USER MANUAL

8150

CamView5 IP 1080P HD CCTV Tester

www.triplett.com/8150

TRIPLETT
Test Equipment & Tools

850 Perimeter Road • Manchester, NH

(603) 669-6400 • info@triplett.com

- Thank you for purchasing the IP camera tester. Please read the manual before using the IP camera tester.
- Please first read the 「Safety Information」 carefully in the manual.
- The manual should be kept with unit in case reference is needed.
- Keep the S/N label for after-sale service within warranty period. Product without S/N label will be charged for repair service.
- If there is any question or problem while using the IP camera tester, or damage to the product, please contact our technical department.

（**V01.00**）

CCTV TESTER User Manual

1. Safety information

◆ The tester is intended for use in compliance with the local rules for electrical testers.

◆ To prevent the functional failure, the product should not come in contact with water.

◆ The exposed part of the tester should not be exposed to any liquids.

◆ During transportation and use, avoid vibration of the tester.

◆Do not leave the tester unattended while charging. If the battery becomes overheated, the tester should be immediately removed from the electrical source. The tester should not be charged over 6 hours.

◆ Do not use the tester in high humidity conditions. Once the tester becomes damp, power off immediately.

◆ The tester should not be used in an environment with the flammable gas.

◆ Do not disassemble the instrument. There are no user replaceable parts inside.

◆ The instrument should not be used in an environment with strong electromagnetic interference.

◆ Do not touch the tester with wet hands.

◆ Do not use detergent to clean the unit. A dry cloth is recommended. If the dirt is not easy to remove, a damp cloth with water can be used.

2. IP Camera Tester Introduction

2.1 General

The 5-inch IPS touch screen IP camera tester is designed for maintenance and installation of IP cameras, analog cameras, TVI, CVI, AHD, SDI/EX-SDI cameras, as well as testing 4K H.264 /4K H.265 camera by mainstream. The 1920x1080 resolution enables it to display a high resolution image from the camera. The meter supports many ONVIF and analog PTZ controls. The combination of touch screen and touch control keys make the IP camera tester very user- friendly.

2.2 Packing list

1)   Tester
2)   Adaptor DC12V 1A
3)   Network cable tester
4)   Lithium ion battery
5)   BNC cable
6)   RS485 cable
7)   RJ45-BNC converter (Only for optional function cable tracer)
8)   DC12V Power cable
9)   Audio cable
10)   Safety cord
11)   Wrist belt
12)   Tool bag
13)   Manual

2.3 Function interface

1	🏠	Menu key
2	↵	Confirm key
3	�	Return: Return or cancel while setting parameters of the menu
4	🔍	4x zoom the image display
5	💡	LED light
6		The RS485 data transmission and received indicator lights red while the data is being transmitted or received.
7		The power indicator lights red while the tester is powered on by the adapter

Top interface

Bottom interface
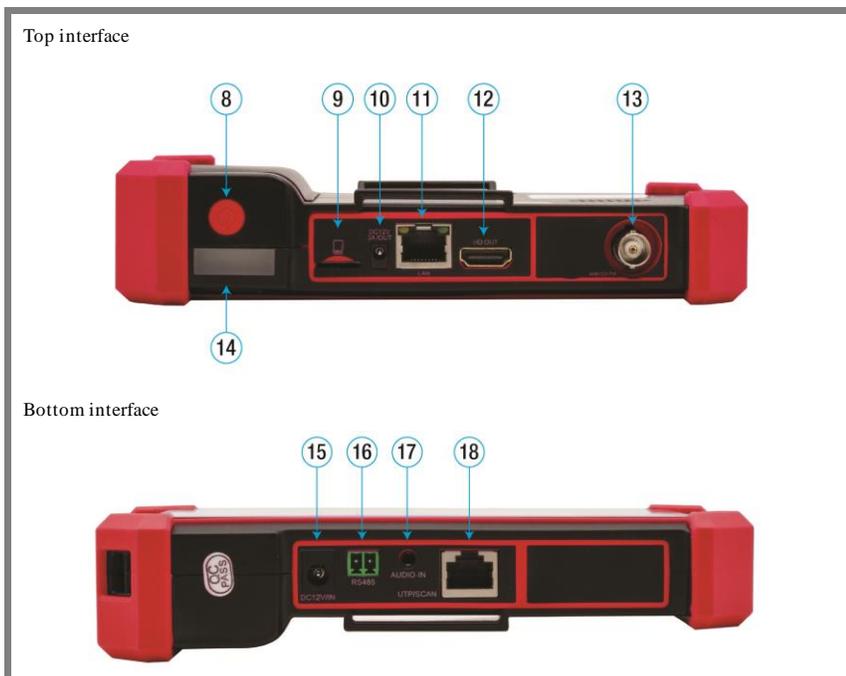
8	Press more than 2 seconds to turn on or off, short press to turn on or off the menu display
9	Micro SD card removeable, supports up to 32G
10	DC12V 3A power output, temporarily supply power to the camera
11	PoE power supply output/LAN test interface
12	HDMI output
13	Video image /AHD/TVI/CVI signal input（BNC interface）
14	LED lamp
15	DC 12V 1A charging interface
16	RS485 Interface: RS485communication for PTZ control
17	Audio input
18	UTP cable port: UTP cable tester port/ Cable tracer port **(Optional)**

3. Operation

3.1 Installing the Battery

The tester has a built-in lithium ion rechargeable battery. The battery should be disconnected for safety during transportation!

