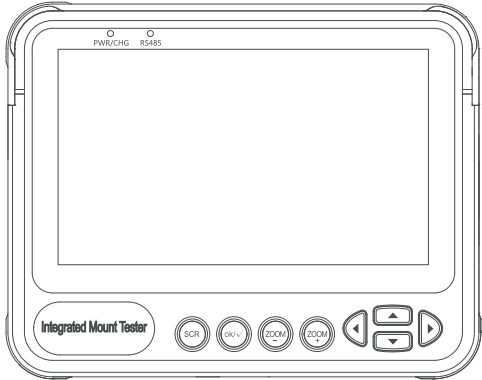


Integrated Mount Tester User Manual



Attention

- ◆ Thank you for purchasing the HD Combine Tester. Please read this manual before using the HD Combine tester, and use properly.
- ◆ For using the HD Combine Tester safely, please first read the "safety information" carefully.
- ◆ The manual should be kept in a safe place for future reference.
- ◆ Keep the S/N label for a 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 HD Combine Tester, or damages occurred on the product, please contact our technical department.
- ◆ If the manual description software version is different from the physical instrument, the operation interface and operation mode described by the manual may be inconsistent with the physical object.
- ◆ If the illustration and interface of the manual are not consistent with the functional model of the physical instrument, the picture of the manual may be inconsistent with the physical object.
- ◆ With "*" means only some models have this function.
- ◆ When using the 12V output, the working time of the built-in battery will be greatly reduced due to the high power consumption of external devices.

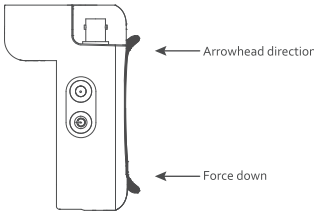
Safety Information

- ◆ When using the Instrument, be sure to comply with local electrical rules. Avoid hospitals, gas stations, and other places where electrical use is not allowed.
- ◆ When using the instrument, please use the original accessories to avoid damage caused by the use of unauthorized accessories.
- ◆ Do not expose the product to rain or moisture. This can cause performance degradation or damage.
- ◆ While charging the device, please do not leave it unattended. If the battery becomes too hot, users should cut off power immediately. Charging time should be no more than 8 hours.
- ◆ Do not use in high humidity areas. If the equipment gets wet, the battery, power cable, and all other cables should be disconnected immediately.
- ◆ Do not use in environments containing flammable gases.
- ◆ Do not attempt to disassemble the instrument. There are no user-serviceable parts inside. If users feel that disassembly is necessary, they should contact our technical department.
- ◆ Do not use in environments with strong electromagnetic interference.
- ◆ Do not use detergent for cleaning. Use a dry cloth to wipe off dirt. If the dirt is difficult to remove, then use a soft cloth moistened with water or a neutral detergent and fully wring it out before use.
- ◆ The top LED is high brightness LED. Do not look directly at the LED light when it is turned on, so as to avoid visual injury or other accidents.

Device Diagram and Function

1. Use the wristband

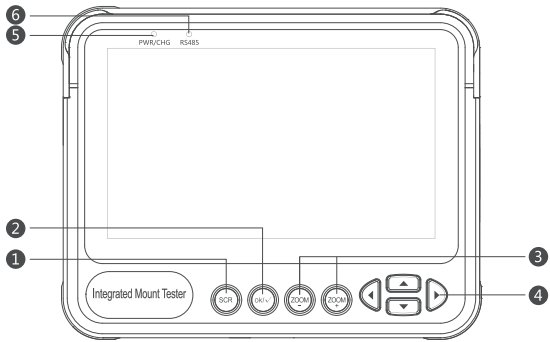
The wristband adopts quick disassembly structure. Press and hold the disassembly button at the bottom of the tester, and lift it up to separate the wristband from the tester.



When installing the wrist belt, keep the arrow direction of the wrist belt and the arrow direction of the tester (as shown on the right), buckle the upper part of the card position first, and then buckle the lower part of the card position, and hear the clear "ka" to represent the successful installation of the wrist belt.

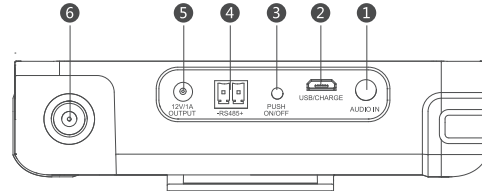
Attention: When working at height, please confirm whether the wristband is installed successfully to prevent falling accidents.

