

Camera ★ Wizard II™

CCTV AND IP CAMERA TESTER



IP/CCTV Tester Manual

V2.10

CAMERA WIZARD II TESTS

IP CAMERA TESTS

- IP address scan: Scan IP cameras and network device's for IP address
- Link monitor: Displays all IP addresses for a given gateway
- Port flicker: Blink a port's link LED to identify cable location
- PING test: Search for IP address to verify connectivity
- POE tester: Displays PoE voltage
- CAT5/6 cable tester: Performs a pairs test on CAT5/6 cables
- *Note: IP video image is not displayed on LCD*

CCTV CAMERA TESTS

- Video image display: 3.5" LCD with 960x240 resolution
- Video signal level meter: Display peak to peak value
- PTZ camera controls for numerous camera types
- RS485/RS422 input and data logging
- 3.5mm audio input
- Built in speaker
- Color bar signal generator
- BNC input with 3' M-to-M BNC pigtail

POWER AND ACCESSORIES

- Up to 11 hour battery life
- 4 hour recharge time
- 12VDC 1A output to power camera with 3' pigtail
- 5VDC 2A AC adaptor powers and charges tester
- Li-ion 3.7V 3000mAh rechargeable battery (replacement battery available)
- Carrying case included

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1、 Safety information

Notice

- The tester is intended to be used in a responsible and safe manner and not in areas where the use of electrical instruments could be dangerous (hospitals, gas stations etc.).
- The tester should be kept dry. Dust and liquid should be avoided.
- Like any instrument, treat carefully. Avoid dropping .
- Don't leave the tester alone when charging. If the battery is hot, the tester should be disconnected from the electric source. The tester should not be charged for more than 8 hours.
- Don't use the tester where the humidity is high. Once the tester is damp, power off immediately and move it away from other connected cables.
- The tester should not be used in the environment with the flammable gas.
- Do not disassemble the instrument, since no component inside can be repaired by the user. If the disassembly is necessary, please contact the factory.
- The instrument should not be used in an environment with strong electromagnetic interference.
- Do not touch the tester with wet hands.
- Do not use detergent to clean. Instead, use a dry cloth. If the dirt is not easy to remove, a soft cloth with water or neutral detergent can be used.

Limited Warranty

Byte Brothers test equipment warrants to the original consumer that this product is in good working order for a period of one year from the date of purchase. During the period this product will be repaired or replaced without charge for either parts or labor unless this unit has been damaged by the user. Repair or replacement as provided under this warranty is the exclusive remedy of the purchaser.

2.Introduction

2.1 General

The Camera Wizard II IP/CCTV tester is designed for the installation and maintenance of IP and CCTV cameras and devices. **CCTV tests:** Video display, PTZ control, DC12V output power, audio test, color generator, RS485 data decoding, picture and video recording, and image magnification. **IP camera tests:** IP address scanning, PING testing, Link monitor, POE measurement, Port flicker and CAT5/6 cable testing. *Note: The color LCD screen will only display CCTV images (not IP images).*

2.2 Features

- High definition 3.5" TFT-LCD color display, 480(RGB)x320 (CCTV only)
- Built-in LED flashlight
- User-defined shortcut keys (F1 and F2)
- Support for both NTSC/PAL video formats
- 10x zoom feature to magnify the video image (CCTV only)
- Record and playback CCTV snapshots and videos using a micro SD card (removable).
- IP address scan to determine an IP camera's IP address
- PING an IP address to verify the connectivity of IP cameras or network devices
- POE measurement to test the PoE switch's voltage to the IP camera
- Port Flicker blinks a switch port's link LED. Perfect for tracing cable locations.
- Cable testing jack to test the pairs of a CAT5/6 cable.
- Link monitor to display IP address usage on the network.
- PTZ address scan to determine the address of a CCTV camera.
- RS232/RS485/RS422 communication link to drive the PTZ unit.
- PTZ testing for cameras so equipped. Driver supports more than thirty protocols.
- DC12V 1000ma power output to temporarily power CCTV camera during test.
- Audio input jack to test audio signals
- Lithium Ion Polymer Battery . This power-efficient battery can last 11 hours during normal use. Charging time is 4 -5 hours.

2.3 Functions

2.3.1 Video signal display

Display the CCTV image on the built-in high definition 3.5"LCD-TFT 480 (RGB) x320 full-view display color screen. Supports PAL/NTSC. The LCD screen brightness/contrast/color and saturation are adjustable. *Note: The color LCD screen will only display CCTV images (not IP images)*

2.3.2 Video signal level test

Test the CCTV video signal strength (attenuation). Longer video cables cause the image to dim and reduces the image's dynamic range. If the video signal is too strong, it will cause a virtual shadow and reduce the sharpness of the image. The level test also displays the video level value and, if out of range, a notice will be displayed on the screen.

