

Labgear

50037PI

CC512 Compact 5-in-1 CCTV Tester Kit with Digital Cable Tracer

User Guide



CCTV TESTER User Manual

Content

1. Safety information	1
2. IP Camera Tester Introduction.....	2
2.1 General.....	2
2.2 Packing list.....	2
2.3 Function interface.....	3
3. Operation	5
3.1 Installing the Battery	5
4. IP camera test.....	5
4.1 Power output	5
4.2 IPC Test pro	6
4.3 IP discovery.....	7
4.4 Rapid ONVIF test	7
4.5 Non-Onvif IP camera test.....	13
5. Analog camera test	14
5.1 CVBS	14
5.2 Auto HD.....	14
5.3 CVI camera test.....	15
5.4 TVI camera test	17
5.5 AHD camera test	18
5.6 SDI/EX-SDI camera test (*Optional).....	19
6. XVR display	20
6.1 HDMI IN (*Optional)	20
6.2 VGA IN(*Optional)	23
7. Other function.....	23
7.1 Network tool	23
7.2 RJ45 cable TDR test.....	25
7.3 Cable Tester	26
7.4 Cable Tracer (* Optional).....	27

CCTV TESTER User Manual

7.5 PoE power / DC12V 3A power output.....	29
7.6 Update	30
7.7 File explorer	31
7.8 System Setting.....	32
7.9 HDMI out (*Optional)	35
8. Specifications.....	35
8.1 General Specifications.....	35

1. Safety information

- ◆ Important - Please read these instructions fully before installing or operating your tester.
- ◆ Keep away from flame sources such as lighted candles.
- ◆ Do not expose to dripping or splashed fluids. Objects filled with liquids, such as vases, must not be placed close to the tester.
- ◆ The unit should not be exposed to direct sunlight, very high or low temperature, moisture, vibrations, strong magnetic fields, high frequencies and dusty environments.
- ◆ Never attempt to insert wires, pins or other such objects into the vents or openings of the unit.
- ◆ Do not disassemble or modify the tester, there are no user serviceable parts.
- ◆ If the tester is damaged in anyway or malfunctions do not use. Consult a qualified service engineer.
- ◆ Do not use abrasives, benzene, thinner or other solvents to clean the surface of the unit. To clean, wipe with clean soft cloth and a mild detergent solution.
- ◆ Do not dispose of this product with household waste at the end of its life cycle; hand it over to a collection centre for the recycling of electrical and electronic appliances.

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 in high resolution image from cameras. The meter supports many ONVIF and analog PTZ control. 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 (different item battery is different, 7.4V DC 2600mAh/3350mAh)
- 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

CCTV TESTER User Manual

2.3 Function interface



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

CCTV TESTER User Manual

Top interface



Bottom interface



8	Press more than 2 seconds, turn on or off the device, short press to turn on or off the menu display
9	Micro SD card moveable, support Micro SD card up to 32G
10	DC12V 3A power output, temporarily supply power for camera
11	PoE power supply output/LAN test interface
12	HDMI IN or HDMI output. (Optional), only can choose one
13	SDI input (BNC interface) (Optional)
14	Video image /AHD/TVI/CVI signal input (BNC interface)
15	LED lamp
16	DC 12V 1A charging interface
17	RS485 Interface: RS485communication for the PTZ

18	Audio input
19	UTP cable port: UTP cable tester port/ Cable tracer port (Optional)
20	VGA input (Optional)

3. Operation

3.1 Installing the Battery

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

Prior to the use of the instrument, please take out the battery insulation paper.

Pressing the key  continuously can power on or 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 automatically, indicate the battery charging is completed.

▲▲Notice: When the Charge Indicator  turns off, the battery is approximately 90% charged. The charging time can be extended for about 1 hour and the charging time within 12 hours will not damage the battery.

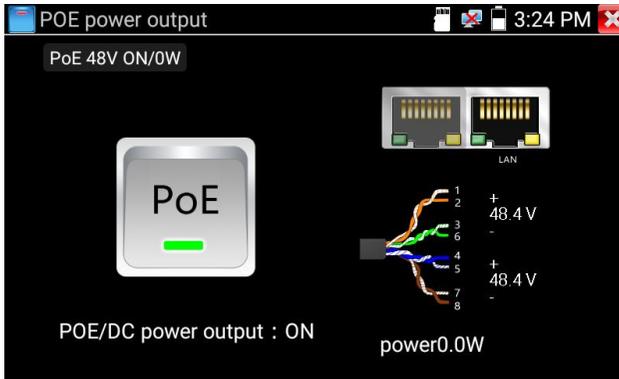
▲▲Notice: Press the key  several seconds to restore the default settings when the instrument works abnormally.

▲▲Notice: While Charging, someone must be present.

4. IP camera test

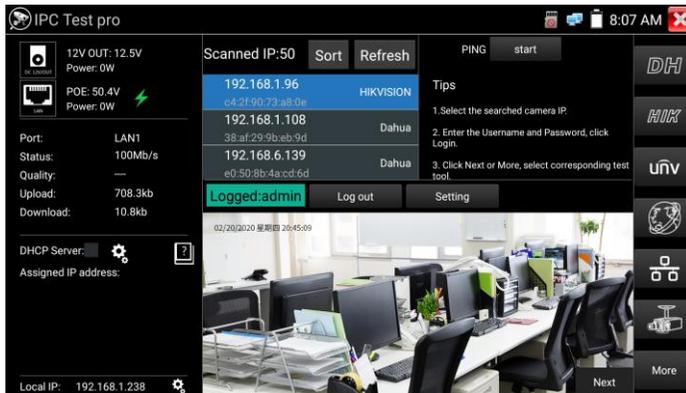
4.1 Power output

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



4.2 IPC Test pro

Camera test often need to open multiple apps, "IPC TEST PRO" app, using new technology and combine multiple functions to one APP, it can increase efficiency.



