SECURITYTRONIX®

THE IMAGE OF QUALITY

ST-ALLIN1-TEST2

USER MANUAL

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- Thank you for purchasing the SecurityTronix ST-ALLIN1-TEST2 CVI/TVI/AHD/SDI, Analog and IP camera test monitor with network tester.
- To use the ST-ALLIN1-TEST2 safely, please read the Safety Information carefully.
- The manual should be kept with the ST-ALLIN1-TEST2 for reference.
- Keep the S/N label for after-sale service within the warranty period. Please see the last page of the manual for warranty information.
- If you have any questions or problems while using the ST-ALLIN1-TEST2 camera tester, please contact Securitytronix technical support department at (610) 429-0334
- Visit our website http://www.securitytronix.com for additional information and up to date user manuals.
- **DISCLAIMER:** All applications and features of the ST-ALLIN1-TEST2 are intended for use on your own networking equipment or with the written permission from the owner of the equipment you are connecting to. You may not use the ST-ALLIN1-TEST2 to access any IP cameras or any other networking equipment that you are not authorized to access. This is illegal. Always check with your local, state and federal laws before using the ST-ALLIN1-TEST2. SecurityTronix does not assume any liability for loss of data or connecting to an unauthorized network device.

WARNING: THIS PRODUCT CAN EXPOSE YOU TO POLYBROMINATED BIPHENYLS, WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION GO TO WWW.PROP65WARNINGA.CA.GOV

Table Of Contents

1 .Safety information

◆ The ST-ALLIN1-TEST2 is intended for use in compliance with applicable codes and laws.

◆ Do not expose to moisture.

◆ Do not drop.

◆ The tester should not be charged over 8 hours.

◆The tester should not be used in an environment with any flammable gasses or chemicals.

◆ Do not disassemble the ST-ALLIN1-TEST2 meter except to change the battery.

◆ Do not use any chemical cleaning products to clean the test meter. Use a dry cloth.

◆ Do not use during an electrical storm.

Digital Multi-meter safety

◆ Prior to taking any measurements, be sure you are using the correct range, function and input jack. Red is positive, black is negative.

◆ Never exceed the protection limit values for each range of measurement.

◆While measuring a live circuit, do NOT touch any unused terminals.

◆If the value to be measured is unknown while using the manual range, set the range selector to the highest position.

◆Always be careful when working with AC or DC voltages to avoid injury or death. Keep your fingers behind the probe barriers while measuring. Do NOT touch the metal probes while taking any measurements.

◆Never perform any capacitance measurements unless the capacitor has been fully discharged.

2. ST-ALLIN-TEST2 Introduction

2.1 General

The ST-ALLIN1-TEST2 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 cameras via mainstream. The 1280x800 resolution enables it to display network HD cameras and analog cameras in high resolution. The unit supports many ONVIF PTZ and analog PTZ controls.

This tester is also a great tool for Ethernet network testing. It can test PoE power voltage, PING, and perform IP address searching. The separate blue cable tracer can be used to locate individual connected cables from a bundle of cables, and test LAN cables for proper connection termination. Other functions include providing 24W PoE power to your IP camera, HDMI IN and OUT, CVBS loop test, LED Flashlight, 12V DC 2A power output, and much more. Its portability, user-friendly design, and many other functions make the ST-ALLIN1-TEST2 an essential tool for all installers and technicians.

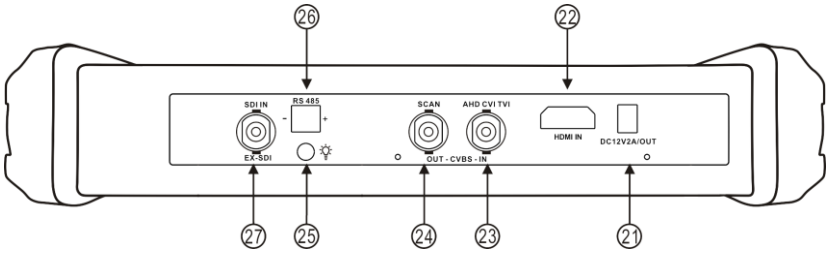
2.2 Packing list

1) ST-ALLIN1-TEST2
2) 12VDC 2A power adapter
3) Network cable tester
4) Polymer lithium ion battery (7.4V DC 5400mAh)
5) BNC cable
6) Multi-meter test leads one pair of red and black
7) 12V DC Output Power cable
8) 3.5mm Audio cable
9) Safety lanyard
10) Tool bag
11) Manual
12) 8GB SD card

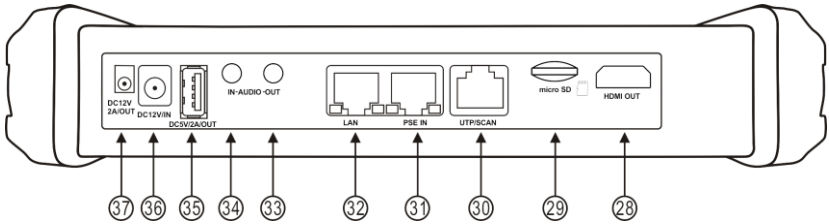
2.3 Function interface

1	⏻	Press for more than 2 seconds to turn the unit on or off. Quick press to put the display into sleep mode.
2	MENU	Press to call the menu.
3	⊕	Press for up to 4x digital zoom.
4	FAR +	Far focus: Adjust the focus for a “far” field of view.
5	NEAR -	Near focus: Adjust the focus for a “near” field of view.
6	TELE +	TELE: zoom in the image.
7	WIDE -	WIDE: zoom out the image.
8	OPEN	Confirm the setting of a parameter, open or enlarge the aperture.
9	CLOSE	Return or cancel while setting a parameter in the menu, close or decrease the aperture.
10	△	Upward, set function or add parameter. Tilt PTZ camera upward.
11	▷	Rightward, select the parameter whose value will be changed. Add the value of the parameter. Pan PTZ camera right.
12	▽	Downward, set function or reduce the value of the parameter. Tilt PTZ cameras downward.
13	◁	Leftward, select the parameter whose value will be changed. Pan PTZ cameras left.
14	ENTER	Confirm key, (Long press to take a screen shot).
15	RETURN	Return/Close: Return or cancel while setting a parameter in the menu, close or decrease the aperture.
17		Charge indicator. Lights red while the battery is being charged. Once charging is complete, the indicator turns off automatically.
18		RS485 data transmission indicator. Lights red while data is being transmitted.
19		Data received indicator. Lights red while the data is being received.
20		Power indicator. Lights green while the tester is powered on by the adapter.

Top interface



Bottom interface



21	12VDC 2A power output
22	HDMI IN
23	CVBS IN/AHD /TVI/CVI Coaxial interface
24	Video signal output（BNC interface）/ cable tracer interface
25	LED lamp
26	RS485 Interface: RS485communication for PTZ
27	SDI input (BNC interface)
28	HDMI output interface
29	Micro SD card, (comes with 8GB card, supports up to 32GB)
30	UTP cable port: UTP cable tester port/ Cable tracer port
31	PSE power sourcing equipment. Tests PoE voltage.

32	PoE power supply output or LAN test port (Use to test PoE or non-PoE IP camera)
33	Audio output and earphone interface
34	Audio input
35	USB 5V 2A power output (used only for power, not data)
36	12VDC 2A charging interface
37	12VDC 2A power output, for DC power output

3. Operation

3.1 Installing the Battery

The ST-ALLIN1-TEST2 includes a lithium ion polymer rechargeable battery. Please remove and retain the plastic tab that disconnects the battery pack from the tester. Re-install this tab when transporting the unit or for long term storage.

You do not need to disconnect the battery during normal use

Pressing the ⏻ key continuously can power on or off the tester.

Notice: Please use the original battery and charger for the tester.

When the battery icon is full or the charge indicator turns off automatically, this indicates battery charging is complete.

Notice: When the Charge Indicator turns off, the battery is approximately 90% charged.

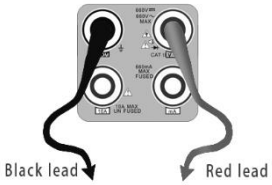
Charging time can be extended for about 1 hour without damaging the battery.

Notice: Press the ⏻ key for several seconds to force the unit to restart in the event of an abnormal operation.

Notice: the red and black multi-meter leads must be inserted into the correct ports.

Warning: Instrument communication port voltage must not exceed 6V as exceeding this may damage the tester.

Warning: DO NOT insert multi-meter leads in the Current terminals to measure voltage.



3.2 Instrument connection

3.2.1 IP camera connection (not using built in PoE)

Power an IP camera with an independent power supply, then connect the IP camera to the ST-ALLIN1-TEST2 LAN port. If the link indicator of the LAN port is green and the data indicator flickers, it means the IP camera and the ST-ALLIN1-TEST2 are communicating. If the two indicators don't flicker, check if the IP camera is powered on and the network cable is functioning properly.

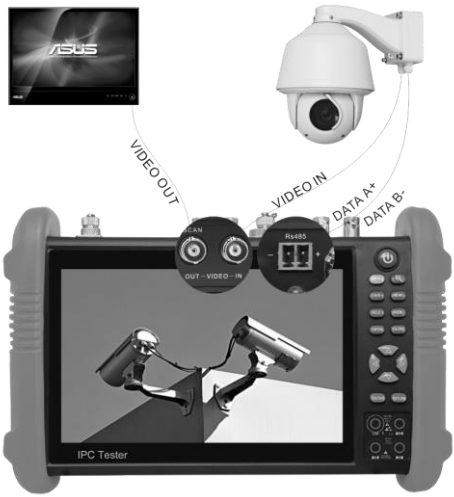
Note: 1) If the IP camera requires PoE power, connect the IP camera to the LAN port, then click on the POE Power Output app. Click on the POE power icon to turn PoE Power on or off. ***Note:*** *the camera will not respond immediately, as it needs time to fully boot up before transmitting a signal.*

2) If using the ST-ALLIN1-TEST2 to test PoE voltage, please make sure the DC power out is turned off. Connect the IPC to the LAN port, and the PSE IN port to the PoE switch being tested. In

this configuration, the IPC will be powered by the POE switch, and NOT the ST-ALLIN1-TEST2. Do NOT activate DC power with a PoE switch connected to the LAN port.

Warning: PoE switch or PSE (power sourcing equipment) can only be connected to “PSE IN” port, otherwise this will damage the unit.

3.2.2 Analog camera connection



(1)) Connect the camera's video output to the VIDEO IN port. The image will display once the camera is powered on, and the PTZ app is opened.

(2) ST-ALLIN1-TEST2 “VIDEO OUT” interface connects to the video input of a separate monitor (if required).

(3) If applicable, connect the camera or the PTZ dome’s RS485 controller cable to the tester’s RS485 interface. (Note: ensure that RS485 cable polarities are not reversed)

3.2.3 High Definition over Coax camera connection

SDI, CVI, TVI, and AHD cameras are classified as HDoC (High Definition over Coax) cameras. The following instruction on how to connect a HDoC camera to the tester applies to CVI, TVI, SDI, and AHD cameras.

(1) Connect the HDoC camera's video output to the appropriate “AHD CVI TVI” or “HD-SDI EX-SDI” interface on the top of the tester. The image will display on the screen once the camera is powered, and the appropriate TVI/CVI/AHD/SDI app is opened.

(2) If applicable, and the camera does not support CoC (Control over Coax), connect the camera or the PTZ dome’s RS485 controller cable to the tester’s RS485 interface. (Note: ensure that RS485 cable polarities are not reversed)

3.2.4 HDMI IN

You can connect a DVR or other HDMI source to the ST-ALLIN1-TEST2 meter to use a portable HDMI monitor. The image will display once the device is connected, powered, and the HDMI In app is opened.

3.3 OSD menu

Press the ⏻ key 2 seconds to turn on.

Press the ⏻ key again to turn off.

Short press the ⏻ key to enter sleep mode, press it again to resume.

If the tester behaves abnormally and cannot be turned off, Press the ⏻ key for several seconds to force a restart.

3.3.1 Lite mode& Normal mode

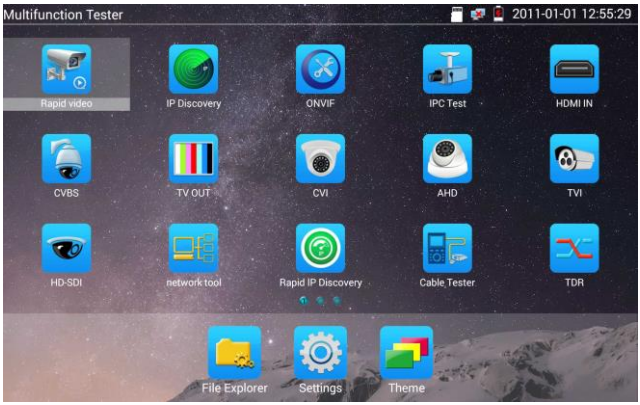
- Lite mode: A different GUI style that makes the apps organized into groups.

- In Lite mode, Press the icons several seconds to drag and drop them to other folders.

- In Lite mode, click the hand icon in the lower right corner to release the icon lock and re-organize the apps within that folder to your liking.

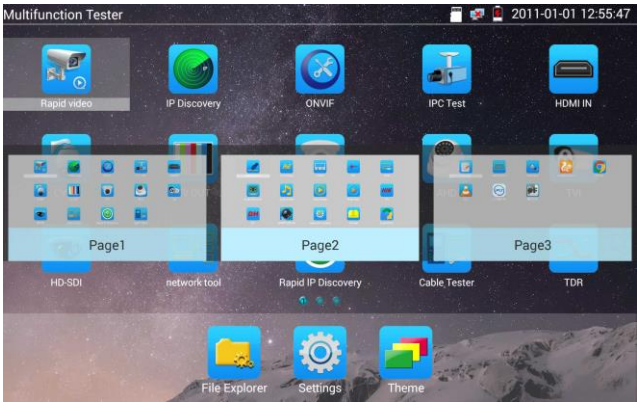
Normal mode

- Tap the screen and slide left or right to change menus.



In normal mode, press the icon for several seconds to enter management mode. You can change the icon locations as well as move them to the quick access tool bar below.

You can move the icons to any page or create new pages. This functionality allows you to best customize the interface to your needs.



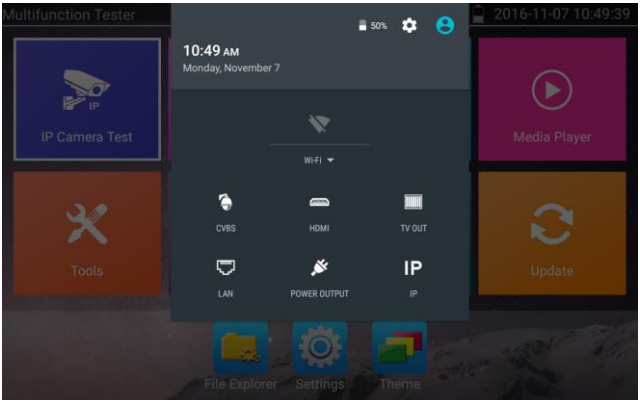
Create New Folder: Drag an icon to the folder in the top right corner and enter a folder name. The Icon will be placed in the newly named folder.

Press the folder several seconds to change the folder name or to move the icons out of a folder. The folder will be deleted automatically if no icons are inside it.

Select Icons to move. If done, click 

3.3.2 Drop-down Menu

Press and slide down at the top-right corner to open the drop-down menu. The drop-down menu includes POE power output, IP settings, HDMI IN, CVBS, LAN, settings etc.



HDMI: Click HDMI to enter the HDMI IN mode to display an input from a HDMI source. You can dual test IP & HDMI or Analog & HDMI at the same time.

CVBS: Click the “CVBS” icon to enter the CVBS testing mode.

TV OUT: Click TV OUT to open a floating window featuring the color bar generator. When you connect a video source over BNC, it will display in this window.

LAN: Display network port or WIFI connection real-time statistics. This will show download speeds and other network parameters.

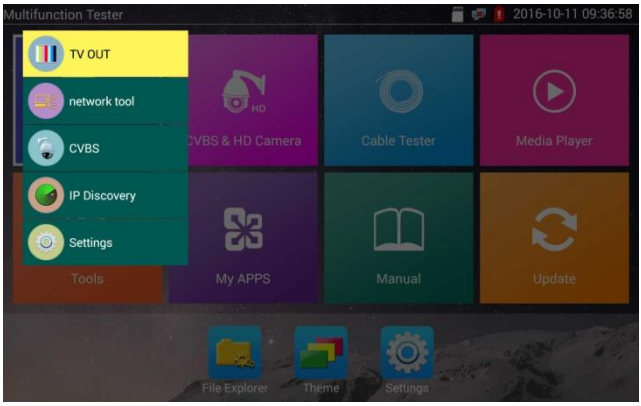
Settings: Enter settings menu.

IP: Enter IP Settings menu.

Power Output: Quickly turn on or off PoE power output.

3.3.3 Short cut-menu

You can call the shortcut menu by pressing the physical “ MENU ” button.

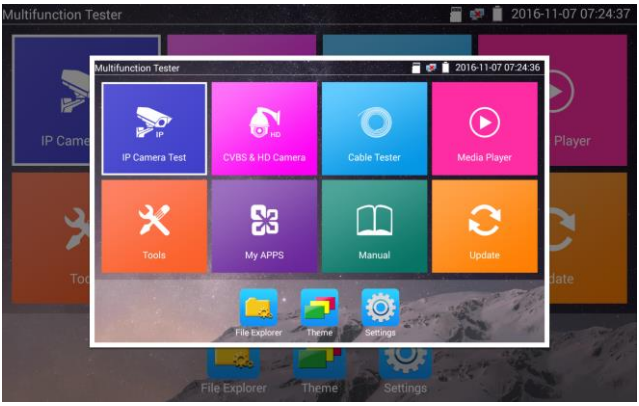


Press the “ MENU ” button to turn it on or off or switch functions, then press or the app name to enter the selected app, or press outside the pop up menu to exit.

You can manually select any application in the app list to be included in the shortcut menu. Long press the icon in the “All application” list to move it to the Shortcut menu. Long pressing the icon in the “Shortcut menu” will remove it from that list.

3.3.4 Screen capture

Long pressing the “enter” button will take a screen shot and save it locally. This can be used at any time during operation.

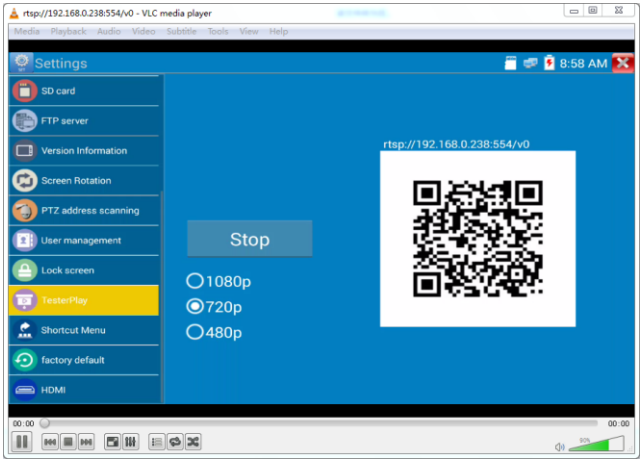


You can go to file management to view. Screenshots are located in File Explorer – SD card – Pictures – Screenshots.