2.3.3 PTZ controller

While displaying the CCTV image, this feature pans, tilts and zooms the PTZ base, if the camera is so equipped. The tester emulates many common PTZ protocols and sets up the controlling parameters like protocol, communication port, baud rate, PTZ ID and pan/tilt speed. These parameters can be stored and recalled ("preset" positions).

2.3.4 Enhanced Color bar generator

The video generator is a PAL/NTSC multi-system color bar video generator used to test the security system's video monitors. With the video generator, you can judge whether the color is different because of the transmission loss or interference.

2.3.5 DC12V 1000ma output power

Power the CCTV camera with the DC12V (1A) power output from the tester. This is helpful during installation when camera power might not be available.

2.3.6 Audio testing

Test the audio input from pickup devices. Connect the tester and pickup device with the audio cable.

2.3.7 Cable tester

Test a CAT5/6 cable's pinouts by using the cable test jack (UTP/SCAN) and the included remote. Connect the CAT5/6 cable to the cable test jack. Connect the remote on the far end of the cable. The cable test results show the pin-to-pin termination of the wires.

2.3.8 RS485 data test

Analyze the data coming from a RS485/RS422 device. The data is displayed in hexadecimal format.

2.3.9 PTZ address scanning

Discover the address of the PTZ camera.

2.3.10 Image magnification (10xZoom)

Set image 10x zoom, can view and display the details by 1x、 2x、 3x、 4x、 5x、 6x – 10X zoom in the monitor and tester.

2.3.11 Video snapshot

Capture the video image and save the current video frames as a JPEG file

2.3.12 Video record

Record and save the current video on a SD card.

2.3.13 Video playback

Playback the video images that have been saved on the SD card. The file directory name that is created is based on the date setting of the tester.

2.3.14 Port flicker

Use this feature to blink the link LED on a switch port. Perfect for tracing the location of a cable that is terminated into a live switch port.

2.3.15 IP address scan

Quickly determine a camera's IP address with the IP address scan feature. The IP address scan steps through every possible address in the network's subnet to determine the IP camera's address. The subnet is entered into the tester as part of making the tester a part of the same network .

2.3.16 Link monitor

The link monitor lists the IP address of all network devices that it discovers in its own subnet. This is useful in making sure there is not a conflict with new IP addresses that are added to an existing network.

2.3.17 PING test

PINGING is a very popular network debugging tool. First, configure the tester with its own IP address to make it a network device, then you use the tester to contact (ping) other Ethernet devices.

2.3.18 POE tester

Detect and display the existence of PoE power. When PoE power is present, the tester will measure and

display the voltage that the PoE switch or injector is supplying to the IP camera.

2.3.19 LED flashlight

Light up the workspace with the ultrabright LED on the front of the tester.

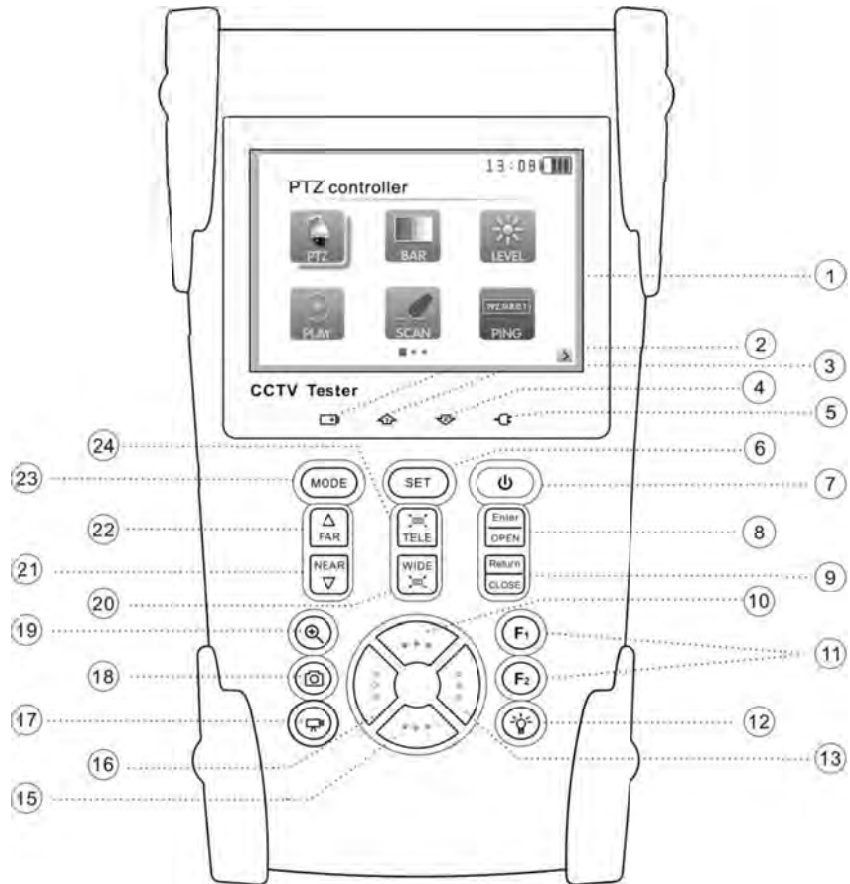
2.3.20 F1, F2 User-defined shortcut keys




