Application:

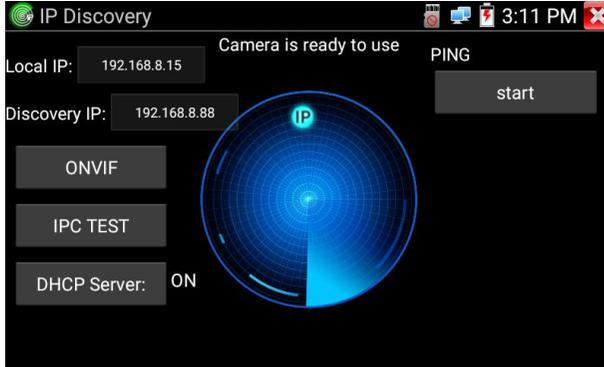
Support multi-segment IP address scan, can visually display camera brand, click IP address to display the image. Connect IP camera, can supply the power to PoE camera. Real-time display network port connection status.

By 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 auto-scan the whole 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 whole network segment IP, and auto- add the IP of 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 connected to the tester directly, tester will display the camera's IP address, if 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

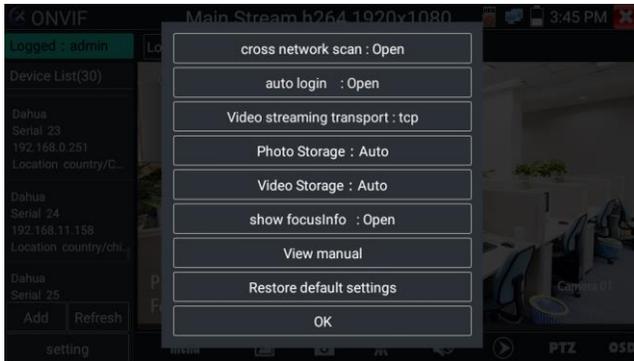
Rapid ONVIF can display 4K H.265/H.264 camera image by tester's mainstream. The meter auto-scan all ONVIF cameras in different network segments. It lists cameras name and IP address on the left of screen. Tester can auto login camera and display camera image. Factory default use admin password to auto login, if you modified the password, then default use the modified password to login.

CCTV TESTER User Manual



Click the button “Refresh”, 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 click the “setting” icon in the upper left corner.



Across network segments scan: After open this function, Rapid ONVIF function can across network segments to scan camera’s IP.

Auto Login: After open this function, tester can auto login camera and display camera image (The login password is the same with last time, the first time using password is the default password "admin")

Video transmission protocol: UTP and TCP protocol.

CCTV TESTER User Manual

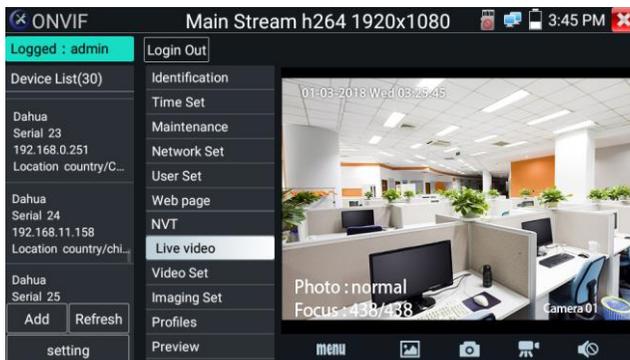
Show focusInfo: Focus Information.

View manual: Open Manual.

Restore Defaults: Revert “Rapid ONVIF” to default settings.

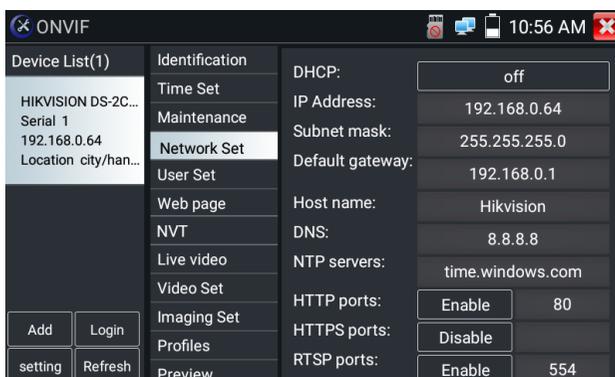
Confirm: Save the modified parameters.

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.

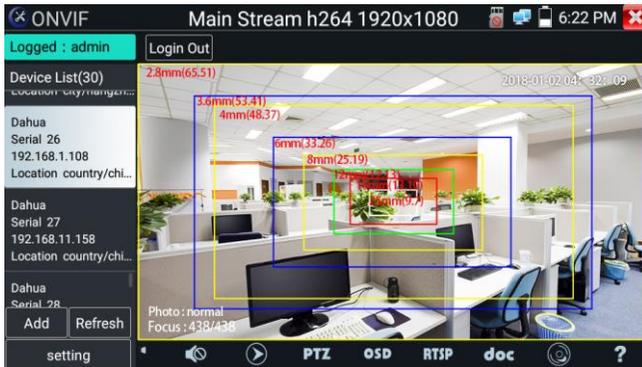
Network setting: Click “Network Set” to change the IP address. Some cameras cannot support change IP address, so there is no change after saving.



