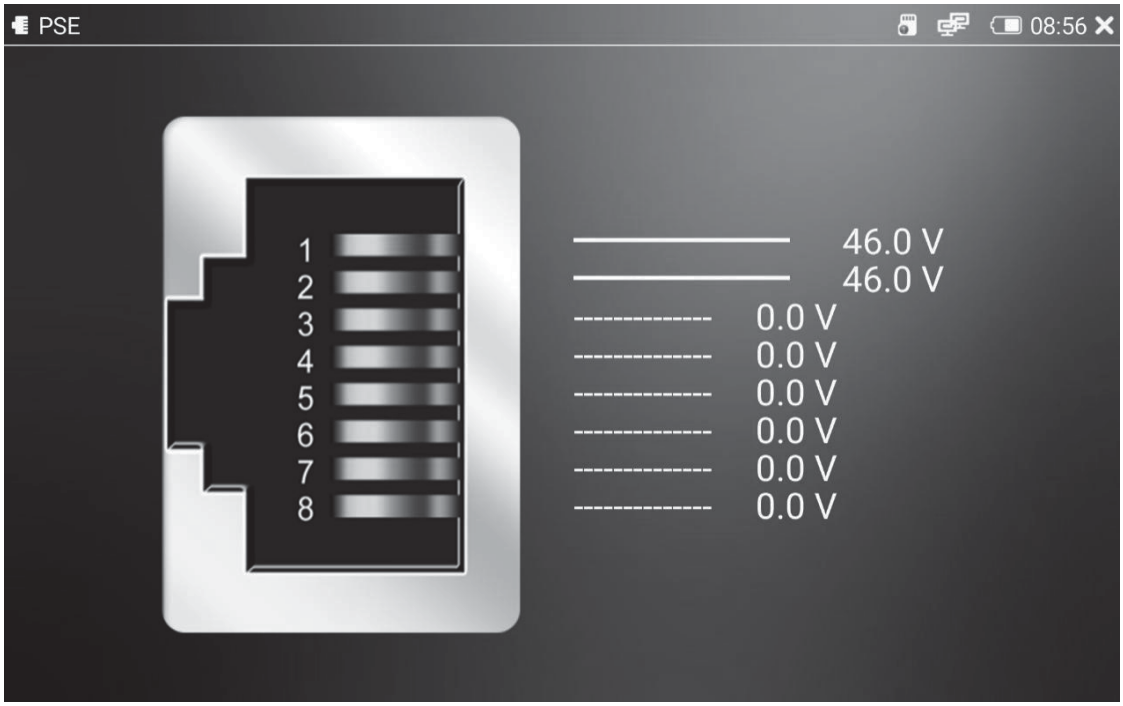


Figure 31

2.9 Power management

Power management enables you supply 48V temporary power for cameras which support POE power. Touch ‘Power’ icon to enter POE power control function, USB5V/2A and 12V/2A power is on by default, no need to open manually, touch the switch button to open or close 48V power, at this time LAN port provides 48V standard POE power for cameras, as shown in Figure 32

Operation Instructions:

POE48V power output: use a network cable to connect LAN port with POE camera, touch ‘ON’ to supply temporary power for POE camera, network cable 1/2/3/4 supply 48V standard power.

⚠Warning: Before using this function, please make sure the camera support POE power, if not, please do not connect the camera, it may cause camera failure or damage and other unpredictable consequences.

