



Video files can play in the Video player on the main menu.

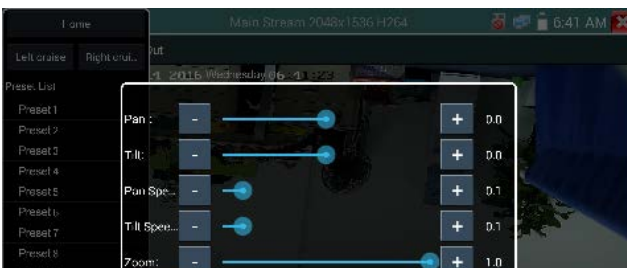
PTZ

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

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



PTZ Speed set: Horizontal and Vertical Speed set.

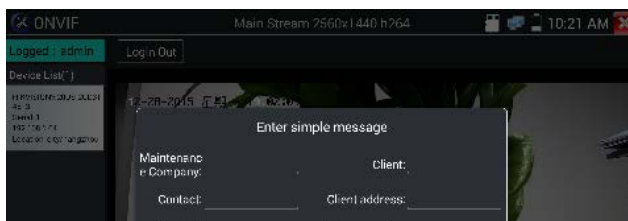


RTSP: Get RTSP address of the current camera

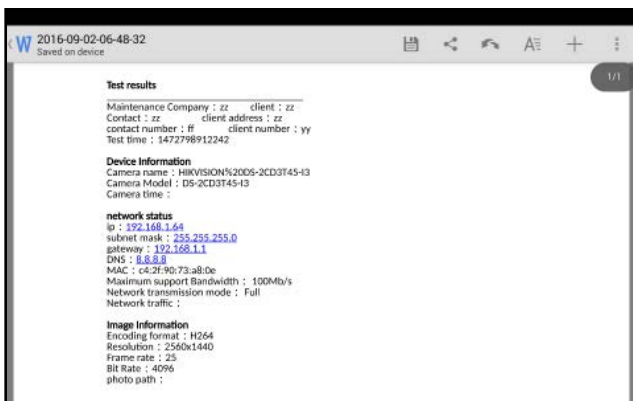
Doc: Auto generate test reports document of camera, click "generate document". Click Preview to view the report document.



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




Click "Doc" menu again, you can preview the report document.



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

3.3.10 NON ONVIF


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

Click icon  to enter IP camera test



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

IPC test interface



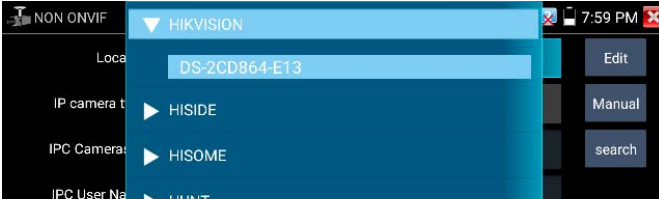
Local IP :	192.168.0.15	Edit
IP camera type :	HIKVISION_DS-2CD864-E13	Manual
IPC Cameras IP :	192.168.0.64	search
IPC User Name :	admin	
IPC Password :	Show
IPC Port :	5198	
Video streaming transp...	TCP	

Enter Reset Restore Rate

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

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

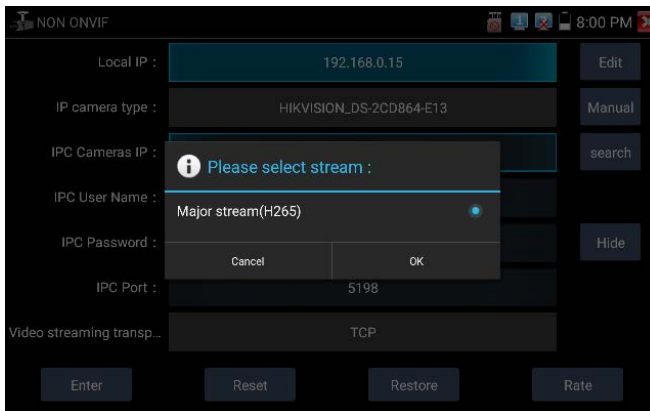
"Manual": Click IP camera type, list Honeywell, Kodak,Tiandy, Aipu-waton, ACTi, WoshiDA IP camera etc. If the brand has offered official original protocols, pls select camera type, input IP camera address, user name and password, click "official" to enter the camera image display interface(Currently,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



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

Enter Reset Restore Rate

Stream code: When test camera via RTSP, you can select mainstream or sub stream to test (if camera's RTSP have not been start or without, it will tip "auto match fail, please switch to manually selecting".



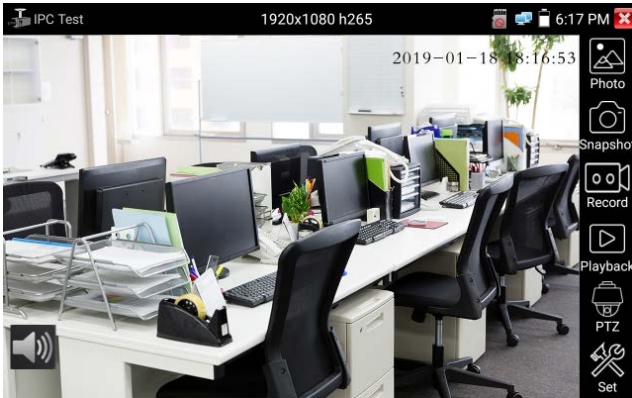
IP Camera's IP: Enter the IP camera's IP address manually or click "Search" to auto-scan for the IP camera's IP address. It is better to directly connect the IP camera to the tester so the search results will only display the camera's IP address. If the tester is connected to a PoE switch, it will find and display several IP address.

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


IPC Password: Enter 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.

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




If IP address setting has error or IP camera is not connected.. The tester prompts "Network Error"

Click  to quit from image display and return to IP camera test interface.



