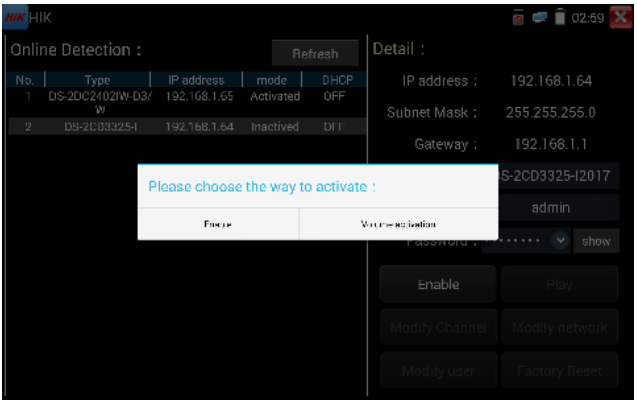
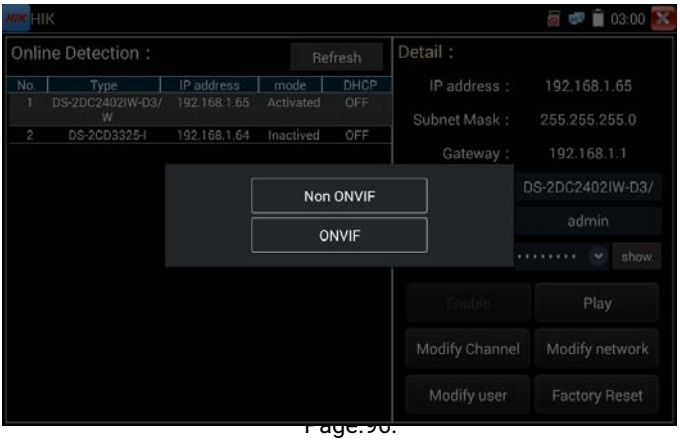
"Activation" and "Batch activation" are optional.



Auto open ONVIF protocol: After activation, the new HIK cameras click "play, modify the channel name, modify network information, modify user information" any one of to auto open the selected camera ONVIF protocol.

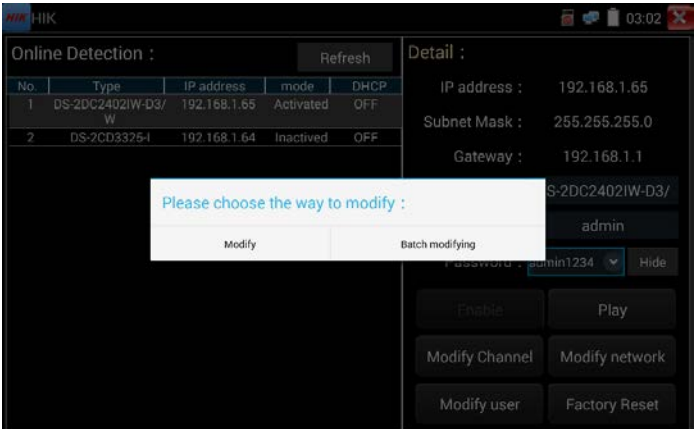
Play: Security status shows the "activated" camera. Enter the correct camera password in the right [password] and click [play] to pop up the "private protocol" or "speed ONVIF" two options. Select the protocol you need to see the camera images.



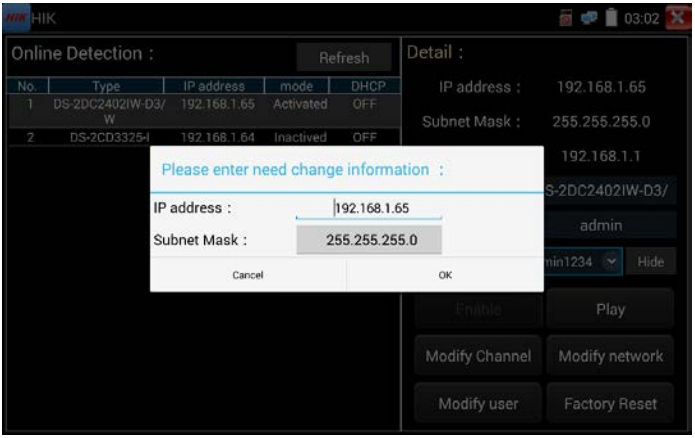
Modify channel name: Clicking "Modify the channel name" will pop up OSD settings, including time, channel name and other optional items.

After channel selecting, you can edit the channel name, modify the display position, and switch the font size. Select "default location" in "content location" is without modification. Select "Customization" to arbitrarily adjust the channel name and display location. Click"OK"and the effects will appear. Press return key or click any area of the screen to return to the upper layer of the interface.