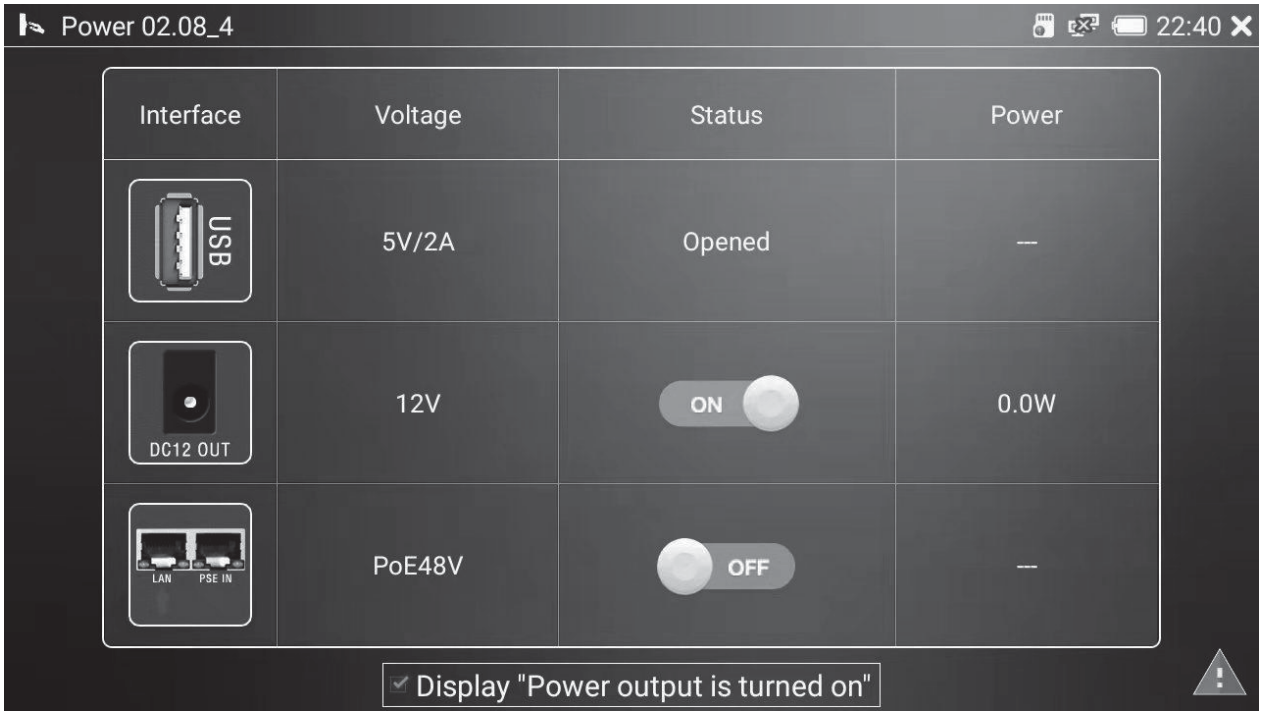


Figure 32

2.10 RS485 Serial Port Tools

RS485 tools can accept, send and analyze RS485 port data. It can be used to analyze PTZ protocols. Touch ‘Series’ icon to enter the serial port function interface, you can set Baud rate, Data bit, Parity bit and Stop bit, you can set the data type to character or HEX to display and send. Touch ‘Clr Recv’ or ‘Clr Send’ to clear the screen, as shown in Figure 37

Operation Instructions:

1. Connect RS485 cable to RS485 port, crocodile clamp to device, be careful the port has positive and negative distinction, do not connect incorrectly.

2. Touch ‘Serial’ icon to enter App to test

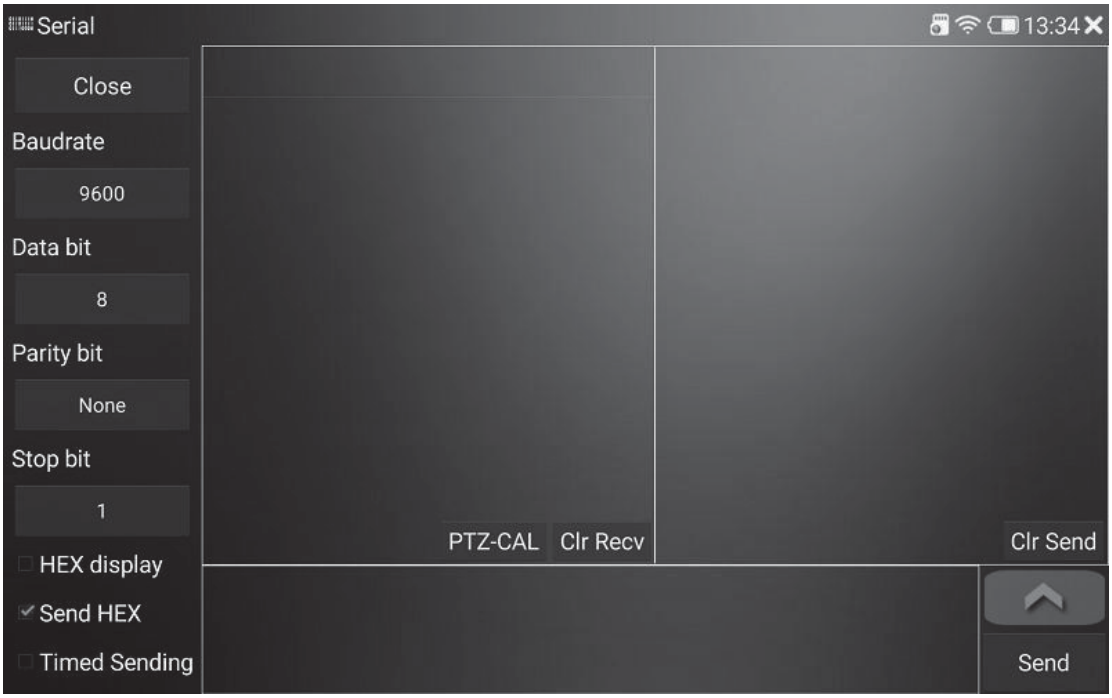


Figure 33

2.11 File management

File management function enables you to perform copy, move, rename or other operations for internal storage and external SD card files conveniently, when the instrument is connected to LAN, FTP function is also available, you can perform file operations directly on computer instead of pulling out SD card.

▲Remote management

When the instrument is connected to LAN, you can use the remote management function, touch ‘Start Service’ button to turn on the remote FTP service, after starting FTP, click ’my computer’ on PC and input ftp address to enter the instrument internal or external SD card storage, it’s convenient to copy or delete files, no need to remove SD card, as shown in Figure 34

Figure 34

2.12 Browser

1)Browser function enables user to access the IPC camera directly through web page, touch the 'Browser' icon to enter browser function, input camera IP address directly in address bar to open the camera web page, as shown in Figure 39 (notice: all IPC testers in the market do not support installing plug-ins for browser).