2. Appearance Introduction

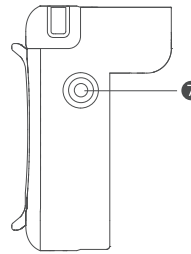


①	Function switching key
②	Confirmation key
③	Control zoom of platform control
④	Control the direction of the operation button
⑤	Red: Power off and charge
Yellow: Power on and charge	
Green: Power on, no charge	
Light off: power off, complete charging/no external power supply	
⑥	Data light: Flicker when sending data

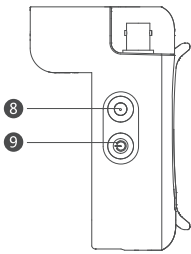
Top Side



Left Side



Right Side



①	Audio Input. 3.5mm audio connector.
②	Used to connect the device to a computer or charge the tester.
③	LED light, Press to turn on the lighting.
④	RS485 Output. Used to control PTZ.
⑤	DC12V/1A provides power supply to the camera output, which will automatically stop when it exceeds this output power.
Attention: Do not connect the external power supply (such as charger, etc.) to the port, otherwise the tester will be damaged.	
⑥	Analog Video Input BNC Connector.
⑦	LED light, Press to turn on the lighting.
⑧	LED light, Press to turn on the lighting.
⑨	Power button, used for power on or off tester, Long press 18 seconds to force shutdown.

Operation Instructions

Installing Battery and Recharging

The tester device uses a rechargeable lithium-ion polymer battery. To ensure safety when transporting, ensure the battery is disconnected from the tester device.

The device may leave the factory with one of the following two battery placements:

Take off the yellow rubber cover, remove the battery cover of tester, install the battery.

Attention:

Please distinguish positive and negative electrodes when installing batteries.

When the battery level is too low, the charging indicator will blink for 3 times and then stop. Tester cannot start, please charge.

⚠ Do not use non-standard power charger to charge the tester, otherwise it may cause damage to the tester.

Turning the Device On and Off

To turn on the device, long press ⑨ 5 seconds, the power icon PER/CHG will light up green when the device is turned on.

To turn off the device, press ⑨ and hold more than 5 seconds, power off.

When the device is on, press the ⑥ key to switch to the function select menu. Press ⑥ multiple times or use the ④/⑤ arrow keys to select a function.

Press the ⑥ key to enter the selected function.

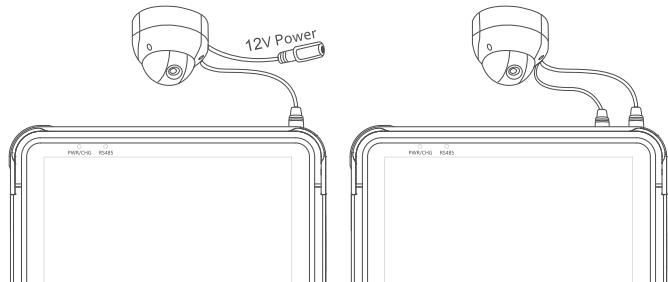
Analog video Test

This function is used to test Analog SD and Analog HD, it is appear video image, showing the video format and signal level. It is also used to send coaxial HD commands though the RS485 cable to control the PTZ.

1. Connecting to Analog Camera

Analog cameras are connected using the BNC connector. Use a BNC cable to connect the camera to the tester via the video input connector on the top side of the tester.

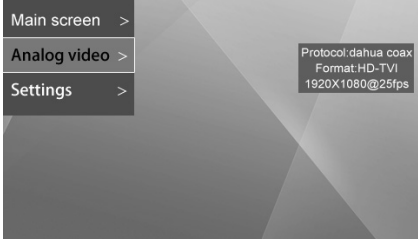
The camera can be self-powered using its own power adapter or use the tester's 12V 1A power output.



⚠ When using the tester to power the camera, please don't exceed the maximum output power of the tester.

2. Analog Video Test

1. Enter the main screen when turning on the tester.
2. Select the analog video interface.
3. In the image display interface or setting interface, press  key to call up the menu.



3. Camera OSD menu

Enter the setting interface to set the protocols used by the analog camera, such as CVI protocol (dahua coax), AHD protocol (Pelco c) and TVI protocol (Hikvision) or choose an adaptive protocol.

After entering the analog video interface, press OK to call up the OSD menu of coaxial camera, and then each function module of the camera can be set according to the menu.

If the camera is speed dome, enter the setting interface, select "PTZ camera Control" - OSD Control, click OK to call up the OSD menu of PTZ camera.

4. HD Coaxial PTZ Control

Enter the setting interface to set the corresponding control protocol and relevant parameters. After setting, the camera can be controlled.

The settings are as follows:

Protocol	Select Coaxial PTZ protocol CVI protocol (dahua coax) AHD protocol (Pelco c) TVI protocol (Hikvision)
Baud Rate	Coaxial Control no need use Baud RATE.
Address	Address of PTZ to control. Due to different camera manufacturer setting, the address may offset by +/- 1. Address range is depend on the protocol. Coaxtron no need to set up.
Speed	Expected PTZ speed, range from 1~63.
Set Preset	Camera's current position to its internal storage.This function is provided by the camera. Refer to the camera manual.
Go Preset	The camera will go to the corresponding pre-saved position at maximum speed. This function is provided by the camera, please refer to the camera manual.

After setting, press the  key to exit. Settings are applied immediately.

After the setting is valid, used   key and Directional key to control the PTZ.

