

USER'S MANUAL

CCTV TesterPro

Stest-893



--vandal proof gum cover for u freely

Ver:STP28V1.12

2009.5



- Thank you for purchasing the CCTV security tester. Please read the manual before using the CCTV testerPRO, and use properly.
- For using the CCTV testerPRO safely, please first read the 「Safety Information」 carefully in the manual.
- The manual should be kept well in case of reference.
- Keep the S/N label for after-sale service within warranty period. Product without S/N label will be charged for repair service.
- If there is any question or problem while using the CCTV testerPRO, or damages occurred on the product, please contact our technical Department.

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1. Safety Information

Notice

- The tester is intended to use in compliance with the local rules of the electrical usage and avoid to apply at the places which are inapplicable for the use of electrics such as hospital, gas station etc.
 - To prevent the functional decline or failure, the product should not be sprinkled or damped.
 - The exposed part of the tester should not be touched by the dust and liquid.
 - During transportation and use, it is highly recommended to avoid the violent collision and vibration of the tester, lest damaging components and causing failure.
 - Don't leave the tester alone while charging and recharging. If the battery is found severely hot, the tester should be powered off from the electric source at once. The test should not be charged over 8 hours.
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- Don't use the tester where the humidity is high. Once the tester is damp, power off immediately and move away other cables connected.
 - The tester should not be use in the environment with the flammable gas.
 - Do not disassembly the instrument since no component inside can be repaired by the user. If the disassembly is necessary indeed, please contact with the technician of our company.
 - The instrument should not be used under the environment with strong electromagnetic interference.
 - Don't touch the tester with wet hands or waterish things.
 - Don't use the detergent to clean and the dry cloth is suggested to use. If the dirt is not easy to remove, the soft cloth with water or neutral detergent can be used., but the cloth should be tweaked sufficiently.



Dimension/Weight	176mmX94mmX36mm/340g
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The data above is only for reference and any change of them will not be informed in advance. For more detailed technical inquiries, please feel free to call the Technical Department of our company.

Products certification:



4. Specification

MODEL	CCTV Security TesterPRO
Video Test	
Signal mode	NTSC/PAL (Auto adapt)
Display	3.5 inch digital TFT-LCD ,960 x 240 resolution
LCD adjustment	Brightness, Contrast, Saturation adjustable
Video IN/OUT	1 channel BNC Input & 1 channel Output
Video Output Mode	1.0 Vp-p
Video Signal Intensity Testing	
PTZ controller	
Communication	RS232, RS422 simplex and RS485
PTZ Protocol	Compatible with more than 20 protocols such as PELCO-D/P, Samsung, Panasonic, Lilin, Yaan, etc.
Baud Rate	150,300,600,1200,2400,4800,9600,19200bps
Video Signal Generation	
Color bar generation	Output one channel PAL/NTSC colorbar video signal for testing monitor or video cable.
UTP CABLE TEST	
UTP cable test	Test UTP cable connection status and display in the screen. Read the number of the test box.
DC12V 1A power output	
DC12V power output	Output DC12V1A power for camera
Audio input test	
Audio input test	test the pickup and other audio equipments on the front-end
RS485 data analyst	
Data Monitor	Captures and analyzes the command data from controlling device
POWER	
Power Adapter	DC5V, 2A
Battery	Built-in 3.7V Lithium polymer battery ,3000mAh
Rechargeable	After charging 3-4 hour, working time lasts 12 hours
Low Consumption	Energy saving technology
General	
Working Temperature	-30°C ---+70°C
Working Humidity	30%-90%