3.3.5 Tester Play (Output an RTSP stream)

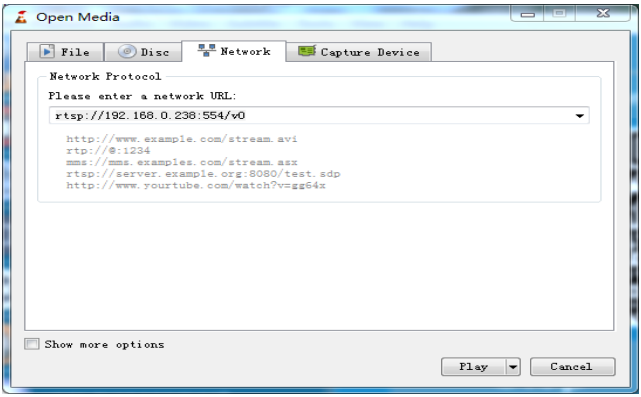
Tester Play can output an RTSP stream of the tester for viewing on a PC.

1) Connect a network cable to the tester’s LAN port, then to a switch on the network.
2) Open “Tester Play” in the “Settings” app, select a resolution, and press “Start”



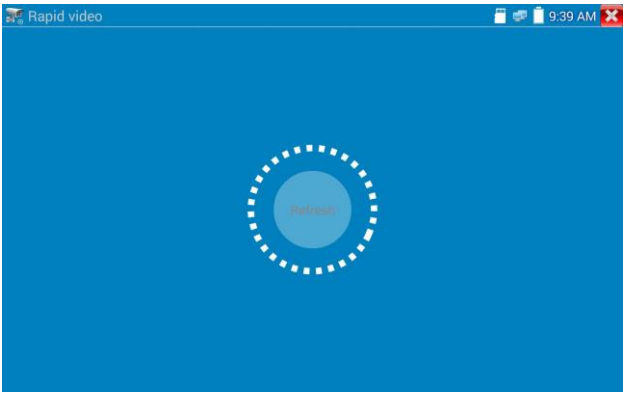
3) PC screen projection：

Install VLC Player on your PC, turn on VLC Player "Media - Open Network Streaming", and input the RTSP address displayed above the QR code displayed in the Tester Play app, click "play" to view the video stream of the ST-ALLIN1-TEST2 display.

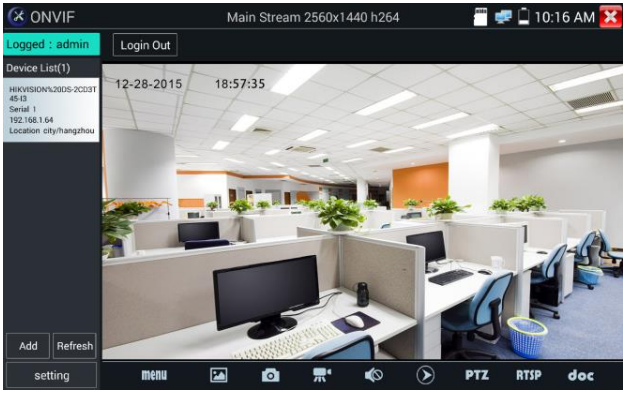


3.3.6 Rapid video

Press the  icon to enter the Rapid Video function and automatically connect to online IPCs.

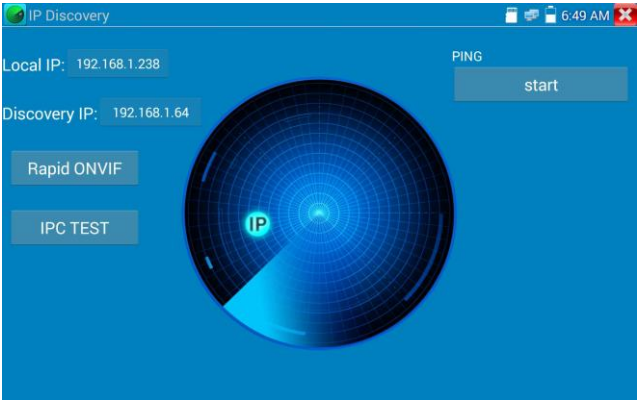


Rapid Video will auto log in and display the camera's image. For detailed operation refer to the **ONVIF** function.



3.3.7 IP discovery

Press the  icon to enter the IP Discovery app. This will auto-scan for camera IP addresses across network segments, as well as temporarily auto-modify the tester's IP to the same network segment as the discovered camera's IP.



Local IP： This displays the meter's IP address. It will auto-modify the IP to the same network segment as the discovered camera's IP.

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

Start： Click "Start" to PING the camera's IP.

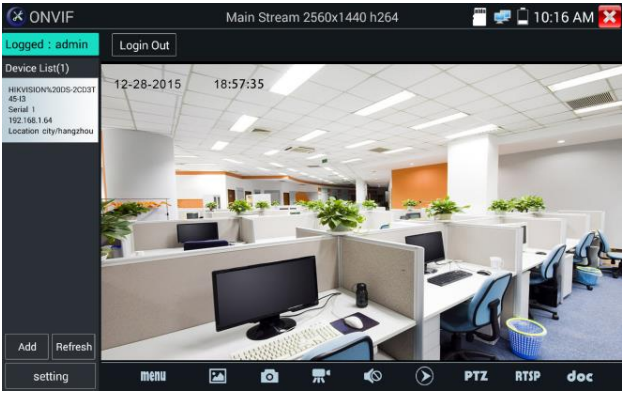
DHCP Server: Opens the DHCP Server app to configure or enable DHCP addressing.

ONVIF: Opens the ONVIF app and attempts to auto-login.

IPC TEST: Opens the IPC TEST app to use specific IP camera protocols.

3.3.8 ONVIF test

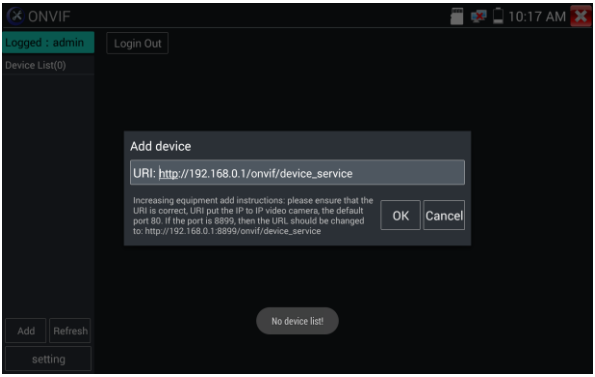
ONVIF can display 4K H.265/H.264 IP camera (IPC) image main streams.



Press  to enter the ONVIF app. The tester will auto scan all ONVIF cameras in the network segment. It lists cameras' names and IP addresses on the left of the screen under "Device List". It can auto-login to a camera and display the camera image. The ST-ALLIN1-TEST2 uses the default credentials of [admin: admin] to attempt an auto login. ***Note:*** *if the camera has different access rights*

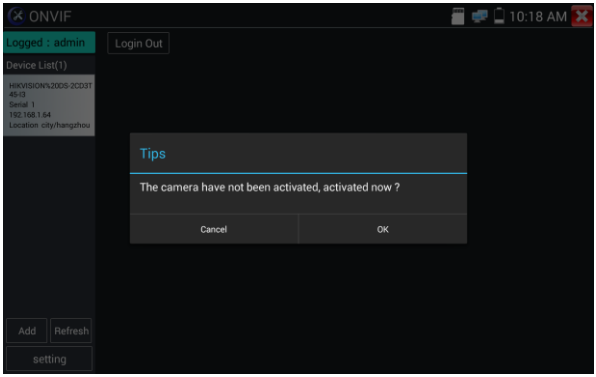
credentials, you will need to enter these to continue.

Alternatively, you can click “Add” at the bottom of the Device List to manually add a camera’s ONVIF URL.

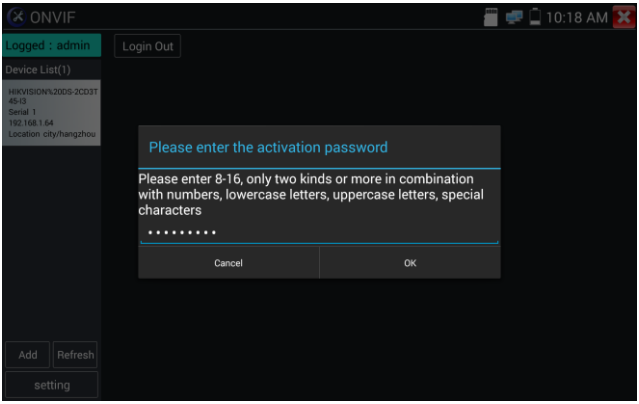


“Refresh” button: the tester will scan the network segment for cameras again. Click the newly displayed ONVIF camera on the Device List and the tester will show the IP camera’s basic information and settings.

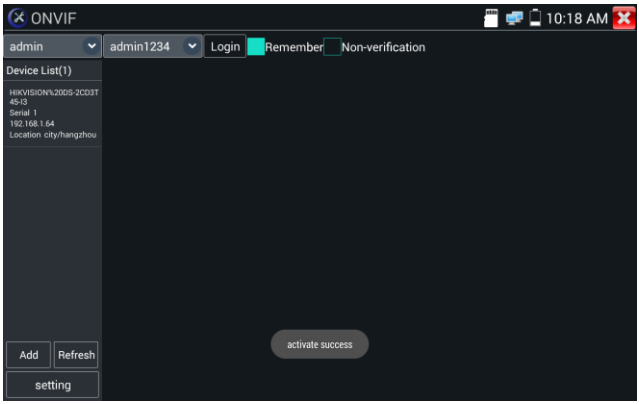
Activate SecurityTronix or HIKVISION Cameras: When connecting an un-activated SecurityTronix or HIKVISION Camera, the ST-ALLIN1-TEST2 will prompt "The camera is not activated, activate it now?" Click "OK" to start.



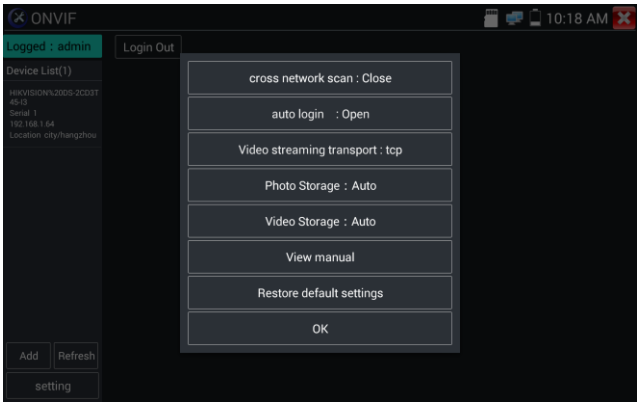
Enter a new password for the camera. New passwords must be 8-16 characters and feature at least 1 letter and 1 number or special character.



When you receive the “activation successful” prompt, the tester will automatically fill in the newly created password for login. Click login to display the camera image.



Clicking the “SETTING” button in the lower left corner will pull up the ONVIF popup menu.



Auto Login: Enabling this function will allow the ONVIF app to auto login to the camera using the default credentials. This is useful when configuring multiple cameras with the same credentials.

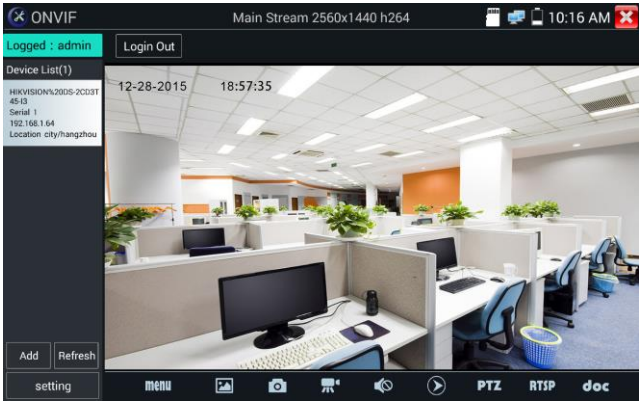
Video transmission protocol: Switches between UTP and TCP protocols.

View manual: Opens the onboard ST-ALLIN1-TEST2 manual.

Restore Defaults: Reverts the ONVIF app to default settings.

OK: Saves the modified parameters.

Click the "MENU" icon to open the camera's settings page.



IP camera video settings: Click “Video Set” to enter the IP camera’s encoder and resolution settings. Make the desired changes and click “OK “to save.

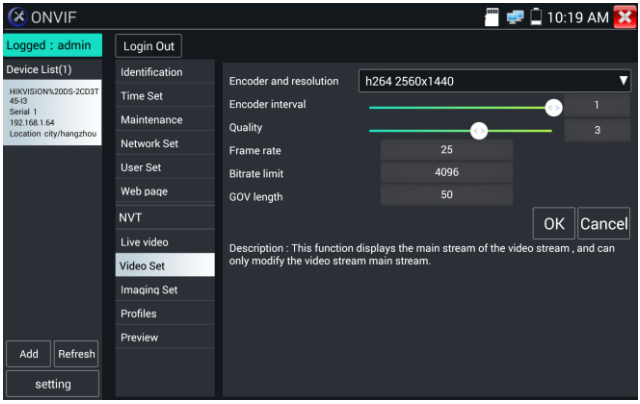
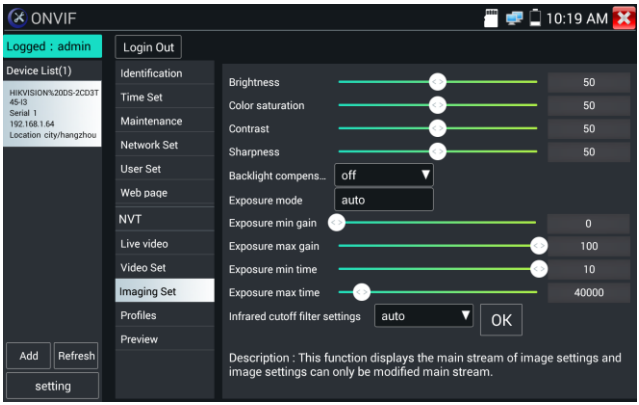
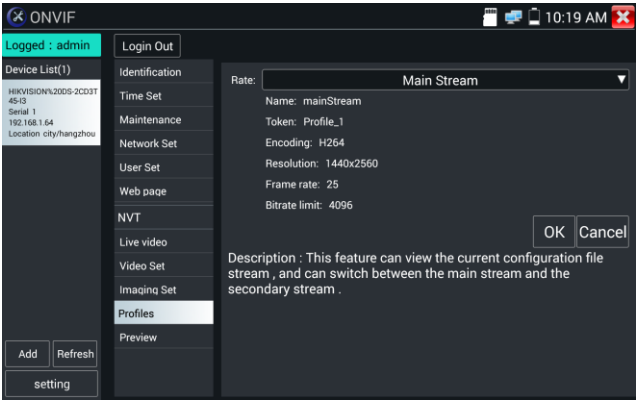


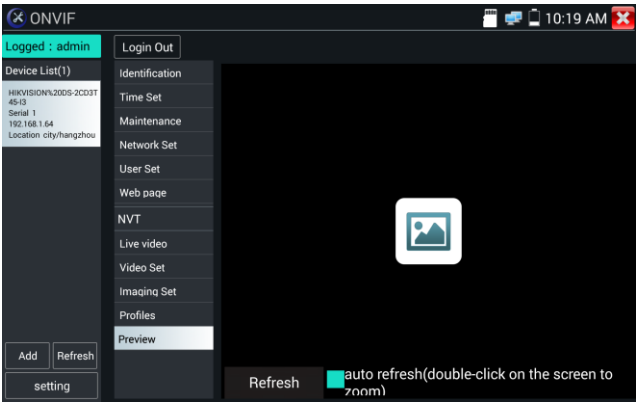
Image setting: Click “Imaging Set” to adjust image brightness, saturation, contrast, sharpness and backlight compensation mode. Make the desired changes and click “OK” to save.



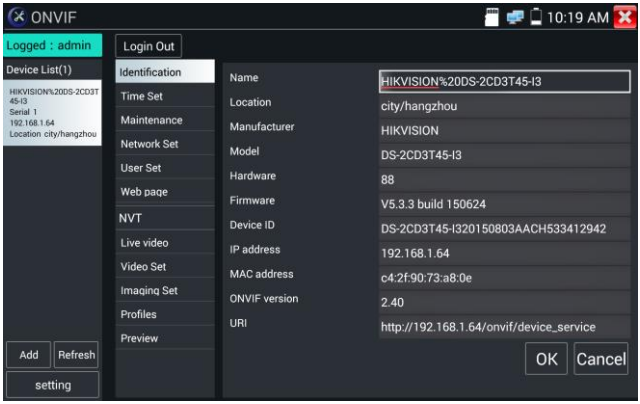
Profiles：Click “profiles" to view video streaming current configuration files, as well as switch between Main stream and any available sub-stream(s).



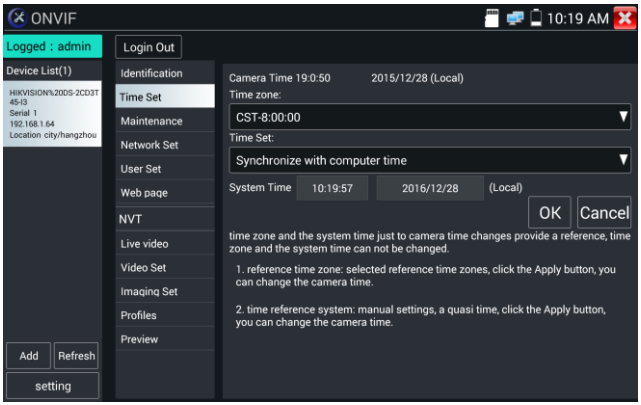
Preview pictures：Quickly preview and zoom in or out pictures, automatically and manual refresh.



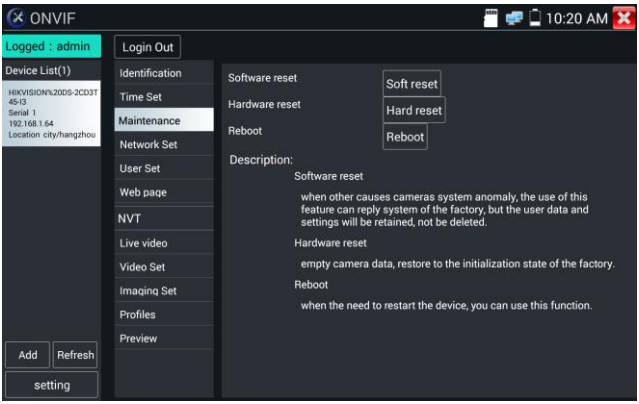
Identification: Click “Identification” to view detailed information on the camera. You may also rename the camera here. Make the desired changes and click “OK” to save.



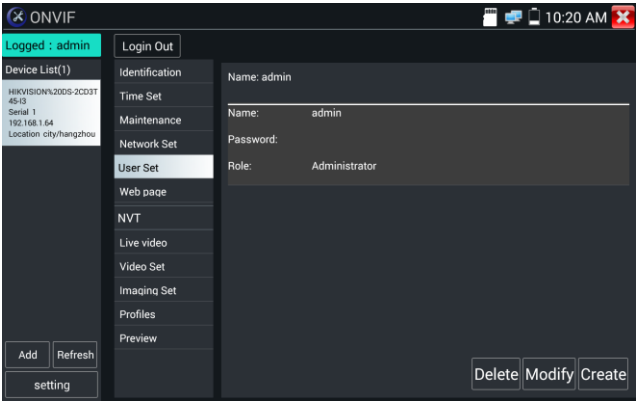
Time set: Click “Time set” and Select "Manual set" to set up the IP camera’s system time. Make the desired changes and click “OK” to save.