Once you are 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.

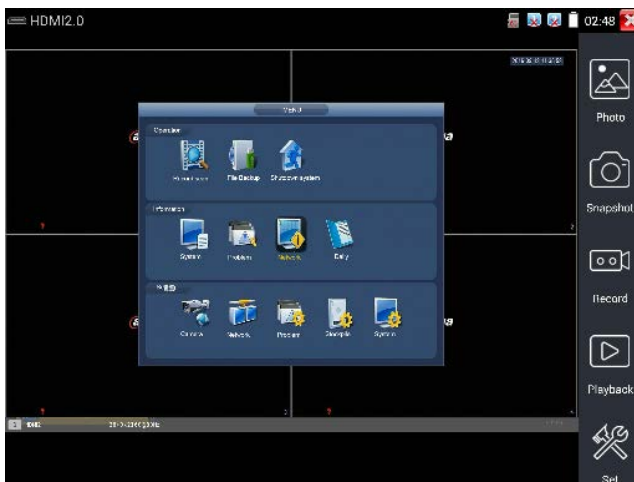
3.3.11 HDMI IN

HDMI in HD signal test, Tap icon  "to enter

When tester receives HDMI in image, the top tool bar shows the resolution of this image. You can select "resolution" to set resolution in the setting menu. Tap screen by twice, full image display. Support resolution upto 4K 60FPS, 3840x2160P 60FPS.

720x480p /720x576p /1280x720p /1920x1080p /1024x768p/1280x1024p /1280x900p

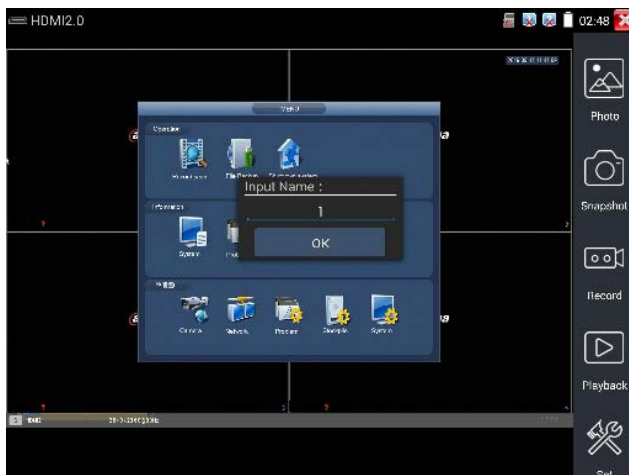
/1440x900p



(1) Snapshot

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

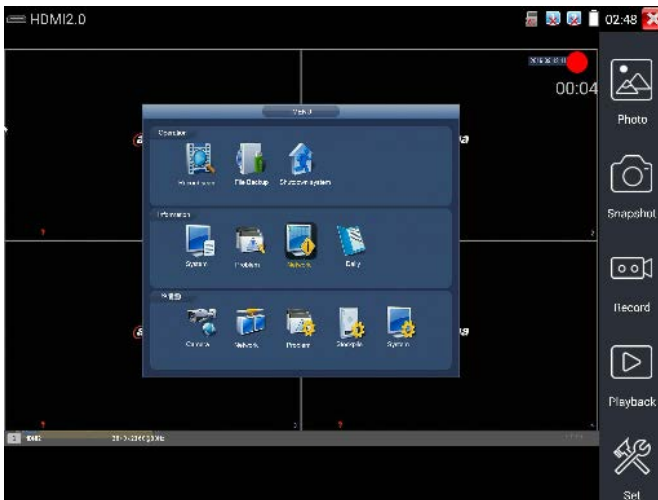
If the unit is set to the manual mode an "Input Name" pop up box will appear and you can enter a title for the snapshot. If the unit is set up to automatically set file names, this box will not pop up.



(2) Video record

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

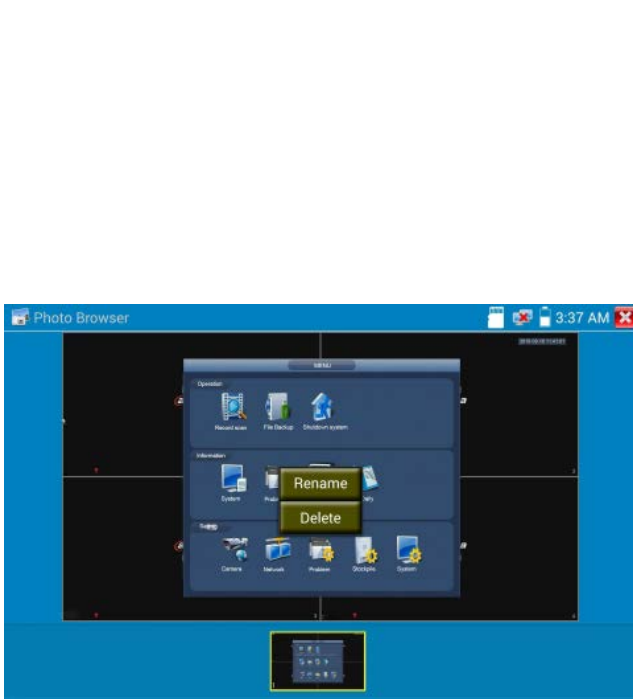
if select manual storage, before recording begins, appears dialog box "Input Name", user-defined the files name(by Chinese character, English letter or digit) to store in SD card, tester will hereby store the files in SD card after recording. if select "Auto-storage", tester will auto store the files in SD card after recording.




