Henkion

CCTV Camera Tester

User Manual

IV8W

V01.02(202504)

Preface

- Thank you for purchasing the Henkion multi-function cable tracer. Please read the user manual carefully before use and operate it correctly.

- To ensure the safe use of this instrument, please read the "Safety Precautions" section in the user manual carefully.

- After reading the manual, please keep it in a safe place for future reference.

- For maintain your warranty rights, do not damage the warranty seal and keep the label and serial number on the device.

- If you encounter any issues during use or if the device is damaged, please contact our technical support department.

Contents

1. Safety Precautions

- When using this device, please comply with local electrical regulations. Avoid using it in places where electrical devices are prohibited, such as hospitals and gas stations.
- Use only the accessories provided by the manufacturer to avoid damage caused by uncertified accessories.
- Do not place the device in humid, dusty, or high-temperature (above 50°C) environments.
- Use batteries that meet the specifications; otherwise, the device may be damaged.
- Do not use this device to detect live power lines (e.g., 220V power lines), as it may damage the device or pose a safety risk.
- Avoid operating communication lines during thunderstorms to prevent lightning strikes and ensure personal safety.
- The accessories provided with this device are only for use with this device. Do not use them for other purposes to avoid accidents.
- Avoid severe collisions or shaking during transportation and use to prevent damage to the components.
- Do not use the device in environments containing flammable gases.
- Do not disassemble or repair the device by yourself. If disassembly is necessary, please contact our technical support team

2. General

The new HD coaxial camera tester is developed for the on-site installation and maintenance of HD coaxial camera, having TVI, AHD and CVI. It also provides many useful functions, such as video display, Control-over-Coax, PTZ control, DC12V output power, audio test, color-bar generator (TV OUT), VGA video signal input, HDMI signal input, UTP cable testing, LED lamp etc.

Product Functions

1. HD coaxial camera testing
2. Control over Coax
3. PTZ controller, The Tester built in Pelco-D /P PTZ control protocol, etc. Through its own RS485 interface.
4. Color-bar generator (TV OUT)
5. DC12V 1A output power. Power the camera with DC12V(1A) power output from the tester. It is helpful for testing when the power supply is not available.
6. Audio testing. Test the audio input from pickup devices. Connect the tester and pickup device with the audio cable.
7. Enhanced UTP cable testing. By UTP CABLE TEST port on the meter, you can test the connection of network cable.
8. VGA HDMI input. Support VGA/HDMI 1.1 Compliant Digital input, once connecting VGA HDMI video, please switch selector to select HDMI or VGA mode. The maximum resolution is 1920X1080P.
9. TVI camera test. HD TVI camera testing, support 1MP,2MP, 3MP, 4MP, 5MP, 8MP.
10. AHD camera test. HD AHD camera testing, support 1MP,2MP, 3MP, 4MP, 5MP, 8MP.
11. CVI camera test. HD CVI camera testing, support 1MP,2MP, 3MP, 4MP, 5MP, 8MP.

12. LED lamp. It is useful for the engineer to install and maintain security system at night. LED On/Off pressing button, easy to operate.

13. The battery graphic display. The tester has advanced power control and protection circuit, low-power energy saving, 4 to 5 hours on a single charge. Normally it can be used for 10 hours.

3. Product Accessories

1. HD coaxial camera tester
2. Adapter DC5V 1A (with micro USB cable)
3. Li-ion battery×2 (in tester)
4. BNC cable
5. RS485 connector
6. Power output conversion cable
7. Audio cable
8. Lanyard
9. Tool bag
10. Manual