Maintenance: Click “Maintenance” for camera software reset or to restore to factory settings.

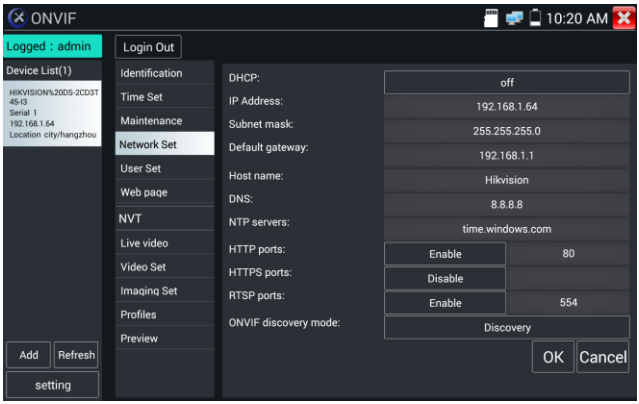


User Set: Modify camera user name and password. Make the desired changes and click “OK” to save.

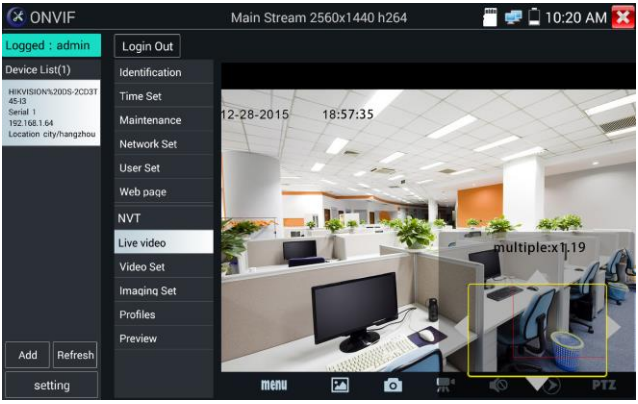


Network setting: Click “Network Set” to change the camera’s IP address settings. Some cameras may not support changing IP addresses; if not supported, there will be no change after pressing “OK”.

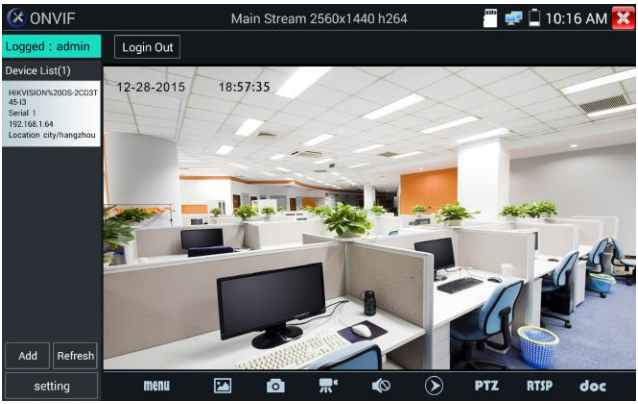
Note: *it is normal to lose connection to the camera after modifying the camera’s IP address. Simply exit ONVIF and rescan via IP Discovery to reconnect.*



Zoom in: press the key to enter 4x digital zoom mode. Press it again to exit zoom mode. When the image is enlarged tap left, right, up or down on the image to move the image on screen.



When the image is enlarged, you can also use the physical buttons to navigate the image. Press the TELE + key to zoom in, press the WIDE - key to zoom out, press directional keys to move the image around.

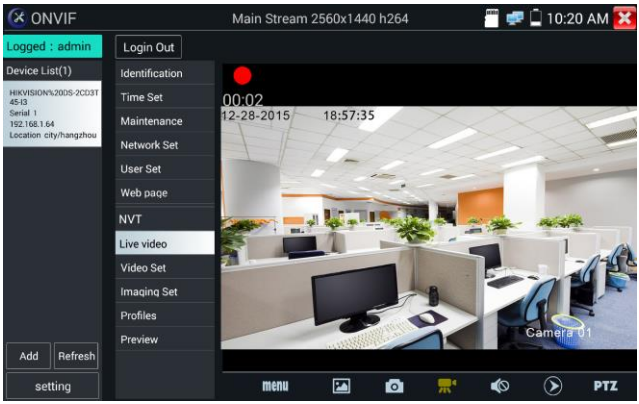


At the bottom of the image is access to the following tools: Snapshot, Record, Photo, Playback, PTZ and Settings.

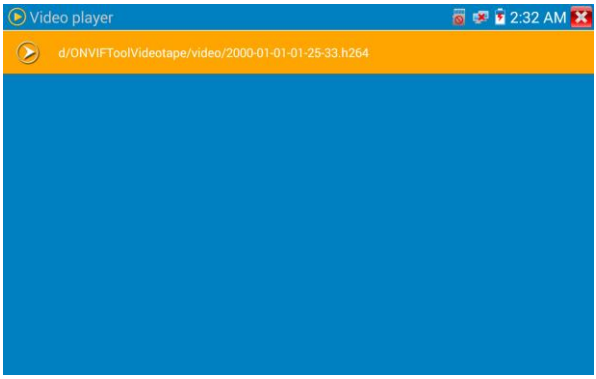
Snapshot：Click the bottom “snapshot” button to screenshot the image and store it to the SD card.

If manual storage is selected, a dialog box appears so you can name the file prior to saving to the SD card. If “Auto- storage” is selected, the ST-ALLIN1-TEST2 automatically names and stores the files after a snapshot.

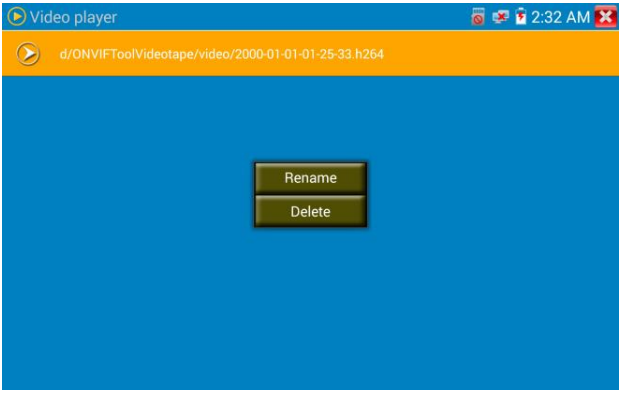
Record: When you click the “Record” icon, local video starts recording. A red recording icon appears on the screen and begins to flash and a timer appears indicating the time elapsed for the video. Click on the “Stop” icon to stop recording and save the video file to the SD card.



Playback: Click the "Playback" icon to view saved videos. Click the video you want to play, or  to return to the last menu.



To rename or delete a photo, click and hold on the file until the Rename/Delete dialog box appears.

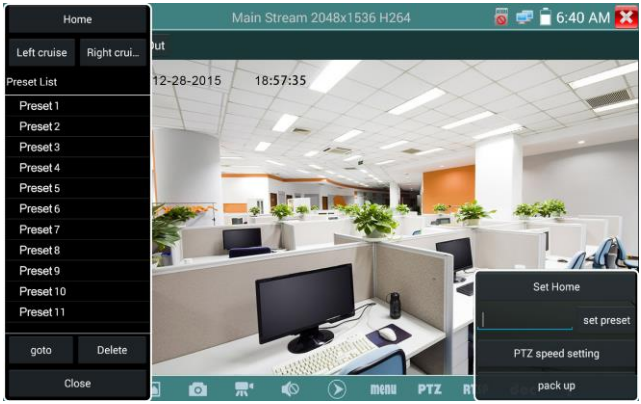


Video files can also be played in the Video Player app on the main menu.

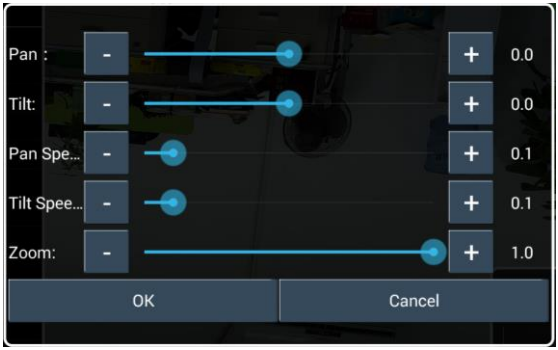
PTZ: Tap the image in the direction you want the PTZ camera to move. Tap the left side of the image to move left, right to go right, up to go up, and down to go down. Compatible IP PTZ cameras will rotate accordingly. PTZ rotation direction is displayed on top-left corner of the image.

Set Preset position: Move the camera to a preset position, enter the preset number on the bottom-right corner, and click “set preset” to complete programming a preset position.

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

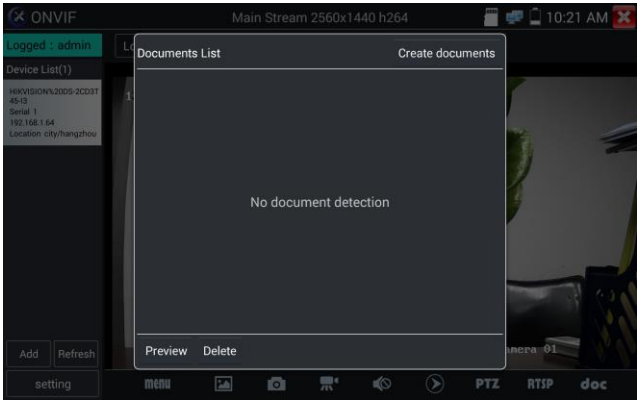


PTZ Speed set: Horizontal and Vertical Speed set.



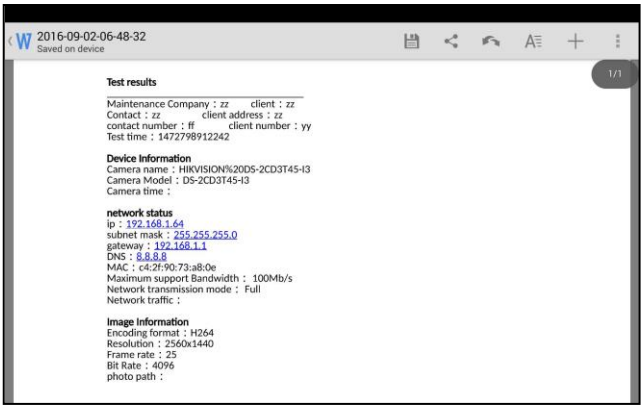
RTSP: Click to obtain the RTSP URL of the current camera (if available).

Doc: Click to automatically generate a test report PDF document for the camera. Click "Create documents" to begin. Click a document name and then click "Preview" to view the report documents, or click "Delete" to discard documents.



Creating a Document: Enter the site/client information, select a snapshot image if desired, then click "Create documents" to complete the report. ***Note:*** *the entered information will be saved for subsequent reports.*

Documents may be reviewed at any time by selecting the document in the list and clicking “Preview” or from the SD card.



[?] Icon: Clicking this icon will describe the functions of the ONVIF app’s lower quick tool bar.

3.3.9 IPC Test

Displays images up to 4K & H.265 via IP camera’s RTSP stream(s).

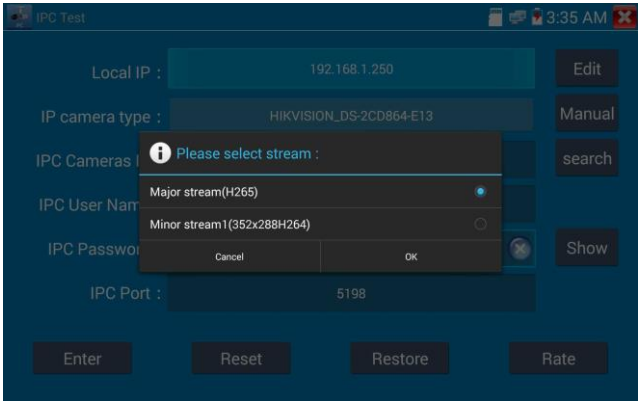
Click the  icon to enter IPC Test app

Note: Currently, the IPC Test app only supports specific brands’ IP camera protocols. Example: models made by ACTI, AXIS, Dahua, Hikvision, Samsung, and more. If the camera is not integrated, please use the ONVIF or RTSP apps.

IPC test interface:

Local IP: This is the tester's IP address. Click "Edit" to enter "IP setting" and change the tester's IP address settings. ***Note:*** *this should not be necessary if IPC Test app was entered via IP Discovery.*

IP camera type: Click on the IP Camera type to select the manufacturer and model number of the IP camera. If set to "Auto," the meter will attempt to automatically detect the manufacturer and model.



IPC Camera's IP: Enter the IP camera's IP address manually or click "Search" to auto-scan for the camera's IP address. Some camera's protocols do not allow the RTSP URL to ***Note:*** *It is better to directly connect the IP camera to the tester so the search results will only display the camera's IP address. If the tester is connected to a PoE switch, it will find and display all IP addresses in the current network segment.*

IPC User Name: Enter the IP camera's user name.

IPC Password: Enter the IP camera's login password.

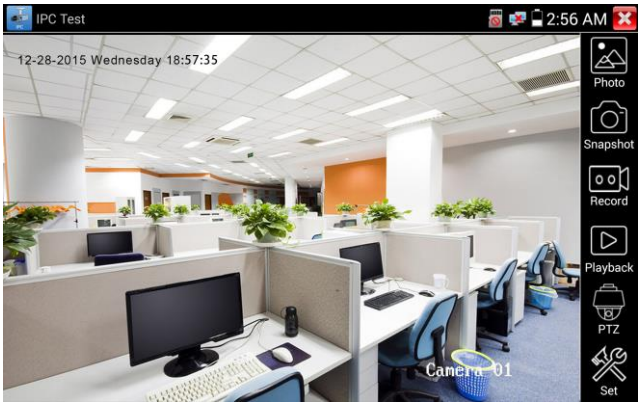
IPC Port: When you select the IP camera type, it will default the camera's port number and doesn't need to be changed (unless this has been manually changed prior to accessing).

Rate: Press to select mainstream or sub stream to view.

Reset: Press to reset all fields.

Restore: Press to restore all fields to previous settings.

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



If the IP address settings have an error or the IP camera is not connected the tester will display "Network Error."

Once viewing video on the IPC Test app, you will see the "Video Menu" icon on the top right. This button will give you access to Snapshot, Record, Photo, Playback, PTZ, and Set. Please refer to the ONVIF section to use these functions.

Click to quit from image display and return to the IPC Test interface.

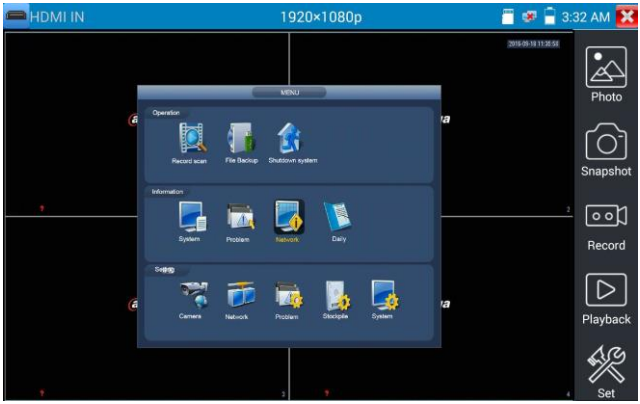
3.3.10 HDMI IN

HDMI input signal test. Tap the icon to enter.

When an HDMI source is connected, the top tool bar shows the resolution of this image. You can select "resolution" to set resolution in the settings menu. Tap the screen twice for a full-screen view.

Supported resolutions:

720×480p /720×576p /1280×720p /1920×1080p /1024×768p/1280×1024p /1280×900p /1440×900p



(1) Photo

Click the icon “Photo” icon to enter the Photo Browser and review stored snapshots. Refer to the ONVIF section for more details.

(2) Snapshot

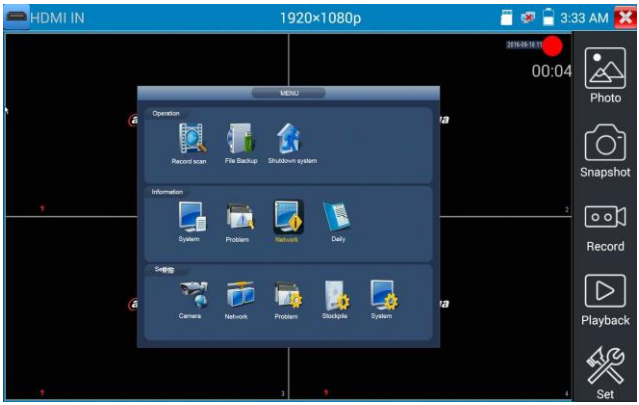
Click the “Snapshot” icon when an HDMI source is connected to take a picture and save the current video frame in the SD card as a JPEG file.

If manual storage is selected, a dialog box appears so you can name the file prior to saving to the SD card. If “Auto- storage” is selected, the ST-ALLIN1-TEST2 automatically names and stores the files after a snapshot.

(3) 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.

If manual storage is selected, before recording begins, a dialog box will appear to input a file name. If auto-storage is selected, the tester will automatically name and store the files in SD card after recording.

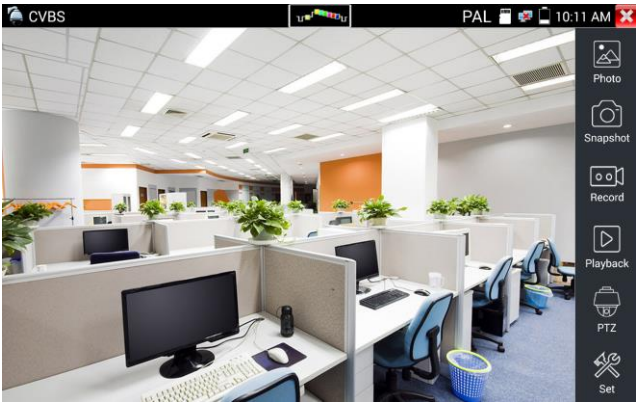


(4) Playback

Click the “Playback” icon to open the Video Player and review stored clips. Refer to the ONVIF section for more details.

3.3.11 CVBS (Composite Video Blanking & Sync)

Analog camera test & PTZ control. Click the  icon to enter.



Select the functions on the righthand side Toolbar to operate, functions including “Photos,” “Snapshot,” “Record,” “Playback,” “PTZ,” and “Set.”

Click  or press MENU to quit.

Tap the screen twice to change to a full-screen view. Double-tap again to exit full-screen view.

(1) Photo

Click the icon “Photo” icon to enter the Photo Browser and review stored snapshots. Refer to the ONVIF section for more details.

(2) Snapshot

Click the “Snapshot” icon when a CVBS camera is connected to take a picture and save the current video frame in the SD card as a JPEG file.

If manual storage is selected, a dialog box appears so you can name the file prior to saving to the SD card. If “Auto- storage” is selected, the ST-ALLIN1-TEST2 automatically names and stores the files after a snapshot.

(3) 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.

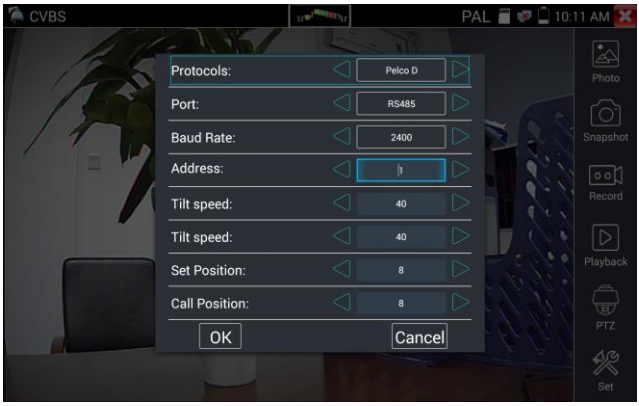
If manual storage is selected, before recording begins, a dialog box will appear to input a file name. If auto-storage is selected, the tester will automatically name and store the files in SD card after recording.