(3)Photo

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

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

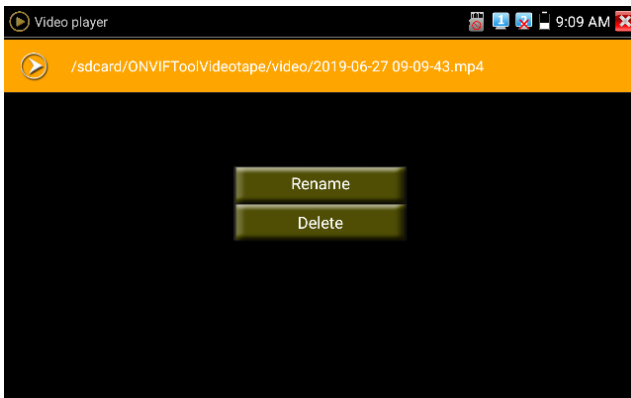


Click  to close and return to PTZ controller.

(4) Recorded video playback


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

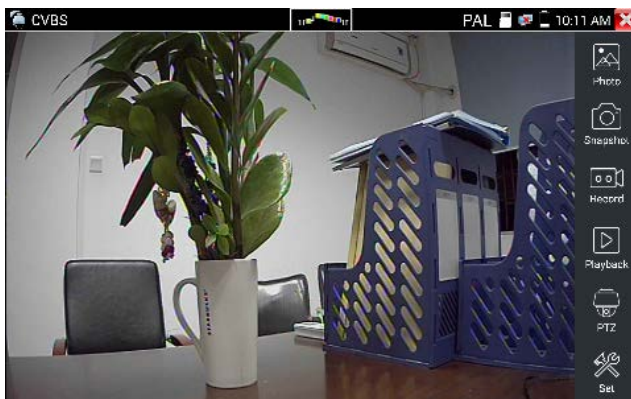
To rename or delete a video, click and hold on the file until this screen appears:




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

3.3.12 Analog camera test

Analog camera test and PTZ control, click icon  to enter



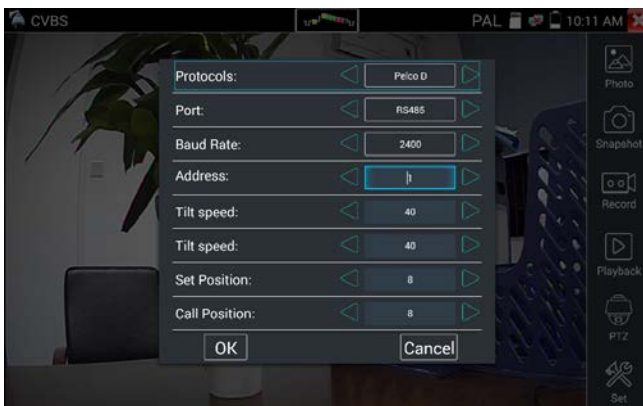
Display the input video image, click the top menu bar icon  to enter video level meter, (PEAK level, SYNC level, COLOR BURST measurement)

Select relative function on the right side Toolbar to operate, functions including "Photos", "Snapshot", "Record", "Playback", "PTZ", "Set".

Click the screen twice quickly, can be full zoom in on the touch screen.

1) PTZ controller parameter setting

Select and click icon "PTZ", to enter PTZ setting:



A. Protocol

Use the up and down arrow keys to move the yellow cursor to the "protocol", set corresponding Protocol and support more than thirty PTZ protocols. Such as Pelco-D, Samsung, Yaan, LiLin, CSR600, Panasonic, Sony-EVI etc.

B. Port

Click and move to "port" Select the communication port for the PTZ camera controlling (RS485)

C. Baud

Move the yellow cursor to "Baud ", Select the baud rate according to baud rate of the PTZ camera.(150/300/600/1200/2400/4800/9600/19200/57600/115200)

D. Address

Set the ID according the ID of PTZ camera (0~254), the setting address data must be consistent the speed dome address.

E. Pan speed: Set the pan speed of PTZ camera (0~63)

F. Tilt speed: Set the tilt speed of PTZ camera (0~63)

G. Set preset position (Set PS)

Click and select "Set PS", set and save preset position number(1~128).

H. Call the preset position (Go PS)

Click and select "Set PS", set and save preset position number (1~128), click "sure" to save, Call some special preset number, can call the dome camera menu

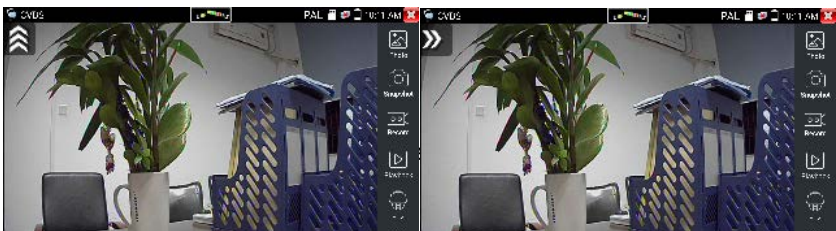


Check and set the protocols, address, interface and baud, all must be consistent with the dome camera, then the IPC tester can test. After setting the parameter, the tester can control the PTZ and lens

To control PTZ by screen touch:



Tap left, right, upward and downward on the touch screen to control the PTZ rotation direction.

By two fingers move outward and inward on the touch screen to zoom in and out the PTZ.



PTZ Control:

Press the key     control the PTZ direction of rotation

Press the key  or  , switch on or turn off the aperture.

Press the key  or  , adjust the focus manually

Press the key  or  , manually adjust the zoom


2) Video and storage setting

Click icon "set", to enter and set analog video image brightness, contrast, color saturation, as well as the file storage way after snapshot and recording, support auto-storage and manual storage.

When select manual storage, user can name and store the files.