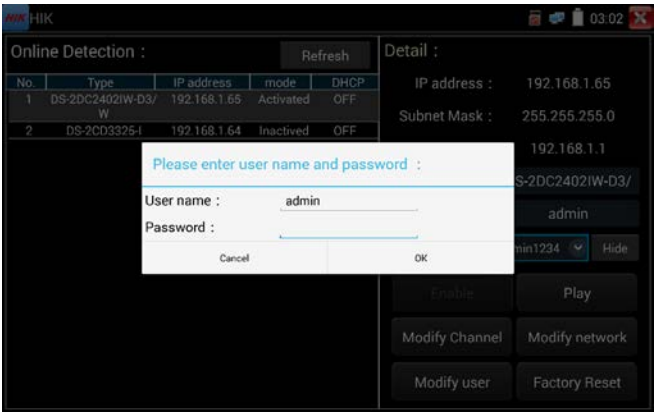
Modify network information: Support "modify" and "batch modify" camera IP address, subnet mask and other parameters modification.



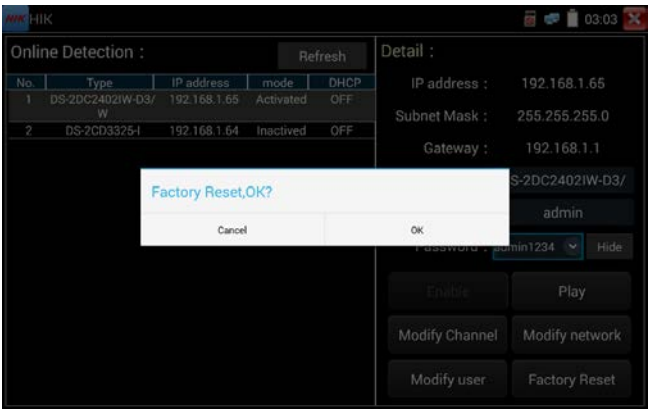
Enter a new IP address and subnet mask, the default gateway will be auto modified according to the IP address. Click "OK" to save the changes.



Modify user information: Modify the camera's user name and password.



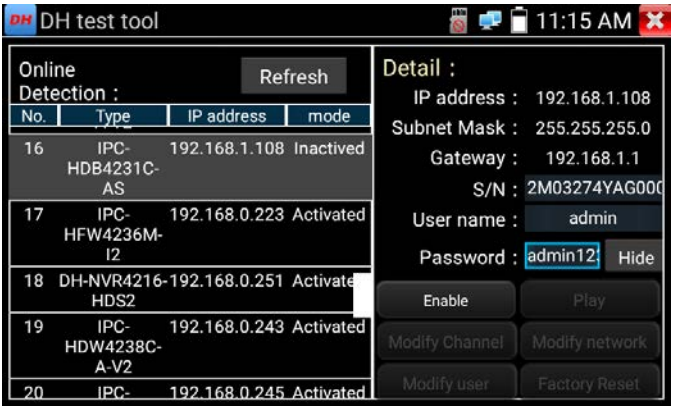
Factory Reset: Camera factory reset.



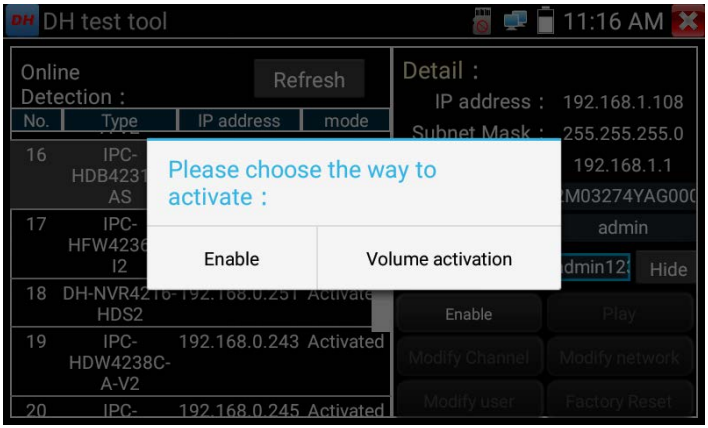
3.3.39 Dahua test tool

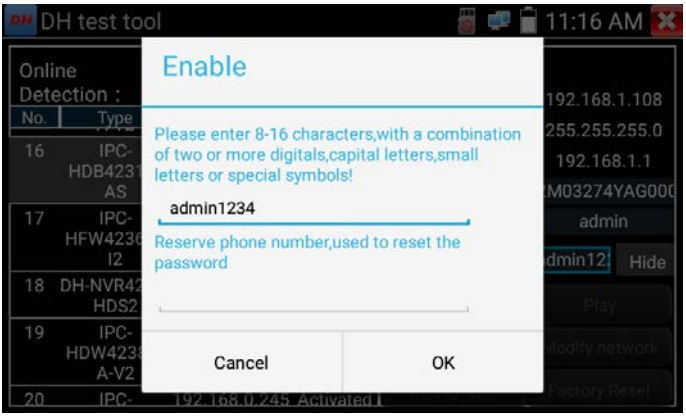
Dahua test tool is developed for installation and debugging of the Dahua IP camera, it can display image, and modify IP, user name and password etc. Making Dahua camera test more convenient and quickly.