(4) Playback

Click the “Playback” icon to open the Video Player and review stored clips. Refer to the ONVIF section for more details.

(5) PTZ

Click the “PTZ” icon to enter PTZ settings:



A. **Protocol**

There are more than 30 PTZ Protocols including: Pelco-D, Samsung, Yaan, LiLin, CSR600, Panasonic, Sony-EVI etc. Use the arrows to select the protocol used by your PTZ camera.

B. Port

Use the arrows to select the communication port for PTZ control. RS485 will be selected by default.

C. **Baud Rate**

Use the arrows to select the baud rate of the PTZ camera you are accessing.

(150/300/600/1200/2400/4800/9600/19200/57600/115200)

D. Address

Use the arrows to set the ID according the ID of the PTZ camera (0~254). In order to obtain control, the ID entered *must* match the camera’s ID.

E. Pan speed:

Use the arrows to set the pan speed of the PTZ camera (0~63)

F. Tilt speed:

Use the arrows to set the tilt speed of the PTZ camera (0~63)

G. Set Position

After the PTZ camera has been moved to a desired location, use the arrows to select a preset number, then click the "Preset" button to save preset position (1~128). ***Note:*** *many cameras will have preset numbers reserved for certain operations. These numbers cannot be overwritten with preset locations.*

H. Call Position

After presets have been stored in the PTZ camera, use the arrows to select a preset number, then click the "Preset" button to call a preset position (1~128).

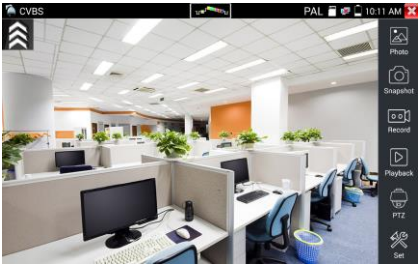
Note: *depending on the camera, some special presets can be called to access the camera's OSD or other features.*

Protocols, Address, Port and Baud Rate must all be consistent with the dome camera's settings, then the ST-ALLIN1-TEST2 can control PTZ, focal position, and call or program presets.

To control the PTZ by screen touch:

Tap left, right, upward and downward on the touch screen to control the PTZ direction. Hold for continuous movement.

Use two fingers "pinching" gestures to move outward and inward on the touch screen to zoom in and out.



To control the PTZ via physical buttons:

Press the keys to control the PTZ direction.

Press the OPEN or CLOSE keys to open or close the aperture.

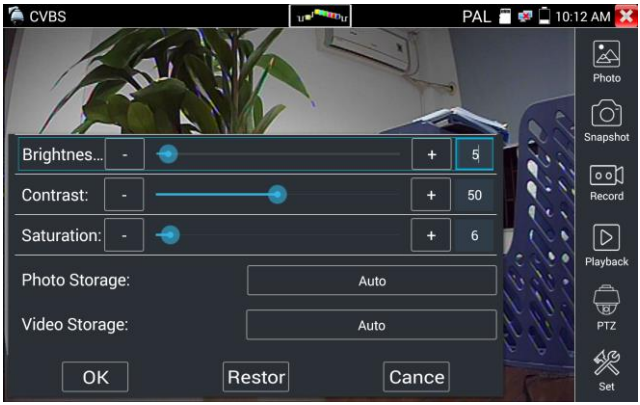
Press the (FAR+) or (NEAR-) keys to adjust the focus.

Press the (TELE+) or (WIDE -) keys to adjust the zoom.

(6) Set

Click the “Set” icon to edit analog video image brightness, contrast, and color saturation, as well as file storage parameters after snapshot and recording between Manual and Auto.

Changing the Photo and Video storage methods to Manual will allow a name to be entered for each file prior to storing on the SD card.



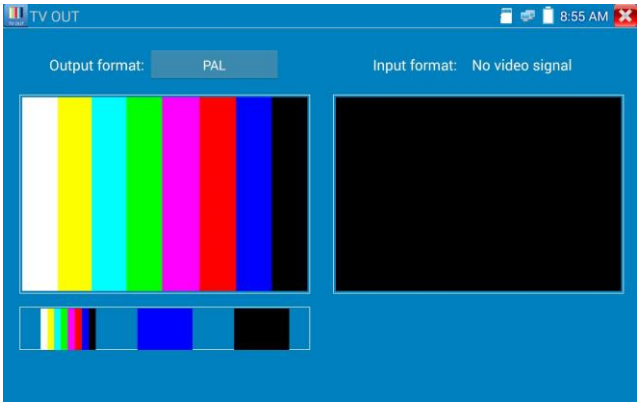
Zoom in: Press the (⊕) key to enter 4x digital zoom mode. Refer to the ONVIF section for more details.

⚠ For analog video input, as the resolution is 720*480, it is normal that the zoomed-in image is not clear. But for high resolution HD cameras, as it supports resolution up to 1280*960 and higher, the zoomed in image will be very clear. This can be very helpful for IP camera installation.

3.3.12 Color-bar generator (TV OUT)

PAL/NTSC color bar monitor test. Click  to enter.

Click the Output Format button to select between “PAL/NTSC” output modes.



Click below the color bar preview to change the output (red, green, blue, white or black).

Double-tap the color bar preview to change the display to full screen. Double-tap again to exit full-screen.

BNC loop test: The ST-ALLIN1-TEST2 can send and receive color bar generator signals through the tester’s “video out and video in” port, for testing video transmission format, video cables etc. This is very useful for testing media converting transmission equipment to confirm operation.

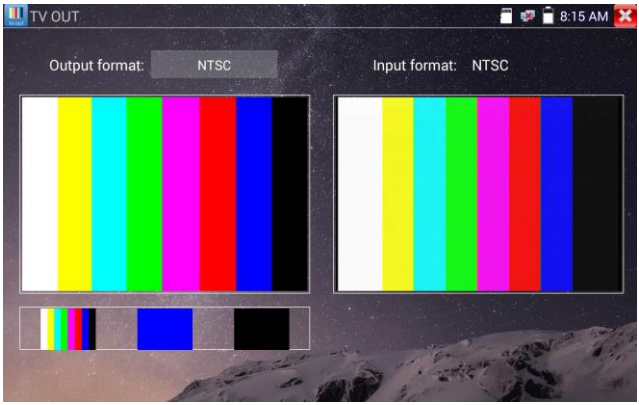
A. While servicing an analog system, the tester sends out the color bar image via the CVBS-Out BNC port to the monitor. If the monitor receives the color bar image, it means the video transmission channel is working normally.

B. The tester can send out solid color (such as white and black) images to a monitor via the CVBS-Out BNC port to check for dead pixels or defects in the display being tested.

C. The tester can send a video signal image from the CVBS-In BNC port out via the CVBS-Out BNC

port to a monitor to test if the image received by the monitor has any artifacts or distortion.

The right-hand preview will display video sources connected to the tester's CVBS-In BNC port.



3.3.13 SDI Camera Test

Click the  icon to enter the SDI app.

The ST-ALLIN1-TEST2 supports SDI/EX-SDI video input in the following resolutions:

1280x720P 25Hz

1280x720P 30Hz

1280x720P 50Hz

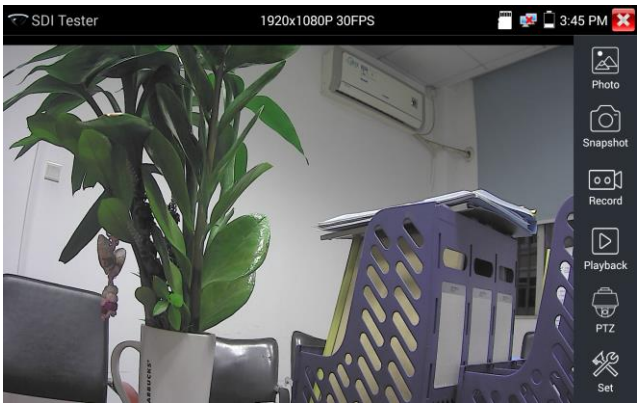
1280x720P 60Hz

1920x1080P 25Hz

1920x1080P 30Hz

1920x1080I 50Hz

1920x1080I 60Hz



Note: *many broadcast or studio SDI cameras use refresh rates outside these parameters (ex: 59.94Hz). Cameras outputting in refresh rates outside the above parameters will not be visible on the ST-ALLIN1-TEST2. Many of these cameras can be set to output within compatible parameters.*

Once an SDI/EX-SDI source outputting within the supported range is connected, video will display.

Functions' on the right-side Toolbar ("Photo," "Snapshot", "Record," "Playback," "PTZ," and "Set) operation is the same as in the video CVBS app. Please refer to the CVBS section for detailed operation instructions.

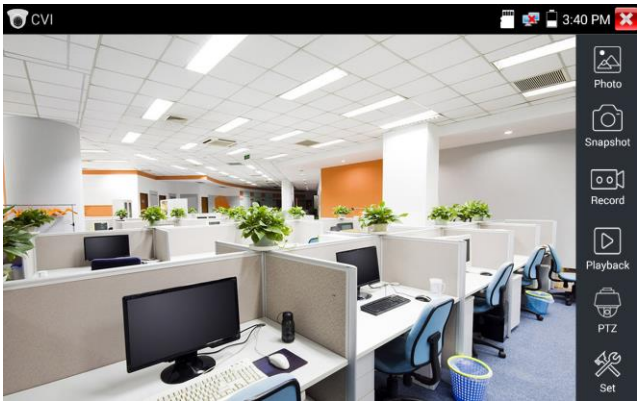
Click or press MENU to return to the main screen.

3.3.14 CVI Camera Test

Click the icon to enter the CVI app.

The ST-ALLIN1-TEST2 supports CVI up to 8MP.

Once a CVI source outputting within the supported range is connected, video will display.

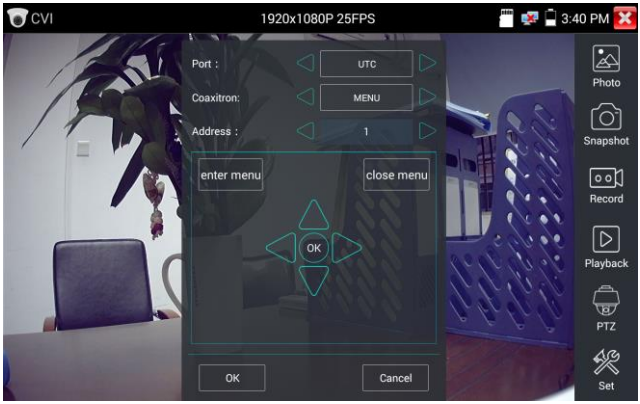


Functions' on the right-side Toolbar ("Photo," "Snapshot", "Record," "Playback," "PTZ," and "Set) operation is the same as in the video CVBS app*. Please refer to the CVBS section for detailed operation instructions.

*Many CVI cameras support CoC (Control over Coax) or UTC (Up the Coax) control. When operating the PTZ function, the "Port" setting may be set to "UTC" to test this feature.

HdoC Camera Menu Operation:

When the control method or Port is set to UTC, tap the "Coaxitron" field to switch between PTZ and Menu operation.



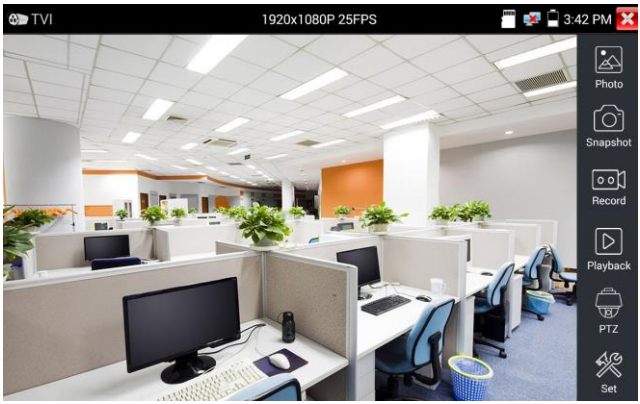
You may use the on-screen controller or press the  keys to navigate the camera's OSD. Use the "OK" or "Enter" buttons to make selections.

3.3.15 TVI Camera Test

Click the  icon to enter the TVI app.

The ST-ALLIN1-TEST2 supports TVI up to 8MP.

Once a TVI source outputting within the supported range is connected, video will display.

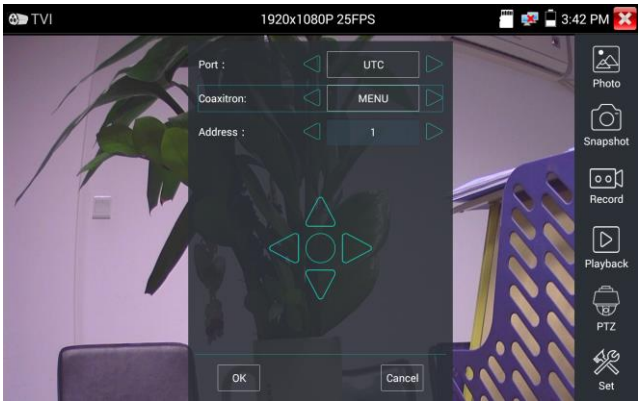


Functions' on the right-side Toolbar ("Photo," "Snapshot", "Record," "Playback," "PTZ," and "Set) operation is the same as in the video CVBS app*. Please refer to the CVBS section for detailed operation instructions.

*Many TVI cameras support CoC (Control over Coax) or UTC (Up the Coax) control. When operating the PTZ function, the "Port" setting may be set to "UTC" to test this feature.

HDoC Camera Menu Operation:

When the control method or Port is set to UTC, tap the "Coaxitron" field to switch between PTZ and Menu operation.



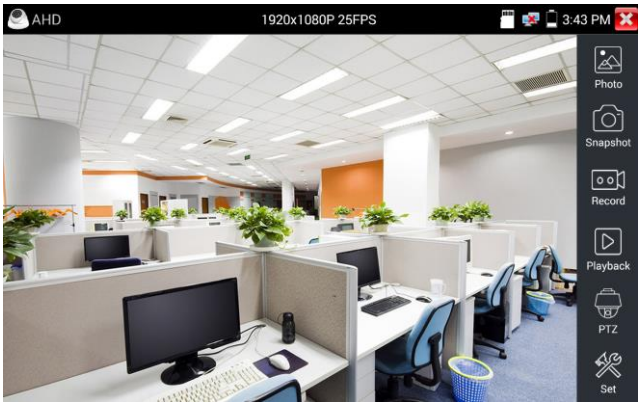
You may use the on-screen controller or press the  keys to navigate the camera's OSD. Use the "OK" or "Enter" buttons to make selections.

3.3.16 AHD camera test

Click the  icon to enter the AHD app.

The ST-ALLIN1-TEST2 supports AHD up to 5MP.

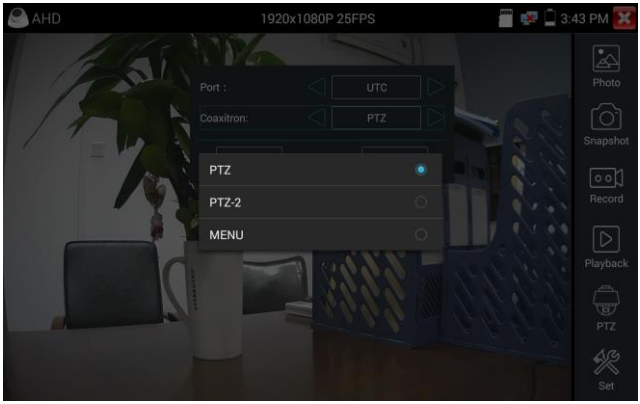
Once an AHD source outputting within the supported range is connected, video will display.



Functions' on the right-side Toolbar ("Photo," "Snapshot", "Record," "Playback," "PTZ," and "Set) operation is the same as in the video CVBS app*. Please refer to the CVBS section for detailed operation instructions.

*Many AHD cameras support CoC (Control over Coax) or UTC (Up the Coax) control. When operating the PTZ function, the "Port" setting may be set to "UTC" to test this feature.

Note on UTC control: AHD cameras have two different protocols. If PTZ control is not functioning with "PTZ" entered in the "Coaxitron" field, press the field and change to "PTZ-2" and try again. Ensure that all entered parameters match those of the camera.



HDoC Camera Menu Operation:

When the control method or Port is set to UTC, tap the "Coaxitron" field to switch between PTZ /PTZ-2 and Menu operation.

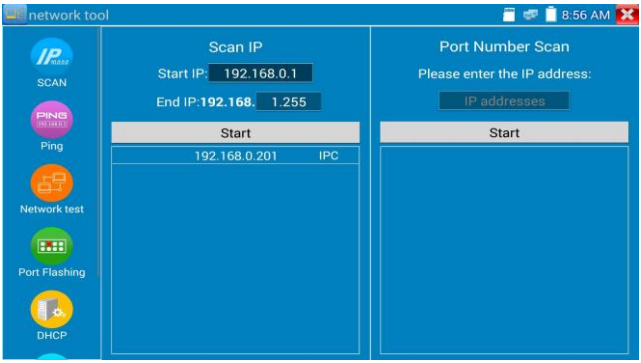
3.3.17 Network Tool

The Network Tool app features several functions for network testing and troubleshooting.

To use: connect an ethernet cable to the LAN port of the tester, then to a switch on your network, then enter one of the functions detailed below.

（1）IP address scan

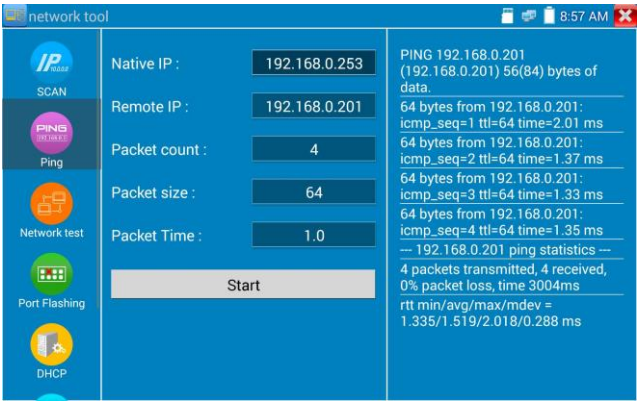
Click the icon to enter the IP Scan tool. Set your IP address search range by changing the Start and End IP addresses, then click the “Start” button to scan the IP address range. You can also input an individual IP address in the Port Number Scan section to scan for open ports.



（2）PING Test

The PING tool is used for testing if a connected IP camera or other network equipment’s Ethernet port is working normally and the IP address is correct.

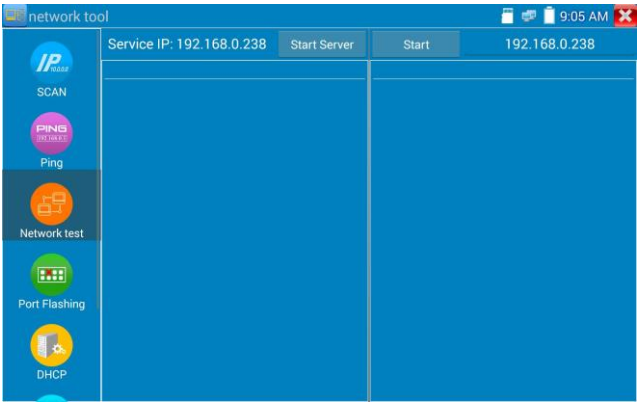
Click the icon to open the PING tool. Set your LOCAL IP address (e.g. tester), remote IP address (e.g. IP camera), packet count, packet size, and packet time, then press “Start” to start pinging. If the IP camera or network device is not configured properly or not plugged in, it will say “Destination host unreachable,” or have 100% packet loss. If the tester connects to the device, the sent and received packets should have a 0% packet loss.