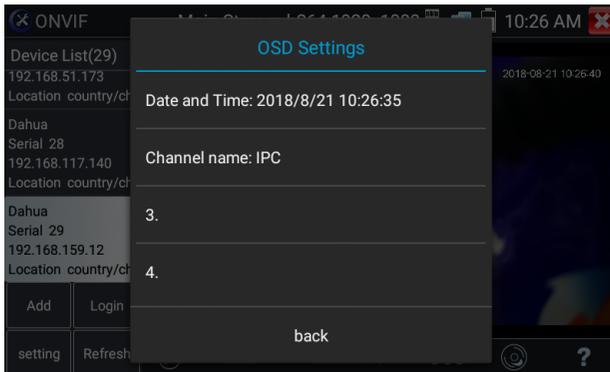
CCTV TESTER User Manual

If it is network video input to the tester, as the tester supports resolution up to 1080p, the input image will be very clear after it is enlarged. This is greatly helpful for the installers to ensure the IP camera's video coverage and decide 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.

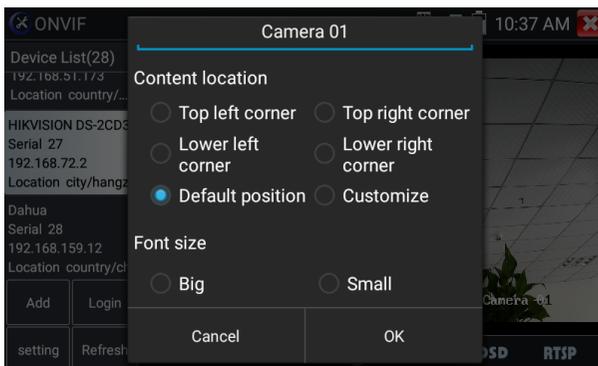


OSD Menu: Select OSD and pop up the OSD menu. include time, channel name and other optional items.



After selecting channel, you can edit the channel name, modify the display position, and switch the font size. If not modify, 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 of the screen to return to 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.

CCTV TESTER User Manual



Doc: Click "Create document", can create the testing reports document of 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.

IPC-TESTER	Report		
Project name :	a	Operator :	b
Customer name :	c	Company :	dd
Location/Building :	cc	Address :	ee
Test Time/Date :	2018-08-28 02:59:33	Tel/Email :	123
Camera Device Info			
Camera name :	HIKVISION DS-2CD3T45-I3	Camera Model :	DS-2CD3T45-I3
Camera Date & Time :	1970-1-2 1:29:35		
Network Info			
Ethernet port speed :	100Mb/s	Duplex :	Full
Camera IP address :	192.168.8.88	Camera subnet mask :	255.255.255.0
Gateway IP Address :	192.168.8.1	Camera MAC add :	c4:2f:90:73:a8:0e
DNS IP Address :	8.8.8.8		
Camera Stream Info			
Resolution :	2560x1440	Encoding format :	H264
Frame Rate (fps) :	25	Bit Rate Max (kbps) :	4096
photo :			

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.



The screenshot shows the IPC Test app interface with the following fields and buttons:

Local IP :	192.168.0.15	Edit
IP camera type :	HIKVISION_DS-2CD864-E13	Manual
IPC Cameras IP :	192.168.0.64	search
IPC User Name :	admin	
IPC Password :	Show
IPC Port :	5198	

Buttons at the bottom: Enter, Reset, Restore, Rate.

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

IP camera type: Click on the IP Camera type to select the Manufacturer and model number of the integrated IP camera.

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

Stream code: When test camera via RTSP, you can select mainstream or sub stream to test (if camera's RTSP have not been start or without, 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 IP 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 doesn't 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.

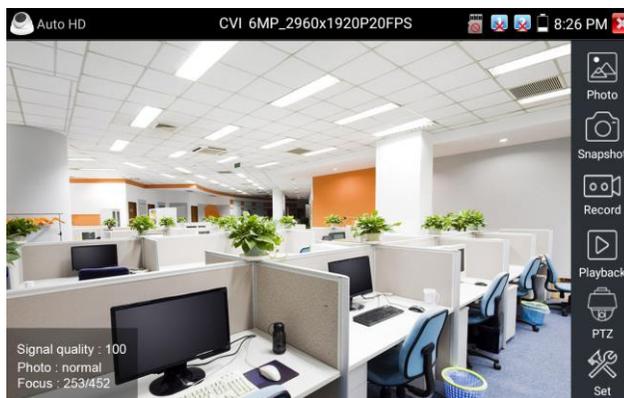


! Check and set the protocols, address, interface and baud, all must be consistent with the dome camera, then the IPC tester can test. After setting the parameter, the tester can control the PTZ and lens.

5.2 Auto HD

Automatically recognize type and resolution of TVI/CVI/AHD camera and display image. Support coaxial PTZ and call OSD menu. Support CVBS and 8MP TVI/CVI/AHD cameras. Select relative function on the right side toolbar to operate, functions including "Photos", "Snapshot", "Record", "Playback", "PTZ", "Set".

Double-taps on the screen to make the image displayed 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-taps on the screen to make the image displayed 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, then the IPC tester can test. 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.