Activation: select left [online detection] to display the "inactivated" camera and click activate.



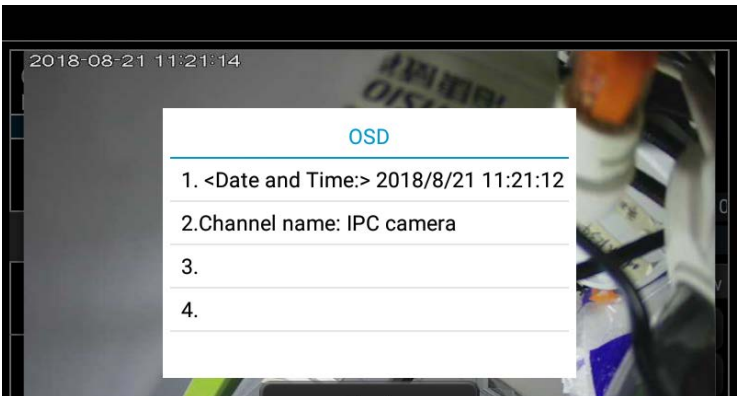
Activate and Batch activate are optional, support reserved phone number for resetting password.



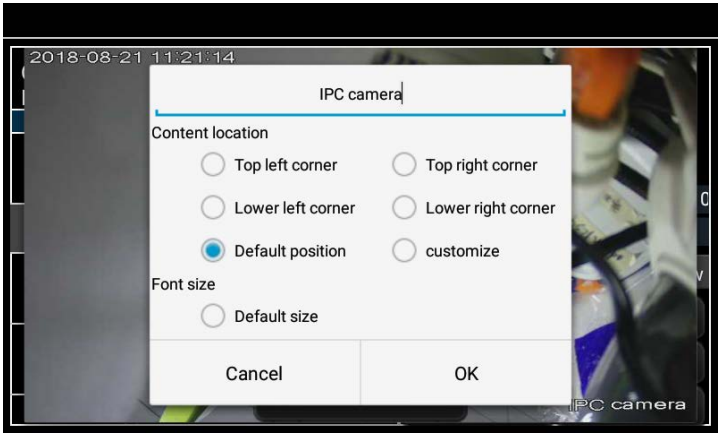


Play: When mode display "activated" camera, input correct password, click "Play" poping up "private protocol" and "ONVIF", Select correspond protocol to view the camera image.

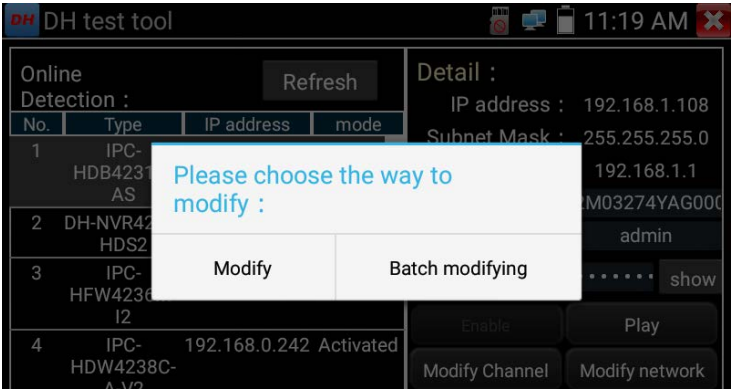
Modify Channel: Click "Modify Channel", will pop up OSD setting, includes time, channel name,etc



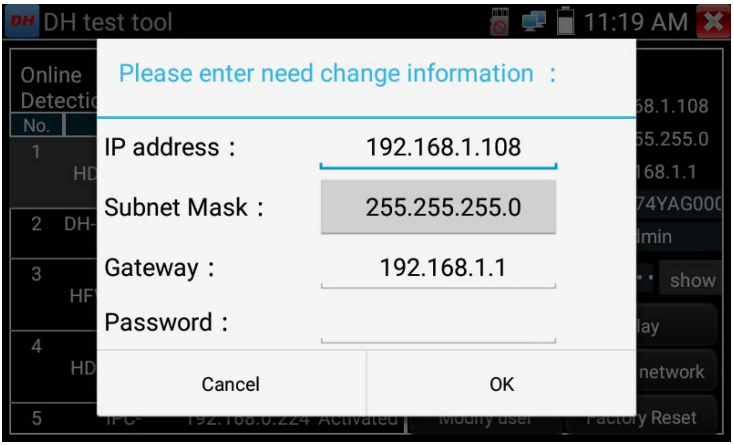
After selected Channel name, can edit channel name, modify the display position and font size. If select "Default position" of Content location, then no need to modify. If select "customize", then can modify Channel name and display position, click "OK"to view the image. Click "Back" or "Return" button to return previous interface.