4. Interface and Function Introduction

(1) Emitter Interfaces and functions:
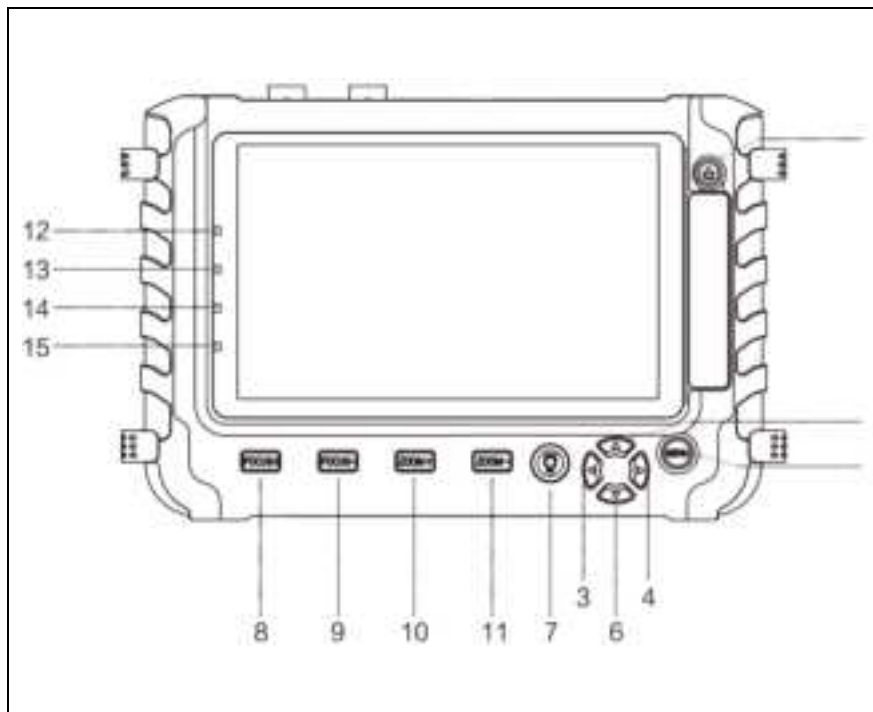
1		Press more than 3 seconds, turn on or off the device
2		Menu key
3		Leftward. Move menu item / Tilt the PTZ leftward.
4		Rightward. Move menu item / Tilt the PTZ rightward.
5		Upward. Move menu item / Tilt the PTZ upward.

6		Downward. Move menu item / Tilt the PTZ downward.
7		LED lamp switch 8
8		Far focus: Focus the image faraway / change the setting parameters
9		Near focus: Focus the image nearby / change the setting parameters
10		Zoom In / change the setting parameters
11		Zoom Out / change the setting parameters
12		The power indicator
13		12V output indicator
14		The data-transmission indicator
15		5V charging indicator

Top interface
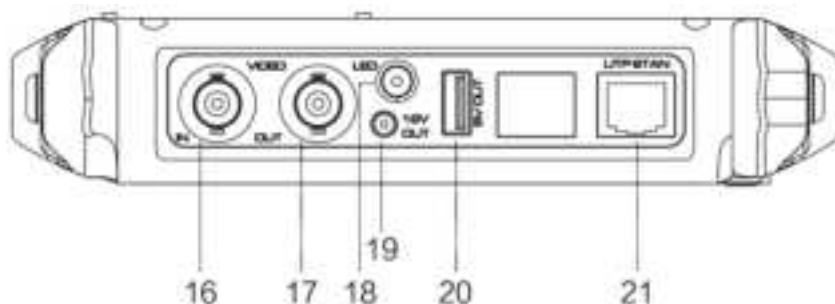
Bottom interface
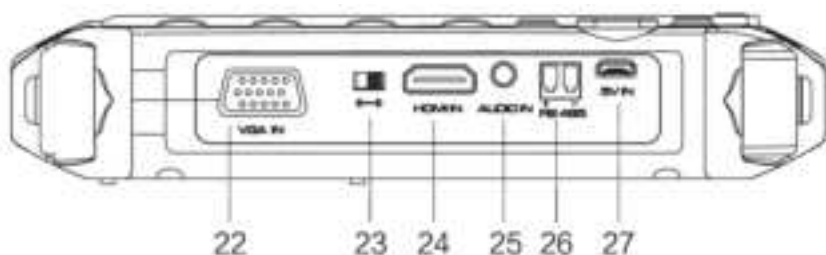
16		Video signal input (BNC interface)
17		Video signal output (BNC interface)
18		LED lamp
19		Output DC12V 1A power, for provisional DC test supply
20		Output DC5V 1A power, for provisional DC test supply
21		UTP cable interface test
22		VGA input interface