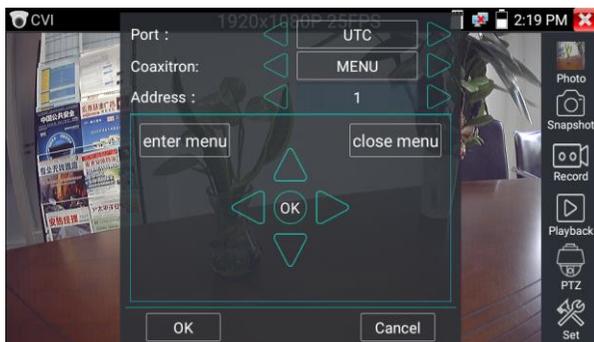


1.2 RS485 control



(2) Coaxial camera menu setting

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



set the parameters by 



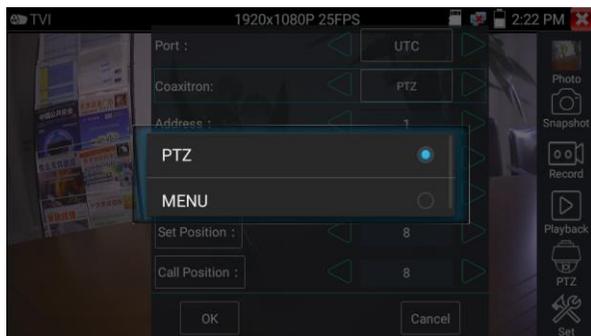
5.4 TVI camera test

When HD TVI signal input, the tester will display the image resolution at the top of the screen. Double-taps on the screen to make the image displayed full screen.

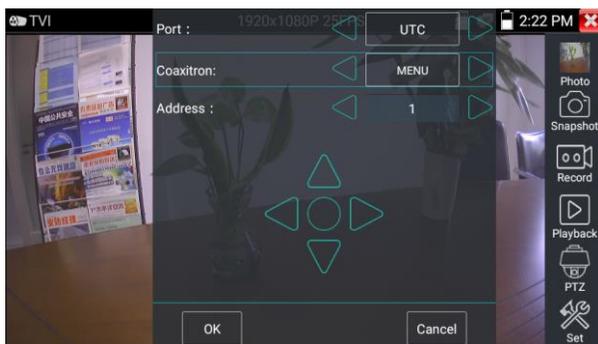
The tester supports resolution up to 3840 x 2160P 12.5/15 FPS.

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 AHD signal input, the tester will display the image resolution at the top of the screen. Double-taps on the screen to make the image displayed 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”)



If to coaxial PTZ control the AHD camera, no parameters setting is needed.

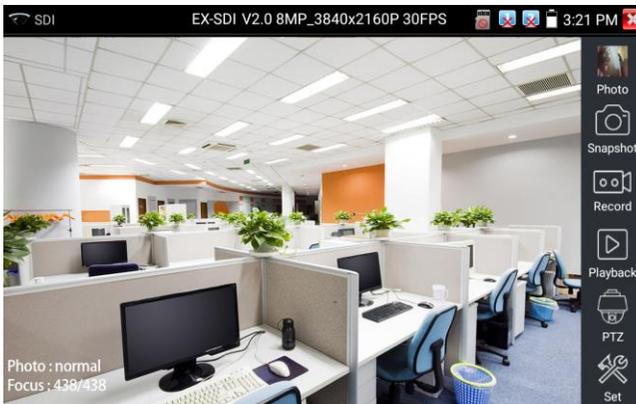
5.6 SDI/EX-SDI camera test (*Optional)

When tester receives SDI camera image, it will display the image data.

Double-taps on the screen to make the image displayed full screen.

The tester supports resolution up to 8MP, as follows:

1280x720P 25Hz/1280x720P 30Hz/1280x720P 50Hz/1280x720P 60Hz/1920x1080P
25Hz/1920x1080P 30Hz/1920x1080I 50Hz/1920x1080I 60Hz/2560 x1440P
25/30FPS/3840 x 2160P 25/30 FPS



6. XVR display

6.1 HDMI IN (*Optional)

When tester receives HDMI in image, the top tool bar shows the resolution of this image. You can select "resolution" to set resolution in the setting menu. Tap screen by twice, full image display. Support resolution up to 4K 30FPS, 3840x2160P 30FPS, 720×480p /720×576p /1280×720p /1920×1080p /1024×768p/1280×1024p /1280×900p /1440×900p



(1) Snapshot

Click the icon "Snapshot", when the video in, to take a picture and save the current video frame in the SD card as JPEG file.

If the unit is set to the manual mode, an "Input Name" pop up box will appear and you can enter a title for the snapshot. If the unit is set up to automatically set file names, this box will not pop up.

CCTV TESTER User Manual



(2) Video record

When you click the "Record" icon, video starts recording. A red recording icon appears on the screen and begins to flash and a timer appears indicating the time elapsed for the video. Click on the "Record" icon again to stop recording and save the video file to the SD card.



(3) Photo

Click the icon "photo" to enter, click the selected thumbnail photo to display it on the screen. Double-tap the image you want to view to make it full screen. Double-click again the photo to return.