（3）Network Test (Ethernet bandwidth test)

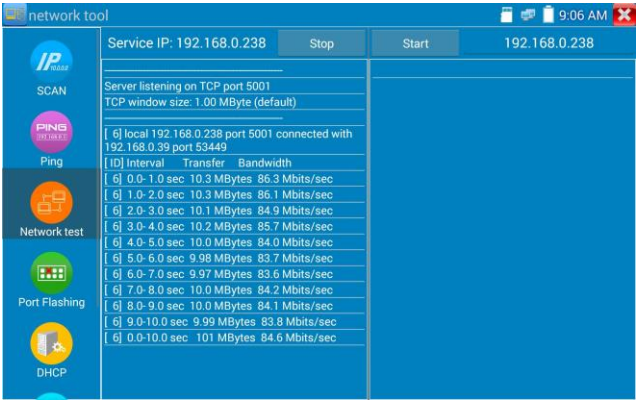
Click the  icon to open the Network Test tool.

To use the Network tester, you will need two IP Buddy+ v2 series meters (such as the ST-ALLIN1-TEST2, ST-IP-TEST2, or ST-HDoC-TEST-MINI2) or a PC with compatible network bandwidth testing software installed.

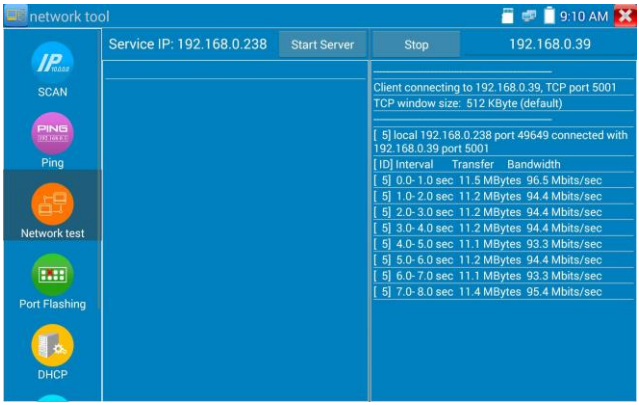


When using two IP Buddy+ v2 series meters, one is used as a server and the other as a client. Both devices must connected to the network and addressed on the same network segment in order to communicate. ***Note:*** *the meters' IP addressed cannot be the exact same.*

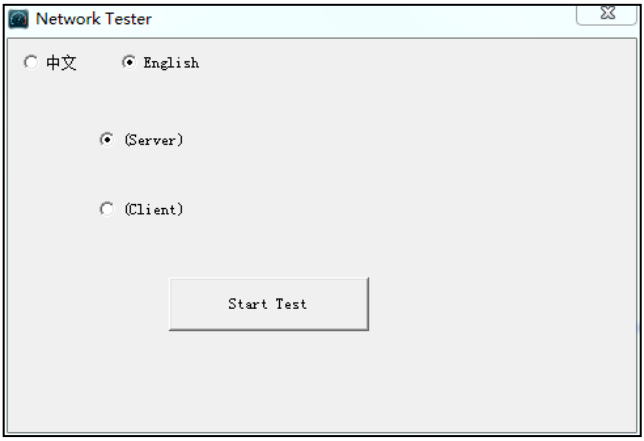
A) **Start the server:** Click "Start Server" button to use the tester as a server. It will display its IP address at the top of the screen.



B) **Start packet test:** Using the other ST-ALLIN1-TEST2, type in the Server IP address at the top right corner of the screen, then click the "Start" button on the Client side of the screen to receive packets and start testing. Click "Stop" at any time to conclude the test.



To test with a PC, a compatible network bandwidth testing software must be installed. The PC must also be addressed on the same network as the tester. Using the software, select the option to use the PC as the Server, and start the test, then click “Start” on the Client side of the tester to begin testing as detailed earlier in this section.

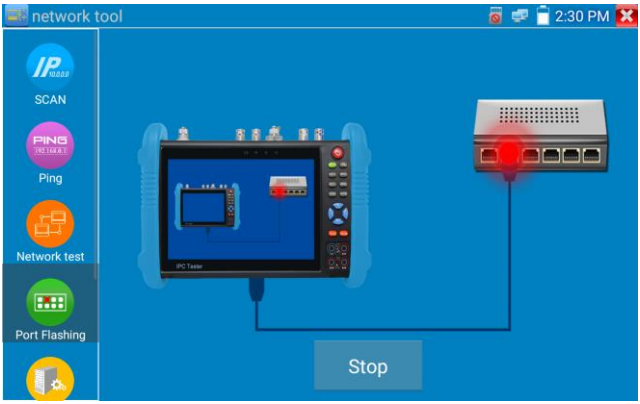


Similarly, the tester may be started as the Server as detailed earlier in this section, and the PC may be started as the Client.

（4）Port Flashing

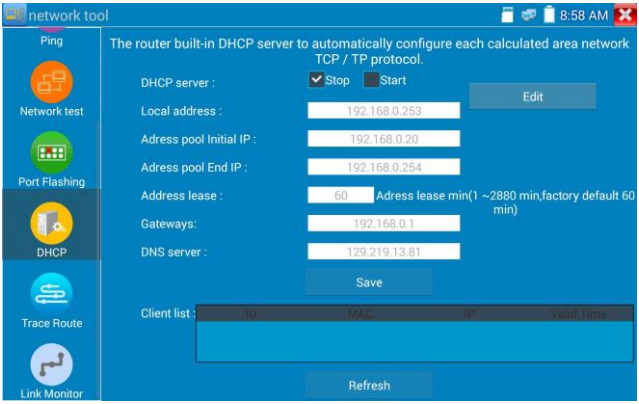
Click the  icon to open the Port Flashing tool, and click “Start” to begin. The ST-ALLIN1-TEST2 sends a unique signal to make the connected port of the switch flash rhythmically, unlike regular network traffic.

If the tester and switch are connected properly, the connected port of the switch will flash at regular intervals. This is useful for easily determine which port a cable is connected to.



（5）DHCP Server

Click on the  icon to open the DHCP Server tool. Click the “Edit” button to open IP Settings to adjust the tester’s IP Address. 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 for connected devices and see their IP addresses..



（6）Trace Route

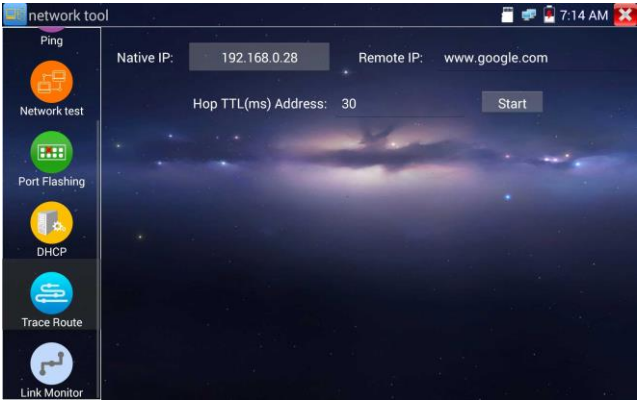
Click the  icon to enter the Trace Route tool.

This tool is used to determine the network path as packets transit across a network. ***Note:*** *Trace route testing results are only for reference. For accurate test route tracking, please use an appropriate Ethernet tester.*

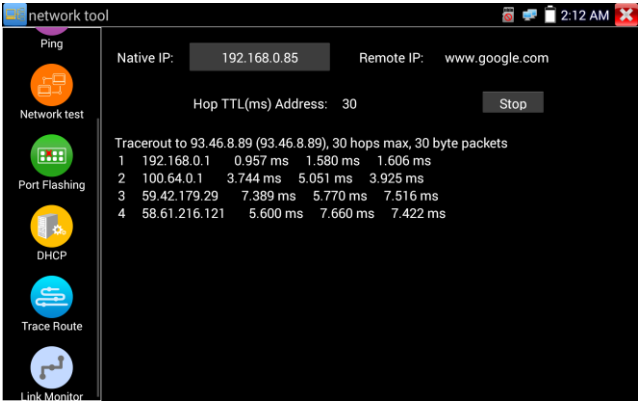
Clicking in the “Native IP” field will open IP Settings to edit the tester’s IP address.

Enter the tracking IP address or domain name in the Remote IP field.

Set maximum hop count (default is 30) to suit the size of the network/topology you are trying to trace.



Click “Start” to trace the target IP address. Click “Stop” to conclude testing.

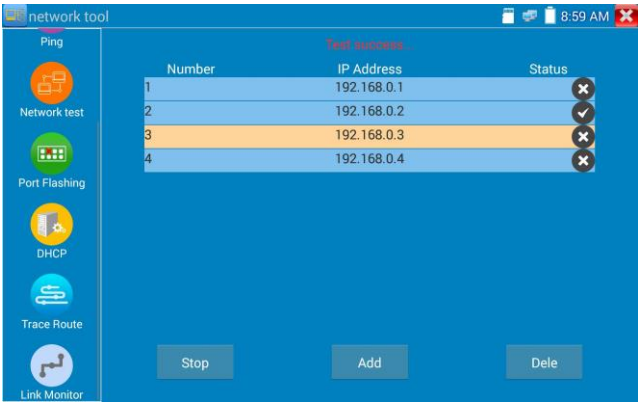


（7）Link Monitor

Click the  icon to open the Link Monitor tool. This app is used to see if an IP address is occupied by other network devices. This can help in avoiding address conflicts while addressing cameras or other network devices. ***Note:*** *Link Monitor can only test within the meter's current network segment. If you wish to test a different segment, enter the Settings app and readdress the tester in IP Settings.*

Click "Add" and enter the desired IP address(es). Once the desired IP addresses are added to the Link Monitor list, click "Start". If the IP address status shows a check mark the IP address is occupied. If the IP address status shows an X the IP address is available. Click "Stop" at any time to conclude testing.

To remove an IP address from the list, press the address to select it, then click the "Delete" button.

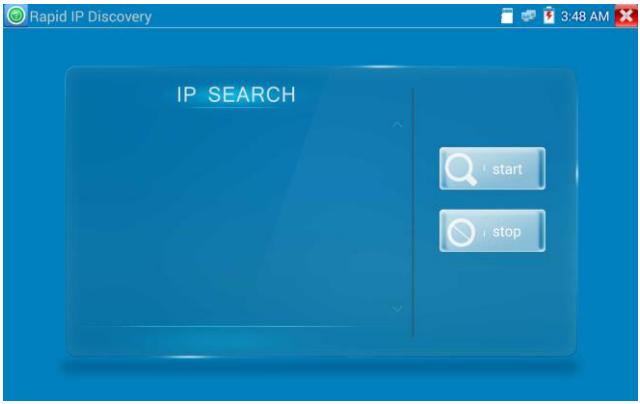


3.3.18 Rapid IP Discovery

Click the  icon to enter the Rapid IP Discovery app.

With an Ethernet cable connecting the LAN port of the tester to a switch on the network, click "Start" to search all IP addresses of connected devices within the tester's network segment.

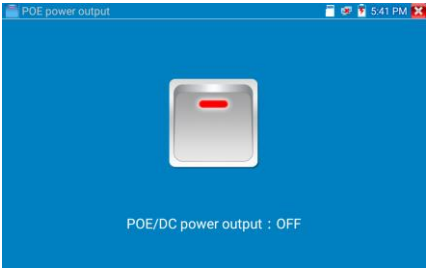
Click “Stop” at any time to conclude searching.



3.3.19 PoE power / DC12V 2A and DC 5V 2A USB power output

When the ST-ALLIN1-TEST2 is turned on, the 12VDC and 5VDC power output functions are automatically turned on. If the unit is turned off, the 5VDC USB can still be used to power an external USB device.

To use the PoE Power Output function, click on the  icon and toggle the switch “ON” or “OFF”. An PoE-compatible device needs to be connected to the LAN port before you turn PoE Power on. If the IP camera supports PoE, the PoE power is delivered via pins 1, 2, 4, and 5 on the LAN port. The IP tester will display “48V ON” at the top of the screen when the POE power is activated, and display the draw of the attached device.

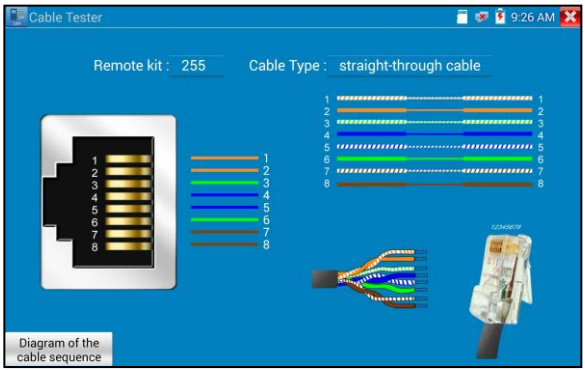


Caution:

1. Do not connect a power supply to the “DC12/2A OUTPUT” port.
2. Do not connect the 12VDC 2A power out to the DC IN port of the ST-ALLIN1-TEST2.
3. The tester’s power output is 2A, if the device’s power requirement is over 2A, the tester will enter protection mode, and disable any power output. Disconnect all cables, power the device using an external source and perform the test again.
4. Before turning on PoE power output, please ensure the device supports PoE power. Connecting a non-PoE device to the LAN port with PoE turned on may damage the device.
5. Make sure you plug your PoE-compatible device to the LAN port prior to turning on PoE power.
6. If the tester does not have sufficient charge to power the device, the screen will show “low power”, or “not able to supply power”.

3.3.20 Cable Tester

Click the  icon to enter the Cable Tester app.

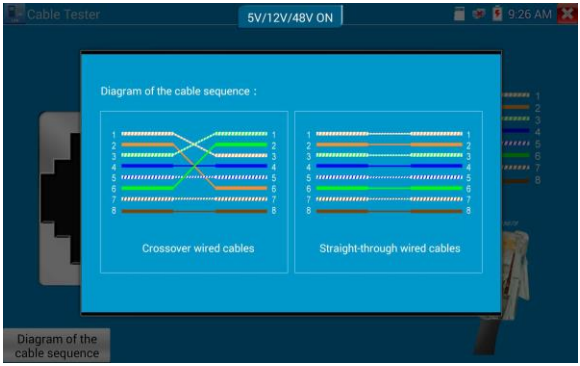


The Cable Test app can be used to test a network cable or telephone cable’s pin configuration. Connect a network cable or telephone cable with the ST-ALLIN1-TEST2 tester and included blue cable tester.

The connection status, cable type, sequence of wires, and the serial number of the cable tester kit will be displayed.

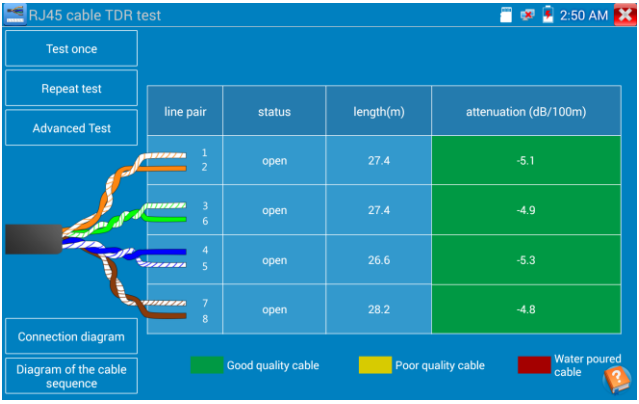
Cable test Sequence Diagram

Click “Diagram of the cable sequence" to display a pop-up window that shows a reference for both straight through and cross over cables.



3.3.21 RJ45 cable TDR test

Connect an ethernet cable to the tester’s LAN port, then click the  icon to enter RJ45 TDR.



line pair	status	length(m)	attenuation (dB/100m)
1 2	open	27.4	-5.1
3 6	open	27.4	-4.9
4 5	open	26.6	-5.3
7 8	open	28.2	-4.8

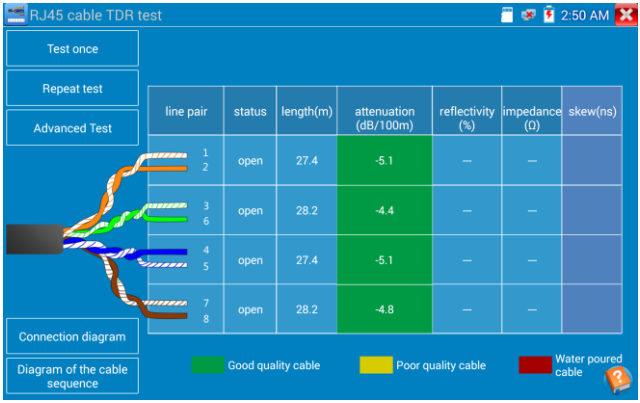
Single test: test cable status (broken, damaged, or normal), length and attenuation.

Repeat test: continuously test cable status, length, and attenuation.

Status: after testing, the screen will display “online” for a good link. If the link is bad or an open circuit, the screen will display “open.” If the cable pair is shorted, the screen will display “short.”

Length: the max test length is 180 meters. When the cable is open or shorted, the unit can test the cable length. If status shows “Online,” the test is not accurate.

Attenuation: the attenuation value will be displayed when the cable is over 10 meters. The o



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

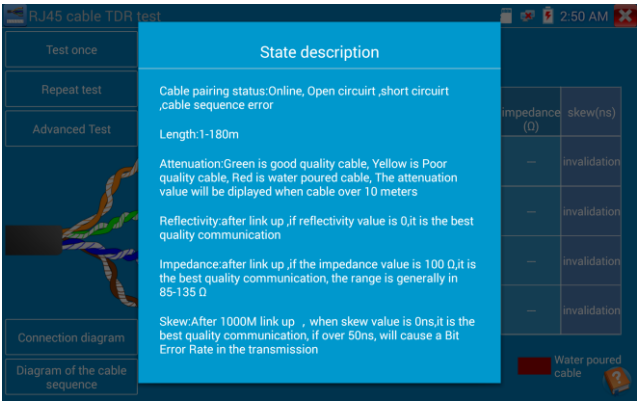
Attenuation reflectivity: after testing, a reflectivity value of 0 indicates optimal cable communication.

Impedance: after testing, an impedance value of 100Ω indicates optimal cable communication. The range is generally in 85-135Ω.

Skew: When testing 1000M ethernet, a skew value of 0ns indicates communication is optimal. If over 50ns, it may cause a Bit Rate Error in the transmission and poor network performance.

Click “Diagram of the cable sequence” to open a pop-up window with a straight- through and cross-over cable diagram for reference.

Click “Help”, to pull up a pop-up window with useful information.