The user-defined shortcut keys can be setup to do your most popular tests.





2.4 Accessories

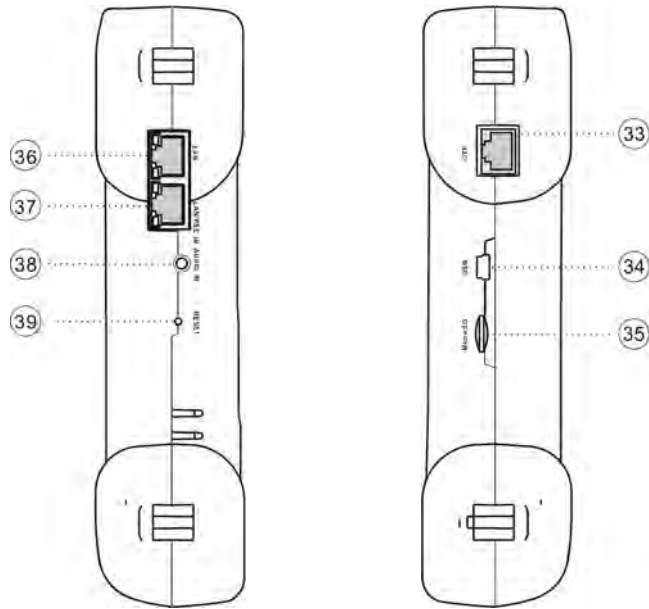
- 1). IP/CCTV camera and device tester
- 2). Power Supply: DC5V 1.2~1.5A (with included USB cable)
- 3). Cable test remote adaptor
- 4). Lithium Ion Polymer Battery (3.7V DC 3000mAh)
- 5). BNC cable
- 6). RS485 cable
- 7). CCTV camera power cable
- 8). Audio cable
- 9). Safety cord
- 10). Tool bag
- 11). Instruction Manual

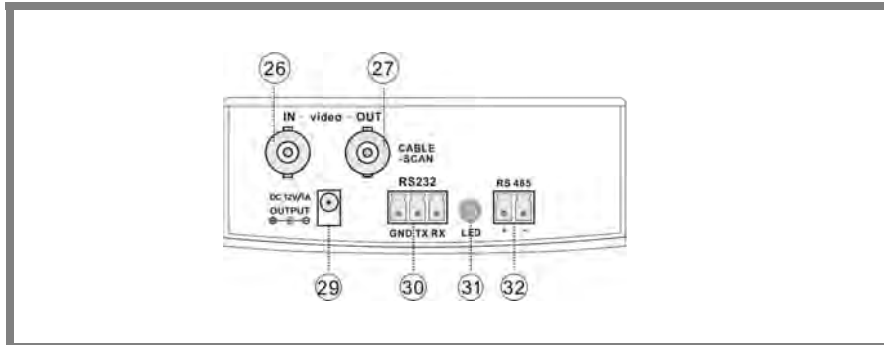
2.5 Front Panel



1		OSD menu
2		The charge indicator: it lights red while the battery is being charged. As the charging is complete, the indicator turns off automatically
3		The data-transmission indicator: it lights red while the data is being transmitted
4		The data-reception indicator: it lights red while the data is being received
5		The power indicator: it lights green while the tester is powered on
6		Set key, press it to enter sub-menu to set the parameters of functions
7		Press more than 2 seconds, turn on or off the device ,short press to turn on or off the menu display
8		Confirm/Open : Confirm the setting of parameters; open or enlarge the aperture
9		Return/Close : Return or cancel while setting parameters of the menu, close or decrease the aperture
10		Upward: Select the item which will be set or add the value of the parameter. Tilt the PTZ upward
11		User-defined key (User setting function, the default is "PTZ controller")
12		LED Lamp
13		Rightward, Enter the sub-menu or select the parameter whose value will be changed. Add the value of the parameter. Pan the PTZ right
14		Number not used
15		Downward: Select the item which will be set or reduce the value of the parameter. Tilt the PTZ downward
16		Leftward: Enter the sub-menu or select the parameter whose value will be changed. Reduce the value of the parameter. Pan the PTZ left
17		Record CCTV videos
18		Snapshot (capture CCTV video image)
19		10x zoom CCTV images on screen and video out
20		WIDE: zoom in the image