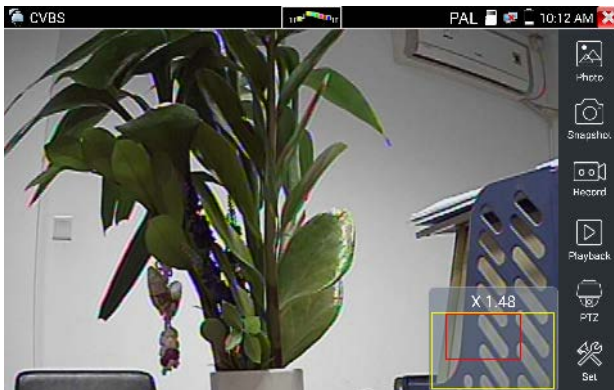


3) 4 x zoom image display and Video out

When image input, press  to enter "zoom", press it again to quit.

Using the touch screen to control PTZ camera movement:

Tap left, right, upward or downward on the video image to move the PTZ camera in a desired direction. Stretch two fingers outward or inward on the touch screen to zoom the image in or out.



If not use touch screen to operate, press the **key** to zoom out , press the **key** to zoom in, press upward and downward key to move the image.



For analog video input, as the resolution is 720*480, it is normal that the zoom in image is not clear. But for network digital video input, as it supports resolution up to 1280*960, the zoom in image is still very clear. This is very helpful for IP camera installation.

4) Snapshot

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

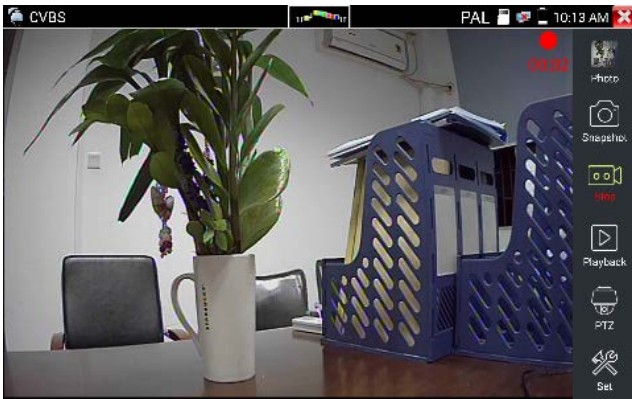
If the unit is set to the manual mode an "Input Name" pop up box will appear and you can enter a title for the snapshot. If the unit is set up to automatically set file names, this box will not pop up.



5) Video record

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

if select manual storage, before recording begins, appears dialog box "Input Name", user-defined the files name(by Chinese character, English letter, or digit) to store in SD card, tester will hereby store the files in SD card after recording. if select "Auto-storage", tester will auto store the files in SD card after recording.




(6)Photo

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

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

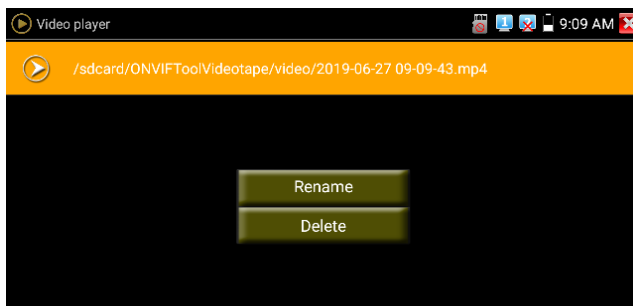


Click  to close and return to PTZ controller.

(7) Recorded video playback


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

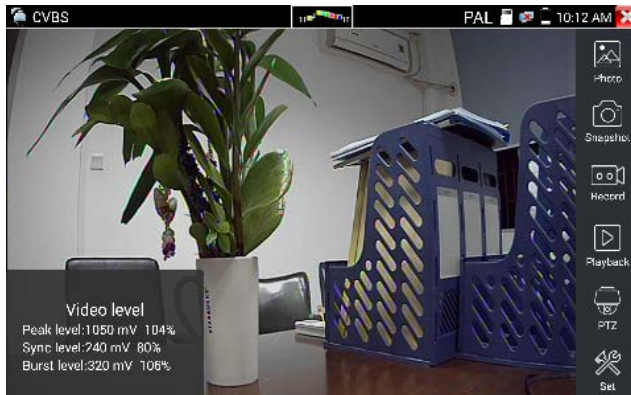
To rename or delete a video, click and hold on the file until this screen appears:



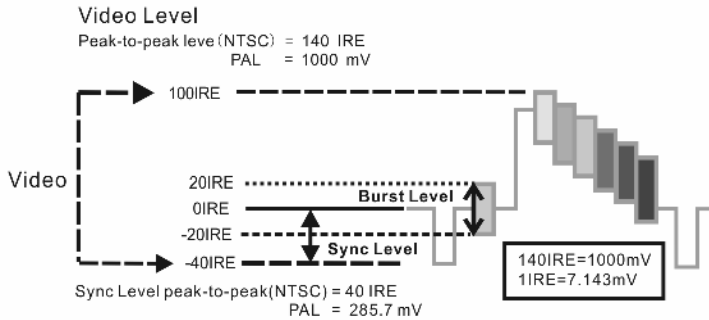
Video files also can play in the main menu "Video Player".

(8) Video level meter

Click the icon  to enter, the IP camera tester has adopted hardware high-speed sampling and processing technology, can perform both NTSC and PAL video amplitude signal measurements for PEAK to PEAK, SYNC levels and COLOR BURST chroma level. When an analog signal is fed into the meter, the tester displays the measurements on the bottom left corner of the screen



While in PAL format, the unit will be mV, While in NTSC format, it will be IRE.



NTSC	Video signal level	140±15IRE
	Chroma level(COLOR BURST)	40±5IRE
	SYNC signal level	40±5IRE
PAL	Video signal level	1000±200mV
	Chroma level(COLOR BURST)	300±35mV
	SYNC signal level	300±35mV

Video signal PEAK to PEAK level:

For NTSC format, the video signal level is 140±15IRE

For PAL format, the video signal level is 1000±200mV

If the level is too low, it will cause the image to lose quality and limit the distance it will travel over cable. If the level is too high, it will distort the image.