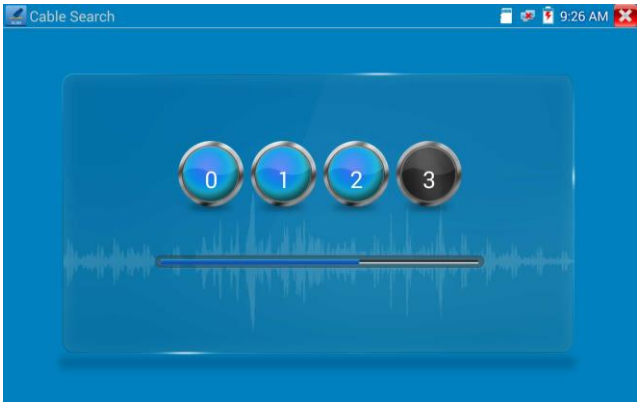
3.3.22 Cable Search

Click the  icon to enter the Cable Search app.

The cable tracer is convenient way to identify cables in an installation with poor cable management.

Connect a network cable to the UTP/SCAN port or a BNC cable to the SCAN/CVBS OUT BNC port on the tester.

Click the number buttons on the screen to adjust the tone type.



Use the blue cable identifier wand's pointer to touch the cables in a bundle .The cable that gives off the loudest tone is the cable connected to the tester.

Press the + or – buttons on on the blue test wand to adjust the volume.

Note: Install two AAA batteries in your blue cable identifier wand before use.

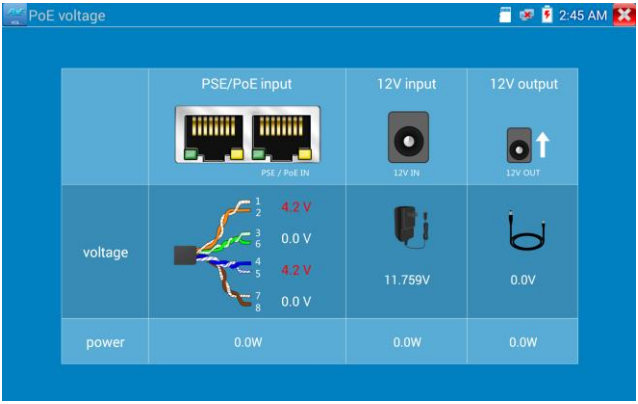
Note: While the cable tracer is receiving the audio signal from the tester, the tone may be introduced into adjacent or crossing cables; the cable that makes the loudest noise is the one that is connected to the tester.

Note: Make sure the battery poles match the corresponding positive pole + and negative pole – of the battery compartment.

Note: While the cable tracer tester is receiving the audio signal from the tester, it may **be influenced by other signals or EMI, and emit noise. This is normal.**

3.3.23 PoE Voltage test

Click the icon to enter the PoE & Power Info app.



Connect a network cable from a PoE switch to the ST-ALLIN1-TEST2's PSE IN port, and connect an IP camera or other PoE device to the LAN port, the PoE voltage and the cable's pin connection status will be displayed on the screen.

Note: This test is for measuring the voltage being drawn by the PoE node. The meter must be between the PoE switch and the PoE node for this test to work.

Note: The PoE switch must be connected to the PSE IN port. The powered device such as IP camera or other PoE node must be connected to the LAN port.

Note: Do not connect PoE power supply equipment (such as a PoE switch) to the tester's UTP/SCAN port; this may damage the tester.

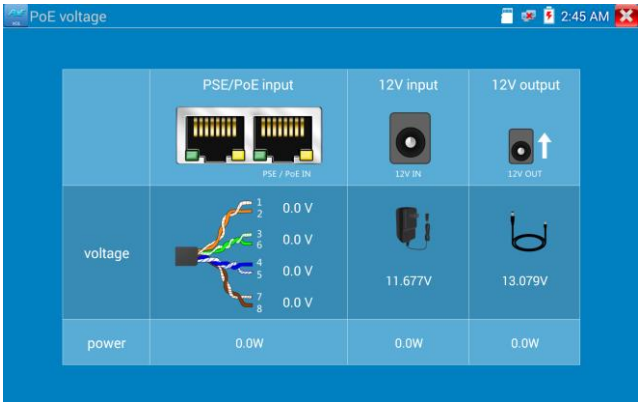
PSE transmission

While PoE / PSE voltage testing, the ST-ALLIN1-TEST2 can supply pass-through voltage for the camera and transmit data at the same time.

3.3.24 12V power input test

Click the icon to enter the PoE & Power Info app.

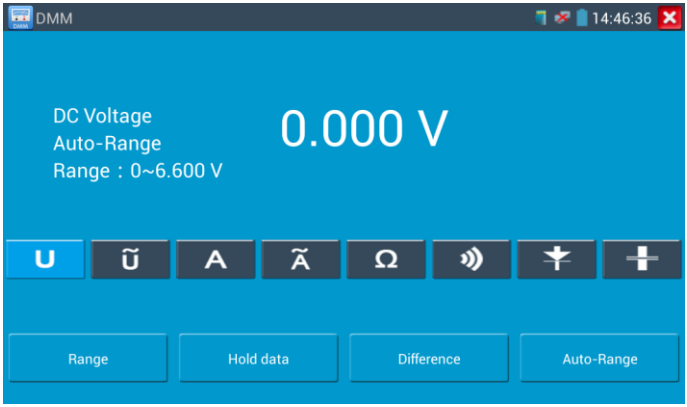
Connect a 12V power adaptor to the ST-ALLIN1-TEST2's 12V DC Input port, then click the "PoE" icon to enter the voltage measurement app. The screen shows the current adaptor input voltage and power draw. Note: the current 12V input measured power draw is both the battery charging and the actual device. Measured power draw will change depending on variables such as screen brightness, PoE use, Wifi, etc.



Warning: Only use the power supply provided with the ST-ALLIN1-TEST2. The warranty does not cover damage due to the use of an incorrect power supply.

3.3.25 Digital Multi-meter

Click the  icon to enter



1) SYMBOLS:

U: DC Voltage Measuring

A: DC Current Measuring

Ω: Resistance Measuring

:Diode Testing

Ũ:AC Voltage Measuring

Ã:AC Current Measuring

: Continuity Testing

:Capacitance Measuring

AC/DC	Voltage and current measurement state display.
Auto- range	Auto-ranging based on input.
Hold Data	Holds data on screen for review.

Relative measurement	Display the relative measurement value Press the key to change display state and refresh
10A socket	10A measurement socket

2) OPERATING INSTRUCTION

A. DC Voltage Measuring

WARNING!

DO NOT apply an input voltage more than 660V DC, as this will destroy the ST-ALLIN1-TEST2.

Use extreme caution when measuring high voltage.

a. Connect the black test lead to the “COM” jack and the red test lead to the “V/Ω” jack.

b. Select U to enter DC voltage measurement.

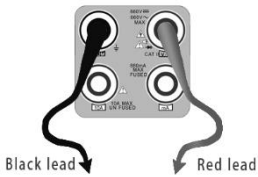
c. The tester defaults to auto-range mode. Pressing the “Auto Range” button can select manual range or restore auto-range.

d. Manual range: 0.000V → 6.600V range

00.00V → 66.00V range

000.0V → 660.0V range

000.0mV → 660.0mV rang



B. AC Voltage Measuring

WARNING!

DO NOT apply an input voltage more than 660V AC, as this will destroy the ST-ALLIN1-TEST2.

Use extreme caution when measuring high voltage.

a. Connect the black test lead to the “COM” jack and the red test lead to the “V/Ω” jack.

b. Select U ~, to enter AC voltage measurement.

c. The tester defaults to auto-range mode. Pressing the “DC Auto Range” button can select manual range or restore auto-range.

d. Manual range: 0.000V → 6.600V range

00.00V → 66.00V range

000.0V → 660.0V range

000.0mV → 660.0mV range

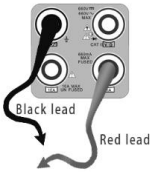
C. DC Current Measuring (manual range only)

WARNING!

Shut down the power to the circuit being tested, then connect the meter’s test leads to the circuit before restoring power and taking any measurements.

a. Connect the black test lead to the “COM” jack and the red test lead to the “mA” jack for a maximum of 660mA current. For a maximum of 10A, move the red lead to the 10A jack.

b. Select **A** enter DC current measurement. The screen will display “DC current.” Select the manual range.



c. Manual range: 0.000mA → 6.6mA range

00.00mA → 66.00mA range

000.0mA → 660.0mA range

00.00A → 10.00A range（use 10A socket）

NOTE:

◆ When the figure “OL” is displayed, it indicates a measurement over the current range has been detected, and a higher range must be selected.

◆ When the current range to be measured is unknown beforehand, set the range selector at the highest

value.

◆ The maximum current of the mA socket is 660mA. Over-current will destroy the meter's internal fuse, and may damage the meter.

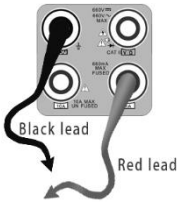
◆ The maximum current of the 10A socket is 10A. Over-current will destroy the meter, and may cause physical harm to the operator.

D. **AC Current Measuring (manual range only)**

WARNING!

Shut down the power of the circuit being tested, then connect the meter's test leads to the circuit before restoring power and taking any measurements.

a. Connect the black test lead to the "COM" jack and the red test lead to the "mA" jack for a maximum of 660mA current. For a maximum of 10A, move the red lead to the 10A jack.



b. Select Ã to enter AC current measurement. The screen will display "AC current." Select the manual range.

c. Manual range: 0.000mA → 6.600mA range

00.00mA → 66.00mA range

000.0mA → 660.0mA range

00.00A → 10.00A range（use 10A socket）

Note:

◆ When the figure "OL" is displayed, it indicates a measurement over the current range has been detected, and a higher range must be selected.

◆ When the current range to be measured is unknown beforehand, set the range selector at the highest value.

◆ The maximum current of the mA socket is 660mA. Over-current will destroy the meter's internal fuse, and may damage the meter.

◆ The maximum current of the 10A socket is 10A. Over-current will destroy the meter, and may cause physical harm to the operator.

◆ In "AC" mode, only "AC" voltage may be applied. Failure to do so will damage the tester.

◆ Overloading of this test instrument will void the warranty.

E. Resistance Measuring

WARNING!

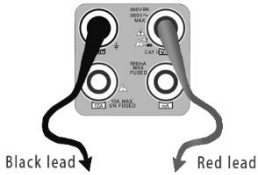
When measuring in-circuit resistance, be sure the circuit being tested has been powered down and that all capacitors have been fully discharged.

a. Connect the black test lead to the "COM" jack and the red test lead to the "V/Ω" jack.

b. Select Ω to enter resistance measurement.

c. The tester defaults to auto-range mode. Pressing the "Auto Range" button can select manual range or restore auto-range.

d. Manual range: ***Note:*** *Connecting the red lead to black leads will display the measurement range.*



000.0Ω → 660Ω range

0.000 KΩ → 6.600KΩ range

00.00 KΩ → 66.00KΩ range

000.0 KΩ → 660.0KΩ range

0.000 MΩ → 6.600MΩ range

00.00 MΩ → 66.00MΩ range

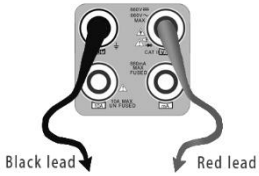
F. Continuity Testing

> **WARNING!**
>
> When testing circuit continuity, be sure that the power of the circuit has been shut down and all capacitors have been fully discharged.

a. Connect the black test lead to the “COM” jack and the red test lead to the “V/Ω” jack.

b. Select))) to begin testing continuity. Connect test leads across two points of the circuit being tested.

c. If continuity exists (i.e. resistance less than about 50Ω), a buzzer will sound.



G. Diode Testing

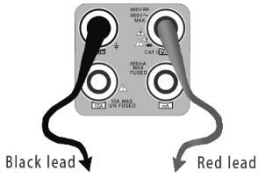
> **WARNING!**
>
> To avoid electric shock, be sure the capacitors have been discharged fully before connecting to measure the capacitance of a capacitor.

a. Connect the black test lead to the “COM” jack, and the red test lead to the “V/Ω” jack.

b. Select ⏚ to enter diode testing.

c. Connect the red test lead to the anode, and the black lead to the cathode of the diode.

d. Connect the red test lead across to the cathode, the black lead to the anode of the diode being tested.



H. Capacitance Measuring

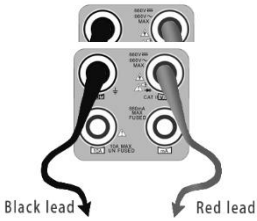
WARNING!

The capacitance of a capacitor should be tested separately and should not be tested while connected to the main circuit.

a. Connect the black test lead to the “COM” jack and the red test lead to the “V/Ω” jack.

b. Select “⊣⊢” to enter capacitance measurement.

c. The tester defaults to auto range status. Pressing the “Auto Range” button can select manual range or restore auto-range.



d. Manual range: 0.000nF → 6.600nF range

00.00nF → 66.00nF range

000.0nF → 660.0nF range

0.000uF → 6.600μF range

00.00uF → 66.00μF range

000.0uF → 660.0μF range

0.000mF → 6.600mF range

00.00mF → 66.00mF range

Note:

a. The capacitance of a capacitor should be tested separately and should not be tested while connected to the original circuit.

b. To avoid shock, ensure capacitors are fully discharged before connecting to measure capacitance.

c. While testing the capacitance of a capacitor to 660uF, the max time for testing will be 6.6 seconds. If the capacitor is leaking or damaged the measurement will either be wrong or there will be no reading at all. Normal tester operation may resume after disconnecting the capacitor.

- **Voltage protection**

  DO NOT input voltage more than 660V AC, this will damage the ST-ALLIN1-TEST2 and void the warranty.

- **Resistance, Continuity, Diode, PTC component Protection**

  Incorrect input voltage will automatically put the tester into a protection state.

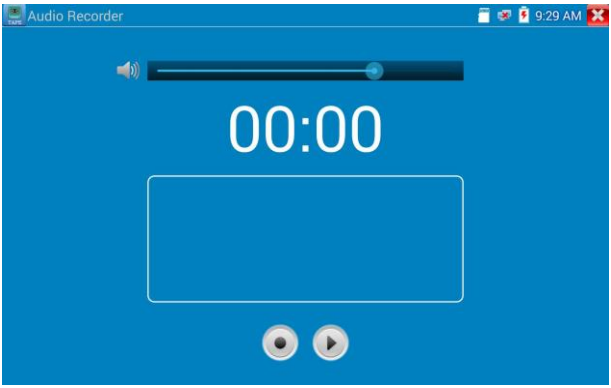
- **mA current fuse range: 250V 1A**

  If a current is applied that exceeds the fused protection circuit rating, the fuse will blow to protect the circuit. Replace only with the identical type of fuse.

Note: The 10A socket is NOT fuse protected. Over current applied to that circuit WILL damage the ST-ALLIN1-TEST2 and void the warranty.

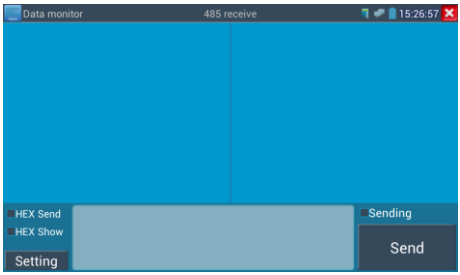
3.3.26 Audio Recorder

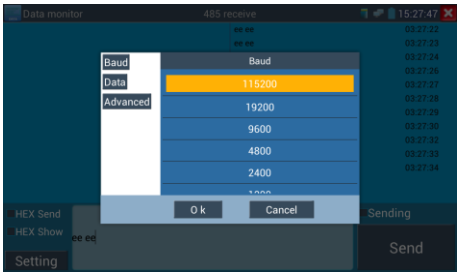
Connect an audio device to the IP tester's audio input port. Click the icon to enter the Audio Recorder app. Click the circular record button to start and stop recording. The tester will prompt you to save the recording upon stopping.



3.3.27 Data Monitor

Click on the icon to enter the Data Monitor app.





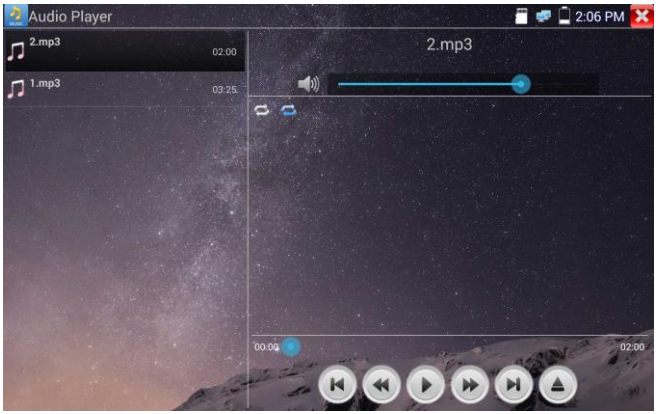
Click “Setting” to choose the baud rate; it must match the target DVR or the Controller keyboard. The DVR or Controller keyboard sends the code to the tester. If it can be read, the protocol will be shown on the upper right.

While the tester is receiving code, press the CLOSE RETURN key to clear the feed.

Through the RS485 port, the ST-ALLIN1-TEST2 can display all of the PTZ control codes being sent to the PTZ camera in real time.

3.3.28 Audio Player

Click the icon to open the Audio Player app. The audio player only supports MP3 format Audio files.

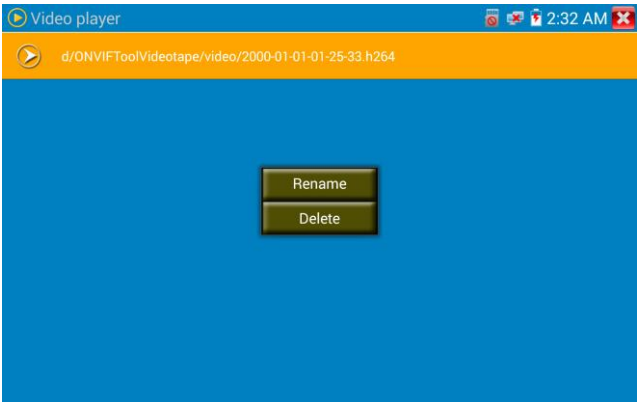


3.3.29 Media Player

Click the icon to enter the Media Player app.

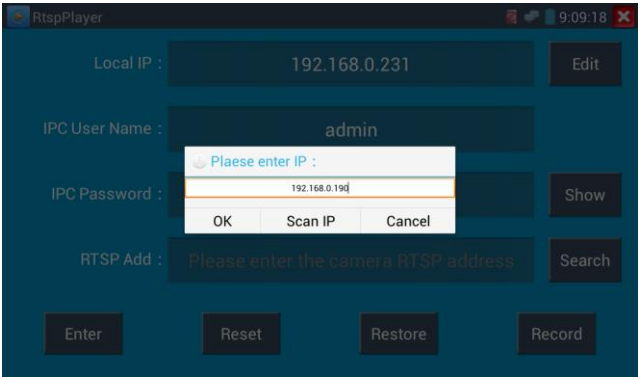
The Media player can browse video and image files. It supports the following video formats: MP4, H.264, MPEG4, and MKV. The ST-ALLIN1-TEST2 recorded files can play directly via the Media player. The Media player will automatically display the video files from the SD card. Click on the desired file to play. Click RETURN to exit.

To rename or delete an existing file, press the file name for a few seconds until the screen below appears. You can then rename or delete the file by pressing the desired option.



3.3.30 RTSP Player

The RTSP Player app will allow you to view the RTSP video stream from an IP camera. If you were unable to view your camera via the ONVIF or IPC Test apps, it is possible your camera will have an RTSP stream available. Your camera manufacturer can supply you with an RTSP URL if RTSP search fails.