21		Near focus: Focus the image nearby
22		Far focus: Focus the image faraway
23		Menu key
24		TELE: zoom out the image





26	Video input (BNC input interface): Inputs the video
27	Video output (BNC output interface): Outputs the video
28	Number not used
29	Output DC12V1A power, for provisional DC test supply
30	RS232 interface: RS232 communication for the PTZ
31	LED lamp
32	RS485/422 Interface: RS485/RS422 communication for the PTZ
33	Network cable /Telephone cable interface test
34	USB data /charge interface
35	Removable Micro SD card
36	Ethernet power supply output/Network testing interface
37	Ethernet power supply input interface
38	Audio input: Test the camera's audio pickup and other audio equipment
39	Reset the default settings of tester


3、 Operation

3.1 Installing the Battery

The tester has a built-in lithium ion polymer rechargeable battery. *The battery (inside the battery compartment) is disconnected for safety during transportation.*

Prior to using the tester, open the battery compartment and connect the battery.

There is no need to disconnect the battery during normal use.

Pressing  key powers on and off the tester.




Notice: Only use the battery charger that comes with the device




The first time you use the tester, allow the battery to completely discharge. Then recharge the battery (4 to 5 hours for full recharge). This extends the life of your battery.



The Charge Indicator  lights red when charging the battery, then turns off automatically when the charging is complete.

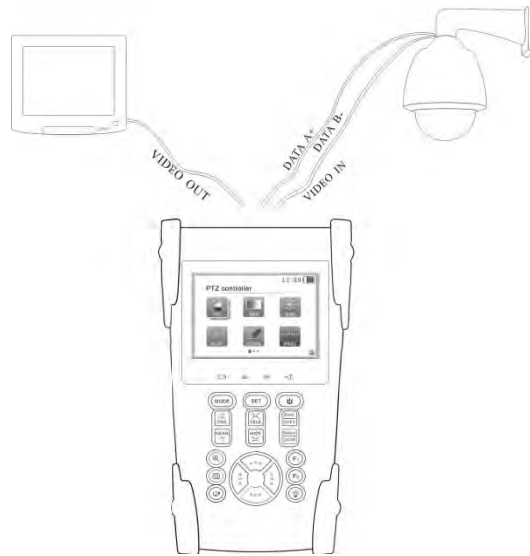


Notice: When the Charge Indicator  turns off, the battery is approximately 90% charged. The charging time can be extended for about 1 hour. Avoid charging the battery more than 8 hours.





Press the small RESET button on the left side of the tester to restore the factory's default settings (when the instrument works abnormally).

3.2 Quick Tester connection for CCTV use








- Connect the CCTV camera's video output to the tester's VIDEO IN jack. The image will display on the tester screen. Note" IP camera images will not display on the screen.
- To drive the video through the tester to a CCTV monitor or optical video transmitter/receiver, connect the device to the tester's "VIDEO OUT" jack . The video image will display on the tester and monitor at the same time.
- To test a camera with a PTZ base, connect the camera's RS485 controller cable to the tester's RS485 interface (note the positive and negative polarity of the cable). For RS232 PTZ controllers, connect the cameras PTZ's RS232 cable to the tester's RS232 jack.

3.3 Turn on the tester (OSD Menu)

- Press the key  to turn on.
- Press the key again  to turn off. The Auto timeout duration is set in Device Settings.



- Once the menu appears, choose a desired tester function by pressing the  key. Press the  key to exit the function.
- In various functional modes, press the  key to enter the parameters.
- Functions that require data entry (IP addresses, etc.) are entered with the  keys.
- The squares tell you if you are on menu 1, 2, or 3 



First page menu




Second page menu



Third page menu


3.3.1 PTZ controller



Display the video input (CCTV) and test the pan, tilt and zoom base of cameras so equipped. Press the key  to enter the PTZ setup menu. Setup the controlling parameters like protocol, communication port, baud rate, PTZ address, pan/tilt speed; set and recall preset positions.




If there is no video input, the screen displays “No video” and the PTX functions cannot be accessed..





PTZ controller parameter setting

In the “PTZ CONTROLLER” mode (as shown above, press the  key to enter the parameters.

Press the key  ,  to move the yellow cursor to different PTZ parameters.

Press the key  or  to change the parameters' values. Then press the  key to save and exit the menu.

If there is no change, press the  key to return to viewing the PTZ camera's video.

Press  to return to the Main Menu.

Note: If there is no video, the PTZ menu is not functional.