SYNC level: Tests the amplitude of the video sync pulse to verify if the video level is correct.

For NTSC format, the SYNC level is 40 ± 5IRE

For PAL format, the SYNC level is 300 ± 35mV

If the level is too low, it will cause the image to not frame out properly. If the level is too high, it will lead to a poor quality image.

COLOR BURST level: Testing the color burst level will determine if the burst signal is sufficient to trigger the displays color producing circuit. Burst will diminish in amplitude over longer cable runs and can get fall below the threshold for the video display to show a color image.


For NTSC format, the Chroma standard level is 40 IRE

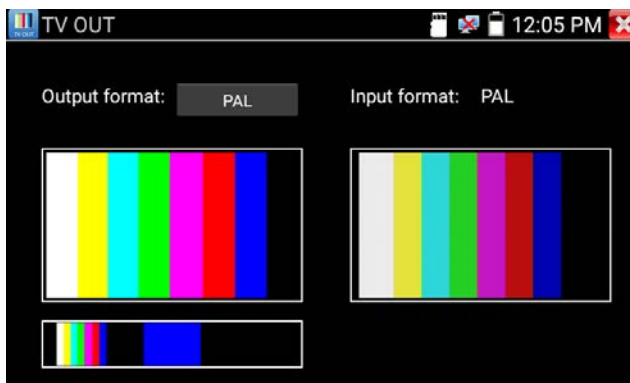
For PAL format, the Chroma standard level is 280mV

If the Chroma level is too low, the color will not be as deep, and some details of the image will become lighter. If the Chroma level is too high, there will be distortions on the image. If the coaxial cable is too long, it will reduce the chroma level.

Image loop test: Test video optical transmitter and receiver and video cable, connect one end to the tester "VIDEO OUT" port, and the other end connected to "VIDEO IN" port, the signal send via "VIDEO OUT" port, and received via "VIDEO IN" port, If the testing is ok, the tester displays several gradually dwindling photos on the desktop.

3.3.13 Color-bar generator (TV OUT)

Click  to enter, the tester sends the color bars from the "Video out" port, Click the icon "PAL", select "PAL/NTSC" output formats.



Click the selected color-bars, testing image or single bar (red, green, blue, white or black).

Double click to full display on the screen a  output, click  to return main menu.

Application

BNC loop test: Tester can send and receive color bar generator through the tester's "video out and video in" port, it is for testing transmission channels, such as video Optical, video cables etc. The tester "VIDEO OUT" port to connect optical terminal's sending port, and "VIDEO IN" port to optical terminal's connect its receiving port.

- A. When maintaining the dome camera, the tester sends out the color bar by its BNC output to the monitor at the monitoring center. If the monitor receive the color bar, it means the video transmit channel works normally. Meanwhile on the basis of the received color bar, the monitoring center can judge if transmission has loss or interference.
- B. The tester sends out the pure color bar (such as white and black color), to test the monitor whether has bright or black dots
- C. The tester sends out video signal image to test if the image received by the monitor has excursion.

3.3.14 AutoHD (*Optional)

Auto-recognize the resolution and Auto-display the image of the connected camera. Support coaxial PTZ control and call OSD menu, support up to 8MP TVI/CVI/AHD cameras.



3.3.15 HD Coaxial & Analog level test

Through hardware high-speed sampling and processing technology, accurately measure video peak level, sync level and burst level. It is used for level measurement of HD coaxial cameras, judge whether the working image of the camera and the image after attenuation by BNC cable transmission are normal, quickly detect and eliminate faults.



Image display: Select the camera type, no need to select the resolution, click the camera icon, can browse the camera image directly.

Level Meter Test: Need to select the camera type and resolution, click "test" to test the level
Color bar generation: Click "CVBS", quickly enter color bar generation app

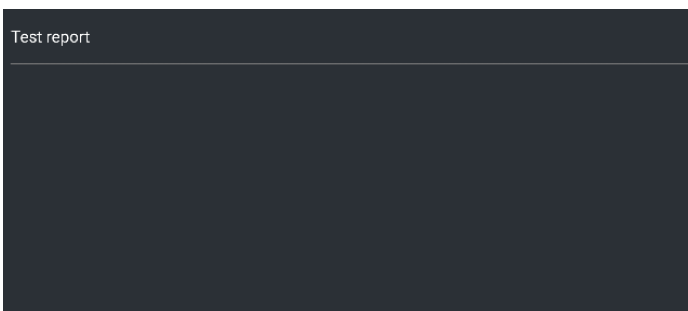
Test Result: The percentage and signal grid of the level value. compared with the reference value. When the value is lower than the threshold, the background color will be grayed and appear the warning icon. Different camera and cable lengths, different level value.

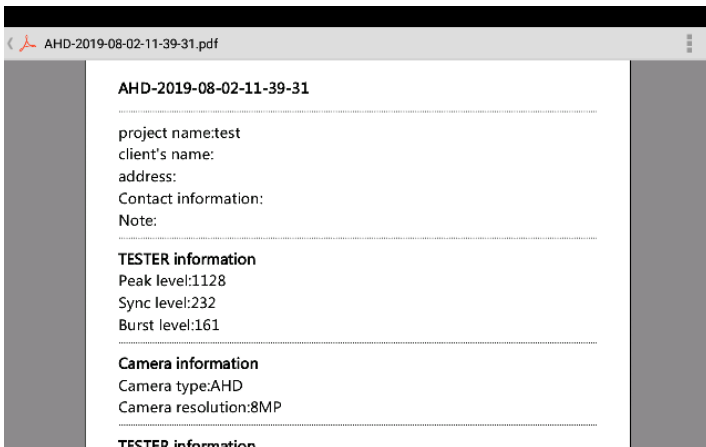
Reference value: The normal value at this resolution, it is used to reference and compare test results, click "value" to modify.