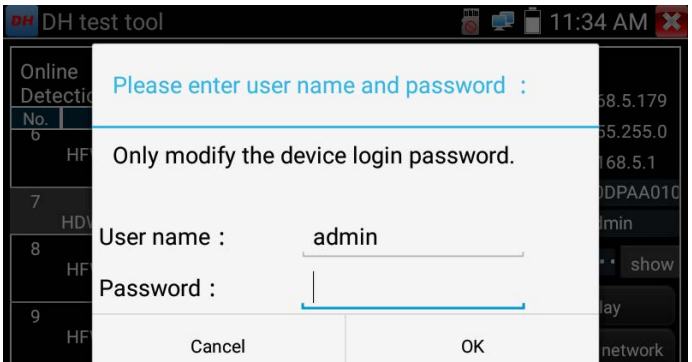
Modify Network: Support Modify and batch modify two way, can modify camera IP address, Subnet mask and gateway.



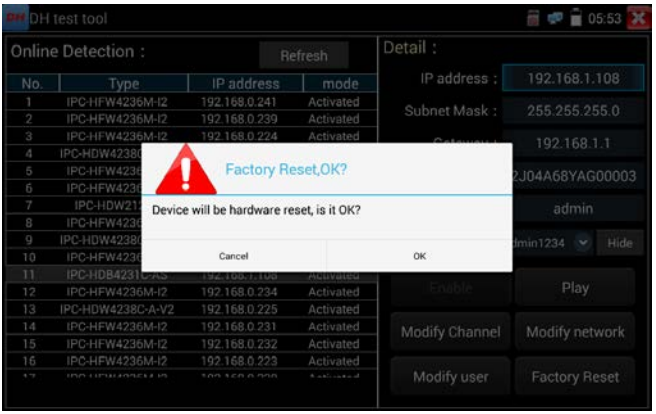
Input new IP address, need to input password, click "OK" to save the modification



Modify user information: Modify camera user name and password, which is onvif, Dahua test tool, IPC TESTE user name and password, not web user name and password.



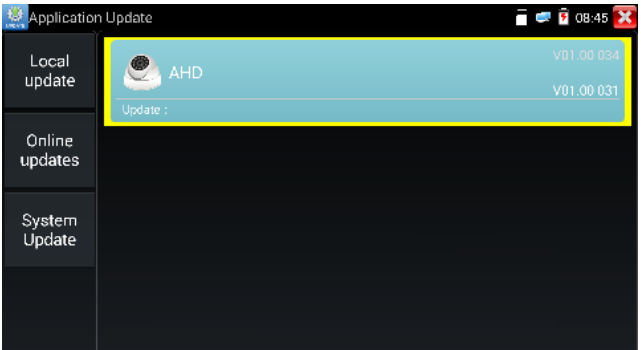
Factory reset setting: Camera will be soft reset, and the device's user name, password and network set be saved. Other settings information is factory reset.



3.3.40 Update

Copy the downloaded update file to SD card "update" directory, if no 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 displayed on the



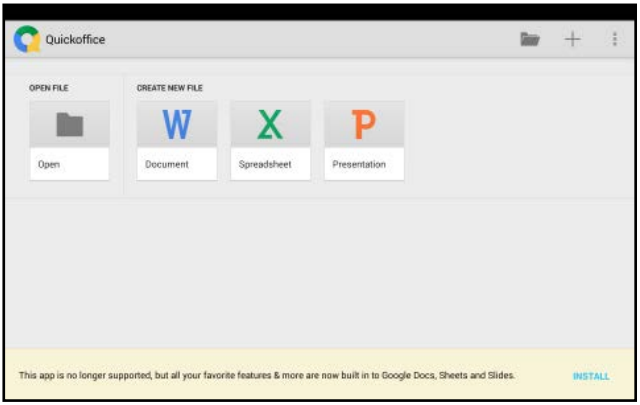
If there are update programs, applications will be listed in the interface, click related applications, update to the latest version.

Update online: Before using online update, need enter settings-user management to register first.

System update: Connect the Internet to update systems.

3.3.41 Office

Quick office app (support excel, word, ppt format) doc. editable



3.3.42 LED Flashlight

It is convenient for the installation or maintenance in the evening or in the dark. Cli n to enter

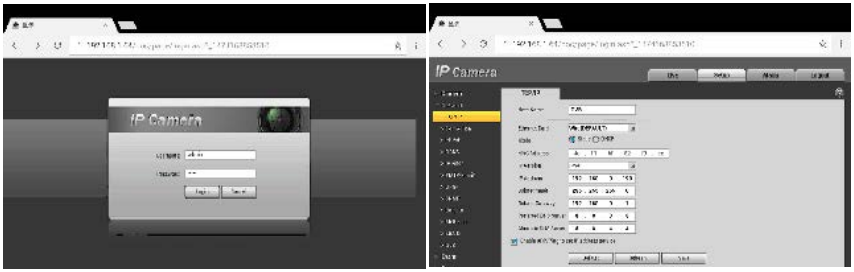
While in the flashlight app, click the red button to turn on the LED lamp. Press it again to turn it off. If you don't press the red button to shut off the lamp and press the button to exit the app, the lamp will stay on. Click the Time Setting button to set a timer that will shut off the lamp.