A. Protocol

Use the Up and Down arrow keys to move the yellow cursor to the "protocol". Select the protocol. The tester support more than thirty PTZ protocols. Such as Pelco-D、Samsung、Yaan、LiLin、CSR600、Panasonic、Sony-EVI etc.



B. Port

Move the yellow cursor to "port". Select which of the tester's communication ports will connect to the PTZ wires controlling the camera's PTZ base (RS232/422/485).

C. Baud

Move the yellow cursor to "Baud". Select the baud rate required by the PTZ camera. (600/1200/2400/4800/9600/19200/57600/115200bps)





D. Address

Enter the address of the PTZ camera (0~254). This setting must match the camera 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) to store positions for later recall

Move the yellow cursor to "SET PS", set and save preset position number (1~128), Press the key   to change the value. Then press the  key to save. Press  to quit.

H. Call the preset position (Go ps)

Move the yellow cursor to "Go PS". Enter the preset you wish to recall (1~128).








Press key  or  to change the value.

Press the  key to execute the preset position setting or press return key to  to quit.



Check and set the protocol fields correctly. The address, interface and baud, must be the same as the CCTV camera's PTZ base for the test and control to work properly. When the parameters are entered correctly, the tester will control the camera's PTZ and lens.






Adjusting and storing preset ("PS") positions: Once you have the PTZ base properly connected to the tester, use the following keys to move the camera's PTZ base:



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

1) Set and Go PS

Setting a PTZ location for later recall (Set PS)






A. P/T/Z the camera to desired position.

B. Press the key  to enter the PTZ controller submenu. Press the key   to move the cursor to "Set PS". Press the   keys to select the preset position number.

Press the  key to complete the preset position setting or preset return the key  to quit.

Recalling a preset location (Go PS)

Enter the preset position. (1~128) The PTZ camera will go to the desired preset position.





Press the  key to enter PTZ controller submenu. Press the   key to move the yellow cursor to "GO ps". Enter the preset position number. Then press the enter  key to complete the preset position setting or  key to quit.

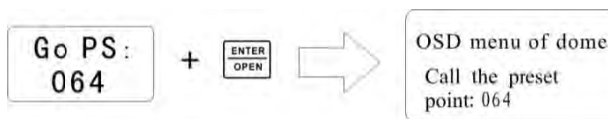
The camera will move to the preset position immediately: Zoom the lens and the focus and iris is automatically changed to the preset parameters.

Tips: Some CCTV cameras store preset position settings that can be read on the tester.

2) Dome camera menus

Check your camera manual to see if your camera can store presets. One example camera will download its preset menu to the tester by addressing preset position 64.

- a. Press the key  to enter PTZ controller submenu
- b. Press the key  , select preset position 64
- c. Press the key  Enter the main menu of the PTZ camera



OSD Menu of Dome (For Reference only)

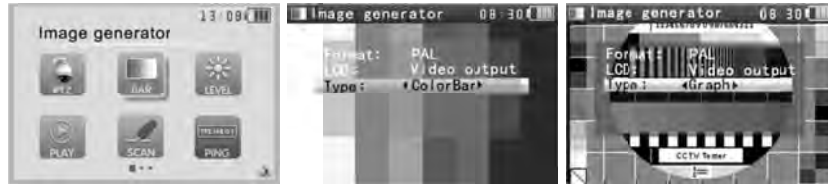


After accessing the dome camera menu , users can select different functions through the arrow keys
Refer to the dome camera's manual for instructions.

3.3.2 Color bar generator

Press the **MODE** key to enter the menu.

Press the **BAR** key to select the bar generator and then press the **Enter/OPEN** key



The Color bar generator supports PAL / NTSC standard color bars.

Press the key **Left** or **Right**, move the cursor to "Format", "LCD display select", "Type" select "Format". The tester sends the color bars from the "Video out" port. Press the key **Up** or **Down** to change the video output formats.

3.3.3 Video "in" level and LCD adjustment

Press **Left** or **Right** to the menu **LEVEL**, press **Enter/OPEN** to enter.



- Use this feature to analyze the CCTV input video and auto display the format (PAL/NTSC).
- The Video Level should be within the indicated range. Video levels that are too low will result in a dim picture with reduced dynamic range. A Video Level that is too high will result in washed out pictures with decreased
- Adjust the tester's LCD brightness, contrast and color saturation.

Depending on the type of camera connected to the CCTV tester, the Video "Format " will automatically change between NTSC and PAL, and the Video Level will automatically change between IRE (Institute of Radio Engineers) and mV. NTSC signals are measured in IRE units. PAL signals are in mV.