23		VGA/HDMI switch
24		HDMI input interface
25		Audio input test
26		RS485 Interface, RS485 communication for the PTZ
27		USB Type-C charging port

5. Product Usage Instructions

- Pressing ⏻ Turn on / off the tester.

- When turn it on, press the key 🔘 to enter the function menu. Press 🔘 🔘 ⬡ ⬡ key to quickly switches to the desired menu, press function menu.

- When turn it on, press the key 🔘 to enter the function menu, select different function, and press the key 🔳 🔳 to change the parameter value, press key 🔘 to save setting and exit menu.

NO SIGNAL

BRIGHT   50

VONTRAST   50

COLOR   50
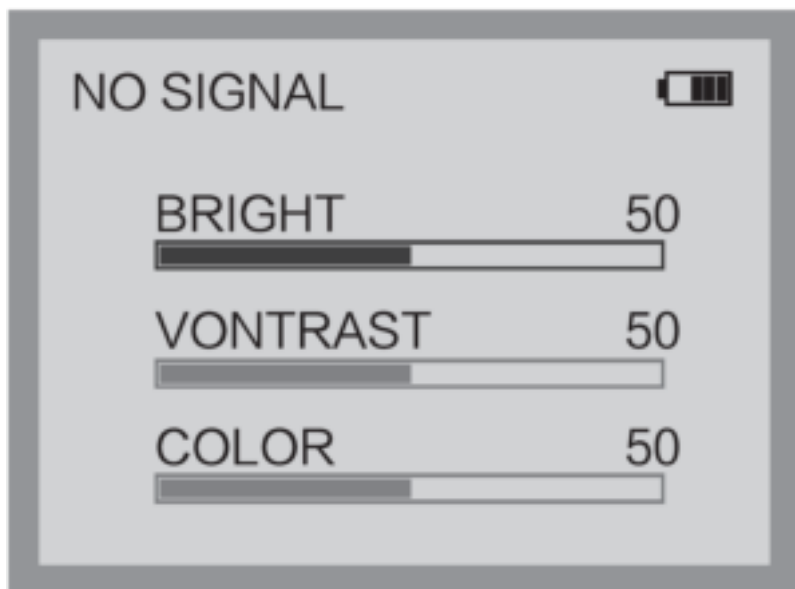
First page menu

Press [icon] to the menu, press [icon] [icon] to chose the item, press [ZOOM+] [ZOOM−] to change the value, LCD brightness, contrast, color saturation can be adjusted, press [icon] to save and exit.