Prior to the use of the instrument, please remove the battery insulation paper. Pressing the key ⏻ to power on /off the tester.

⚠Notice: Please use the original adaptor and connected cable of the device!

When the battery icon is full or the charge indicator turns off, battery charging is completed.

⚠Notice: When the Charge Indicator 🔋 turns off, the battery is approximately 90% charged. Charging time can be extended for about

1 hour and the charging time under 12 hours will not damage the battery.

⚠**Notice:** Press the key ⏻ several seconds to restore the default settings when the instrument works abnormally.

⚠**Notice:** While Charging, someone must be present.

4. IP camera test

4.1 Power output

Camera can be powered from the DC 12V/3A output or by Power over Ethernet.
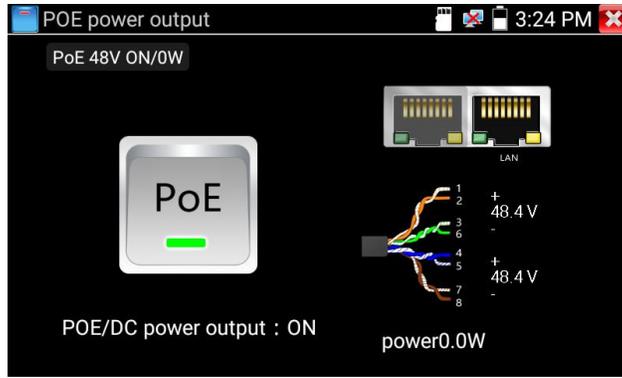
4.2 IPC Test pro

Camera test often needs to open multiple apps, "IPC TEST PRO" app, using new technology and combing multiple functions into one APP, can increase efficiency.
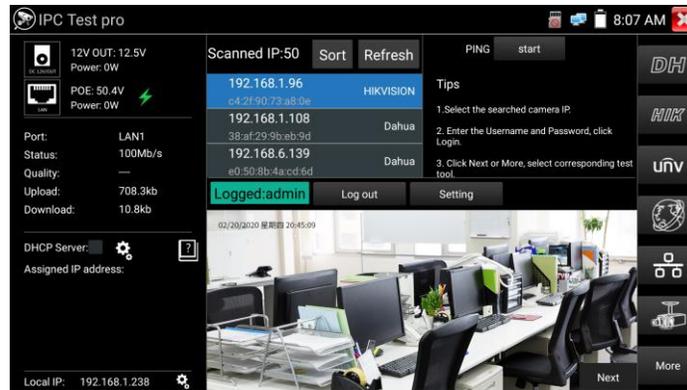
Application:

Support multi-segment IP address scan, can visually display camera brand, click IP address to display the image. Can supply the power to PoE camera.

Real-time display network port connection status.

Use one key to connect camera test tool, browser can login and configure camera.

Batch activate Hikvision and Dahua cameras.

4.3 IP discovery

Press IP discovery tester to auto-scan the entire network segment IP, as well as auto-modify the tester's IP to the same network segment with the scanned camera's IP. The meter auto-search the entire network segment IP, and auto-add the IP from different network segments.
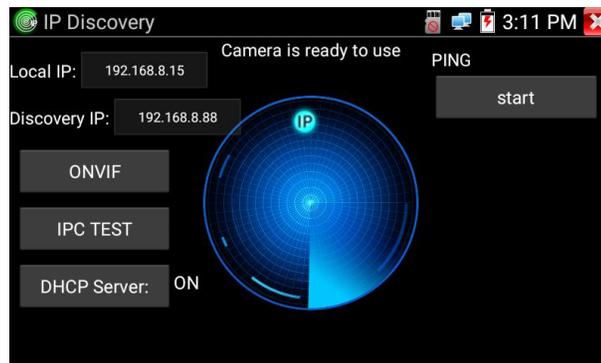
Local IP: Tester's IP address, Tester can auto-modify the tester's IP to the same network segment with the scanned camera's IP.

Discovery IP: Connected tester equipment's IP address. If the camera is connected to the tester directly, the tester will display the camera's IP address, if the tester connects to Local Area Network, it displays the current IP address.

**Start:** PING function, click "Start", can PING camera's IP.

ONVIF: Rapid ONVIF Quick link.

IPC TEST: IPC TEST Quick link, Non-OnVIF IP camera test.

4.4 Rapid ONVIF test

Rapid ONVIF can display 4K H.265/H.264 camera image by tester's mainstream.

The meter auto-scans all ONVIF cameras in different network segments. It lists cameras' name and IP address on the left of screen. Tester can auto login camera and display camera image. Factory default uses admin password to auto login, if you modified the password, then default uses the modified password to login.

Click the button "Refresh", the tester will scan the ONVIF camera again. Click the newly displayed ONVIF camera on the "Device List". The tester will show the IP camera's relative information and settings.

Pop-up settings menu when you click the "setting" icon in the upper left corner.
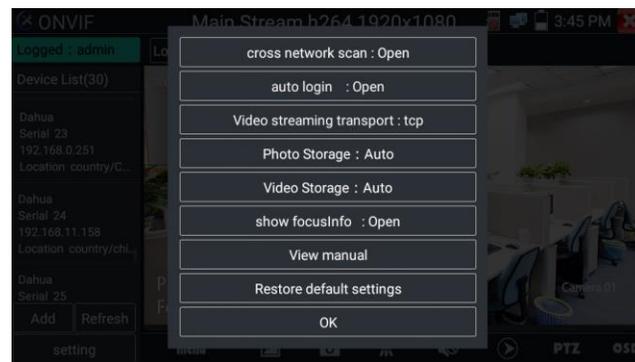
Across network segments scan: After opening this function, Rapid ONVIF function can scan across network segments to scan camera's IP.