3.3.43 Browser

Click icon to enter

Type in the camera's IP address and press "Go" to access the IP camera's interface.

NOTE: You will not be able to view live video in the web browser. For viewing video, use the IP tester's live camera view Apps



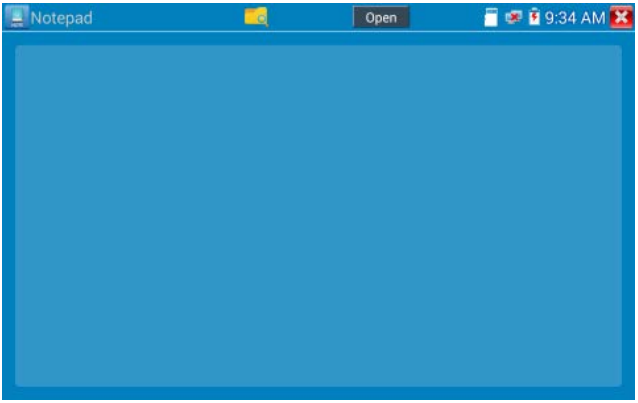
The IP camera and IP tester be on the same network segment for the browser to interface with the camera. If they are not in the same segment, click the button or press "RETRUN" to exit. Open the "Settings" app from the main menu to change the IP tester's

network settings to match those of the IP camera.

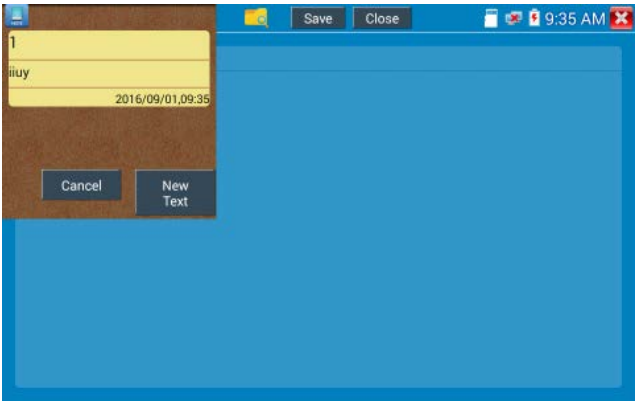
3.3.44 Notepad

Notepad can be used to record the important testing results, click the key "Save" to save the contents. Notepad can auto record the storage date and time.

.

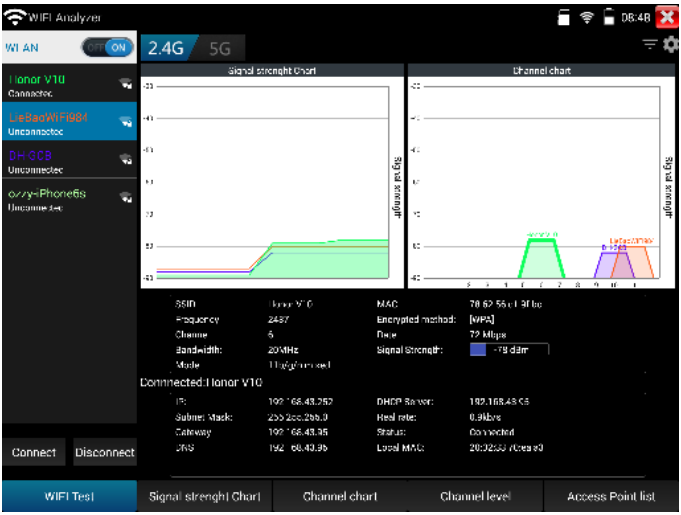


Please click  to view the notepad, all saving contents display. Click each record bar to show the details. Press the record bar for several seconds, prompt whether delete it.

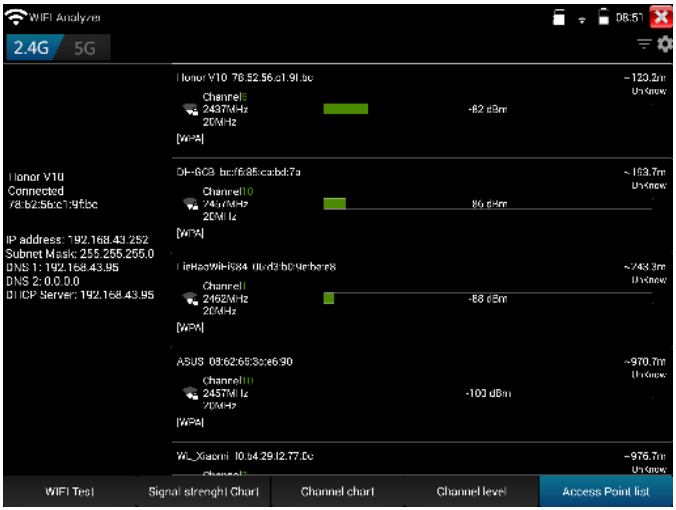


3.3.45 Professional Wifi Analyzer

Detect the surrounding wifi signal and signal strength, support 2.4G and 5G frequency band.