NO SIGNAL

ENGLISH

MODE
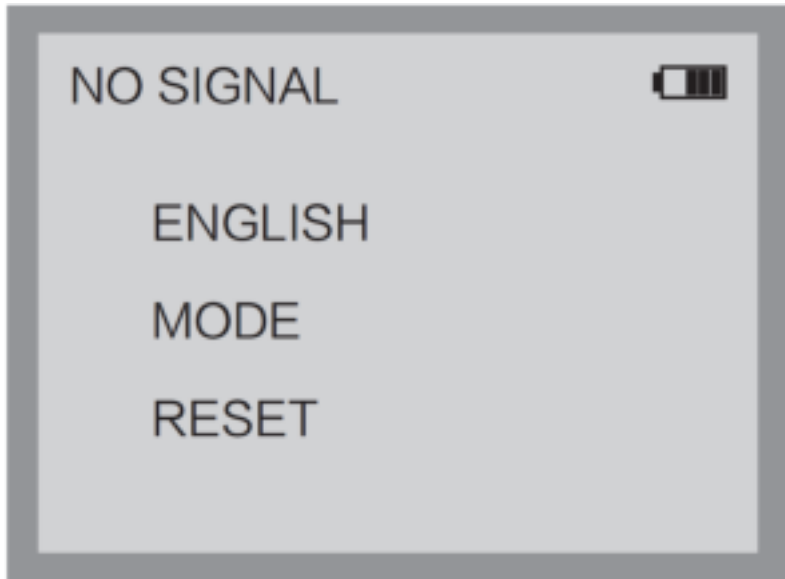
RESET

Second page menu

Press (MENU) to the menu, press to change to the next page, press to chose the item, press ZOOM+ ZOOM- to set the language, video format (AHD, TVI, CVI) and reset.

NO SIGNAL

PROTOCOL   PELCO-D

ADDR   1

BAUD   2400
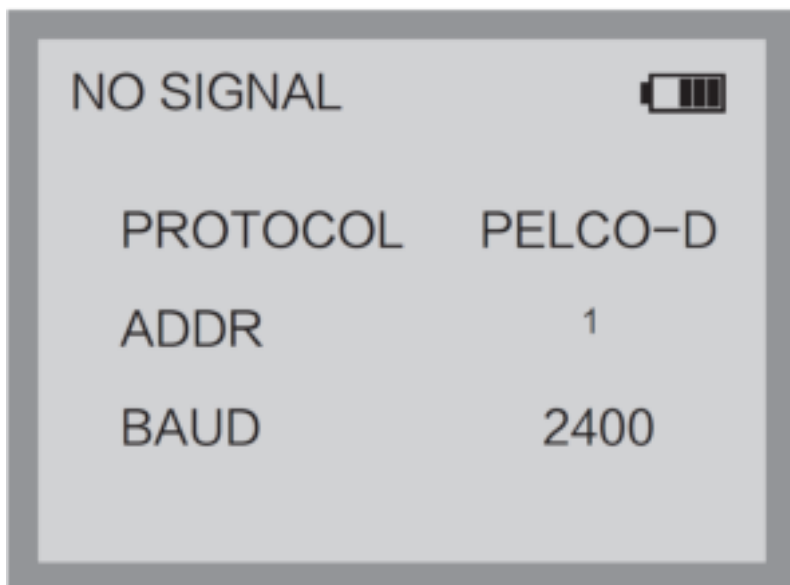
Third page menu

Press [MENU] to the menu, press [P] to change to the third page, press [▲] [▼] to

chose the item, PTZ protocol, baud, address can be set, press [MENU] to save and exit.

Press [▲] [▼] [◄] [►] to control the PTZ direction of rotation.