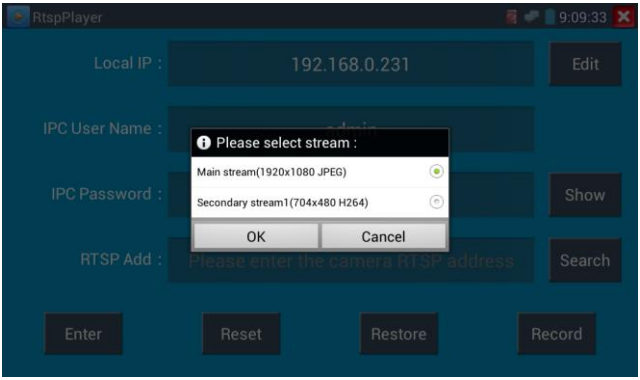
Local IP: This is the ST-ALLIN1-TEST2's IP current address.

RTSP Add: This is where you can manually enter the IP camera's RTSP URL or click Search to search the network segment for cameras with a searchable RTSP stream.

IPC Username: Enter the IP camera's user name.

IPC Password: Enter the IP camera's password.

Once you have entered all the necessary information, select Enter at the bottom left to view the RTSP stream.



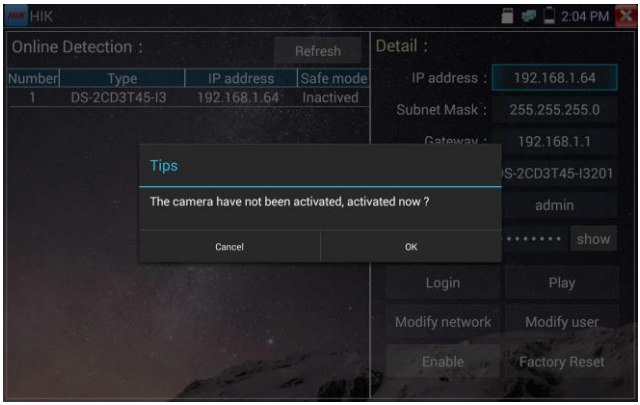
Note: *In the event the ST-ALLIN1-TEST2 does not auto detect the RTSP stream, refer to the camera's manufacturer for the camera's RTSP URL. You can often also find this online with a search of the camera model number + "RTSP".*

3.3.31 Hik Test Tool

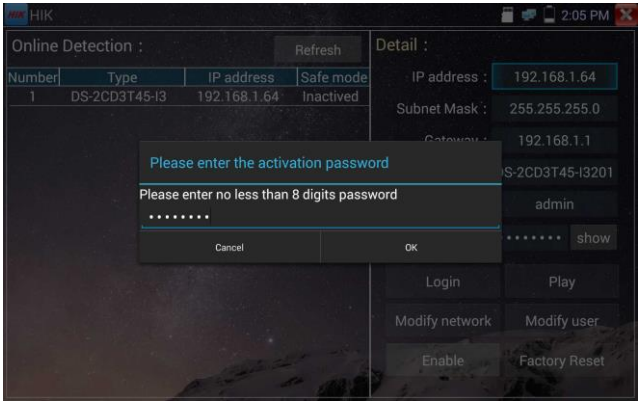
The Hik test tool app is designed for viewing, activating, and troubleshooting Hikvision cameras. It can detect inactivated Hikvision cameras, activate cameras, and display their live streams.

Tap the  icon to enter

1. **Hikvision activation:** When an inactive Hikvison camera is connected to the ST-ALLIN1-TEST2, the Hik test tool will detect the camera and display that the connected camera has not been activated. Select "OK" to proceed with activation.

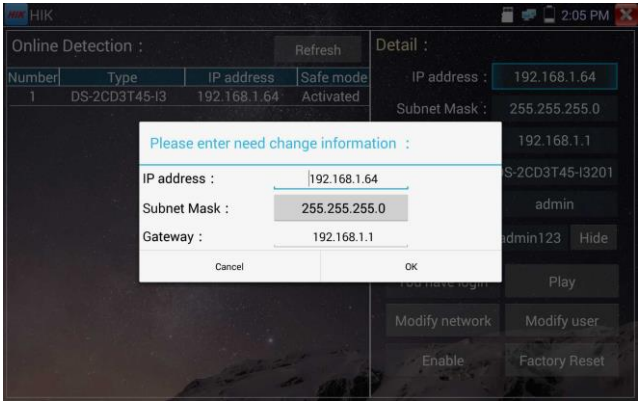


2. Input password: Input the new password according to the guidelines and click “ok” to activate.



3. Initial IP change

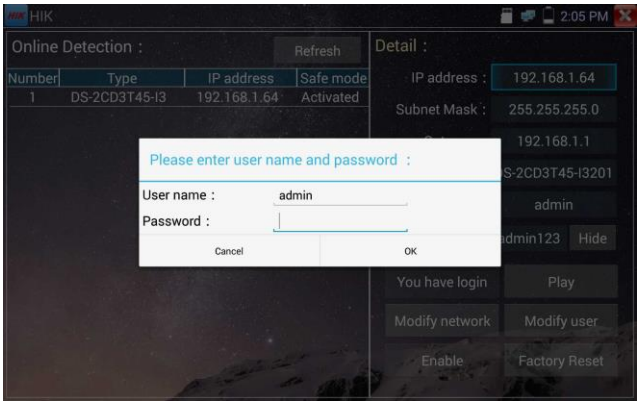
After activating the camera, the app will prompt you to make an IP address change to the camera if needed. You can activate and configure multiple cameras from this interface to optimize installation.



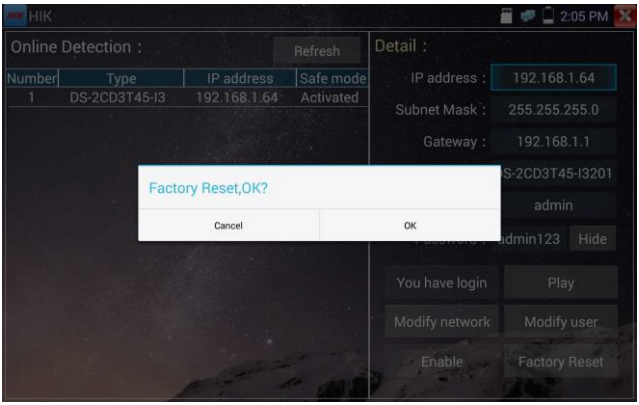
Play: display the live view of the camera

Modify network information: Change the camera IP address, subnet mask, gateway etc.

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



Factory Reset: Camera factory reset. This will reset all settings, including username and password, and IP settings, restoring the camera to an inactive state (if applicable).



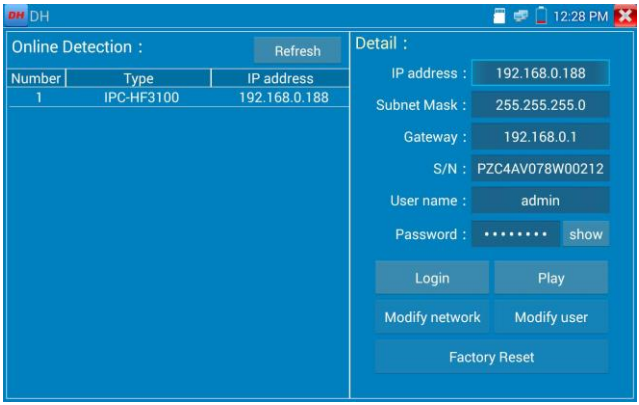
3.3.32 Dahua Test Tool

The Dahua test tool is designed for installing, viewing, and troubleshooting Dahua IP cameras. It can display the live image, modify IP, user name, password, etc.

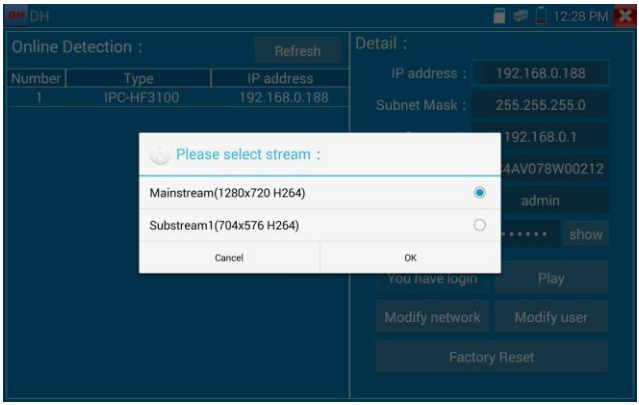
Click the 

icon, to enter the Dahua test tool.

Select the camera from the online detection menu, and if the camera supports non-verification login, you can click “PLAY” to access the live image of the camera.

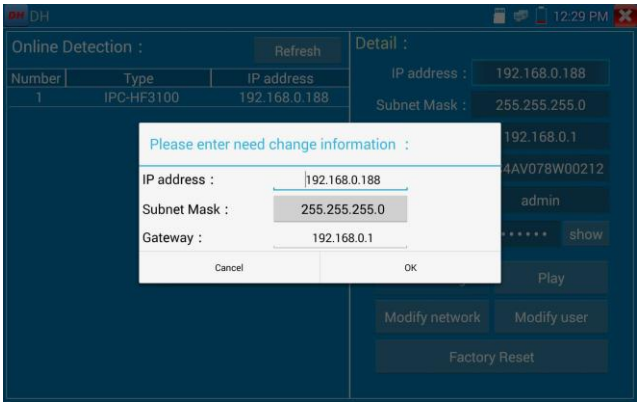


When selecting “PLAY,” a pop-up menu will appear; select mainstream or substream to view.

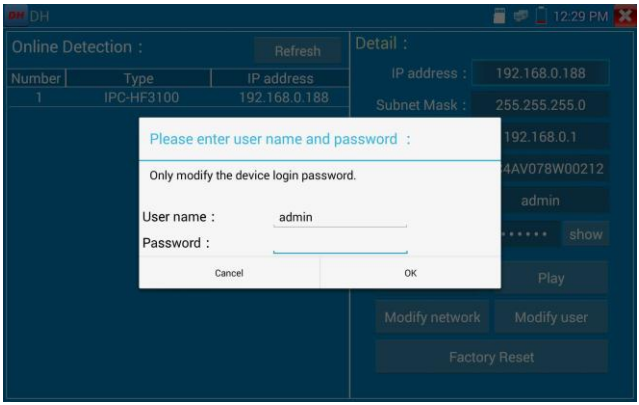


If the camera does not support non-verification login, please select the camera from the online detection menu, input the correct user name and password, click “log in”, then click “Play” to access the live view.

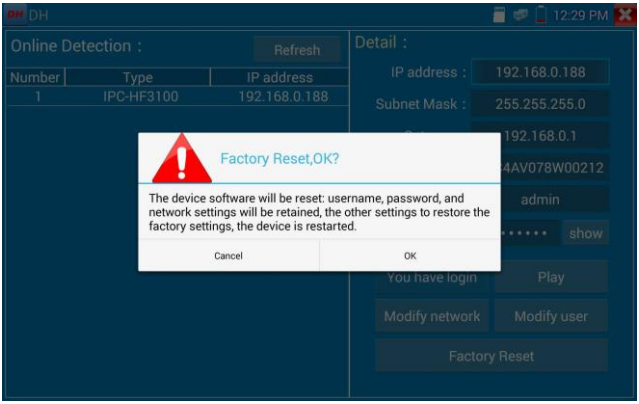
Modify network information: modify camera parameters such as IP address, subnet mask, gateway, etc.



Modify user information: modify camera user name and password.

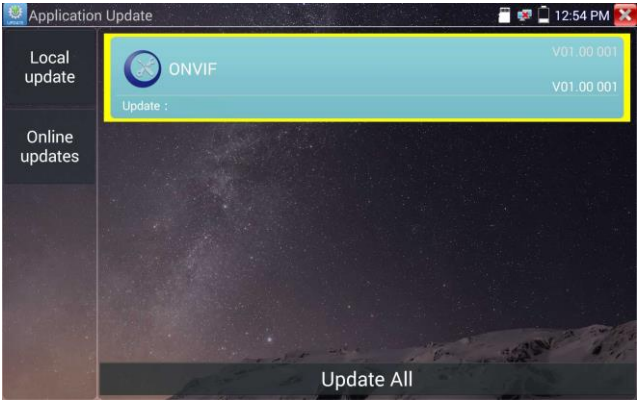


Factory reset: The camera will be soft reset, the device's user name, password and network settings will be saved. Other settings will be defaulted back to factory settings.



3.3.33 Update

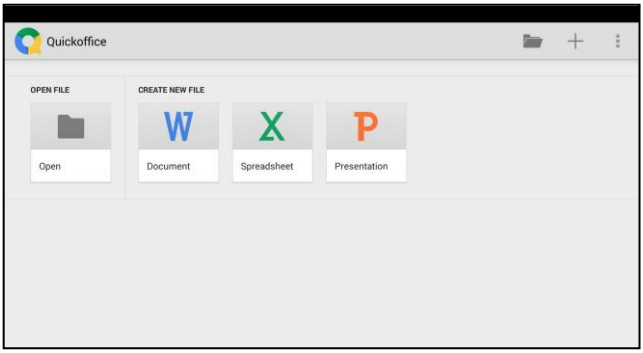
Click the  icon to open the Update menu. Select "Local Update" to update via the SD card or select "Online Update" (if connected to the local network) to check for updates on the internet (preferred). If there are applications that need updating, the applications will be displayed. Click on the application to begin the update process.



3.3.34 Quick Office

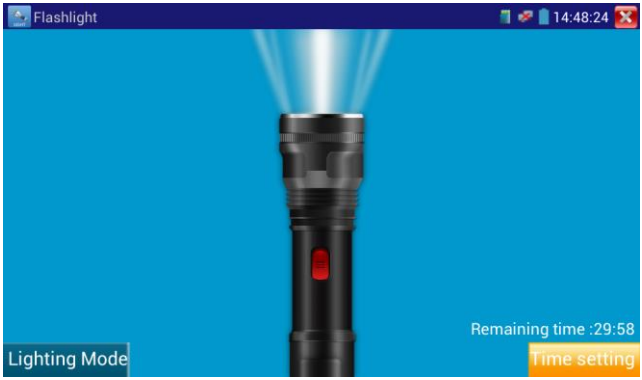
Quick Office is included for your convenience. You may open and edit several typical document types here.

Note: *Quick Office will suggest changing to Google Docs/Sheets. This is not currently possible. Simply click "Cancel" to use Quick Office normally.*



3.3.35 LED Flashlight

Click the  icon to open the Flashlight app, and then use the red button on the screen to toggle the LED lamp on the top of the ST-ALLIN1-TEST2 on or off.



The LED lamp will remain on when the app is closed if the red button is not pressed to turn the lamp off. Click the Time Setting button to set a timer that will shut off the lamp.

3.3.36 Browser

Click the  icon to enter the web browser app.

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 (ONVIF/ IPC TEST/ RTSP/etc.)*

The IP camera and ST-ALLIN1-TEST2 must be on the same network segment for the browser to interface with the camera. If they are not in the same segment, open the "Settings" app from the main menu to change the IP tester's network settings to match the segment of the IP camera. ***NOTE:*** *the IP camera's IP address and the tester's address cannot be the exact same.*

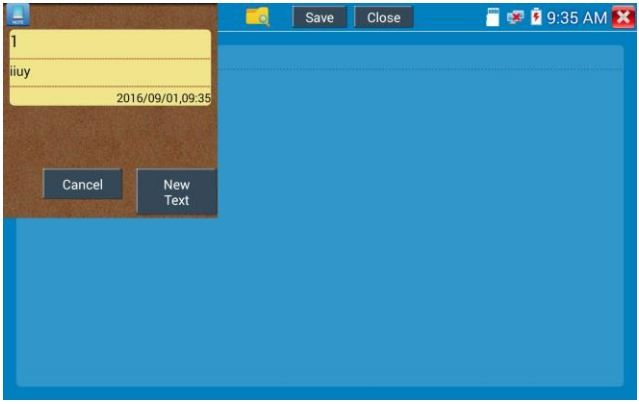
The web browser app can also be used to access websites when connected to a local network with internet access.

3.3.37 Notepad

Notepad can be used to record important testing results, or job site notes, etc. Click 

to open the notepad app, and all saved contents. Click the title of a saved note to show the details. Press the title of a saved note for several seconds to delete the note.

Click “New Text” to begin a new note. Click the “Save” key to save the contents. Notepad will automatically record the date and time the note was created.



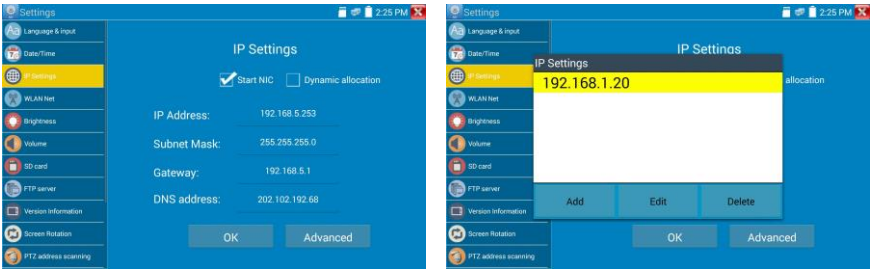
3.3.38 System Settings

Click icon  to enter system settings.

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

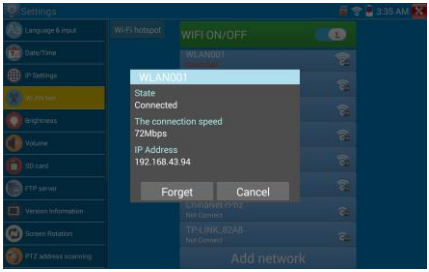
Date/Time: Set the Date/time of the ST-ALLIN1-TEST2.

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.

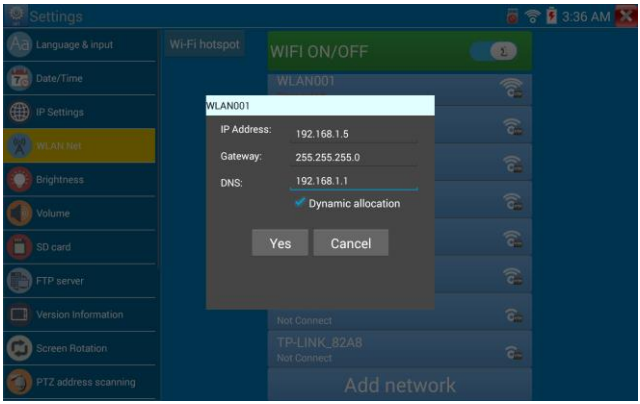


After setting an advanced IP address (refer to the photos above), the unit can test two network segments at the same time. ***Example:*** *192.168.1.x & 192.168.5.x*

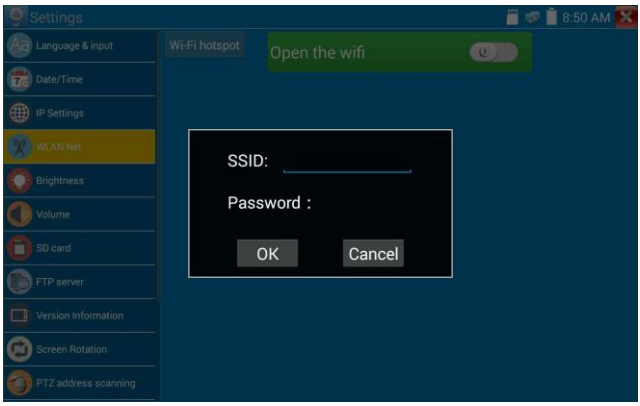
WLAN Net: Turn WiFi off or on by pressing the slider button. Once WiFi is turned on, the ST-ALLIN1-TEST2 will scan for wireless networks in your area.