Access point list and List format, display WIFI's channel, frequency, signal strength, device information and distance, etc.



3.3.46 System Setting

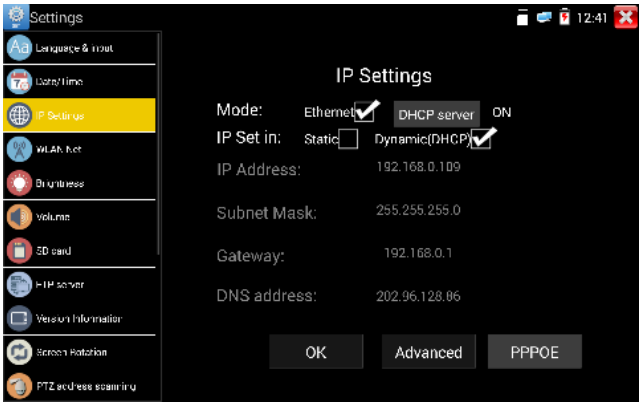
Click icon  to enter

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

Typewriting: You can select typewriting or install other typewriting:

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

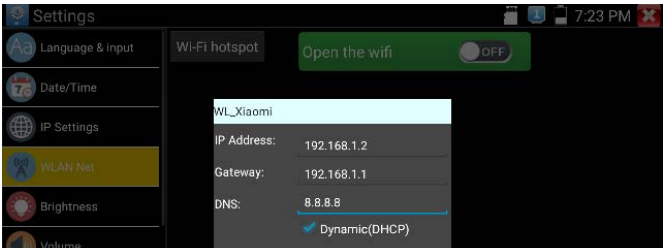
IP setting: Manually set the IP address, Subnet Mask, Default Gateway and DNS address or select "Dynamic allocation" to use DHCP. To test multiple network segments, click "Advanced " and then click "Add " to enter another IP address for the IP tester.



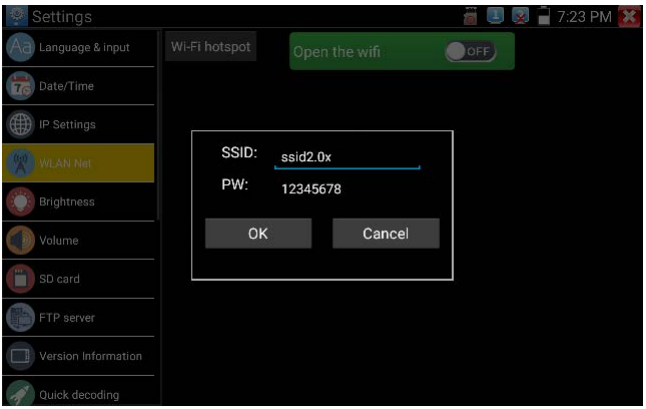
After setting an advanced IP address (refer to the photos above), the unit can test two network segments (192.168.5.0) and (192.168.1.0)

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.

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.



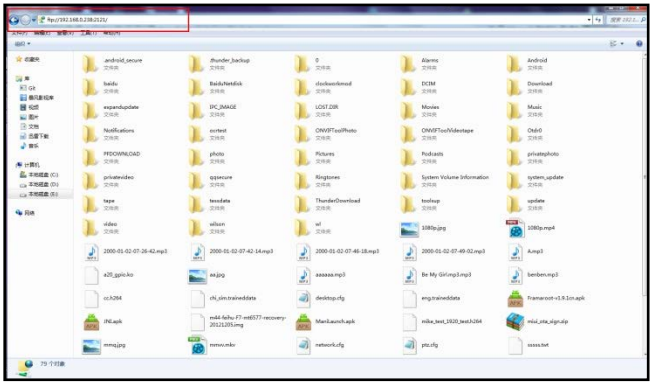
Brightness: Set the desired brightness of the IP tester and adjust the sleep time settings.

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.

Online Registration: Online update need register first, after the tester connect to network, then fill registration information to register.

User Feedback: If you have any comments or suggestions for the tester, please connect it to network and write your feedback.

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

Password Lock Screen: Set password, you can input digitals, letters or characters as password, input it again to confirm .when the meter is in standby mode or turn it on, you can input your password to enter.

Pattern Lock Screen: Drawing a pattern to lock. While the meter is in standby mode or turn it on, you can input your pattern to enter.

Modify Lock screen password, you need input lock password again. Select password Lock screen or pattern Lock screen to reset lock screen password. After reset pattern lock screen, you need to draw a new lock pattern.