2. Introduction

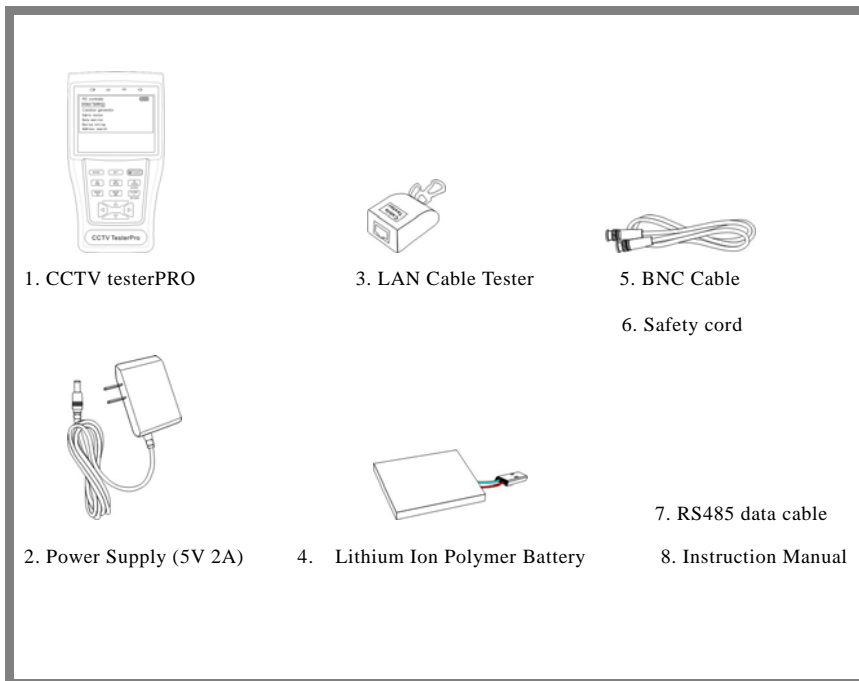
The CCTV testerPRO is developed for the On-Site installation and maintenance of video monitoring system. It can be used for displaying video, controlling PTZ, generating images, capturing data of RS485 and testing LAN cable etc. Its functions, easy operation, and portability makes it simple for the CCTV technician to install and maintain CCTV system, improving work efficiency and get the labor cost down.

2.1 Features

- 3.5" TFT-LCD , 960 (H) × 240 (V) resolution.
- DC12V 1A power output for camera
- Audio input test
- PTZ control. Pan/tilts the P/T unit, zooms in/out the lens, adjusts the focus, aperture and sets and calls the preset position
- Video displaying. Automatically adapts and displays the video format of NTSC/PAL. LCD Brightness/Contrast/Color Saturation are adjustable.
- Video Generating. The PAL/NTSC multi-system colorbar video generator (seven-system switchable, transmit/receive seven-system colorful imagines)
- Data analyst. Captures and analyzes RS485 controlling data to help the technician to find out the problem.
- Cable testing. It is powerful in testing LAN cable, measuring the connecting status , displaying the sequence of connection and the NO. of the LAN cable.
- Multi-interface and Multi-baud rate. Support RS232 ,RS485 and RS422 interface; baud rate ranging from 150, 600 to 19200bps.
- Multi-protocol. Supports more than twenty PTZ protocols. For example, PELCO-P, PELCO-D, SAMSUNG etc.
- Lithium Ion Polymer Battery (3.7V DC3000mAh). The device employs advanced power control and protection circuit. The device is high power-efficient, energy saving and environmental protection. It can last 12 hours for normal use after charging for 4 hours.

2.2 CCTV testerPRO Kits

Professional design, light and portability, video display and data control are deliberately integrated, which makes the instrument so simple, practicable, easy for use that the training is



almost unnecessary for an operator to be skillful.

3. The power output of the tester :the output current is limited to 1A; if the current of cameras is higher than 1A, the tester will enter the protection mode. The tester will lift the protection mode when powered by 5V2A charger.

4. Please ensure that the battery of the tester has been fully charged or filled with more than three cells during the use of this function, otherwise the power supply will be a very short time.

5. Audio input test

Audio testing function:test the normal operation for the sound of front-end audio equipments.

Audio testing function of the video tester can test the pickup and other audio equipments on the front-end of the video tester .

Press manual single-step decreasing button, the Dome Camera stop rolling when the address is found.

Press button to decreasing scan , and the Dome Camera turn right when scan to the address; please press any key immediately to stop scanning.

Press manual single-step incremental button, the Dome Camera stop rolling when the address is found.

Press the direction control button to adjust Dome Camera. Press button to quit from the address-scanning function interface