Take HIKVISION IP camera as an example, input HIKVISION camera IP to open the following page.

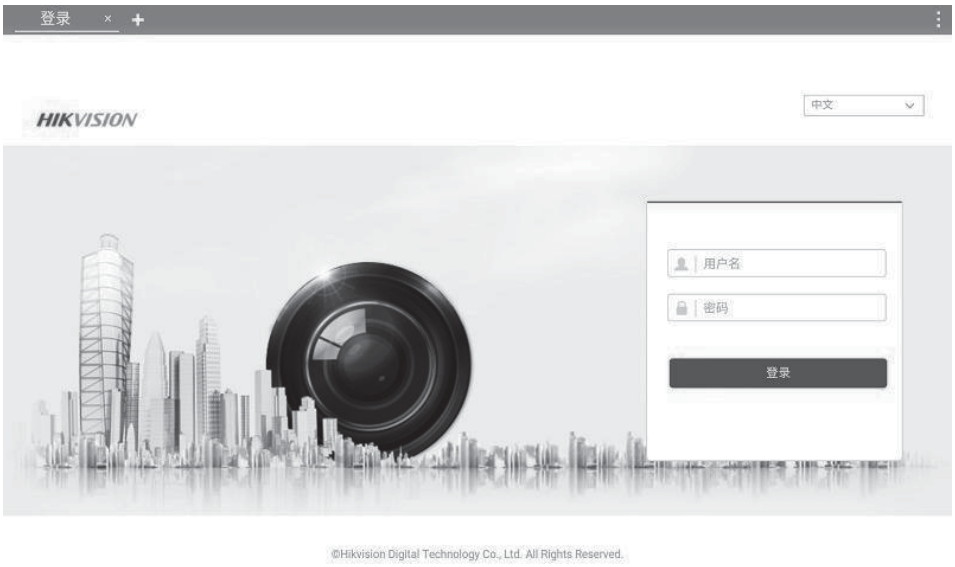


Figure 35

2) Input camera username and password to login to camera web configuration page to modify IP and other parameters directly, as shown in Figure36

Figure 36

2.13 Upgrade center

Upgrade center is used for application management, you can install or uninstall Instrument Apps here, it supports to connect remote server to install online or install locally.

1） In application center, you can view application version, perform online or local upgrade for Apps. The number under App name is current version number, touch the App to jump to corresponding manual, long press to uninstall it, after uninstalling, if it is a system App, slider to the page end you can find and recover it, touch ‘Store’ icon to enter application update function, as shown in Figure37

2) Online installation, touch ‘Online’ button, the instrument will connect to server and check if there are any Apps need to upgrade, as shown in Figure38

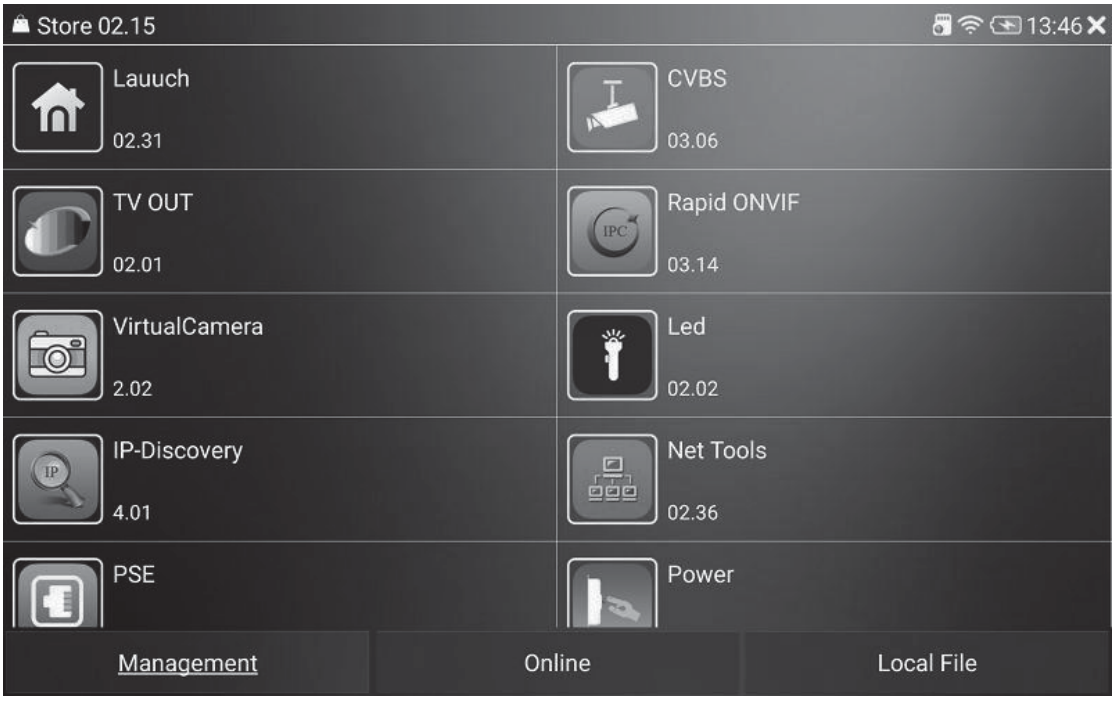


Figure 37

Figure 38

3) Local installation, touch 'Local File', the instrument will scan internal storage, SD card and U disk to look for installable software packages, long press corresponding Apps to delete application file, as shown in Figure39