Threshold: Critical value at this resolution. Lower this value, will appear image noise on the screen, click "value" to modify.


Reset: Click "Reset" to reset the reference value and threshold.

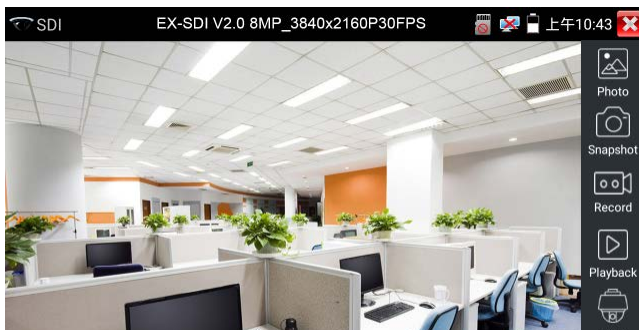
Create documents: The testing report can save customer information, level meter test information, camera information and Instrument information.





3.3.16 SDI Camera Test (*Optional)

SDI camera test, Dome camera test and PTZ control, click  to enter.



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

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


The tester supports resolution as follows:

1280x720P 25Hz/30Hz, 1280x720P 50Hz/60Hz, 1920x1080P 25Hz/30Hz, 1920x1080P 30Hz, 1920x1080I 50Hz, 1920x1080I 60Hz, EX-SDI: 2560x1440P /25/30FPS, 3840x2160 25/30FPS. IPC tester's HDMI output port can be use as SDI to HDMI converter, output HD SDI image to HD TV monitor.

Select relative function on the right side Toolbar to operate, "Snapshot", "Record", "Photos ", "Video playback", "PTZ control", "Video Brightness and Storage set", the operation is the same to the video monitor function, please refer to the relevant instructions "3.3.1" in the manual.

Click  or press  to quit.

3.3.17 CVI camera test (*Optional)

HD CVI camera, CVI dome camera test and PTZ control, click ic  to enter

When HD CVI signal input, the tester will display the image resolution on the top bar.

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

The tester supports resolution as follows:

1280x720P 25FPS / 1280x720P 30FPS / 1280x720P 50FPS / 1280x720P 60FPS / 1920x1080P 25FPS / 1920x1080P 30FPS/2560x1440P 25FPS/2560x1440P 30FPS/ 2592x1944P 20FPS / 2880x1920P 20FPS / 3840 x 2160P 12.5/15 FPS

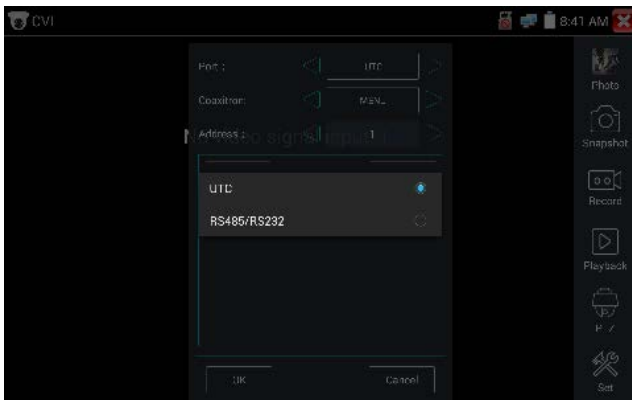


(1) PTZ control

1.1 Coaxial PTZ control

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


"Port": select coaxial control

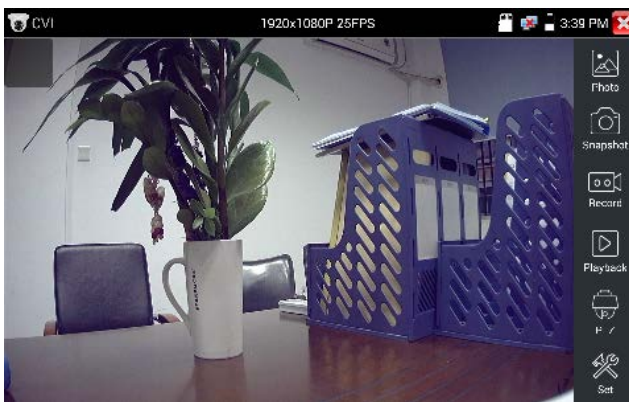


Enter PTZ address to perform parameters setting



Operation instructions, please refer to "3.3.1 PTZ (1) Video monitor test"

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











To control PTZ by screen touch:

Tap left, right, upward and downward on the touch screen to control the PTZ rotation direction, PTZ cameras will rotate accordingly. By two fingers move outward and inward on the touch screen to zoom in and out the PTZ.

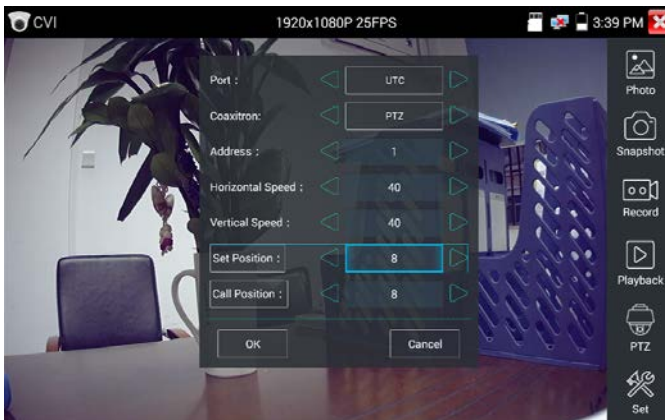
To control PTZ by key buttons



- ◆ Press arrow keys to control   to control the PTZ direction of rotation
- ◆ Press the key   to switch on or turn off the aperture.
- ◆ Press the key   to adjust the focus manually.
- ◆ Press the key   to manually adjust the zoom.