3.3.4 PTZ address search

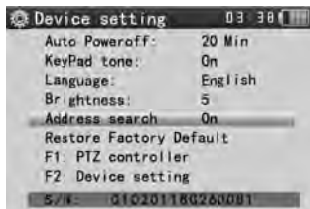
Press   to select , press  to enter.




Note: Please isolate the PTZ camera from other PTZ cameras before searching. Otherwise all




the PTZ cameras in the same system will pan at the same time.




Press   to select , and then press  to enter (as follow picture). Select to "Address search", press   to select ON or OFF, then Press  to save. The PTZ address search function  displays on the main menu.







Note: This function needs to be reset each time the tester's power is turned off.






Press the  key to set the protocol, communication port, communication rate. The should match the PTZ camera's settings.

Press the  button. The tester will scan for the camera's PTZ address. As the address is searched, the PTZ camera will pan right. Press  to stop searching up. Press the  key to single-step through the search.

Press the  button, the tester will search for the PTZ base address. When the address is searched, the PTZ camera will pan left. Press  to stop searching. Press  to single-step through the search.

Manual search address: Press  or  to search the address gradually, the image will flash when the address found. Press the direction control button  to adjust a Speed Dome Camera. Press button  to quit.


3.3.5 10x zoom image display and Video out

When video is present, press  to 10x zoom, press the button  to zoom in the image, press  to zoom out the image. Press  to see the details. Press  to quit.



Repeatedly pressing the 10x zoom key changes the zoom 1x、2x、3x、4x、5x、6x -10X zoom on the monitor and the tester screen.




3.3.6 Photograph




With video present, press the  key to save the current video frame on the SD card as a JPEG file. The stored image is named according to the date. The tester automatically checks as to whether a SD card is installed or not. If no SD card is installed, a "no SD Card" message is displayed on the screen.

3.3.7 Video record





With video present, press  momentarily. The blinking icon at the top left, means the video is recording, saving the video to the SD card (in AVI format). Press  again and the blinking icon disappears. The file is named according to the date.


Note: Press the button  for several seconds and release to start, and stop video recording.


3.3.8 Record playback





Press  to select , press  to enter, the latest photograph or video record file displays on the screen.



A photograph file displays with the  icon in the top right corner. A video recording displays a . Press  to start and stop video playback and, press  to quit. In the above image, the 3/0008 means there is a total of 8 photos and video files, and the current file is the third.






Press  to quit the latest storage image.

Press  to choose the files.


Then press  to show all the storage files, press  to choose the files. Press  to enter the files, press  to choose the image.



3.3.9 PING Test

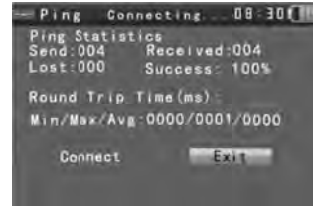
Connect the CAT5/6 cable to the LAN port, press  to select , and then press  to enter. Press  to adjust the IP address, Packet Size, Timeout, TTL, Count. Press  to adjust the parameter.



If the IP camera or other Ethernet equipment is not connected to the tester, “connect fail ” displays on the screen. In this situation, the sending and receiving packet will be 0 and the success rate is 0%. Press  to restart the Ping testing. With the equipment connected and a valid IP address, the sending and receiving packet amount will be consistent and the success rate will be 100%.

Application

PING testing is one of the most conventional network debugging tools. It is useful for verifying if the connected IP camera or other network equipment is working normally and the IP address is correct.



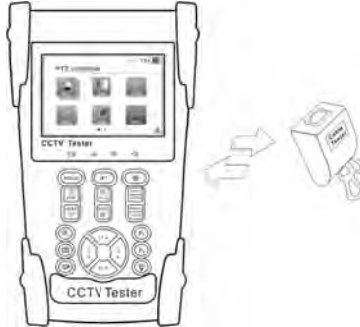
It is normal that the first data packet will be lost at the start of the PING testing process.

3.3.10 Cable tester

Press  to menu , press  to enter.



Connect the CAT5/6 LAN cable to the tester's UTP/Scan port. Connect the far end of the cable to the Remote adapter (shown). The cable's wiremap (sequence of wires) will be displayed, as well as the serial number of the cable tester kit.



3.3.11 Port flicker

Press to select and then press to enter. Press to start and stop sending the port LED blinking signal. This signal makes the connected switch port flicker at special frequency.

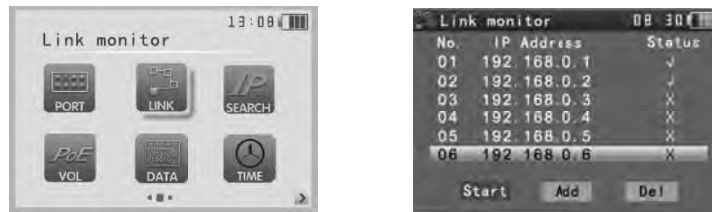



Application:

This test is an easy way to determine which port a LAN cable is using.