5. RS485 PTZ Control

Enter the setting interface to set relevant RS485 parameters. After setting, RS485 control can be carried out on the camera.

The settings are as follows:

Protocol	Select RS485 PTZ protocol. The tester supports many PTZ protocols.
Baud Rate	RS485 communication baud rate.
Address	Address of PTZ to control. Due to different camera manufacturer setting, the address may offset by +/- 1. Address range is depend on the protocol. Coaxtron no need to set up.
Speed	Expected PTZ speed, range from 1~63.
Set Preset	Camera's current position to its internal storage.This function is provided by the camera. Refer to the camera manual.
Go Preset	The camera will go to the corresponding pre-saved position at maximum speed. This function is provided by the camera, please refer to the camera manual.

Use supplementary RS485 power cable connect to controlled PTZ RS485 communication lines.

Use and Directional key to control PTZ turn up.

6. UTC Function Using

Enter to Setting function, select "SD-UTC" protocol.

Press  key to switch "TVI",  key to switch "AHD", the  key to switch "SD", and the  key to switch "CVI". The default mode of the system is A, please switch to mode B when controlling the speed dome.

Attention: This function supports switching from SD mode to HD mode. Please use OSD to switch before HD mode.

Analog Video Test

The tester is equipped with an audio test function. It can be used to test microphones or other audio devices. After the connection is completed, the tester will be turned on and sound will be emitted from the built-in speaker.

Attention: Use 3.5MM audio cable in accessories to connect audio device. Black clamp is earth connection, red clamp is signal connection.

Please connect earth first, avoid large noise during connection.

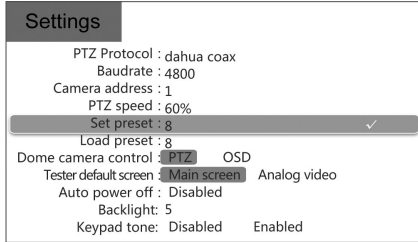
If connect successful and the tester is power on, audio is play out from internal speaker.

System Setting

System settings function is to set up some Operating parameters.

Press  button to choose "settings" function, press  button and access into "settings" interface.

FIG:



Use  button to choose the needed options or the needed functions.

After modifying the settings, press  to save up the setting.

Automatic shut-down Time Setting

Choose the Automatic shut-down function, press  button to adjust the options.

Adjust the step length to 5 Min, Minimum 5 Min, Maximum 60 min. Select disable to turn off automatic shutdown.

Tester will be power-off when it's idled to the setting time.

Setting keyboard Voice prompts

Choose the keyboard voice function, optionally turn keyboard sounds on or off.

Modify back-light brightness

Choose back-light brightness function, then can adjust screen back-light brightness.

Description: The tester display screen back-light brightness has 10 levels for adjustment and increase screen brightness in outdoor environments with strong light.

System Upgrade

1. Put the device into the burning mode

1.1 Connect the USB end to the tester.

1.2 Connect the other end of the USB cable to the computer.

1.3 Press the light button next to the power button to light up the light, Then press the power button and the light button for 3 seconds at the same time, The device enters the burning mode at this time.

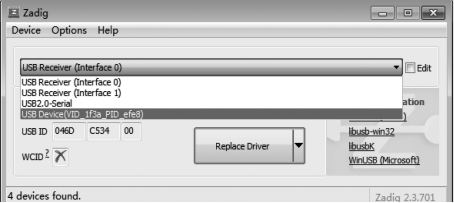
2. Use zadig-2.3 to install the USB driver of the corresponding device

2.1 Click on the computer to run zadig-2.3 software.

2.2 Click on Options in the menu bar, Select List All Devices, then Select the USB of the corresponding device in the list below.



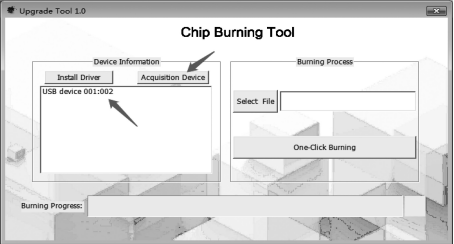
2.3 Finally click the Install Driver button to install the corresponding driver.



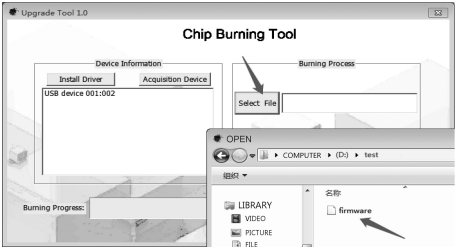
3. Burning operation

3.1 Click on the Upgrade Tool 1.0.exe to run the software.

3.2 Click the Acquisition Device button on the left to get the device USB information in the list.



3.3 Click the file Select File button on the right. In the pop-up selection folder, select the bin file you want to burn.



4. After the burning is completed, exit the burning mode.

4.1 Disconnect the USB connection between the burning device and the computer, and exit the burning mode.

4.2 Press the power button to restart the device to view the burned information.