4. DC12V 1A power output

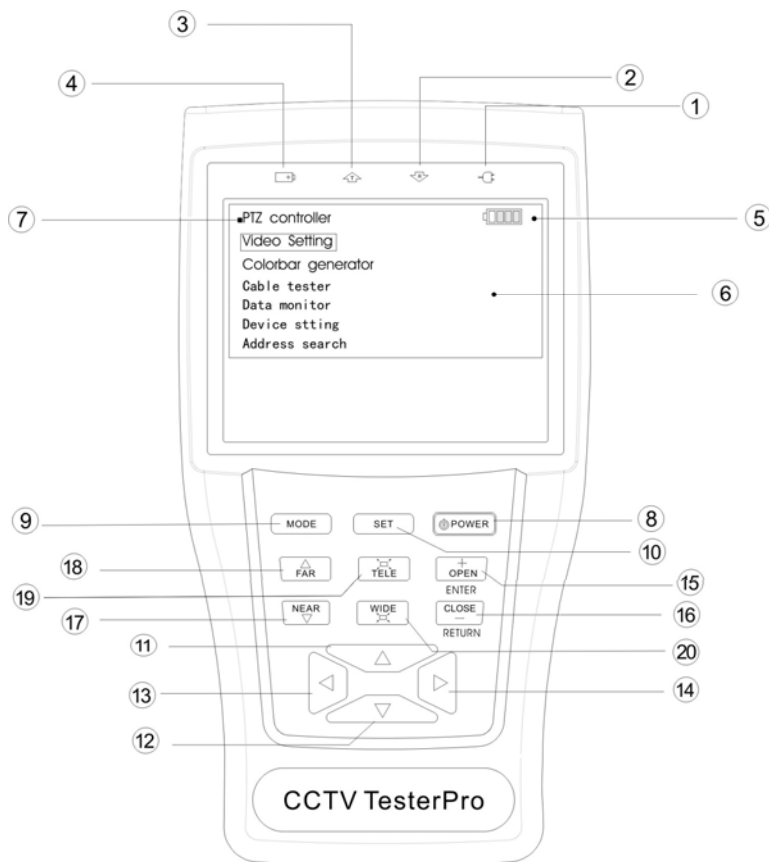
DC12V power output to power for cameras.

The video tester specially designed the 12V1A power output ports for the temporary power supply of cameras, which are mainly used in live demonstration and test. At the same time, to some sites where cameras should be installed, it is very necessary to get temporary power supply for cameras because no power is available before the implementation of the project. So, the Power output of the tester plays an essential role here.

Notice

1. The connection of an external power (such as chargers, etc.) and the "DC12V OUTPUT" power output port is forbidden, otherwise the tester will be damaged, and the external power will also be damaged at the same time. This kind of damage will not be within the scope of our company warranty.
2. The power output from DC12V OUTPUT to the INTPUT DC5V power input port, otherwise the tester will be damaged. This kind of man-made damage will not be within the scope of our company warranty.

Front Panel



1		The power indicator: it lights green while the tester is powered on.
2		The data-reception indicator: it lights red while the data is being received.
3		The data-transmission indicator: it lights red while the data is being transmitted
4		The charge indicator: it lights red while the battery is being charged. As the charging is complete, the indicator turns off automatically.
5		The display Icon of battery electricity: it displays the electric quantity

Keypad tone: Open or close the beep of pressing keypad.

Language: Select language of OSD menu

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

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

- Press or key to move the parameter we want to change.
- Press or to change the value.
- Press ENTER to save the change or press RETURN key to give up the change.

3.9 PTZ address scanning

Note: During the use of this function, only front-end operation for single Dome Camera is allowed; Control center operation is prohibited. Otherwise, the latter will make all the Dome Camera rolling ceaselessly at the same time!

Press keys to “Device setting” menu:



Press key to confirm after change “Address search:” to “on”, which add address scan interface. Press to switch the interface as illustrated:

(**Note:** The system returns to “OFF” after shutdown, and the scan interface closes automatically. Set “ON” again for next use.)

Press key to set: protocol, communication port, communication rate.

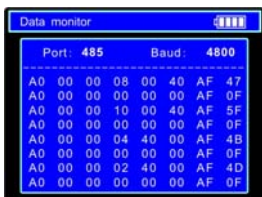
Press key, the address values is constantly on the rise or decrease.

Press button to incremental scan , and the Dome Camera turn right when scan to the address; please press any key immediately to stop scanning.



Straight-through Line
Cross Line
Open Line or Short Line
3.7. Data monitor

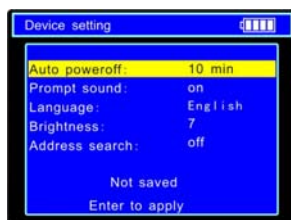
Capture the command data from RS485 controlling system.



- Connect the RS485 or RS232 interface of controlling system with the RS485 or RS232 interface of the CCTV testerPRO (In case of RS485, A to A, B to B)
- Press SET key and then press or key to select communication port according to the system connection. Press SET key to save the change.
- Press or key to select the baud rate according to the baud rate of controlling system and then press SET key to save the change and capture command data from controlling system.
- Press RETURN key to clear the screen.