Auto Login: After opening this function, the tester can auto login camera and display camera image (The login default password is "admin")

Video transmission protocol: UTP and TCP protocol.

Show focus Info: Focus Information.

View manual: Opens the Manual.

**Restore Defaults:** Restore "Rapid ONVIF" to default settings.

Confirm: Save the modified parameters.

Click "MENU" icon to open camera setting.

While in the "Live video" menu, click "Video Menu" at the top right of the image to access the following tools: Snapshot, Record, Photo, Playback, Lens simulation, PTZ and Settings.

Network setting: Click "Network Set" to change the IP address. Some cameras cannot support change IP address, so there is no change after saving.
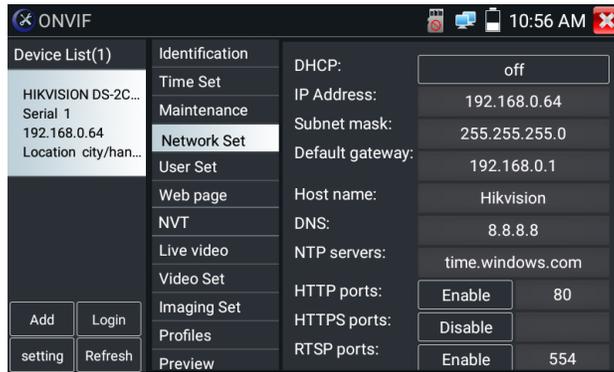
When using the network video input, the tester supports resolutions up to 1080p, the input image remains clear after it is enlarged. This is helpful to installers to ensure the IP camera's video coverage and determine the IP camera's install site.

Lens simulation: Simulate different lenses' display area. Supported lens: "2.8/3.6/4/6/8/12/16/25mm", for choosing the suitable camera lens.
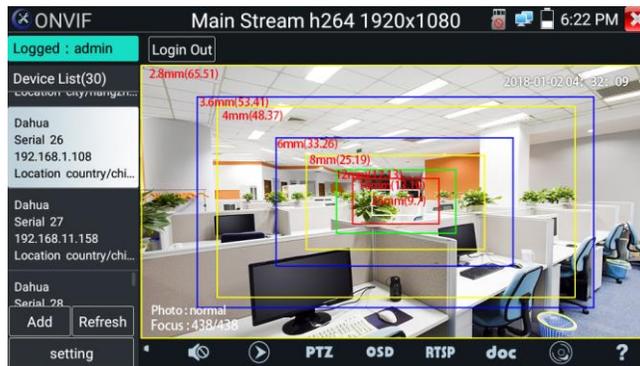
OSD Menu: Select OSD and popup the OSD menu. include time, channel name and other optional items.
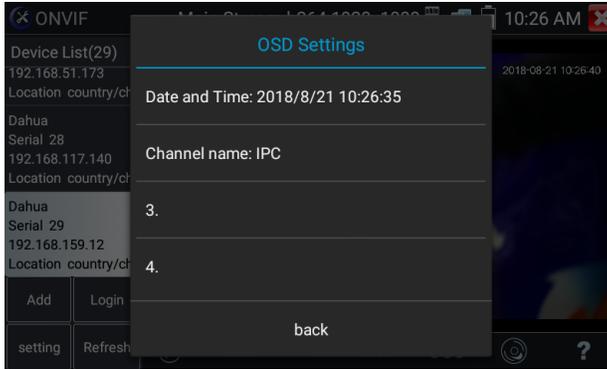
After selecting a channel, you can edit the channel name, modify the display position, and switch the font size. Select "Content location - Default location". Select "Customize" to arbitrarily adjust the channel name and display location.

Click "OK" to save the modification. Press return key or click any area on the screen to return to the previous interface.
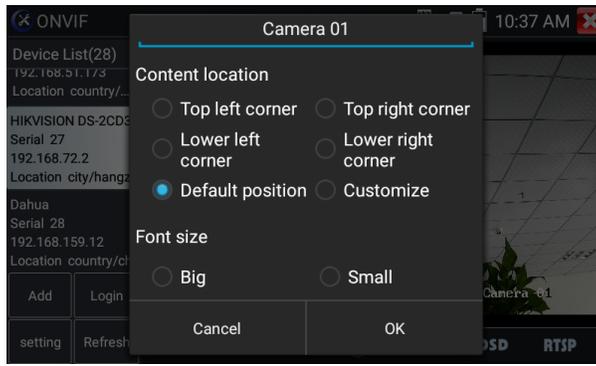
⚠ Video files can play in the Video player on the main menu.

PTZ

Set preset position: Move the camera to preset position, enter the preset number on the bottom right corner to complete position preset.

Call the preset position: Select the preset number on the left, click "Call" to call preset.

PTZ speed set: Horizontal and Vertical speed set.

Doc: Click "Create document", to create a test report document for the camera, . Click "Preview" to view the report document

Enter the camera test information, click "Create Document" to complete the report.

Click doc menu again, you can preview the report document.

Icons description: The description of function icons on the bottom toolbar.

4.5 Non-OnVIF IP camera test

Display image from the 4K H.265 camera by mainstream.