Select and press “WIFI” for several seconds to set a static IP address.



Wi-Fi hotspot: input “SSID” name and “password”, and then click “ok” to create a Wi-Fi hotspot.

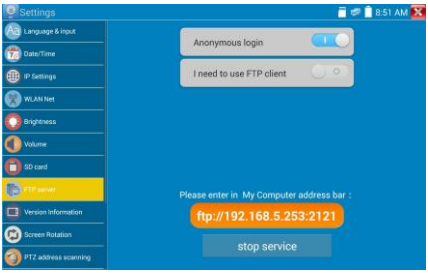


Brightness: Set the desired brightness of the tester's screen and adjust the auto-sleep time settings.

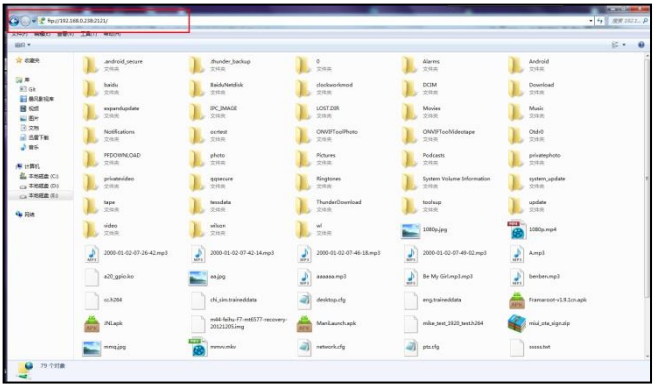
Volume: Set audio volume level.

SD Card: Displays SD Card Capacity. You can also format the SD card or unmount it. The SD card should be unmounted before removing from the tester.

FTP server: Starts or stops FTP services, allowing a computer to read files from the SD card in the ST-ALLIN1-TEST2 if the tester is connected to the local network.



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 application version information.

Screen display rotation: Click on “Screen Rotation” to flip the IP tester’s display 180 degrees. This function can sometimes be convenient when using the LAN cable on the bottom of the unit.

PTZ address scan: Toggle the PTZ Address scan off or on before entering the “PTZ controller” app.

Note: *this needs to be turned on in order to use the PTZ Scan feature of the PTZ app.*

Lock Screen: the meter defaults to “No Security”. You can choose “Password Lock screen”, “Image Lock screen” (pattern lock) or “No Security”.

Password Lock Screen: Set a password of your choice using letters, numbers, and/or symbols, and then input it again to confirm. The password will be needed when waking the tester up from sleep mode or powering on.

Image Lock Screen: Draw a pattern to lock, then input it again to confirm. The pattern will be required when waking the tester up from sleep mode or powering on.

To modify the lock screen password, the previous password or pattern will need to be entered.

Restore the factory settings: Restores the unit to factory default settings. All user settings will be removed.

3.3.39 File explorer

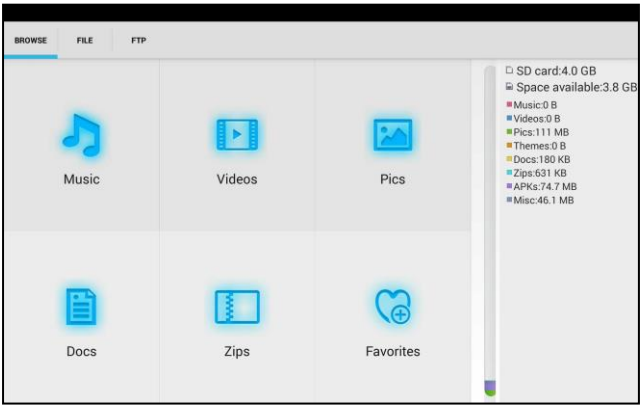
Click the “File Explorer” icon to enter the app.

File

Click “File” on the top bar to select internal or external storage locations. Click on the upper right corner button to access the menu.

Browse

Click “Browse” on the top bar to display category views. Displays views for Music, Videos, Pictures, Documents, zip files, etc.



FTP server

Click “FTP” on the top bar to access FTP settings. Start/stop FTP service, choose internal or external SD card storage, as well as edit login/client preferences here.

3.3.40 Theme

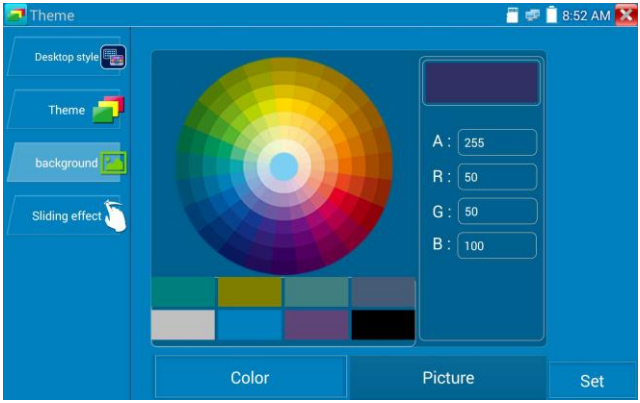
Click the “Theme” icon to enter theme settings.

Desktop style: you can select Lite mode or Normal mode. Lite mode is the default setting, and groups apps into similar functions.

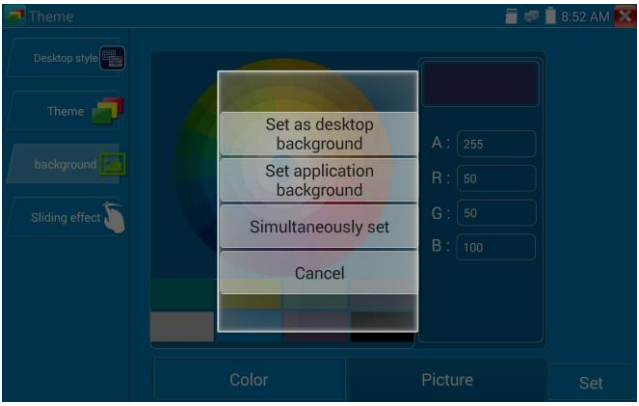
Theme: Press any color square in the area below to select a color palette the ST-ALLIN1-TEST2 will apply to all of the desktop icons. Click and hold to add. Click and hold again to remove a color from the palette.

Color

When setting a background color, you can select colors from the color wheel, or input the color’s RGB code to set.



After finishing color settings, click “set” to set it as desktop or application background.



Set as desktop background: Sets selected color as the desktop background.

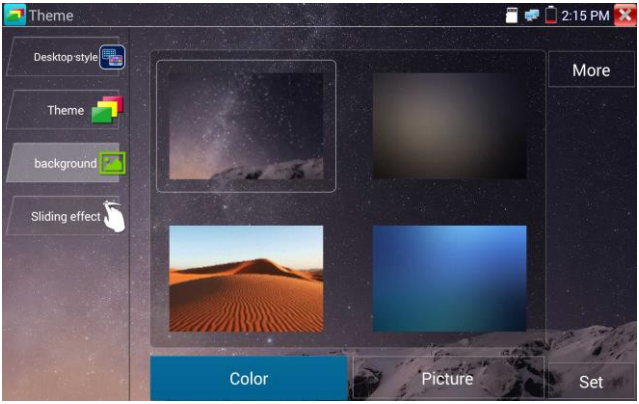
Set as application background: Sets selected color as the application background.

Simultaneously set: Sets selected color as both the desktop and application backgrounds.

Cancel: Cancel current settings changes.

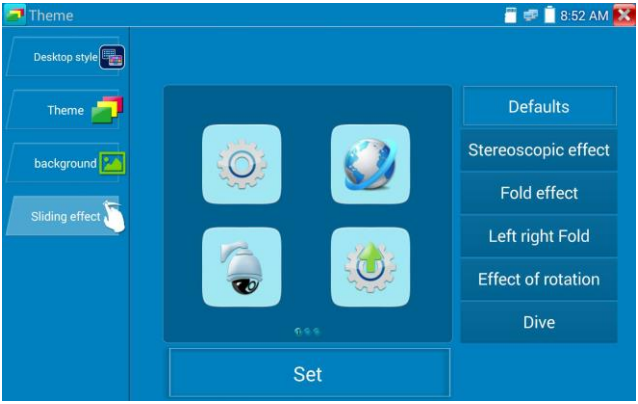
Picture:

Click “Picture” to select, and set the background temporarily to preview the effect. Click “more” to select pictures from local files. Click set to set the selected picture as the background.



Sliding effect:

Note: *this setting available in "Normal" desktop mode only.* The ST-ALLIN1-TEST2 sliding/transition effects includes Stereoscopic, Fold, Left-to-Right Fold, Rotation, Dive, and Default. These effects are purely cosmetic. Click "Set" to save.



3. 4 Audio Test

You can test the audio input from microphones by connecting the audio input device to the ST-ALLIN1-TEST2's Audio IN port with the supplied audio cable, and connecting an output device to the tester's Audio OUT port.

3.5 HDMI output

The built-in HDMI output port can output 1080p live video from an analog/IP camera, recorded files, media files and images to an HDMI HDTV monitor. Connect an HDMI cable from the ST-ALLIN1-TEST2's HDMI OUT port to an HDMI monitor at any time.

3.6 PoE power output

The ST-ALLIN1-TEST2 tester supports PoE (Power over Ethernet) output to an IP camera via the LAN port. If the IP camera supports PoE, you can directly connect to the camera without the use of an external power supply.

Notice

a. Please make sure the cable connected to the LAN port is a straight-through cable and has no breaks or short circuits, otherwise, this may damage the tester and/or connected equipment.

b. Before using PoE power output, please check the IP camera to confirm it supports POE, otherwise, this will damage the IP camera.

c. The tester's maximum PoE power output is 24W. If a high-power load occurs, the tester will enter protection mode, and must be reset to restore normal function. This is done by disconnecting all cables, then holding the red power button until the tester restarts.

3.7 12V DC 2A power output

When the IP tester is turned on, the 12V DC power output is always ON. The smaller end of the supplied converter cable connects to the DC12V/2A OUTPUT port, and the other end connects to the camera's power input (5.5mm barrel).

If there is no power outlet available to power the camera, the tester can power it for short periods of time. Should you require a long-duration power-up, use a separate power supply.

Notice:

a. Do not input any power into the "DC12/2A OUTPUT" port of the tester, otherwise, this will damage the tester. ***Note:*** *user damage is not covered under the warranty.*

b. The ST-ALLIN1-TEST2's power output capacity is 2A. If the IP camera uses more than 2A, the tester will automatically enter a protection mode. If this occurs the tester must be reset to resume use. This is done by disconnecting all cables, then holding the red power button until the tester restarts.

c. Make sure the tester's battery has a sufficient charge otherwise the tester will not able to provide enough output power for connected devices.

3.8 5V 2A USB power output

The 5V USB can still be used to power an external USB device as long as the tester's battery is sufficiently charged, whether the unit is on or off.

Note: *the USB port is for power only and not data.*

4. Specifications

4.1 General Specifications

Model	ST-ALLIN1-TEST2
Display	7" IPS touchscreen with 1280*800 resolution
Network port	10/100/1000M auto detecting RJ45 port
WIFI	Built-in WIFI, speeds up to150Mbps; allows you to connect to a wireless network and view IP cameras over WIFI.
H.265 Compatibility	H.265/H.264 image decoding.
IP discovery	Scans across entire network segments to discover IP cameras.
Rapid ONVIF	Auto log-in and display images from ONVIF-compliant IPC cameras.
Hik test tool	Activate Hikvision cameras, display camera images, modify IP, user name and password parameters, etc.
DH test tool	Test Dahua cameras, modify IP, user name and password parameters, etc.

IP camera type	ONVIF, ONVIF PTZ, SecurityTronix, Dahua IPC-HFW2100P, Hikvision DS-2CD864-E13, Samsung SNZ-5200, Tiandy TD-NC9200S2, Kodak IPC120L, Honeywell HICC-2300T, RTSP.
SDI video signal test	1 channel SDI input（BNC interface). Resolutions supported: 720p 25/30/50/60,1080p 25/30/50/60,1080i 50/60
CVI video signal test	1 channel CVI input（BNC interface), up to 8MP, 25/30fps supported.
TVI video signal test	1 channel TVI input（BNC interface), up to 8MP, 25/30fps supported.
AHD video signal test	1 channel AHD input（BNC interface), up to 5MP, 25/30fps supported.
Analog video test	1 channel BNC Input & 1 channel BNC Output, NTSC/PAL
Zoom Image	Supports Analog and IP camera digital zoom.
Snapshot, Video record and playback	Capture current images and record live video. Media player will view photos and playback video.
HDMI IN *(Optional)	HDMI IN. Supports 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 1080p.
RJ45 cable TDR test	RJ45 cable TDR test and cable quality test, to test cable pair status, length, attenuation reflectivity, impedance, skew and other parameters.
12V/2A power output	12VDC /2A output to power cameras and devices.
USB 5V power output	5VDC 2A power output. (power only)
PoE power output	48V PoE power output (max 24W)
Theme	Modify the desktop and application interface, as well as customize display parameters such as sliding effect, etc.
Quick-Access menu	Quick-access drop-down menu: PoE power switch, IP setting, WLAN switch, HDMI IN functions, etc.
Audio test	1 channel audio signal input and 1 channel audio signal output (3.5mm)
PTZ control	Supports RS485 control, Baud 600-115200bps, Compatible with more than 30 protocols such as PELCO-D/P, Samsung, Panasonic, Lilin, Yaan, etc.
Color bar generator	Outputs one channel PAL/NTSC color bar video signal for testing monitors

	or video cables. (red, green, blue, white and black colors)
UTP Cable tester	Test UTP cable connection status.
Data monitor	Captures and analyzes the command data from a controlling device.
Network test	IP address scan, link scan, and Ping test. Quickly search the for an IP camera's address on a network.
Cable tracer	Find a connected cable from a bundle using audio tones.
PoE /PSE voltage test	Measures PoE switch voltage and displays pin configuration.
Digital Multi-meter	AC/DC Voltage, AC/DC current, Resistance, Capacitance, Data hold, Relative measurement, and Continuity testing. Input range -6600～+6600.
External power supply	12V DC (2A)
Battery	Built-in 7.4V Lithium polymer battery, 5400mAh
Rechargeable	After charging 5~6 hours, average working time of 10hours
Languages	English, Chinese, Korean, Russian, Italian, Polish, Spanish, French, and Japanese.
Auto off	1-30 (mins)
Working Temperature	14°F---122°F
Working Humidity	30%-90%
Dimension/Weight	9.4" x 6" x 1.8" / 1.3lbs.

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 connectors.

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	A tone will sound for a measurement value less 30Ω±3Ω.

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

The information above is for reference only and any is subject to change without notice. For more detailed technical inquiries, please feel free to contact our technical support department.

SECURITYTRONIX 2- YEAR LIMITED WARRANTY

ST-IP-TEST, ST-SDI-TEST, ST-HDoC-TEST-MINI, ST-HDoC-TEST-MM, ST-ALLIN1-TEST, ST-HDoC, ST-HDoC-MM, ST-HDoC-MM, ST-HDoC-MM, ST-IP-TEST2, ST-ALLIN1-TEST2 and ST-HDoC-TEST-MINI2

1 YEAR LIMITED WARRANTY ON BATTERY

SecurityTronix (the "Company") warrants to the Original Purchaser that the ST-F35TEST, ST-IP-TEST, ST-SDI-TEST, ST-HDoC-TEST-MINI, ST-HDoC-TEST-MM, ST-ALLIN1-TEST, ST-HDoC, ST-HDoC-MM, ST-HDoC-MM, ST-IP-TEST2, ST-ALLIN1-TEST2 and ST-HDoC-TEST-MINI2 series meters are free from defects in workmanship or material under normal use. This warranty starts on the date of shipment of the hardware to the Original Purchaser. During the warranty period, the Company agrees to repair or replace, at its sole option, without charge to Original Purchaser, any defective component in the ST-IP-TEST, ST-SDI-TEST, ST-HDoC-TEST-MINI, ST-HDoC-TEST-MM, ST-ALLIN1-TEST, ST-HDoC, ST-HDoC-MM, ST-HDoC-MM, ST-IP-TEST2, ST-ALLIN1-TEST2 and ST-HDoC-TEST-MINI2 series meters. To obtain service, the Original Purchaser must return the meter to the Company properly packaged for shipping. All defective products must be returned to the Company within thirty (30) days of failure. Products must be returned with a description of the failure and Return Merchandise Authorization (RMA) number supplied by the Company. To receive a RMA number and a return shipping address on where to deliver the hardware, call (610) 429-1821. The shipping, and insurance charges incurred in shipping to the Company will be paid by Original Purchaser, and all risk for the hardware shall remain with the Original Purchaser until such time as Company takes receipt of the hardware. Upon receipt, the Company will promptly repair or replace the defective unit, and then return said unit to Original Purchaser, shipping prepaid. The Company may use reconditioned or like-new parts or units, at its sole option, when repairing any hardware. Repaired products shall carry the same amount of outstanding warranty as from original purchase. Any claim under the warranty must include dated proof of purchase or invoice. In any event, the Company's liability for defective hardware is limited to repairing or replacing the hardware. This warranty is contingent upon proper use of the hardware by Original Purchaser and does not cover: if damage is due to Acts of God (including fire, flood, earthquake, storm, hurricane or other natural disaster), accident, unusual physical, electrical, or electromechanical stress, modifications, neglect; misuse, operation with media not approved by the Company, tampering with or altering of the hardware, war, invasion, act of foreign enemies, hostilities (regardless of whether war is declared), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike, lockout or interruption or failure of electricity, air conditioning, or humidity control, internet, network, or telephone service

This Limited Warranty covers batteries for one (1) year and is only in effect if the battery capacity falls below 60% of rated capacity. This Limited Warranty does not cover any battery if (a) the battery has been charged by a battery charger not approved by SecurityTronix; (b) any of the seals on the battery are broken or show evidence of tampering; or (c) the battery has been used in equipment other than the device for which it was included with. The warranties given herein, together with any implied warranties covering the hardware, including any warranties of merchantability or fitness for a particular purpose, are limited in duration to two years from the date of shipment to the Original Purchaser. Jurisdictions vary with regard to the enforceability of warranty limitations, and you should check the laws of your local jurisdiction to find out whether the above limitation applies to you. The Company shall not be liable to you for loss of data, loss of profits, lost savings, special, incidental, consequential, indirect, or other similar damages arising from breach of warranty, breach of contract, negligence, or other legal action even if the Company or its agent has been advised of the possibility of such damages, or for any claim brought against your by another party. Jurisdictions vary with regard to the enforceability of provisions excluding or limiting liability for incidental or consequential damages. You should check the laws of your local jurisdiction to find out whether the above exclusion applies to you.

This warranty allocates risks of product failure between Original Purchaser and the Company. The Company's hardware pricing reflects this allocation of risk and the limitations of liability contained in this warranty. The warranty set forth above is in lieu of all other express warranties, whether oral or written. The agents, employees, distributors, and dealers of the Company are not authorized to make modification to this warranty, or additional warranties binding on the Company. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by the Company and should not be relied upon. This warranty gives you specific legal rights. You may also have other rights which vary from one jurisdiction to another. SecurityTronix tech support: Please call **(610) 429-1821**, press 3 for tech support and then 2 for CCTV Tech support.