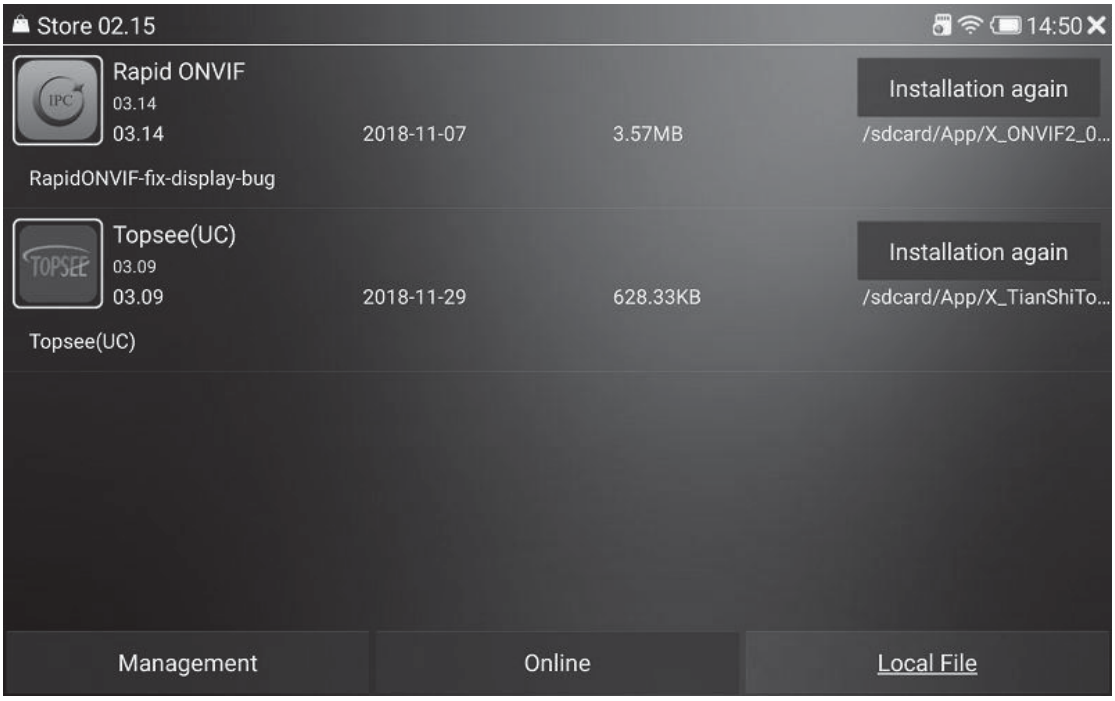


Figure 39

2.14 Settings

System settings function can set instrument parameters such as network parameter, WIFI, time (it's able to use network time after connecting to Internet), backlight brightness, volume, sleep time, languages, etc. you can also view the instrument system version information. Touch the 'Set' icon to enter system setting function.

1) Ethernet Settings

Touch 'Ethernet' icon on the left bar, select 'use Ethernet' column, connect a network cable to instrument LAN port, the instrument can be set to static IP or dynamic IP mode, if you want to use static IP, select 'Use static IP' column, then set the instrument IP address, gateway, subnet mask, primary DNS and alternate DNS items and you can add multi segment IP, as shown in Figure 40

1.By default, the instrument uses static IP address 192.168.1.88, gateway is 192.168.1.1, subnet mask is 255.255.255.0, primary DNS is 192.168.1.1 and alternate DNS is8.8.8.8

2.Use dynamic IP address mode, the instrument can be changed to dynamic IP acquisition mode, current IP is 192.168.1.86, as shown in Figure40