⚠ Note: Currently, the IPC Test App only supports some brands' specific IP cameras, these include specific models made by ACTI, AXIS, Dahua, Hikvision, Samsung, and many more. If the camera is not fully integrated, please use the ONVIF or RTSP apps.

Local IP: This is the tester's IP address. Click "Edit" to enter "IP setting" and change the tester's IP address settings.

8

IP camera type: Click on the IP Camera type to select the manufacturer and model number of the connected IP camera.

Manual: Click IP camera type, list Honeywell, Kodak, Tiandy, Aipu-waton, ACTi, WoshiDA IP camera etc. If the brand has official original protocols, pls select camera type, input IP camera address, username and password, click "official" to enter the camera image display interface.

Stream code: When testing the camera via RTSP, you can select mainstream or sub stream to test (if camera's RTSP has not been started, it will prompt "auto match" fail, please switch to manual selection.

IP Camera's IP: Enter the IP camera's IP address manually or click "Search" to auto-scan for the camera's IP address. It is better to directly connect the IP camera to the tester so the search results will only display the camera's IP address.

IPC Port: When you select the IP camera type, it will default the camera's port number and does not need to be changed.

After all settings are completed, click "Enter" to view the live video.

5. Analog camera test

5.1 CVBS

Analog camera test and PTZ control.
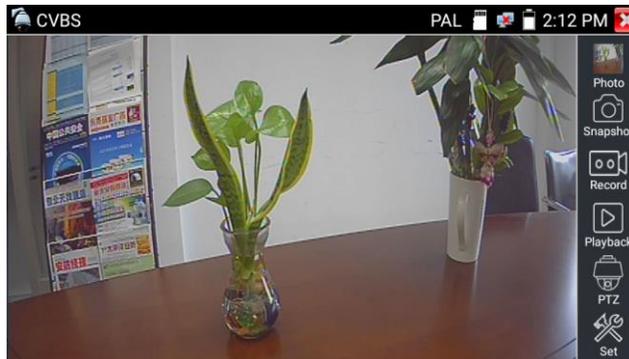
⚠ Check and set the protocols, address, interface and baud, all must be consistent with the dome camera for the tester to work. After setting the parameter, the tester can control the PTZ and lens.

5.2 Auto HD

Automatically recognize type and resolution of TVI/CVI/AHD camera and display an image.

Support coaxial PTZ and call OSD menu. Support CVBS and 8MP TVI/CVI/

AHD cameras. Select relative function on the right toolbar to operate, functions including "Photos", "Snapshot", "Record", "Playback", "PTZ", "Set".

Double tap on the screen to display in full screen.
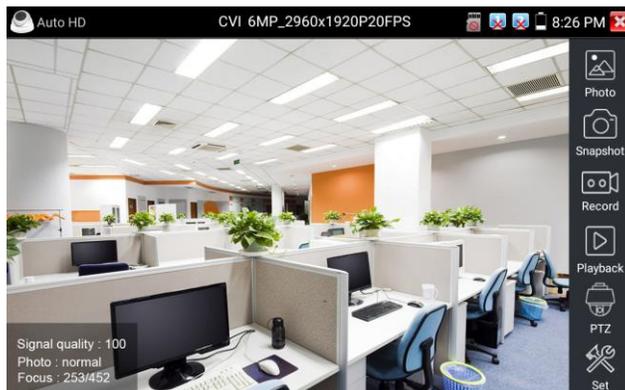
5.3 CVI camera test

When HD CVI signal input, the tester will display the image resolution at the top of the screen. Double tap on the screen to display the image in full screen.

The tester supports resolution up to 3840 x 2160P 12.5/15 FPS.

（1）PTZ control

1.1 Coaxial PTZ control

Click the icon "PTZ" on the right toolbar to do the corresponding setting.

"Port": select coaxial control

Enter PTZ address to perform parameters setting.

⚠️ The PTZ address in the tester must be consistent with the dome camera or decoder for the IPC tester to work. After setting the parameter, the tester can control the PTZ and lens.

Set preset position:

Move the PTZ camera to the preset position, tap it and input preset position number. Tap "Set position" to complete set preset position.

Call preset position:

Tap the preset position area, input preset position number. Tap "call position" to complete call preset position.

1.2 RS485 control

（2）Coaxial camera menu setting

Input calling dome camera menu address code, you can press the key "Enter" or click the icon [icon] to call the dome camera menu.

set the parameters by △ ▽ ◁ ▷ (OK)

5.4 TVI camera test

When using an HD TVI signal input, the tester will display the image resolution at the top of the screen. Double tap on the screen to display the image in full screen.

The tester supports resolution up to 3840 x 2160P 12.5/15 FPS.

Coaxial camera menu settings:

Tap icon "UTC", select "MENU" to enter the dome camera menu.

Input calling dome camera menu address code, after finishing the parameter settings, you can press the key "Enter" or click the icon ⬭ to call the dome camera menu.
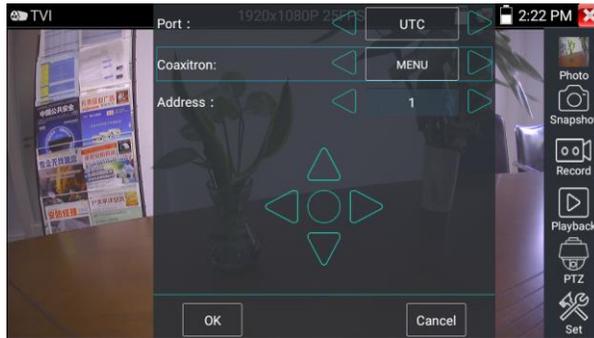
5.5 AHD camera test

When using an AHD signal input, the tester will display the image resolution at the top of the screen. Double tap on the screen to display the image in full screen.

The tester supports resolution up to 3840 x 2160P 15 FPS.

(1) Coaxial PTZ control

UTC control: Select "PTZ or PTZ-2" (AHD camera has two different order, if the "PTZ" not working, pls go "PTZ-2")


To use coaxial PTZ control with the AHD camera, no parameter settings are needed.

6.1 Network tool

(1) IP address scan

Connect the cable to the LAN port, click icon ![IP icon] to enter, set your IP address search range by changing the Start and End IP addresses. Click the "Start" button to scan the IP address range. You can also input an IP address in the Port Number Scan to scan for open ports.
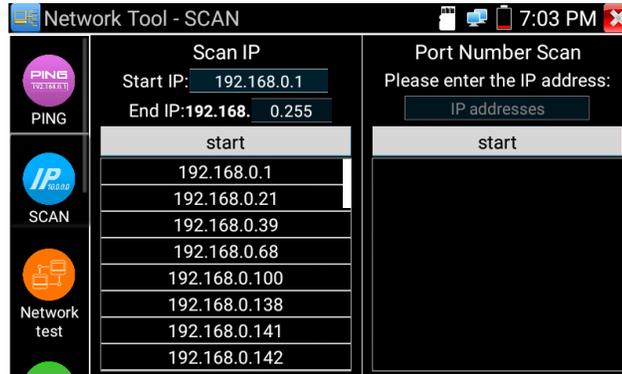
(2) PING Test

Application: PING testing is the most conventional network debugging tool. It is used for testing if the connected. IP camera or other network equipment's Ethernet port is working normally, and the IP address is correct.

It is normal that the first data packet will be lost when testing starts.

(3) Network test (Ethernet bandwidth test)

To use the Network tester, you will need two IP testers. One is used as a Server and the other as a Client. In order to communicate, both devices must be on the same network segment.

(4) Port Flashing

Application:

The tester will send special signals to make the connected LAN port flicker at special frequency, which will aid the installer in finding the connected Ethernet cable easily and quickly. This function can prevent mistakenly inserting or disconnecting the wrong cable and interrupting network connection.

(5) DHCP server

Click on the DHCP icon to open the DHCP server app. Select the "Start" check box at the top and make any desired changes to the network settings. Click "Save" to start assigning dynamic IP addresses for IP cameras and other networked devices. Click the "Refresh" button to check your Client list.
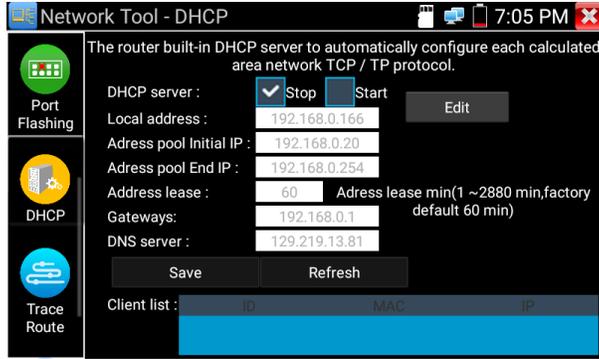
(6) Trace route

It is used to determine the path of the IP packet access target.

Note: Trace route testing results only for reference, for accurate test route tracking, use a professional Ethernet tester.

(7) Link monitor

This app is used to see if an IP address is occupied by other network devices. This will avoid new address conflicts.

6.2 RJ45 cable TDR test

Connect cable to tester's LAN port, click icon " " to enter app.
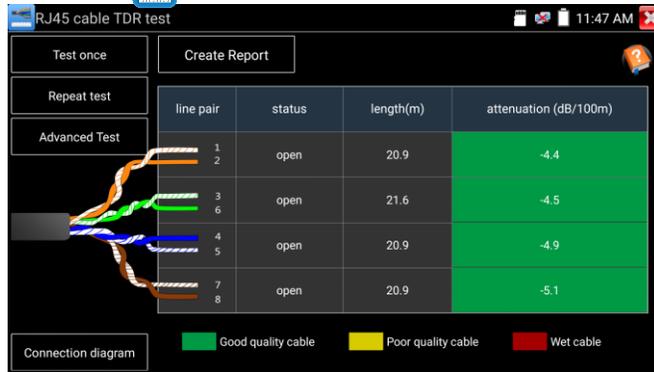
Single test: Test cable status, length and attenuation.

Repeat test: Continue to test cable status, length and attenuation.

Status: After link-up, the screen displays "online", or for an open circuit, the screen displays "open circuit", if the cable pair has a short circuit, the screen displays "short circuit".

Length: The max test length is 180 meters, when the cable is open circuit or short circuit, can test the cable length, if screen display "online", the testing result would not be accurate.

Cable quality test: Green is good quality cable, Yellow is poor quality cable, Red is water damaged cable, the attenuation value will be displayed when a cable is over 10 meters.

Advanced Test: Test cable pair status, length, attenuation, reflectivity, impedance, skew and other parameters.

Attenuation reflectivity: After link-up, if the reflectivity value is 0, it is the best quality communication

**Impedance:** After link-up, if the impedance value is 100 Ω, it is the best quality communication, the range is generally in 85-135 Ω

Skew: After 1000M link up, if the skew value is 0ns, it is the best quality communication, if over 50ns, it will cause a Bit Error Rate in the transmission.

Click "Help", check the instruction of all parameters.

6.3 Cable Tester

Click icon to enter.
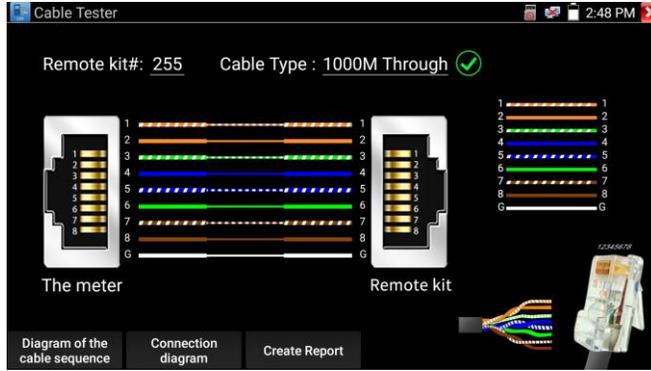
Test LAN cable or telephone cable.

Connect LAN cable or telephone cable with the CCTV tester and cable tester. And then the connecting status, cable type and the sequence of wires as well as the serial number of the cable tester kit will be displayed.

The number of the cable tester is 255.

Quickly detect the near-end, mid-end and far-end fault point of RJ45 cable connector
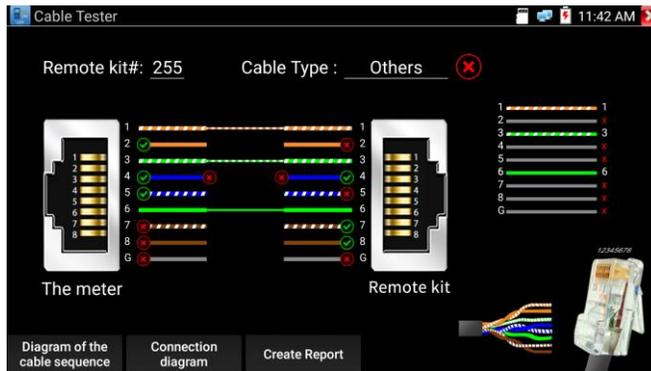
Cable test:

Tap "Diagram of the cable sequence", pop up the connection diagram of Straight-through cable and crossover cable. You can then create a test report.

6.4 PoE / DC12V 3A power output

When the tester is turned on, the DC12V power output functions are automatically turned on.

To use the PoE Power Output function, change the switch "ON" or "OFF".

The IP camera needs to connect the LAN port before you turn on PoE Power. If the IP camera supports PoE, the PoE power is delivered via pins 1, 2, 3, and 6 on the LAN port. The IP tester will display "48V ON" at the top of the screen when the POE power is on.

⚠ **Note:**

1. Do not input power into the "DC12/3A OUTPUT" port.

2. Do not output the DC12V/3A power into the DC12V/IN port of the IP camera tester.

3. The IPC tester power output is close to 3A, if the IP camera's power is over 3A, the tester will auto enter protection mode. Disconnect all tester connections and then connect the tester with the power adaptor to continue.

4. Before turning on the PoE power output, make sure the IP camera supports PoE power. Otherwise it may damage the IP camera.

5. Before turning on PoE power output, connect the IP camera to the LAN port of tester.

6. Make sure the tester is full charged or more than 80% charged, or it will show "low power", "not able to supply power".

6.5 Update

Copy the downloaded update file to SD card "update" directory, if there is no directory, please create one.

Click the [icon] icon to open the Update menu. Select "Local Update" to update via the SD card or select "Online Update" to check for updates on the internet. If there are applications that need updating, the applications will be listed in the interface, click related applications, update to the latest version.
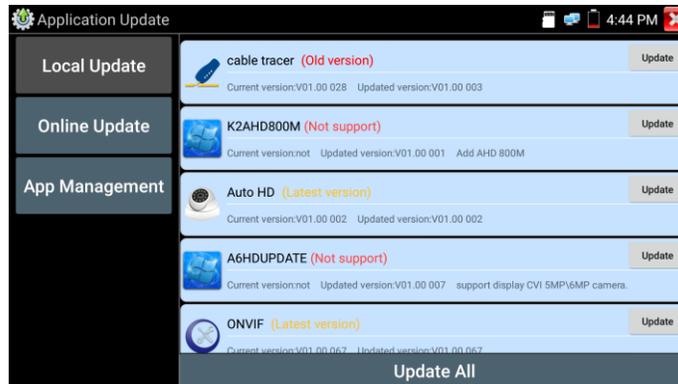
Online update: Connect the Internet to update the apps.
**App management:** This can uninstall and open APP.

6.6 File explorer

Click "File" on the top toolbar, to select internal or external storage. Click on the upper right corner Icon "...", to select other operations from the menu or exit.

Browse

It includes Music, Videos, Pictures, Documents, zip file etc.to conveniently view and manage.
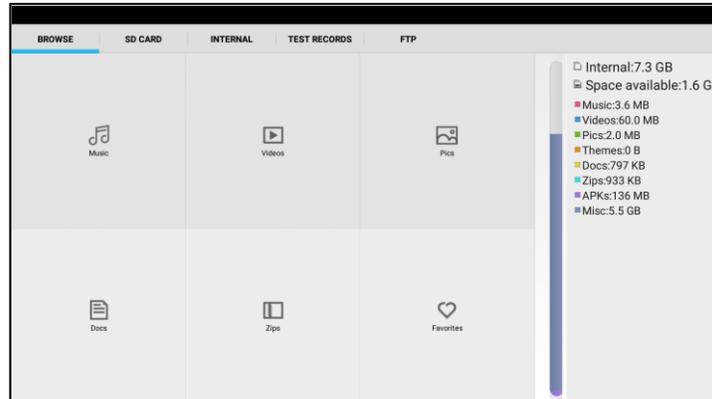
FTP server

You can choose internal or external SD card.

For other operation details, refer to FTP settings.
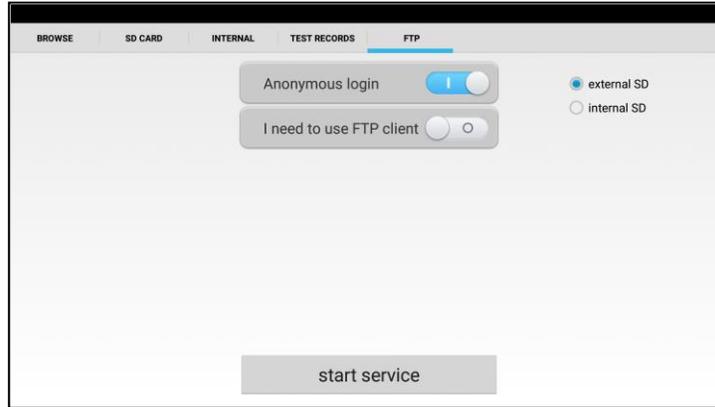
6.7 System Setting

Language: Select your desired language: English, Chinese, Korean, Russian, Italian, Polish, Spanish, French or Japanese.

Typewriting: You can select typewriting or install other typewriting:

Date/Time: Set the Date/time of the IP tester.

IP setting: Manually set the IP address, Subnet Mask, Default Gateway and DNS address or select "Dynamic allocation" to use DHCP. To test multiple network segments, click "Advanced" and then click "Add" to enter another IP address for the IP tester.

WLAN Net: Turn WiFi off or on by pressing the "Open the wifi" button. Once WiFi is turned on, click connected WIFI, to scan for wireless networks in your area.
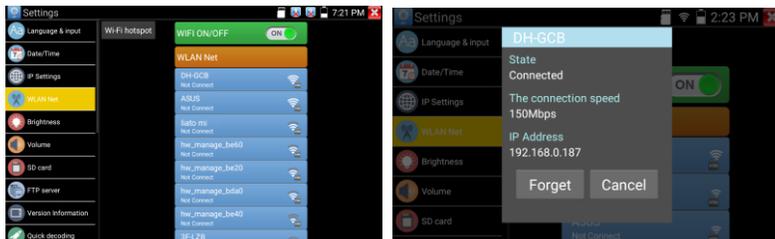
Select and press "WIFI" several seconds, to set static IP address.

Wi-Fi hotspot: Input "SSID" name and "password", and then click "ok" to create Wi-Fi hotspot.
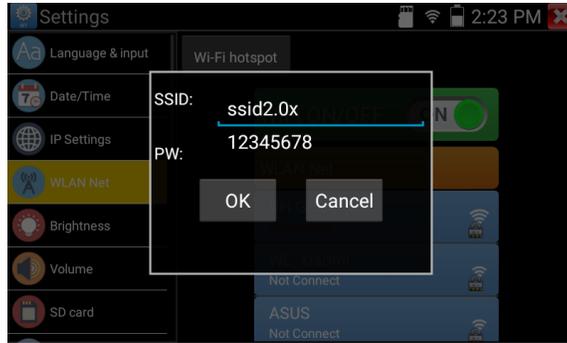
Brightness: Set the desired brightness of the IP tester and adjust the sleep time settings.

Volume: Set volume level

SD Card: Displays SD Card Capacity. You can also format the SD card or unmount it before removing it.

FTP server: Once the IP tester connects to a network, a computer can be used to read the SD card files via FTP.
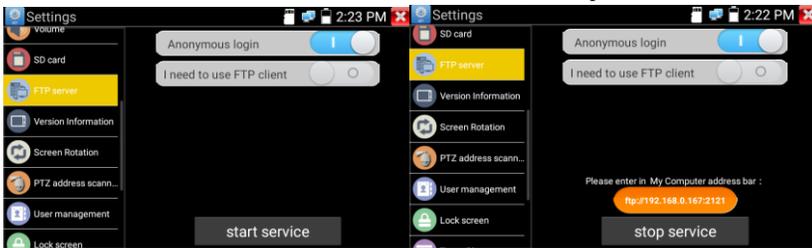
Start the FTP server and then input the tester's FTP address in the PC's address bar. This will enable the PC to read, copy and edit the files from the SD card without the use of SD card reader.

Version information: Shows applications version information, press any apps icon several seconds to uninstall.

Screen display rotation: Click on "Screen Rotation" to flip the IP tester's display 180 degrees. This function is very convenient for the user to connect the LAN cable on the bottom of the unit without having to flip the unit itself.

PTZ address scan: You can toggle the PTZ Address scan off or on before entering the "PTZ controller" app. This needs to be turned on in order to use the PTZ Scan feature of the PTZ app.

Lock Screen: The meter default is not locked. You can choose password Lock screen, pattern Lock screen or "NO".

Restore the factory settings: If the tester is restored to factory settings, all of your personal files and apps will be removed.

Power Off: Manually set Auto Off time (0-23h 59min).

Button mode selection: It can select button mode .
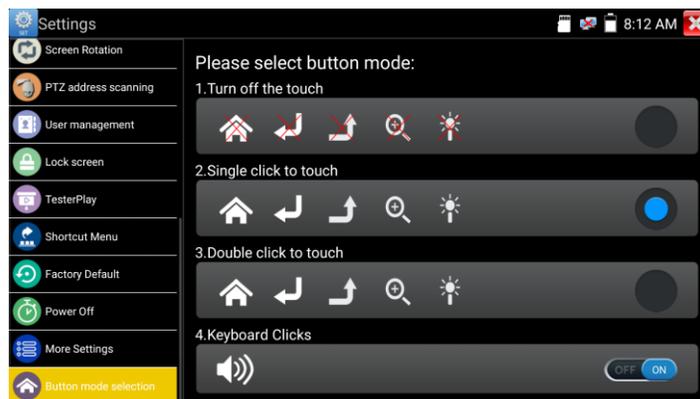
6.8 HDMI out

The built in HDMI output port can output live video from an analog or IP camera, recorded files, media files and images to HDTV monitors. Connect an HDMI cable from the IP tester to an HDTV monitor at any time. It supports up to 3840x2160P 30FPS resolution.

7. Specifications

7.1 General Specifications

Model	8150 Camview5 Security Camera Tester
Display	New 5-inch IPS touch screen cctv tester, 1920*1080 resolution
Network port	10/100/1000M auto adjust, RJ45
WIFI	Built in WIFI, speeds 150M, display wireless camera image
H.265 Main stream test	New hardware decoding, 4K H.265/H.264 camera image display by mainstream testing
IP discovery	Auto-scan the whole network segment camera IP
Rapid ONVIF	Search camera quickly, auto log in and display image from the camera, activate Hikvision camera
Hik test tool	Batch activate Hikvision camera, display image from the camera, modify channel, batch modify IP, username and password parameters etc.
DH test tool	Batch activate Dahua camera, batch modify IP, modify channel, username and password parameters etc.
IP camera type	ONVIF, ONVIF PTZ, Dahua IPC-HFW2100P, Hikvision DS-2CD864-E13, Samsung SNZ-5200, Tiandy TD-NC9200S2, Kodak IPC120L, Honeywell HICC-2300T, RTSP Viewer
Auto HD	Automatically recognize type and resolution of TVI/CVI/AHD camera and display image. Support coaxial PTZ and call OSD menu
HD-SDI/EX-SDI camera test *(Optional)	1 channel SDI in（BNC interface), resolution support up to 8MP: 720p 60fps / 1080p 60fps /1080i 60fps, EX-SDI: 2560x1440P /25/30FPS, 3840 x 2160P 25/30 FPS
CVI video signal test	1 channel CVI input （BNC interface, resolution support 8MP CVI camera test, 3840 x 2160P 12.5/15 FPS, 2880x1920P 20FPS, 2592x1944P 20FPS, 2560x1440p 25/30fps, 1920x1080p 25/30fps, 1280x720p 25/30/50/60fps, UTC control and call OSD menu
TVI video signal test	1 channel TVI input （BNC interface), resolution support 8MP TVI camera test, 3840 x 2160P 12.5/15 FPS, 2592x1944p 12.5/20fps, 2688x1520p 15fps, 2560x1440P 18/25/30fps, 2048x1536p 18/25/30fps, 1920x1080p 25/30fps,

	1280x720p 25/30/50/60fps, UTC control and call OSD men
AHD video signal test	1 channel AHD input（BNC interface）, resolution support 8MP AHD camera test, 3840 x 2160P 15 FPS, 2592x1944p 12.5/20fps, 2560x1440p 18/25/30fps, 2048x1536p 18/25/30fps, 1920x1080p 25/30fps, 1280x720p 25/30/50/60fps, UTC control and call OSD menu
Analog video test	1 channel BNC Input, NTSC/PAL (Auto adapt)
Snapshot, Video record and playback	Capture current images and record live video as JPG file. Media player will view photos and playback video
TesterPlay	screen projection: tester, mobile phone and PC display at the same time
12V/3A power output	Output DC12V/3A power to camera
PoE power output	48V PoE power output, Max power 25.5W
Theme	Self-define icons, desktop and application interface background, modify interface sliding effect
Audio test	1 channel audio signal input
PTZ control	Support RS485 control, Baud 600-115200bps, Compatible with more than 30 protocols such as PELCO-D/P, Samsung, Panasonic, Lilin, Yaan, etc
Data monitor	Captures and analyzes the command data from controlling device, also can send hexadecimal
UTP Cable tester	Test UTP cable connection status and display on the screen. Read the number on the screen
Power	
External power supply	DC 12V 1A
Battery	Different item, battery is different, Built-in 7.4V Lithium ion battery, 2600mAh/3350mAh
Rechargeable	After charging 3-4 hours, normal working time 5 hours or 6 hours (different item battery is different, the working time is different
Parameter	
Operation setting	OSD menu, select your desired language: English, Chinese, Korean, Russian, Italian, French, Polish, Spanish, Japanese etc
Auto off	1-30 (mins)
General	
Working	-10℃---+50℃

Temperature	
Working Humidity	30%-90%
Dimension/Weight	183mm x 110mm x 36.5mm /0.32kg