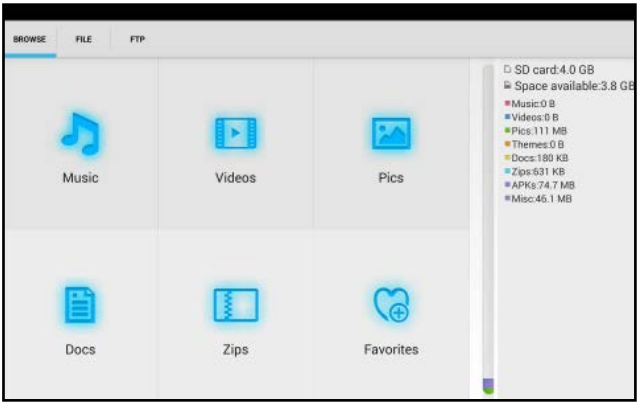
Restore the factory settings: If the tester to restore factory settings, all your personal files and apps will be removed.

3.3.47 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, Please refer to FTP settings.

3.3.48Audio test

You can test the audio input from audio pickup devices by connecting the audio pickup device to the IP tester with the supplied audio cable.

4. Specifications

4.1 General Specifications

Model	IP Camera Tester【*】models Optional
Display	New 8 inch retina touch screen, 2048x1536 resolution
Network port	10/100/1000M auto adjust, RJ45, Dual LAN port
WIFI	Built in WIFI, speeds 433M, allows you to connect to a wireless network and view IP cameras, Operating Frequencies: 2.4G and 5G
Professional Wifi Analyzer	Detect the surrounding wifi signal and signal strength, support 2.4G and 5G frequency band.
H.265 Mainstream 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..Support 4 channels H.264/1080P.
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
AutoHD* (Optional)	Auto-recognize the resolution and Auto-display the image of the connected camera. Support coaxial PTZ control and call OSD menu, support up to 8MP TVI/CVI/AHD and CVBS cameras.
4K HD Coaxial level test	Through hardware high-speed sampling and processing technology, accurately measure video peak level, sync level and burst level. By one key to create testing report.
SDI video signal test * (Optional)	1 channel HD-SDI/EX-SDI input（BNC interface), resolution support: 720P 60fps, 1080P 60fps, 1080i 60fps, EX-SDI: 2560 x1440P /25/30fps, 3840 x 2160P 20/30 fps, UTC control and call OSD menu
CVI video signal test *（Optional）	1 channel CVI input（BNC interface, resolution support 720P 25/30/50/60fps,1080P 25/30fps, 2560x1440P 25/30fps, 2592x1944 20fps, 2880x1920 20fps, 3840 x 2160 12.5/15 fps. UTC control and call OSD menu
TVI video signal test*（Optional）	1 channel TVI input（BNC interfce）,resolution support 720P 25/30/50/60fps, 1080P 25/30fps, 2048x1536P 18/25/30fps, 2688x1520P 15fps, 2560x1440P 15/25/30fps, 2560x1944P 12.5/20fps, 3840 x 2160 12.5/15 fps, UTC control and call OSD menu

AHD video signal test *（Optional）	1 channel AHD input（BNC interface）,resolution support 720P 25/30fps, 1080P 25/30fps, 2048x1536P 18/25/30fps, 2560x1440P 15/25/30fps, 2560x1944P 12.5/ 20fps, 3840 x 2160P 15 fps, UTC control and call OSD menu
Analog video test	1 channel BNC Input & 1 channel BNC Output , NTSC/PAL (Auto adapt)
Video level meter	PEAK video signal level, SYNC signal level, COLOR BURST chroma level measurement for CVBS camera.
Zoom Image	Supports Analog and IP camera image zooming & movement
Snapshot, Video record and playback	Capture current images and record live video as JPG file. Media player will view photos and playback video
HDMI IN	HDMI IN, Support 4K 60FPS, 3840x2160P 60FPS, 720×480P /720×576P/1280×720P/1920×1080P /1024×768P/1280×1024P /1280×900P /1440×900P.
HDMI output	1 channel HDMI output, supports up to 4K 30FPS, 3840x2160P 30FPS.
RJ45 cable TDR test	RJ45 cable TDR test and cable quality test, to test cable pair status, length, attenuation reflectivity, impedance, skew and other parameter.
24V 2Apower output	Output DC24V/2A power to camera
12V 3A power output	Output DC12V/3A power to camera
USB 5V power output	5V 2A power output
PoE power output	48V PoE power output, Max power 25.5W
Screen management	Under normal mode, you can change icons sequence and self-define the number of icons in each page
Theme	Self-define icons, desktop and application interface background, modify interface sliding effect.
drop-down menu	PoE power switch, IP setting, WLAN switch, HDMI IN functions etc

	screen lock, password lock screen or pattern lock
Audio test	1 channel audio signal input and 1 channel audio signal output to connect headphones
PTZ control	SupportRS485 control, Baud 600-115200bps, Compatible with more than 30 protocols such as PELCO-D/P, Samsung, Panasonic, Lilin, Yaan, etc
Color bar generator	Output one channel PAL/NTSC color bar video signal for testing monitor or video cable.(red, green, blue, white and black color)
UTP Cable tester	Test UTP cable connection status and display on the screen. Read the number on the screen
Data monitor	Captures and analyzes the command data from controlling device, also can send hexadecimal
NET TOOL PRO	NET TOOL PRO-Cable Test, Wireless Tool, Link Tool, Full Duplex Detection, PING, IP Scan, DHCP Server, PPPOE, OUI Search, Socket Tool, DNS, LLLDP.
Cable tracer	Using the advanced multiplexing technique, the cable tracer and cable test in the same interface. Find a connected cable from a bundle of cables using audio tones
PoE /PSE voltage test	Measures PoE switch voltage and displays pin configuration
Digital Multi-meter *(Optional)	AC/DC Voltage, AC/DC current, Resistance, Capacitance, Data hold, Relative measurement, Continuity testing. Testing speed: 3 times/ seconds, Data range -6600 ~ +6600.
Optical power meter *(Optional)	Calibrated Wavelength(nm): 850/1300/1310/1490/1550/1625nm Power range(dBm): -70 ~ +10dBm
Visual fault locator *(Optional)	Test fiber's bending and breakage (SM and MM fiber)

TDR cable test *(Optional)	BNC cable, network cable, telephone cable, RVV cable and elevator cable, cat 5/6 cable's length and short circuit. measurement range 1.2KM
BNC attenuation test	Through hardware high-speed sampling and processing technology, test the BNC coaxial cable transmission attenuation value, detect the transmission quality of BNC cable.
POWER	
External power supply	DC 12V 2A
Battery	Built-in 7.4V Lithium polymer battery, 7000 mAh
Rechargeable	Fasting charge, after charging 3.5 hours, normal working time 13 hours
Parameter	
Operation setting	Capacitive touch screen, OSD menu, select your desired language: English, Chinese, Korean, Russian, Italian or Polish, etc
Auto off	1-30 (mins)
General	
Working Temperature	-10℃---+50℃
Working Humidity	30%-90%
Dimension/Weight	264mm x 182mm x 43mm / 1Kg

4.2 Multi-meter specifications

Counts: -6600 ~ +6600

Conversion rate: 3times/s

Current modes for clamp meter with ZERO function

Isolation: the Multi-meter connector must be isolated with the other connector.

DC voltage

Range	Accuracy	Resolution
660mV (Manual range)	±（0.3%+4）	0.1mV
6.600V		1mV
66.00V		10mV
660.0V		100mV

AC voltage

Range	Accuracy	Resolution
660.0mV (Manual range)	±（1.5%+6）	0.1mV
6.600V	±（0.8%+6）	1mV
66.00V		10mV
660.0V		100mV

DC current

Range	Accuracy	Resolution
6.600mA	±（0.5%+3）	1uA
66.00mA		10uA
660.0mA		100uA
10.00A	±（1%+5）	10mA

AC current

Range	Accuracy	Resolution

6.600mA	±（0.5%+3）	1uA
66.00mA		10uA
660.0mA		100uA
10.00A	±（1%+5）	10mA

Resistance

Range	Accuracy	Resolution
660.0Ω	±（0.8%+5）	0.1Ω
6.600KΩ	±（0.8%+2）	1Ω
66.00KΩ		10Ω
660.0KΩ		100Ω
6.600MΩ		1KΩ
66MΩ	±（1.2%+5）	10KΩ

Continuity

Range	Resolution	Function
660.0Ω	0.1Ω	The measurement value less 30Ω±3Ω,the tester will sound

Diode

Range	Resolution	Function
2.0V	1mV	Schottky diode:0.15~0.25V rectifier diode:0.6~1.0V triode PN junction:0.5~0.8V

Capacitance

Range	Accuracy	Resolution

6.600nF	±（0.5%+20）	1pF
66.00nF	±（3.5%+8）	10pF
660.0nF		100pF
6.600μF		1nF
66.00μF		10nF
660.0μF	±（5%+8）	100nF
6.600mF		1μF
66.00mF		10μF

4.3 Optical power meter specifications

Measure Range(dBm)	-70 ~ +10dBm
Wavelength(nm)	850nm,1300nm,1310nm,1490nm,1550nm,1625nm
Detector	InGaAs
Uncertainly	< ±3%dB(-10dBm,22℃) < ±5%dB(full range,22℃)
Display Resolution	Linear:0.1% ; Nonlinear:0.01dBm
Operating Temperature(℃)	-10 ~ +50
Storage Temperature (℃)	-20 ~ +70
Connector type	FC/PC

4.4 Visual fault locator specifications

Laser type	LD
Wavelength Calibration	650nm
Output power	5mW（Optional 10mW,20mW）
Modulation mode	CW/1Hz/2Hz

Measurement Range	5KM（Optional 10-20KM）
Connector	FC/PC exchangeable
Working Temperature	－10℃～+50℃
Operating Temperature	-20℃～+70℃

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 Technical Department of our company.

FCC Warning Statement:

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.

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

NOTE: This device and its antenna(s) must not be co-located or operation in conjunction with

any other antenna or transmitter

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with minimum distance of 5mm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna nr transmitter.