CCTV TESTER User Manual

To rename or delete an image, click and hold on the file until this screen below appears

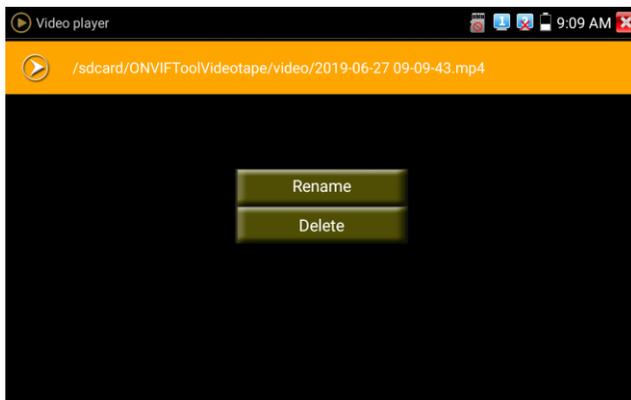


Click  to close and return to PTZ controller.

(4) Recorded video playback

Click the "Playback" icon to view your recorded videos. Tap on the video file image you want to watch.

To rename or delete a video, click and hold on the file until this screen appears:



Video files also can play in the main menu "Video Player".

6.2 VGA IN(*Optional)

When tester receives VGA in image, the top tool bar shows the resolution of this image. Tap screen by twice, full image display. Support resolution as bellow:
1920x1200P 60FPS, 1920x1080P 60FPS, 1792x1344P 60FPS, 1680x1050P 60FPS,
1600x1200/900P 60FPS/1440x900P 60FPS, 1360x768P 60FPS,
1280x1024/960/800/768/720P 60FPS, 1152x870P 60FPS, 1024x768P 60FPS,
800x600P 60FPS, 640x480P 60FPS.



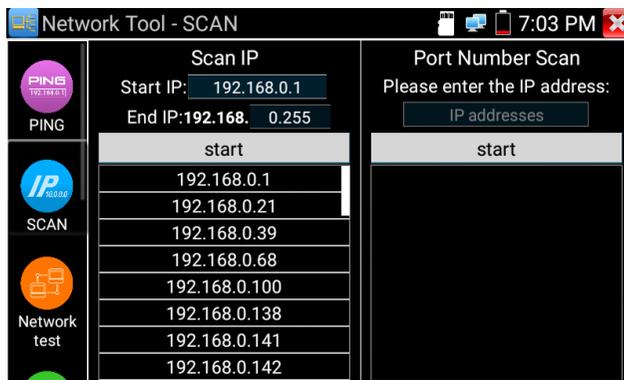
It supports “Snapshot”, “Record”, “Photos”, “Video playback”.

7. Other function

7.1 Network tool

(1) IP address scan

Connect the cable to the LAN port, click 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 tools. 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's normal that the first data packet will be lost when test start.

(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. Both devices must be on the same network segment in order to communicate.

(4) Port Flashing

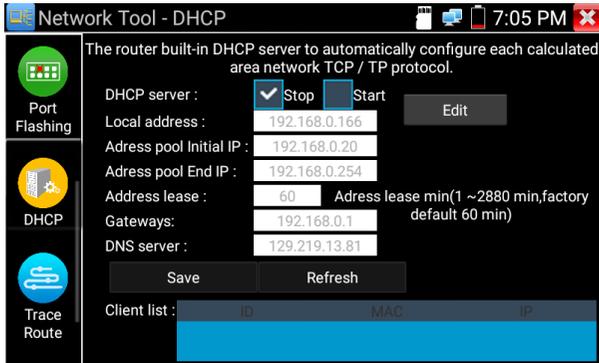
Application:

The tester will send special signals to make the connected LAN port flicker at special frequency, which will enable the installers to easily and quickly find the connected Ethernet cable. This function can prevent mistakenly insertion or disconnection non-corresponding cable to artificially interrupt 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 path of the IP packet access target.

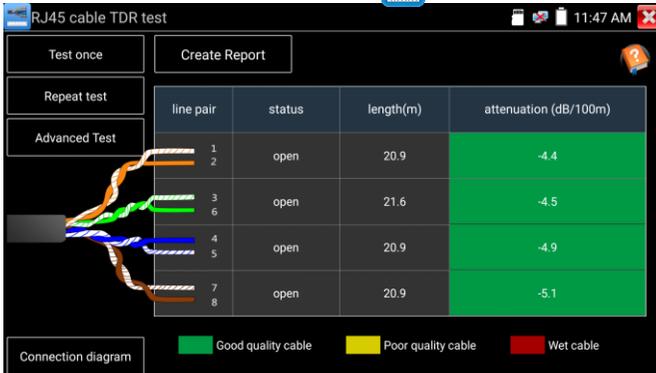
Note: Trace route testing results only for reference, for accurate test route tracking, Pls use professional Ethernet tester.

(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.

7.2 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, screen display “online”, if not link up or open circuit, screen display “open circuit”, if cable pair is short circuit, screen display “short circuit”.

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

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

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

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

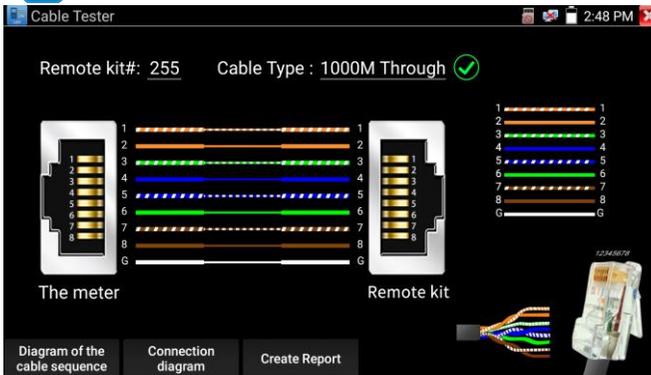
Impedance: After link up, if the impedance value is 100 Ω , it is the best quality communication, the range is generally in 85-135 Ω

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

Click “Help”, check the instruction of all parameters.