3.8 Device setting

Set the parameters of the CCTV testerPRO



Auto poweroff: Setting the time of auto shut-down.(Disable,5,10,...,60)

Disable: Disable the "Auto poweroff" function. 5 means the CCTV will power off after 5 minutes when there is no any operation.

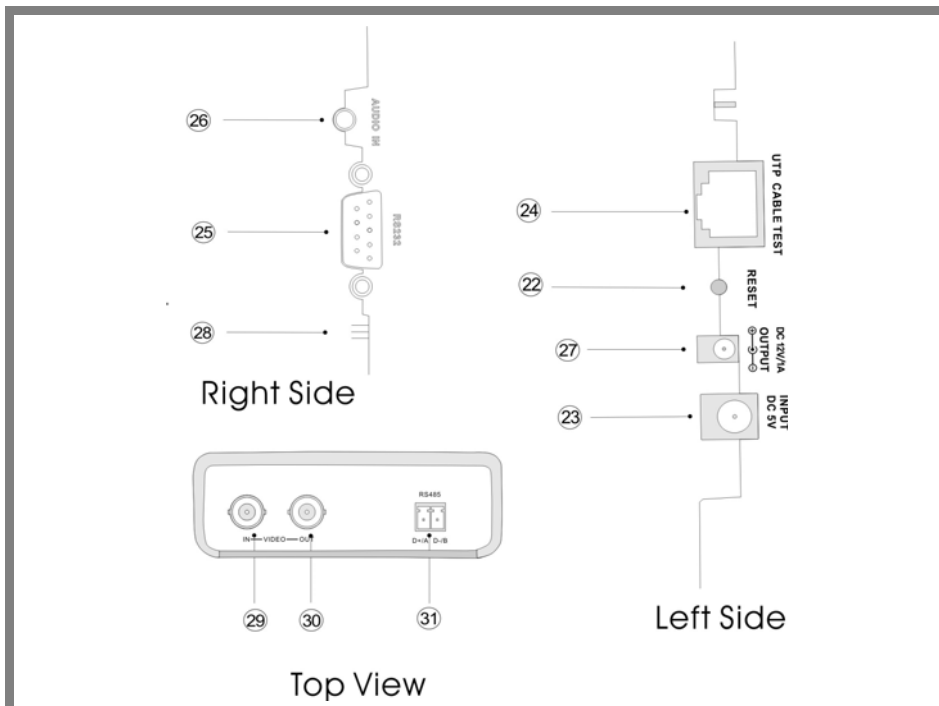
6		Main-menu: it shows main functions of CCTV testerPRO.
7		Sub-menu: Shows and sets the values of functions
8		Long-pressing it more than 2 seconds to turn on/off the tester; short-pressing to turn on/off the PTZ controller menu displaying.
9		Menu key: it pops up the main-menu; constant-press it or press the or key can shift between functions
10		Setup key : press it or press left or right key to enter sub-menu to set the parameters of functions.
11		Upward : Select the item which will be set or add the value of the parameter. Tilt the PTZ upward.
12		Leftward : Enter the sub-menu or select the parameter whose value will be changed. Reduce the value of the parameter. Pan the PTZ left.
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		Downward : Select the item which will be set or reduce the value of the parameter. Tilt the PTZ downward.
15		Confirm/Open : Confirm the setting of parameters; open the aperture.
16		Return/Close : Return or cancel while setting parameters of the menu; close the aperture
17		Near focus: Focus the image nearby.
18		Far focus: Focus the image faraway.
19		TELE: zoom in the image

20



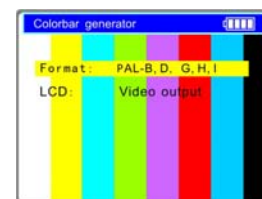
WIDE: zoom out the image

2.3 Side view



22	Reset the default settings of parameters.
23	External power supply (DC, 5V): It is highly recommended to use the equipped power adapter.
24	UTP cable port: Please use together with UTP LAN cable tester.
25	RS232 interface: RS232 communication for the PTZ.
26	Audio input: test the pickup and other audio equipments on the front-end
27	DC12V1A power output: output DC12V power for camera
28	Tester speaker
29	Video input (BNC input interface): Inputs the video.

equipment.