Press [FOCUS+] [FOCUS-] to adjust the focus manually

Press [ZOOM+] [ZOOM-] to adjust the zoom manually

NO SIGNAL   🔋

NET CABLE TEST

1	X
2	X
3	X
4	X
5	X
6	X
7	X
8	X
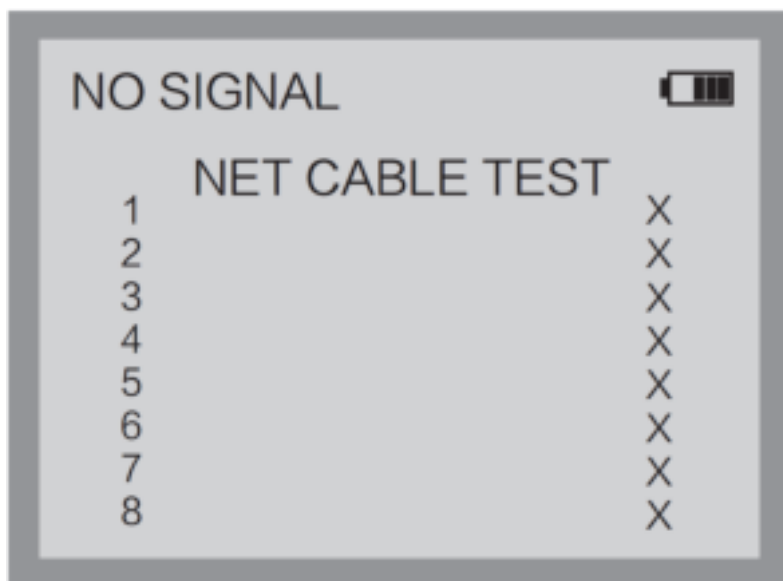
Forth page menu

At first connect LAN cable with the HD coaxial tester and cable tester, press 🔘 to the menu, press the key 🔘 change to the fourth page.

6. Technical Specifications

Product	HD CCTV Camera Tester	
Model	IV8W	
Display screen	5.0 inch VGA TFT-LCD, 800×480 resolution	
LCD adjustment	Brightness, contrast, saturation adjustable	
Video input/output	1 channel BNC input and 1 channel BNC output	
Signal mode	CVBS	**Support Analog camera testing**
	HD-AHD	AHD camera testing, support 1MP,2MP, 3MP, 4MP, 5MP, 8MP.
	HD-TVI	TVI camera testing, support 1MP,2MP, 3MP, 4MP, 5MP, 8MP.
	HD-CVI	CVI camera testing, support 1MP,2MP, 3MP, 4MP, 5MP, 8MP.
	IPC and SDI	Don't support
HDMI and VGA input	Supports VGA/HDMI 1.0 video input. After connecting VGA or HDMI video, please use the switch selector to select the corresponding mode. The highest resolution is 1920×1080P. Ultra-high resolution images cannot be displayed. Note: HDMI only supports 1.0 version analog signals. HDMI signals with higher versions of digital signals will not be displayed.	

PTZ Controller	RS485 Communication
PTZ Protocol and Baud Rate	Compatible with protocols PELCO-D/P 1200, 2400, 4800, 9600, 14400bps
Color bar test	Support standard color bar output (Red, Green, Blue, White, Black, Grey) and testing image output
UTP cable test	Display UTP cable connection status, cable type and the sequence of wires as well as read the number of the test box.
Audio test	1 Channel audio signal input
Power out	DC12V/1A power out for cameras
Power adapter	DC5V/1A
Battery	2×Li-ion battery (Users can add more batteries to increase the usage time.)
Rechargeable	After charging 5 hours, working time about 10 hours
OSD menu Language	English, Chinese
Operating Temperature	-10 to +50℃ (14 to 122℉)
Operating Humidity	30% to 90%
Dimensions/weight	Item: 170×114×34mm / 0.4kg (6.69×4.49×1.34inch / 0.88lbs) Package: 230×180×90mm / 0.65kg (9.06×7.09×3.54inch / 1.43lbs)

7. Common faults and troubleshooting

For new users or during use, you may encounter some problems. These are some common fault phenomena. You can check and troubleshoot according to the methods we provide.

Fault type	Fault phenomenon	Solution
Power and startup	Unable to turn on	1. The battery of the new device is insulated based on transportation requirements. Please remove the battery insulation device when using it for the first time. 2. The battery is low, please charge. The battery of the new device needs to be kept at a low power level based on transportation requirements. 3. The positive and negative poles of the battery are incorrect, please reinstall the battery correctly. 4. You need to press and hold the power button to power on, please make sure the button is correct.
	Unable to charge	1. The battery of the new device is isolated according to transportation requirements. Before charging, please remove the battery isolation device. 2. Use a non-original charger or other charger with wrong output voltage is used, please use the original charger to charge the device.

		3. The positive and negative polarity of the battery is wrong, please reinstall the battery correctly. 4. The charging plug is not reliably connected or there is a fault, please replace the charging cable.
	Turned off quickly after turning on	1. The battery is low, please charge. 2. The DC12V power output power is too large, please stop supplying power to high-power external devices.
	Still turned off when connected to charge	1. The battery power is too low, and the power provided by the charger is not enough for the tester to work. 2. The device uses a charging power of less than 5W, and the DC12V power supply output power is too large, resulting in insufficient power for the device. Please stop powering external devices. 3. Please turn off the screen first and charge for 30 minutes before using.
Camera test failure	No image displayed when testing the camera	1. Check if the camera is connected to the power supply. The camera needs to be connected to the power supply during the test. 2. Check if the BNC cable connection is reliable. 3. Check if the camera type is correct. The tester supports CVBS AHD CVI TVI cameras, but not other types of cameras. Check whether the tester's test mode is consistent with the camera mode.

		Inconsistent modes will cause the image to fail to display or display abnormally. 4. Check if the camera's pixels and frame rate are in the tester compatible list. Cameras with parameters not in the list are not supported. 5. The camera parameters are abnormal or there is a failure.
	Lost image when testing the camera	1. Check if the BNC cable connection is reliable. 2. Check if the camera type is correct. The tester supports CVBS AHD CVI TVI cameras, but not other types of cameras. 3. Check whether the tester's test mode is consistent with the camera mode. Inconsistent modes will cause the image to fail to display or display abnormally. 4. The camera parameters are abnormal or there is a failure.
	Unable to identify camera type	1. The camera may be a non-standard type, resulting in incompatibility and failure to be identified. 2. The tester can manually adjust the test camera type to match the camera.
	Abnormal camera image during testing	1. The tester type is inconsistent with the camera. Please change the test type on the tester to be consistent with the camera type. 2. The BNC cable is of poor quality or the connector has poor contact. 3. The camera parameters are abnormal or there is a failure.

HDMI/VGA and audio test failure	HDMI does not display image	1. The HDMI cable is faulty or not reliably connected. Please reconnect or replace the HDMI cable. 2. The HDMI signal output device outputs an HDMI video signal that is incompatible with the tester. The tester only supports HDMI1.0 analog signals. Higher versions of digital video signals are incompatible and images cannot be displayed. 3. The HDMI signal output device outputs a signal with a resolution exceeding 1920x1080P, resulting in no display. The tester supports HDMI images with a maximum resolution of 1920x1080P. 4. The HDMI and VGA switches are not switched to HDMI mode, resulting in no display. Please switch the switches correctly. 5. The HDMI signal output device outputs a non-standard HDMI image signal, resulting in no display.
	HDMI image display abnormality	1. The HDMI cable is faulty or not reliably connected. Please reconnect or replace the HDMI cable. 2. The HDMI signal output device outputs an HDMI video signal that is incompatible with the tester. The tester only supports HDMI1.0 analog signals. Higher versions of digital video signals are incompatible and images cannot be displayed. 3. The HDMI signal output device outputs a signal with a resolution exceeding

		1920x1080P, resulting in no display. The tester supports HDMI images with a maximum resolution of 1920x1080P.
	VGA does not display image	1. The VGA cable is faulty or not reliably connected. Please reconnect or replace the VGA cable. 2. The VGA signal output device outputs a signal with a resolution exceeding 1920x1080P, resulting in no display. The tester supports VGA images with a maximum resolution of 1920x1080P. 3. The HDMI and VGA switches are not switched to VGA mode, resulting in no display. Please switch the switches correctly. 4. The VGA signal output device outputs a non-standard HDMI image signal, resulting in no display.
	Audio test abnormal	1. Please check whether the microphone or camera audio output interface is correctly connected. 2. Please check whether the audio positive and negative interfaces are correctly connected. 3. Please check whether the audio cable is correctly connected or there is a fault. 4. The camera does not support audio function.
	Cable test abnormal	1. Please check whether the network cable is connected correctly.

		2. Please check whether the RJ45 connector of the network cable is normal. 3. Please check whether the network cable is missing some cores or has a non-standard arrangement.

If you need help with other issues not mentioned above during use, you can contact us for solutions.

Thank you!