7.3 Cable Tester

Click icon  to enter.



CCTV TESTER User Manual

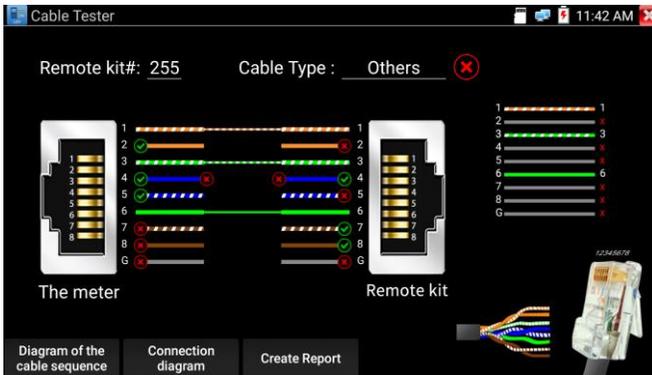
Test LAN cable or telephone cable.

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.

If need several different number other types cable testers, should pay the additional cost.

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

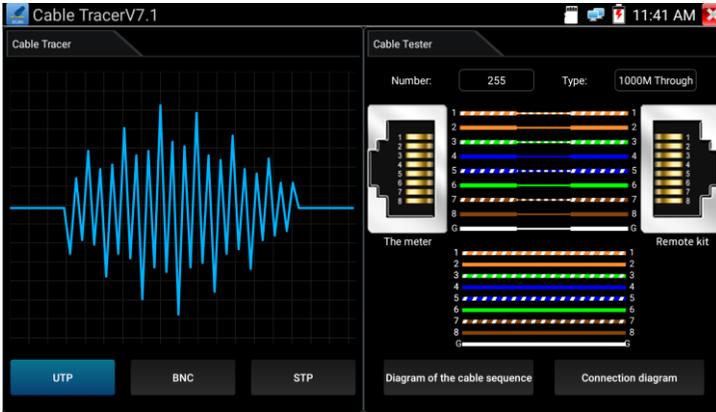


Cable test:

Tap "Diagram of the cable sequence", pop up the connection diagram of Straight-through cable and crossover cable. And can create the testing report.

7.4 Cable Tracer (* Optional)

Connect UTP cable or telephone cable to tester bottom port "UTP/SCAN", or use adapters and cables to connect other cables, such as BNC cable. Or use BNC adapters and alligator clip cable to connect BNC cable etc.



Note: If use BNC adapters and alligator clip cable to connect BNC cable etc. Please switch to “BNC mode”, if connect shielded cable, please select “STP mode”.

UTP mode is used for searching the normal network cable or other cables. “BNC mode” for finding BNC cable after connecting adapter. STP mode is used for searching the shielded network cable.

Rotating the switch of cable tracer to turn on. Clockwise rotation increases sensitivity, anticlockwise rotation reduce sensitivity.

Cable tracer and Cable tester app in the same interface. It is better to judge whether the search network cable is accurate. Connect the other end of the tested network cable to the "UTP" port of cable tracer, the cable sequence, continuity, test box number and network cable type will be displayed on the right side of the meter interface. The "G" indicates the continuity of the shielded network cable.

The 1-8 indicators of cable tracer will flash according to the cable sequence. The DIRECT / CROSS / OTHER three indicator lights display the type of network cable directly.

Press the "MUTE" button of cable tracer for 2 seconds. After the "Di" sound, the silent mode is turned on. In the silent mode, can judge cable type according to the indicator light. Press the "MUTE" button again to exit the silent mode.

Application

It's convenient for people to find out the other end of the cable from the messy cables in security maintenance and network engineering.

While searching BNC cable, one port of the alligator clips connect to the copper core or copper net of the BNC cable, the other one to connect the earth wire (barred windows).



Note: The battery of the cable tracer must according to corresponding positive pole + and negative pole -, otherwise will damage the tester.



Note: While the cable tracer tester is receiving the audio signal from the tester, it may be influenced by other signals and make some noise.

7.5 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 still on.



Note:

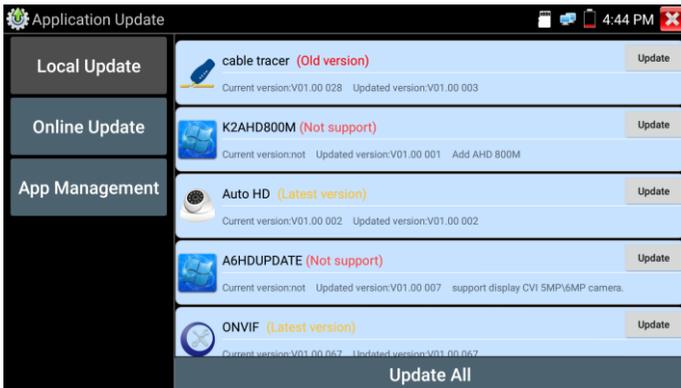
1. Don't input power into the “DC12/3A OUTPUT” port.
2. Don't output this DC12V/3A power to the DC12V/IN port of the IP camera tester to avoid destroy.

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 the connections of the tester and then connect the tester with power adaptor to resume the tester.
4. Before turning on the PoE power output, please make sure the IP camera supports PoE power. Otherwise it may damage the IP camera.
5. Before turn on PoE power output, please connect the IP camera to the LAN port of tester.
6. Make sure the tester is full charged or more than 80% charged, otherwise the tester will shows "low power", "not able to supply power".

7.6 Update

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

Click the  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.

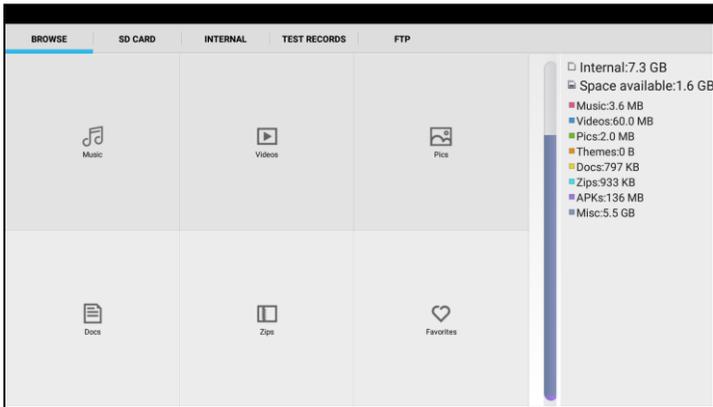
App management: This can uninstall and open APP.

7.7 File explorer

Click “File” on the top bar tool, can select internal or external storage. Click on the upper right corner Icon “...”. will pop-up menu, you can select other operation or exit.

Browse

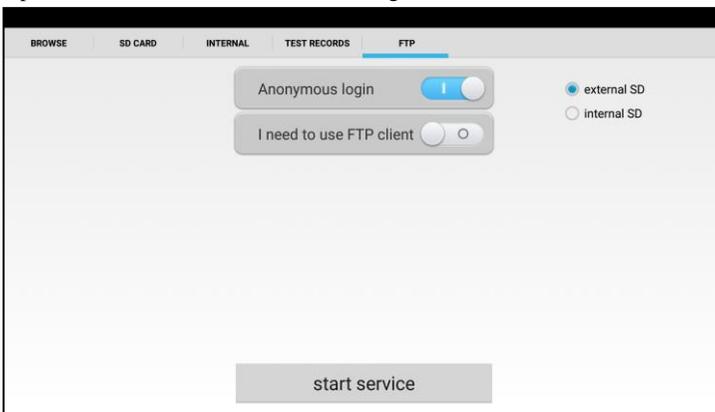
It includes Music, Videos, Pictures, Documents, zip file etc. It is convenient to view and manager.



FTP server

You can choose internal or external SD card.

Other operation details, Pls refer to FTP settings.



7.8 System Setting



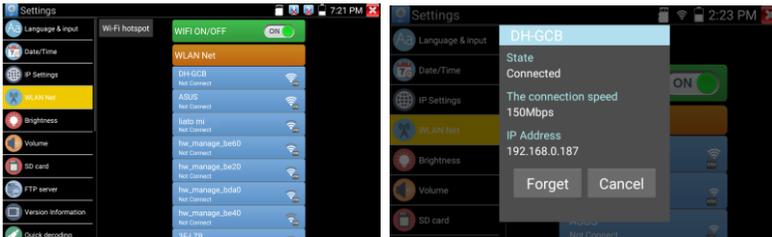
Language: Select your desired language: English, Chinese, Korean, Russian, Italian, Polish, Spanish, French or Japanese.

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.

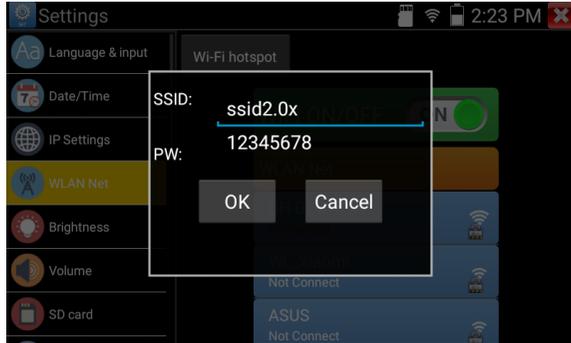
WLAN Net: Turn WiFi off or on by pressing the “Open the wifi” button. Once WiFi is turned on, and click connected WIFI, it will scan for wireless networks in your area.



CCTV TESTER User Manual

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.

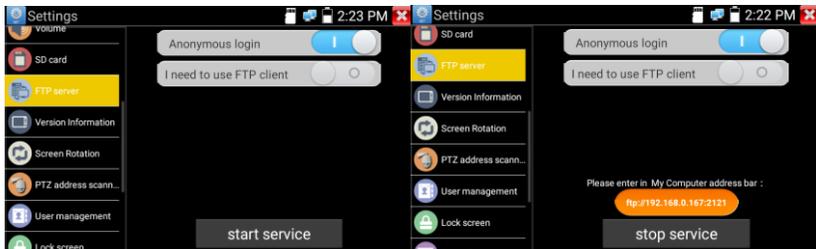


Brightness: Set the desired brightness of the IP tester and adjust the sleep time settings.

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, if 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.

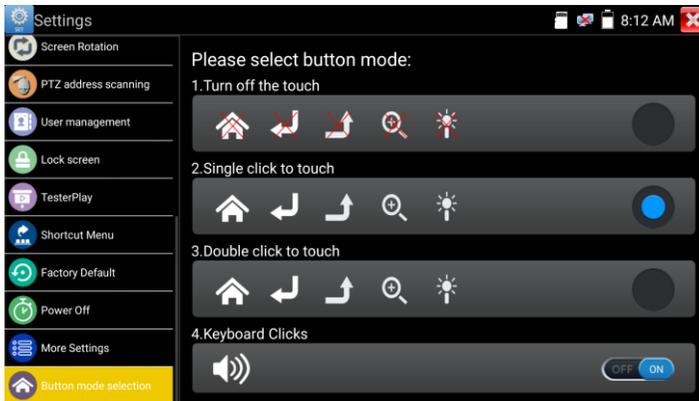
PTZ address scan: You can toggle the PTZ Address scan off or on before entering the “PTZ controller” app. This needs to be turned on in order to use the PTZ Scan feature of the PTZ app.

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 to restore factory settings, all your personal files and apps will be removed.

Power Off: Manually to set the power off after hibernation time(0-23h 59min).

Button mode selection: It can select button mode .



7.9 HDMI out (*Optional)

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.

8. Specifications

8.1 General Specifications

Model	IP 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, speeds150M, 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, user name and password parameters etc.
DH test tool	Batch activate Dahua camera, batch modify IP, modify channel, user name 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

CCTV TESTER User Manual

<p>HD-SDI/EX-SDI camera test *(Optional)</p>	<p>1 channel SDI in (BNC interface), resolution support upto 8MP: 720p 60fps / 1080p 60fps /1080i 60fps, EX-SDI: 2560x1440P /25/30FPS, 3840 x 2160P 25/30 FPS</p>
<p>CVI video signal test</p>	<p>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</p>
<p>TVI video signal test</p>	<p>1 channel TVI input (BNC interface), resolution support 8MP TVI camera test, 3840 x 2160P 12.5/15 FPS, 2592x1944p12.5/20fps, 2688x1520p 15fps, 2560x1440P 18/25/30fps, 2048x1536p 18/25/30fps, 1920x1080p 25/30fps, 1280x720p 25/30/50/60fps, UTC control and call OSD men</p>
<p>AHD video signal test</p>	<p>1 channel AHD input (BNC interface), resolution support 8MP AHD camera test, 3840 x 2160P 15 FPS, 2592x1944p12.5/20fps, 2560x1440p 18/25/30fps, 2048x1536p 18/25/30fps, 1920x1080p 25/30fps, 1280x720p 25/30/50/60fps, UTC control and call OSD menu</p>
<p>Analog video test</p>	<p>1 channel BNC Input, NTSC/PAL (Auto adapt)</p>
<p>Snapshot, Video record and playback</p>	<p>Capture current images and record live video as JPG file. Media player will view photos and playback video</p>
<p>HDMI IN* (Optional)</p>	<p>Support 4K 30FPS, 3840x2160P 30FPS, 720x480P/60fps, 720x576P/60fps, 1280x720P/25/30/50/60fps, 1920x1080P/25/30/50/60fps, 1920x1080I/50/60fps,</p>

CCTV TESTER User Manual

	800x600P/60fps, 1024x768P/60fps, 1280x1024P/60fps
VGA IN* (Optional)	1 channel VGA Input, support resolution: 1920x1200P 60FPS, 1920x1080P 60FPS, 1792x1344P 60FPS, 1680x1050P 60FPS, 1600x1200/900P 60FPS/1440x900P 60FPS, 1360x768P 60FPS, 1280x1024/960/800/768/720P 60FPS, 1152x870P 60FPS, 1024x768P 60FPS, 800x600P 60FPS, 640x480P 60FPS
HDMI output* (Optional)	1 channel HDMI output, supports up to 1080P (Only some model support)
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
Cable tracer* (Optional)	Find a connected cable from a bundle of cables using tone generator

CCTV TESTER User Manual

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 Temperature	-10°C---+50°C
Working Humidity	30%-90%
Dimension/Weight	183mm x 110mm x 36.5mm /0.32kg

CCTV TESTER User Manual

Comparison Table:

Note: Digital cable tracer is optional function.

Features/ Model	5 inch tester + IP+Analog+TVI CVI AHD+ HDMI output	5 inch tester + IP+Analog+TVI CVI AHD+VGA input + HDMI input	5 inch tester +IP+Analog+ TVI CVI AHD+SDI/EX SDI+VGA input + HDMI input
8MP AHD	√	√	√
8MP TVI	√	√	√
8MP CVI	√	√	√
4K IP /Analog	√	√	√
Snapshot, Video recording	√	√	√
DC12V 3A /48V PoE output	√	√	√
HD-SDI/3G-SDI/EX-SDI 2.0*	X	X	√
HDMI output*	√	X	X
HDMI INPUT 4K 30 FPS*	X	√	√
VGA IN*	X	√	√
Battery	2600mAh	3350mAh	3350mAh
Working hours	5 hours	6 hours	6 hours
Digital Cable tracer*	Optional	Optional	Optional
Upgrade UTP cable test, check fault of RJ45 cable plug	√	√	√

The data above is only for reference and any change of them will not be informed in advance. For more detailed technical inquiries, please feel free to call the our technical department.

More detail operations and instruction, please check the tester's manual.

For further information or any queries
please contact

Technical Support:
www.labgear.co.uk/support



Waste electrical and electronic products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority for recycling advice.



Distributor in the UK: Labgear,
Philex House, London Road, Bedford, MK45 2HP, UK.

Distributor in the EU: Philex Electronic Ireland Ltd.,
Robwyn House, Corrintra, Castleblayney,
Co. Monaghan, A75 YX76, Ireland.