Set preset position

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



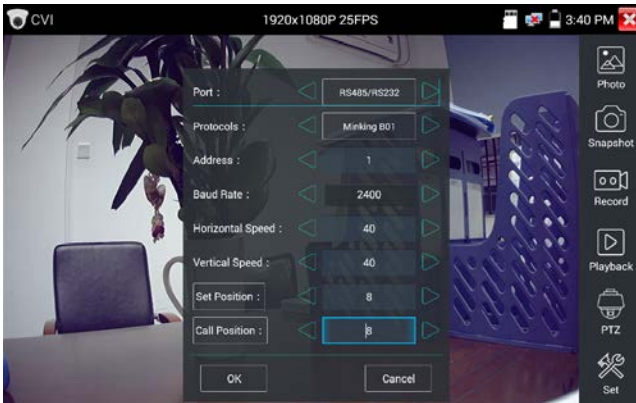
Call preset position

Tap the preset position:

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



1.2 RS485 control



Operation instructions, please refer to "3.3.1 PTZ (1) PTZ control parameters setting".


(2) Coaxial camera menu setting

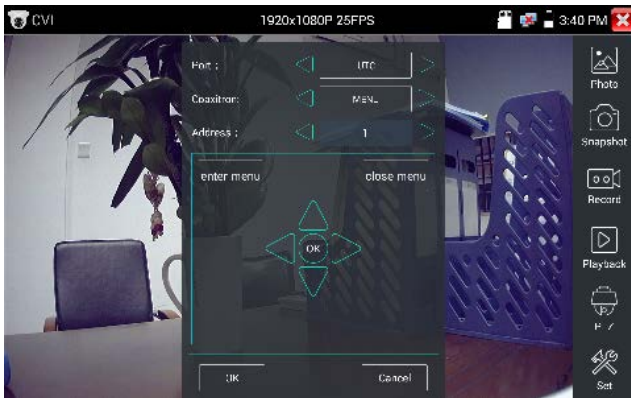
Tap icon "UTC", select "menu setting" to enter the dome camera menu.



Input calling dome camera menu address code, after finishing the parameter settings, you can

press  the key

or click the icon  to call the dome camera menu.

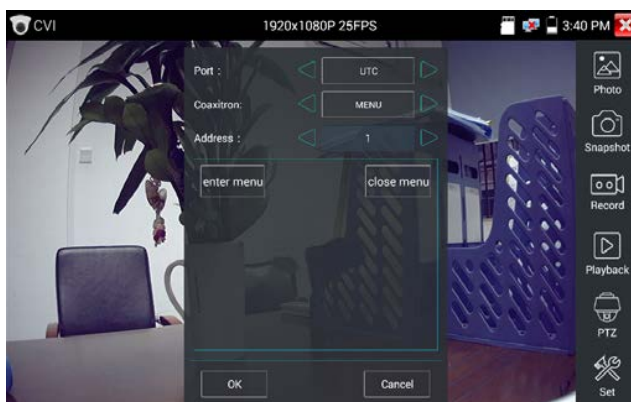


Press arrow keys     to set



(3) Snapshot, record, photo viewer and video play back, please refer to "3.3.1 PTZ (1) Video monitor test".

Tap "close menu" or press the key "ENTER" to close camera menu.

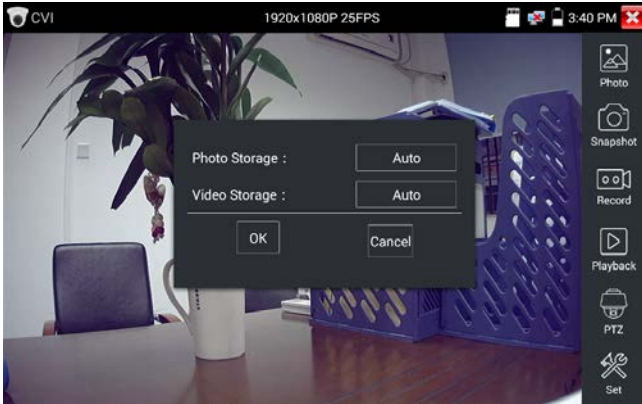


(4) Save setting


Click icon "Set" on the right toolbar to enter storage setting.

Support auto-storage and manual storage.

When select manual storage, user can name and store the files.

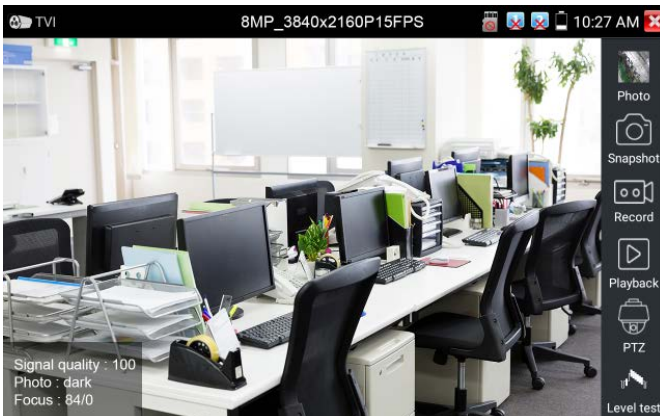


3.3.18 TVI camera test (*Optional)

HD TVI camera, TVI dome camera test and PTZ control, Click  to enter

The tester supports resolution as follows:

- 1280x720P 25FPS / 1280x720P30FPS / 1280x720P 50FPS / 1280x720P 60FPS
- 1920x1080P 25FPS / 1920x1080P 30FPS / 1920x1080P 50FPS / 1920x1080P 60FPS
- //2048x1536P 18FPS/2048x1536P 25FPS/2048x1536P 30FPS /2560x1440P
- 15FPS/2560x1440P 25 FPS/2560x1440P 30FPS/2688x1520P 15FPS/2592x1944P
- 12.5FPS/2592x1944P 20FPS/3840 x 2160P 12.5/15 FPS