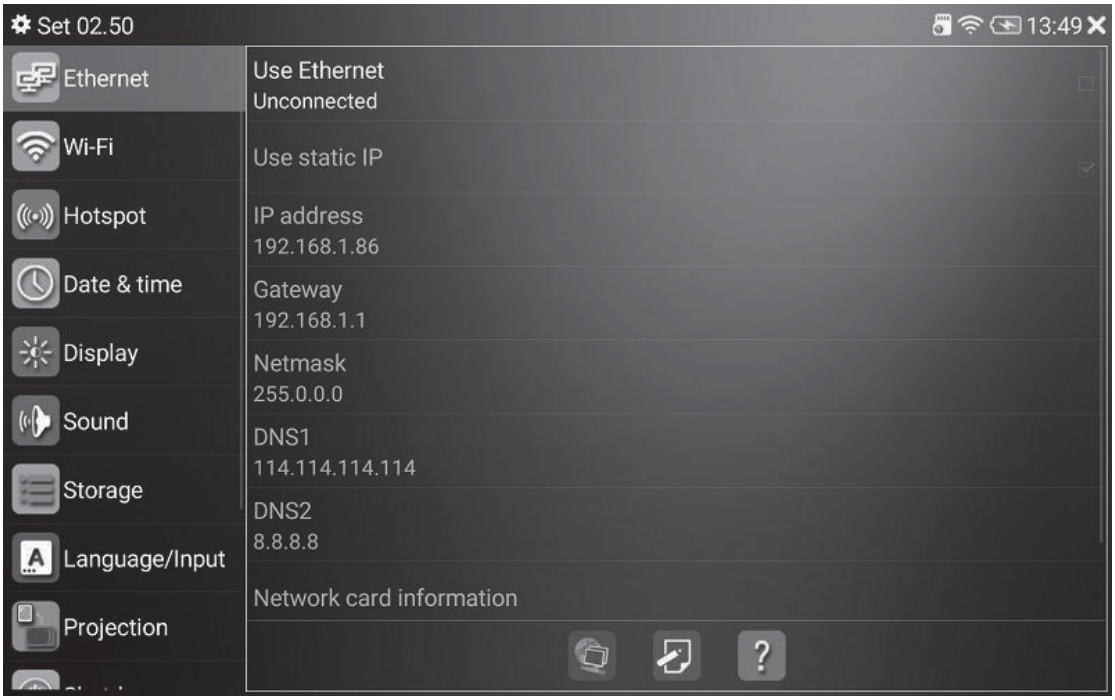


Figure 40

3. Touch the icon  in the bottom to set IP quickly, rapid IP setting enables you to add, edit and delete common used IP, touch the icon  in the bottom to restore default network settings, as shown in Figure41

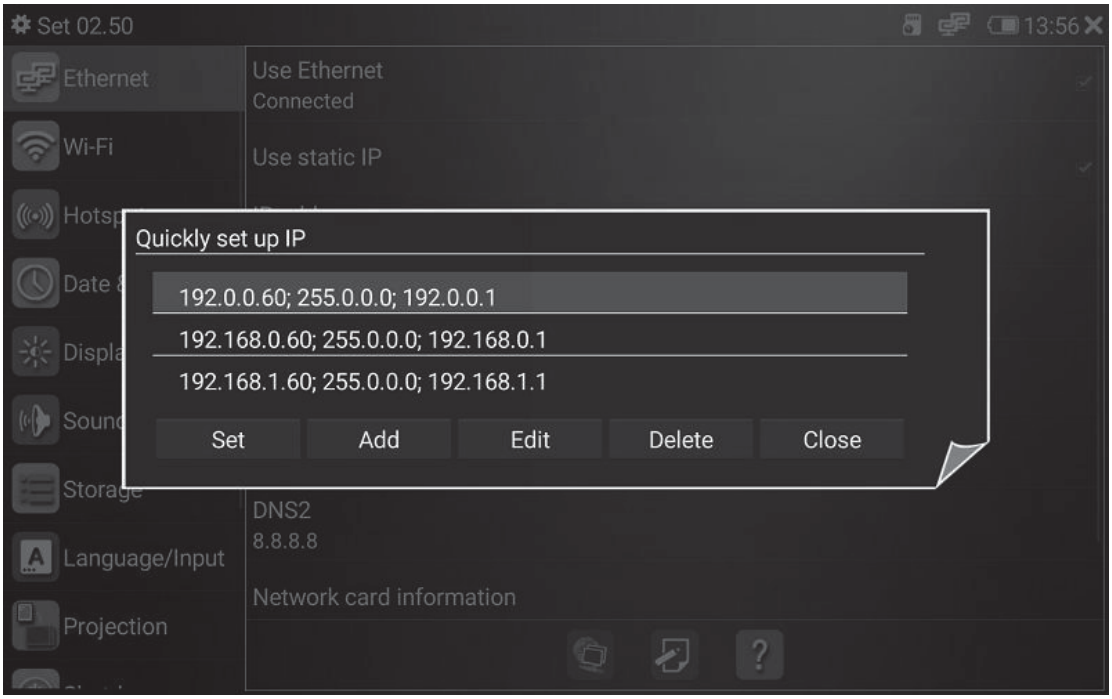


Figure 41

2) WLAN Setting

⚠ **Notice:** Please pull out the network cable first if you want to use WIFI, or the instrument will use Ethernet by default

3)WLAN Hotspot

⚠ **Notice:** WIFI hotspot and WIFI cannot be used at the same time

4)Storage

Storage settings enable you to view the current internal storage space and available capacity, external SD card and U disk, you can uninstall SD card or U disk, when SD card is plugged in and selected to use, the storage path is external SD card, if not selected, the storage path is internal SD card, by default, storage path is external SD card when it's plugged in, as shown in Figure42

⚠ **Warning:** before pulling out SD card or U disk please uninstall it first, or it may cause data loss or SD card, U disk damage, etc unpredictable consequences