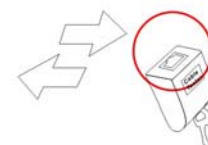


- Press the or key to select the parameter which we want to change the value.
- Press the or key to change the value.
- Press ENTER key to save the change or press RETURN key to give up the change

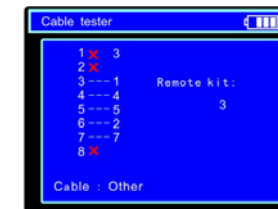
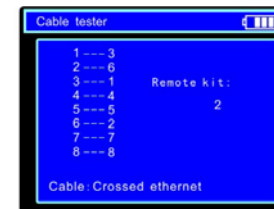
3.6 Cable Tester

Test LAN cable or telephone cable.

Connect LAN cable or telephone cable with the CCTV testerPRO and cable tester. And then the connecting status, cable type and the sequence of wires will be displayed, as well as the serial number of the cable tester kit



The right picture shows line1-7 are closed, line8 is open and the number of the cable tester box is 255



■ Operate auto-running functions by calling preset position(effective for some brands of PTZ camera)

Call preset-33—Open Auto-flip function

Call preset-34—Reset zero point of PTZ camera

Call preset-64—Enter the main menu of the PTZ camera

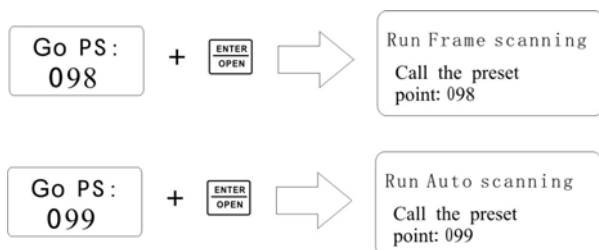
Call preset-95—Enter the main menu of the PTZ camera or stop the PATTERN recording.

Call preset-96—Run pattern-1

Call preset-97—Run preset tour-1

Call preset-98—Run frame Scan

Call preset-99—Run Auto scan







3.4.

Video Setting

User can customize the brightness, contrast and saturation of the LCD according to the using environment and display the format(PAL/NTSC) of video input.



- a. Press the  or  key to select the parameter which we want to change the value.
- b. Press the  or  key to change the value. Press ENTER key to save the change or press RETUR key to give up the change


3.5. **Colorbar generator** (Output video at any mode)



Output or receive seven different forms of video color bar to test monitor, video cable or other


30	Video output (BNC output interface): Outputs the video.
31	RS485/422 Interface: RS485/RS422 communication for the PTZ.



2.4 Installing the Battery


The tester has built-in lithium ion polymer rechargeable battery. The battery cable inside battery cabin should be disconnected for safety during transportation!

 Prior to the use of the instrument, the battery cables inside the battery cabin should be well connected.

 Usually it need not to disconnect the cable at the normal use, pressing  key continuously can power on or off the tester.



 At the first time of use, the batteries should be completely exhausted and then recharged for 4 or 5 hours.



 The Charge Indicator  lights red when charging the battery, The charge indicator turns off automatically when the charging is completed.



△ Notice: When the Charge Indicator  turns off, the battery is approximately 90% charged.
The charging time can be extended for about 1 hour and the charging time within 8 hours will not damage the battery.

△ The tester can work as usual while it is being charged, however. But the charging time will be extended.





△ Press the RESET key at the right of the instrument to restore the default settings when the instrument works abnormally.

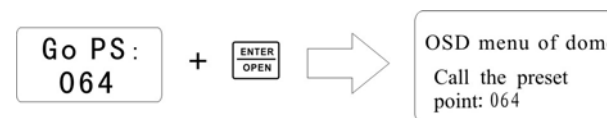
Tips: Press  or  key to accelerate the value changing.

- H. Go PS:** Call the preset position. (0~128) The PTZ camera will go to the desired preset position.
- Move the yellow cursor to “Go PS” and then press  or  key to select the preset position number.
 - Press ENTER key to complete preset position calling or preset RETURN key to give up preset position calling.

Tips: Press  or  key to accelerate the value changing.

The way of calling the OSD menu and preset of the PTZ camera may vary with control systems from different manufacturers. Please read the operation manual of control system manufacturer for details. The way of calling OSD provided for reference is calling preset-64.

- Move the yellow cursor to “PTZ controller” to enter PTZ controller mode
- Press SET key to enter PTZ controller sub-menu. Press  or  key to move the yellow cursor to “Go PS”,
- Press  or  key to select the preset number 64, and then press ENTER key to call OSD menu of the PTZ controller.