3.3.12 Link monitor

Press to select , and then press to enter.











The link monitor displays all active IP addresses that exist on a network segment. Choose “start”, and press  to start the link monitor. If the status is “√”, it means the IP address is occupied, if the status is“×”, means the IP address is available

Application:





When adding an IP camera or other network device to a network, the new IP address must not be occupied. If two devices are using the same IP address, the equipment will not work properly. The Link monitor can quickly check if an IP address is occupied.

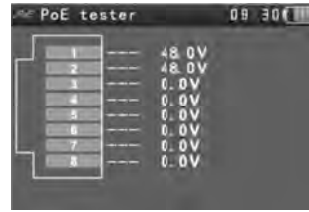
3.3.13 IP address scan

This could be the most popular IP test on the tester. Use it to determine the IP address of an IP camera. First, connect the IP camera to the tester’s LAN jack. If the camera needs PoE, connect the PoE into the PSI IN jack. Press   to select  . Press  then cursor over to Start. Press  . If the camera is found, its IP address will be displayed. For this to work properly, the tester must be configured to be on the same network as the camera (you must know the gateway address of the camera so you can set the tester to have the same). To configure the tester, cursor to “Set IP”, press  . Use the cursor keys   to give the tester an IP address, mask and gateway address.






3.3.14 POE tester

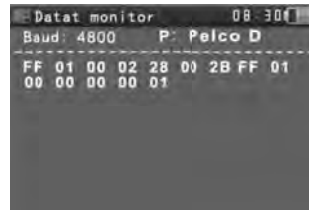
Press   to select  , and then press  to enter. To test for PoE, the IP camera and the PoE power source must both be connected to the tester (the IP camera is what triggers the PoE power source to turn on). First connect the PoE cable to the tester’s PSE IN jack. Then connect the IP camera to the tester’s LAN jack. The POE voltage will be displayed on the tester screen.





Note: PoE power supply equipment (PoE switch, PSE power supply) must be connected to the tester's PSE IN port so it can power the IP camera or other devices that are plugged into the tester's LAN jack. **Warning:** Do not connect POE switches or power supplies port to the UTP/SCAN jack. This will damage the tester.

3.3.15 Data monitor

Connect the device to the tester using the RS485 or RS232 ports. Press  to select , press 

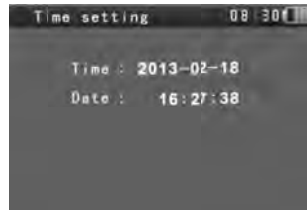





to enter. Press  to set the baud rate of RS485/RS232 port. The tester must match the baud rate of the device being analyzed. Data transfer will start automatically. If the tester can interpret the protocol being sent, the tester will display it in the upper right ("P: Pelco D"). If not, "P:----" will display. Press  to stop the transfer. PTZ control codes from a joystick, DVR or keyboard can also be displayed .



3.3.16 Time setup

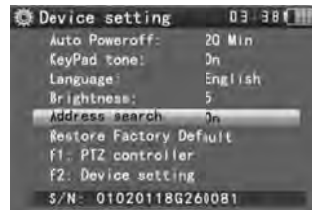
Press  to select , press  to enter.



 **Note:** Press  to adjust the time. Press  to save. The time stamp used to name photographs and video is based on this time setting.

3.3.17 Device (tester) setup

Press  to menu , press  to enter.



Press  or  to choose the item, press  to adjust, press  to save, press  to quit.

Auto power off: Set the time of auto shut-down. 5,10,...,60 minutes (of no activity). Select "Disable" to turn off this feature.



Keypad tone: Turn on or off the keypad beep feature.

Language: ENGLISH/ CHINESE and other languages

Brightness: Setting the brightness of OSD menu and background.(0-7)

Address search: off / on Open or close the PTZ address search Menu.

Restore factory setting: restore the data of the factory.

F1 user-defined shortcut key (softkey): Define this key to execute any menu item. Press  to select, press  to save. The default setting is "PTZ controller".

F2 user-defined shortcut key (softkey). Adjust as above. The default setting is "Device setting".

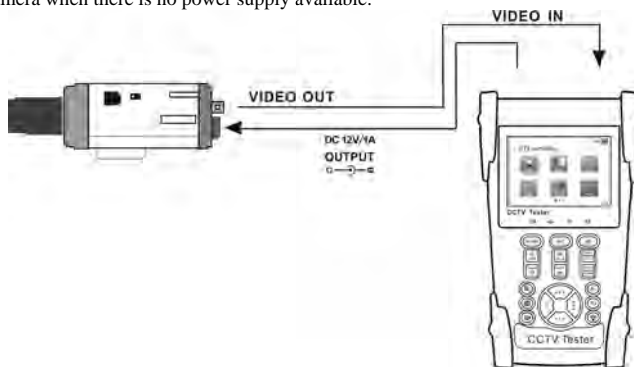
3.3.18 USB

Photographs and video files can be uploaded to a Windows computer using the USB jack.



3.4 DC12V 1A power output for CCTV cameras

Power a CCTV camera with the DC12V (1A) power output from the tester. Perfect for powering the camera when there is no power supply available.



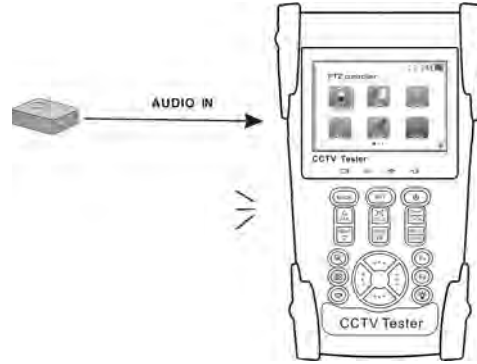
 **Notice**

- a. Do not connect any power source into the tester's "DC12/1A OUTPUT" port. Damage will occur.

- b. Only connect the DC12V/1A power output to a CCTV camera.
- c. When the CCTV camera draws more than 1A, the tester enters a protection mode.
- d. For best performance, fully charge the tester before powering a camera.

3.5 Audio input test

Test the audio from audio devices. Connect the audio device to the Audio In jack .



3.6 LED flashlight

Use the ultrabright LED lamp to light up the work space (see the front panel of the tester).

Turn on the tester. Press  to turn On/Off the LED.



Note: Bright light can be harmful. Do not look directly into the LED light.

4、 Specifications

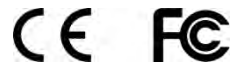
4.1 General Specifications

Video Test	
Signal mode	NTSC/PAL (Auto detect)
Display	3.5 inch digital TFT-LCD ,480 (RGB) x 320 resolution
LCD adjustment	Brightness, Contrast, Saturation adjustable
Video IN/OUT	1 channel BNC Input & 1 channel Output

IP/CCTV Tester User's Manual

Video Output Mode	1.0 Vp-p
Video Level test	
Level test	Video signals measured in IRE (NTSC) or mV (PAL)
PTZ controller	
Communication	Supports RS232 and RS485
PTZ Protocol	Compatible with more than 30 protocols such as PELCO-D/P, Samsung, Panasonic, Lilin, Yaan, etc.
Baud Rate	600, 1200, 2400, 4800, 9600, 19200,57600,115200bps
Video Signal Generation	
Color bar generator	Outputs one channel PAL/NTSC color bar video signal for the testing of monitors or a cable's red, green ,blue, white or black color channel.
UTP Cable tester	
UTP cable test	Using a Remote Adapter (included), test a CAT5/6 UTP cable. The pinout is displayed.
DC12V 1A power output	
DC12V power output (CCTV camera)	Output DC12V (1A) power for powering a CCTVcamera
Audio input test	
Audio input test	Test the audio devices using the Audio In port.
RS485 data analysis	
Data Monitor	Captures and analyzes the command data from controlling devices.
10x Zoom CCTV Image	
Image 10x zoom	Zoom CCTV image display and video out signal.
Photograph, Video record, Record playback	
Photograph	Save the CCTV image as JPG file on mini SD card (included).
Video record	Record CCTV videos and store them on mini SD card (included)
Record playback	View the stored photographs and video from the mini SD card.

Port flicker	
Port flicker	Blink the link LED on a switch port to locate a cable's port location.
IP scan、Link monitor、PING test	
IP scan	Determine an IP camera's IP address (must be on same network).
Link monitor	Detect IP devices on the network (check for available IP addresses).
PING testing	Search for IP cameras or other devices by scanning for their addresses on the network. When roundtrip time of the communication is displayed.
PoE tester	
PoE tester	Display PoE power supply voltage and cable pairs used
POWER	
Power Adapter	DC 5V (1.5A)
Battery	Built-in 3.7V Lithium polymer battery. 3000mAh.
Rechargeable	Charge time is 3-4 hours. Working time is 11 hours.
Low Consumption	Energy saving technology, the battery icon real-time display
Setup parameters	
Language	English/Chinese and other languages OSD menu
Auto off	Adjustable 5-60 (mins) or disable.
Keystroke tone	On/Off
General	
Working Temperature	-10℃ ~+50℃
Working Humidity	30%~ 90%
Dimension/Weight	194mm x 112mm x 48mm / 540g



CAMERA WIZARD II
MODEL VTX455

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