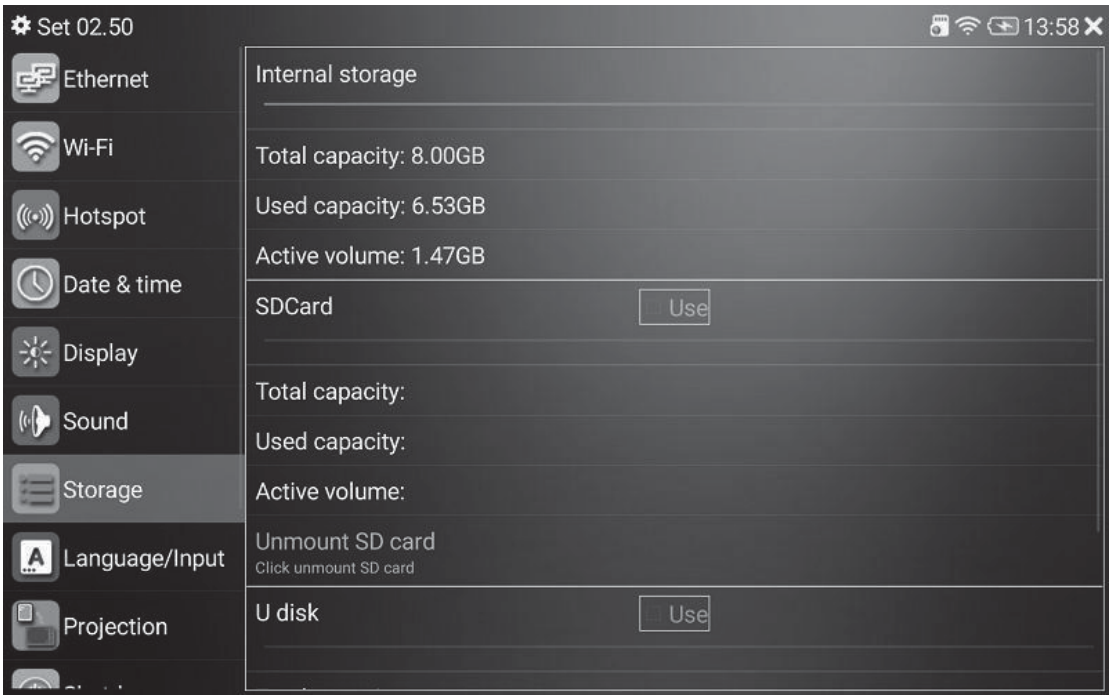


Figure 42

5)Screen projecting, the instrument can use Ethernet, WLAN or WLAN hotspot to perform projection (turn on WLAN hotspot first), screen projection supports devices including Android, Apple, WP, Black berry, Computer, etc., no need to download, free flow, scan QR code to perform projection directly or input manually, as shown in Fig

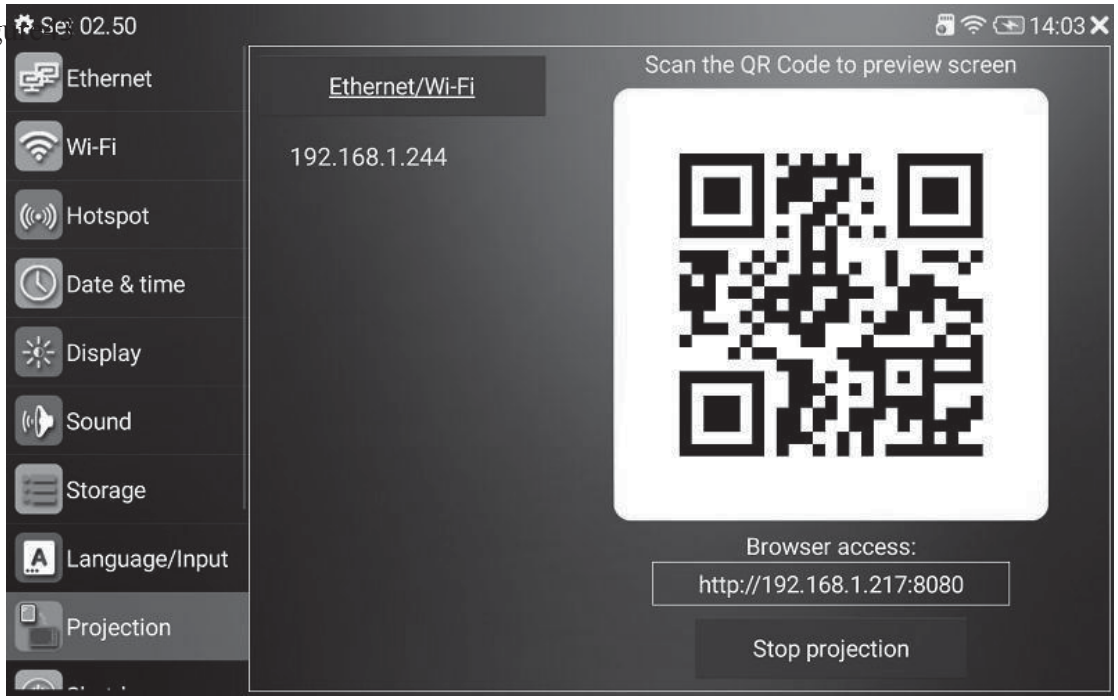


Figure 43

6)Language/Input, this instrument is built-in multiple languages, you can use English, Russian, Japanese, etc. as shown in Figure 44

Figure 44

2.15 Network Cable Test

The network cable test function can display cable connection status directly, there is a built-in wire map to work with the cable test function to find out which side of the connectors is a fault connector, it can generate test report, as shown in Figure 45

Operation Instructions:

1. Connect one end of network cable to instrument TDR port, the other end to the port on cable tracker signal receiver or the blue cable test box

2. Touch ‘Cable test’ App to enter network testing interface

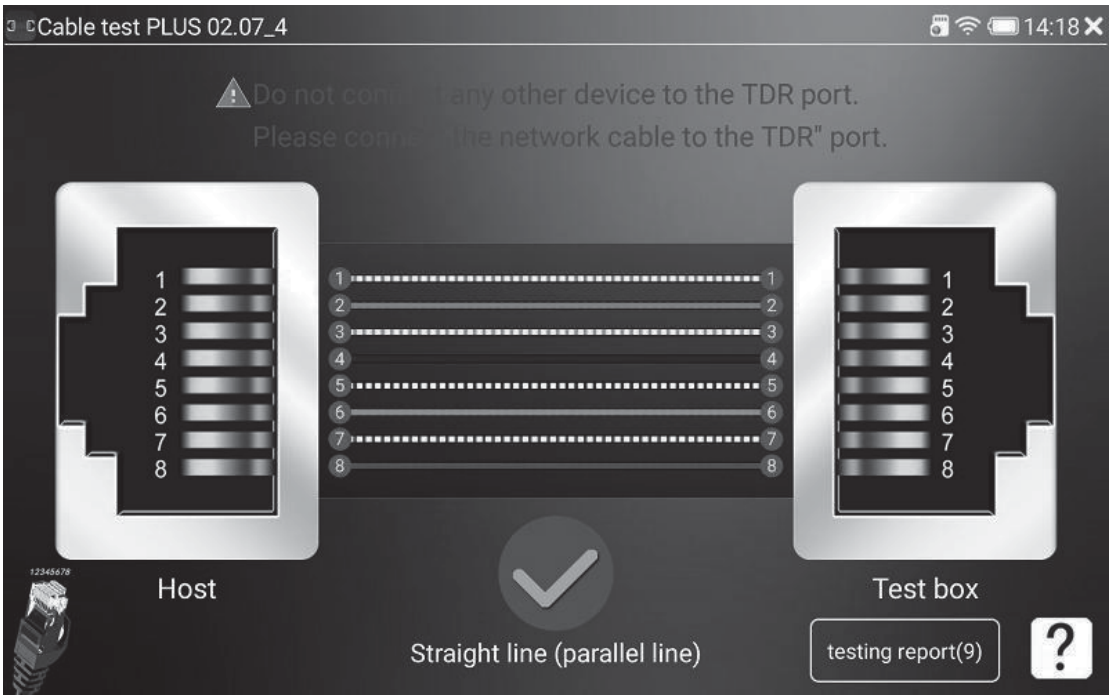


Figure 45

⚠ Warning: TDR port is not allowed to connect PoE switch or other over 5Vdevice, or it can be burnout.

Description

1. When the network cable test fails, in order to find out which end of the connectors is incorrect, the cable should be at least 2 meters.

2.16 TDR Breakpoint Test (optional)

TDR breakpoint test function can measure the cable length or the distance between breakpoint and instrument, support max 1500m, support network cable, BNC cable, telephone wire, TVVB, etc. It also supports user-defined cables and precision calibration. It can lock the test result and generate test report, as shown in Figure 46

Operation Instructions:

1. Connect ordinary network cable to the instrument TDR port to view its length directly, the other end do not need to connect anything

2. BNC video cable or other cable please use a RJ45/BNC or BNC/crocodile clamp convertor to connect instrument TDR port, the other end do not need to connect anything

3. Touch ‘TDR’ icon to enter cable breakpoint test function interface

Figure 46

2.17 Network Cable TDR Test

Network cable TDR test function can display cable length, attenuation, quality, reflectivity, impedance parameters, etc. Touch ‘Cable TDR test’ icon to enter this App, touch setting icon on the lower right hand corner to view ‘help’ text, to test attenuation, there is a cable length requirement please refer to detailed instructions, you can set the data unit, there are built-in connection map and cable sequence map to help understand test result, it can also generate test reports, as shown in Figure47

Operation Instructions:

1.Connect network cable to LAN port then you can view cable status and length data, if no value is measured, keep the other end from any devices away and try again