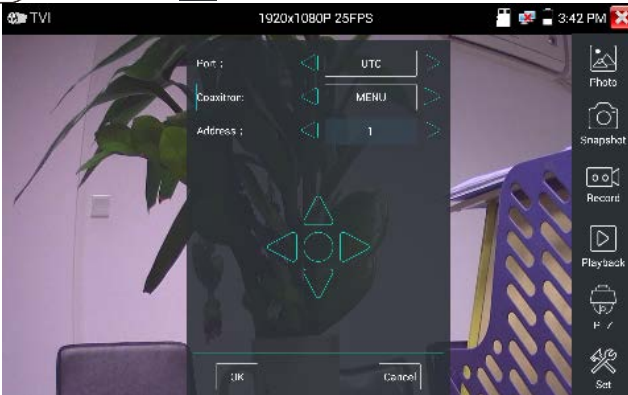


Coaxial camera menu settings

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




Input calling dome camera menu address code, after finishing the parameter settings, you can press the key or click the icon to call the dome camera menu.



More operation instructions (such as PTZ control, coaxial camera menu setting, snapshot, recording and playback etc), please refer to "3.3.6 CVI camera test".

3.3.19 AHD camera test (*Optional)

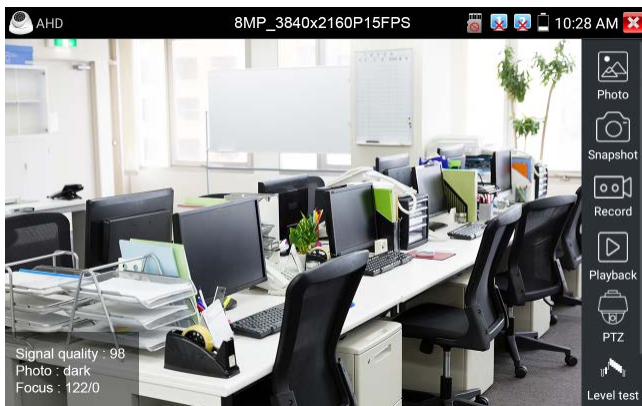
AHD camera, AHD dome camera test and PTZ control, Click  to enter

The tester supports resolution as follows:

1280x720P 25,30FPS / 1920x1080P 25FPS / 1920x1080P 30FPS/2048x1536P

18,25FPS/2048x1536P 30FPS /2560x1440P 15 FPS/2560x1440P 25,30 FPS/2592x1944P

12.5,20FPS/3840 x 2160P 15FPS



(1) Coaxial PTZ control

UTC control: select "PTZ control or PTZ control-2"(AHD camera has two different order, if select "PTZ" cannot control, please go "PTZ-2")

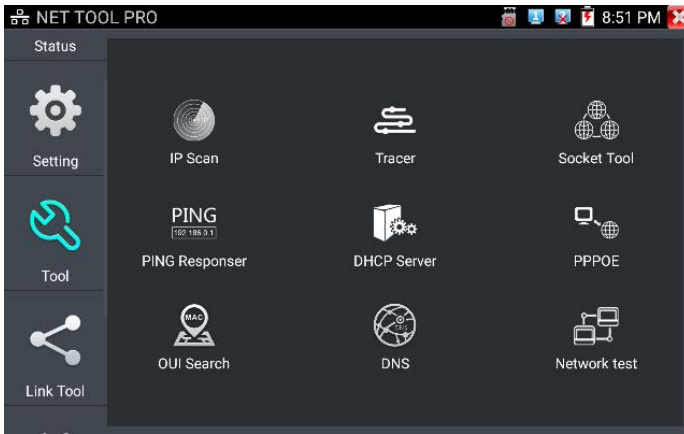


If to coaxial PTZ control the AHD camera, no parameters setting is needed.

More operation instructions please refer to "3.3.6 CVI camera test"

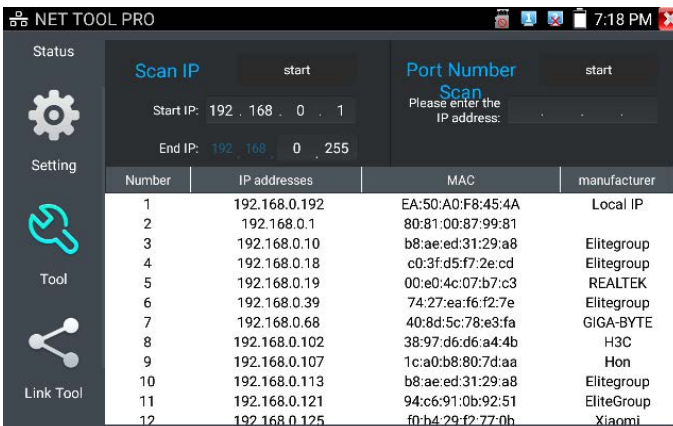
3.3.20 NET TOOL PRO

NET TOOL PRO-Cable Test, Wireless Tool, Link Tool, Full Duplex Detection, PING, IP Scan, DHCP Server, PPPoE, OUI Search, Socket Tool, DNS, LLLDP.



(1) IP address scan


Connect the cable to the LAN port. Set your IP address search range by changing the Start and End IP addresses. Click the "Start" button to scan the IP address range. You can also input an IP address in the Port Number Scan to scan for open ports.



(2) PING Test

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



Connect a network cable to the LAN port and click the  icon to open the PING tool. You can set your LOCAL (native) IP address, Remote IP address (e.g. IP camera), Packet count, Packet Size, Packet time and Timeout. 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 send and receive packets will have a 0% packet loss.