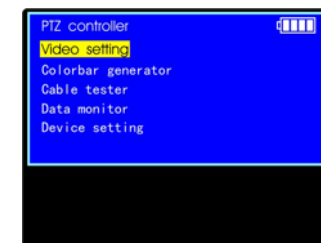
OSD Menu of Dome (For reference only)

MAIN MENU	MAIN MENU
1. DISPLAY SETUP	1. Display configuration
2. CAMERA SETUP	2. Set camera parameters.
3. CONTROL SETUP	3. Set PTZ controlling
4. CAMERA MASK SET	4. Set privacy mask
5. PROGRAM	5. Set auto-running functions
6. PAL CAMERA	6. PAL/NTSC Switch
7. CAM DEFAULT SET	7. Restore the default settings
8. DOME RESET	8. Reset the dome
9. EXIT	9. Exit the main menu



3. Operation



3.1 Power on

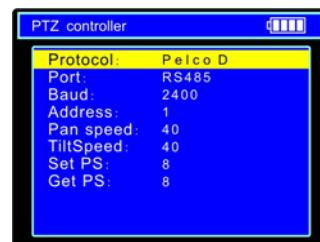
Continuously press  (at least 2 seconds) to power on/off the CCTV testerPRO. When the CCTV testerPRO is powered on, press MODE key the main-menu will pop up.



Menu & Functions

Press MODE key continuously or press the  or  key to select the function (PTZ controller, Video settings, Colorbar generator, LAN cable tester, Data monitors, Device setting) and enter corresponding function setting sub-menu. Press SET key to set the parameters in function sub-menu.
Note: When the CCTV testerPRO is powered on, it will return to the function which is being operated before it is turned off.

- a. Press SET key to enter the sub-menu of PTZ controller.
- b. Press the  or  key to select the parameter which we want to change the value.
- c. Press ENTER key to save the change or press RETURN key to give up the change
- d. Press SET key to exit the sub-menu.
- e. Press POWER key to full-screen the image



A. Protocol: Select the protocol according to the protocol of the PTZ camera. Up to 21 popular protocols are available, like elco P, Pelco D, Samsung, Yaan, LiLin, CSR600 etc.

B. Port: Select the communication port for the PTZ camera controlling (RS232/422/485)



C. Baud: Select the baudrate according to baudrate of the PTZ camera.(150, 300, ... , 19200bps)

D. Address: Set the ID according the ID of PTZ camera (0~254).

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

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

G. Set PS: Setup preset position (0~128)

- a. P/T/Z the camera to desired position
- b. Press SET key to enter PTZ controller submenu
- c. Move the yellow cursor to "Set PS" and then press  or  key to select the preset position number.
- d. Press ENTER key to complete preset position setting or preset RETURN key to give up preset position setting.

	<p>1. PTZ controller</p> <p>Display the input video images. Pan/tilt the P/T unit and zoom in/ out the image. Setup the controlling parameters like protocol, communication port, baud rate, PTZ ID, pan/tilt speed; set and call preset position.</p>
	<p>2. Video setting</p> <p>Adjust the LCD brightness, Contrast, Color saturation.</p> <p>Video Signal Intensity Testing</p>
	<p>3. Colorbar generator</p> <p>Output or receive seven different forms of video color bar to tester monitor, cable or other equipment.</p>
	<p>4. Cable tester</p> <p>Test LAN cable or telephone cable.</p> <p>The connecting condition and the sequence of wires will be displayed, as well as the serial number of the cable tester kit.</p>

	<p>5. Data Monitor</p> <p>Captures the protocol from the controlling system and display command data. It is helpful to debug and maintain RS485 communication.</p>
	<p>6. Device setting</p> <p>Set the parameters of the CCTV testerPRO (Auto power off/ Keypad tone/Language/Brightness/Address search)</p>

3.2 PTZ Controller

Display the input video images. Pan/tilt the P/T unit and zoom in/ out the image. Setup the controlling parameters like protocol, communication port, baud rate, PTZ ID, pan/tilt speed; set and call preset position.

The following connections should be confirmed before use

- a. The Video In interface of the CCTV testerPRO and the output interface of camera
- b. Data A+ of the CCTV testerPRO and A+ of the PTZ camera or controlling device, data B- of the instrument and B- of the PTZ camera or controlling device

Note: Don't connect communications interface with a circuit the voltage higher than 6V.