2. To test attenuation value, the cable length should be more than10m

3. Reflectivity, impedance parameter can be tested only when communicating to cameras

4. Touch ‘Cable TDR test’ icon to enter this function interface

Figure 47

Description

1. Cable TDR test requires cable length 2-195meters.
2. Test result may have an accuracy error, error range±3%.

2.18 Laser Rangefinder (Optional)

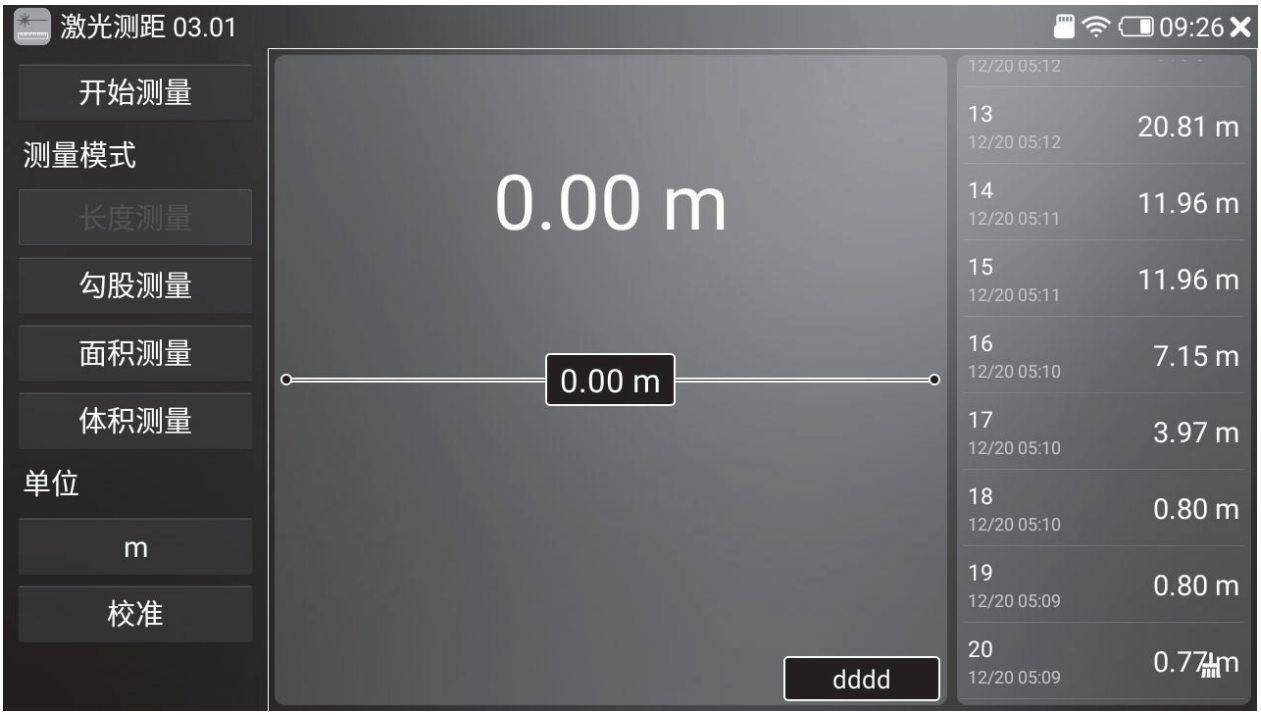
Indoor Measurement Range: up to 80m

Laser Class: II

Laser Type:635nm, <1mW

Operation Instruction:

1. Click application on the desktop "Laser Ranging" to enter the operation interface.
2. Click "Start Measurement", the instrument will emit a red light, aim at the measured surface and leave the instrument still to read the distance value.



⚠ **Notice:**

1. In order to ensure the accuracy of the test results, the cleanliness of the interface is necessary during daily use. It is recommended to use alcohol regularly for cleaning

2.Test result may have an accuracy error, error range±3cm

⚠ **Warning:** visible laser light source is harmful to eyes, do not look at it directly

More Details about how to operate, kindly please refer to built-in instruction

Chapter 3.After-sales Service

To our users:

With your trust and support, in order to protect your interests and make you get better quality service, our company makes the following commitments:

1. Product warranty: all products sold by our company enjoy a 2-year warranty service. During maintenance we support spare machine for customer use (except for the damage or failure caused by man-made factors or irresistible natural phenomena). When the warranty expires, we provide paid service (charge a fee).

2. After-sales technical service: we provide timely, comprehensive technical and business consultation, comprehensive technical information and data, lifetime free technical support and using guidance service. Users can inquire technical issues and get a clear solution through after-sales phone.

3. When performance problem occurs in normal use, our company promises the above warranty service. In addition, our company will comply with relevant laws and regulations that the state clearly defined.

4. During the warranty period, paid maintenance service will be implemented in the following situations:

(1) Damage caused by man-made factors or irresistible natural phenomena;

(2) Damage or failure caused by improper operations;

(3) Damage or failure caused by transformation, decomposition, assembly of the product.

Warranty

Dear customer:

Thanks for choosing this product, in order that you can enjoy the perfect after-sales service, after purchase please read the instructions of this product carefully and keep it properly.

1. With this card, you can enjoy free warranty during the warranty period and preferential service after expiration of the warranty period.

2. The free replacement period due to quality problems is 7 days from the date of purchase, the warranty period is 2 years.

3. With this card, you have the priority to get new product information or preferential activity opportunity.

4. Product failures cased by the following circumstances are not included in the warranty:

1) Unable to provide valid warranty certificate or valid purchase invoice, receipt.

2) Caused by improper operation circumstance or operation method, such as using non-standard batteries or connecting to strong current devices.

3) Failure or damage caused by installing, repairing, changing or reassembling the instrument by non-company authorized agency or person.

4) Products exceeded the warranty period stipulated by the company.

5. When users have any disputes with technical service provided by the distributor, complaints can be lodged with the manufacture customer service support center.

6. The warranty card must be stamped by the manufacturer before it is valid.

User Name:_____

Address:_____

Telephone:_____FAX:_____ZIP Code: _____

E-mail:_____

Product Model:_____

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception,
which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different
from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction