FHD PT CAMERA INSPECTION SYSTEMS
WITH DVR & MANUAL FOCUS
ASSEMBLY AND OPERATING INSTRUCTION

Contents

Attention

1）Please read the user manual carefully,

2）Please format the USB flash disk or USB hard disk on the DVR control box if use a new USB flash disk

3）Using wireless keyboard,please make sure the battery for keyboard is full. If battery is low, it needs to change a new 7th battery.

4）Using original charger adaptor to charge battery.

Read these instructions completely before operating the device
PLEASE CHARGE BATTERY FIRST BEFORE USE!

Specification

Monitor	
Screen size	8 inch LCD IPS screen
Display Ratio	16:9
Resolution	1920x1080
Menu	Chinese English and others
Sunshade function	Yes

Audio power amplifier	
Power Amplifier	Stereo Class-D Audio Power Amplifier
Power	3W*1

HD DVR		
Support playback file format	video	H.264 encode， MP4 format
	Audio	audio and video
	Picture	JPEG
Audio input	Built-in Microphone	
Video input	AHD analog high-definition signal(suport	
Signal input	CAM	
Video system	AHD PAL、AHD NTSC（Support CVBS	
Video Input	Stereo aduio output (Internal Audio or	
Video Output	Composite video signal output	

Power support	
External charge	DC12V (Input voltage AC 100V~240V, Output voltage DC:12.5V，Current 3000mA)
Battery	11.1V 10000mA

Power	20W （Max）
Battery charge time	8hours
Battery work time	6 hours

Pan Tilt camera head with manual focus （512hz transmitter）	
Camera Diameter	Dia.33mm x L225mm
View range	+/- 180°, rotation endless (slip ring)
Lighting	4pcs white LEDS
Camera Sensor	1/3 CMOS,1.3MP 960P
Operating temperature	5°C ~ 50°C
Camera housing material	304# Stainless steel
Waterproof	IP68

Cable wheel
Special gold point touch connector to camera
Fiberglass rod push cable   Ø7mm
Cable length: ☐ 30 meters

Other function	
Meter counter	Feet and Meter switch. Display on the screen
Keyboard	Support wired and wireless keyboard.

Know Your Device

Menu & Photo Video Playback
Adjust LED
Photo-video recording
Keyboards
Camera head skid
Chargers
7mm cable
33mm rotating camera
Charging port
Rotation control
8" HD screen

Camera skids

It includes below items.

2pcs/set (Diameter 65mm and Diameter 105mm)

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How to install camera skid

| **Step1:**Loose the screws	**Step2:**Install skid to camera head
Step3: Rotate the skid's gap to screws	**Step4:**Use tool to screw it tightly

DVR Control Unit

9
10
11
8
7
188

5
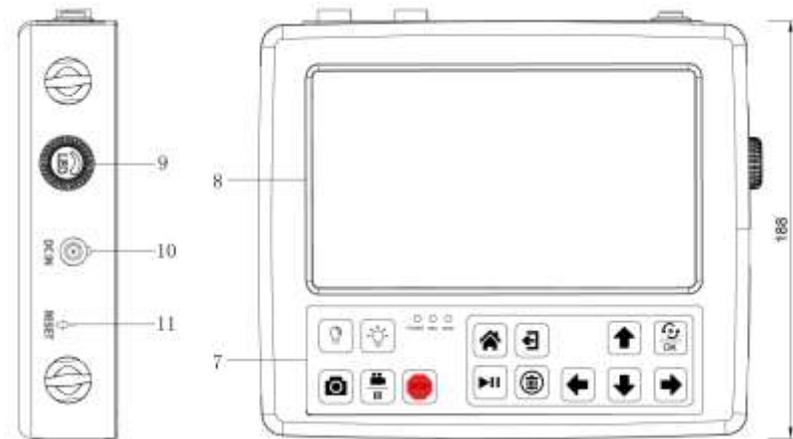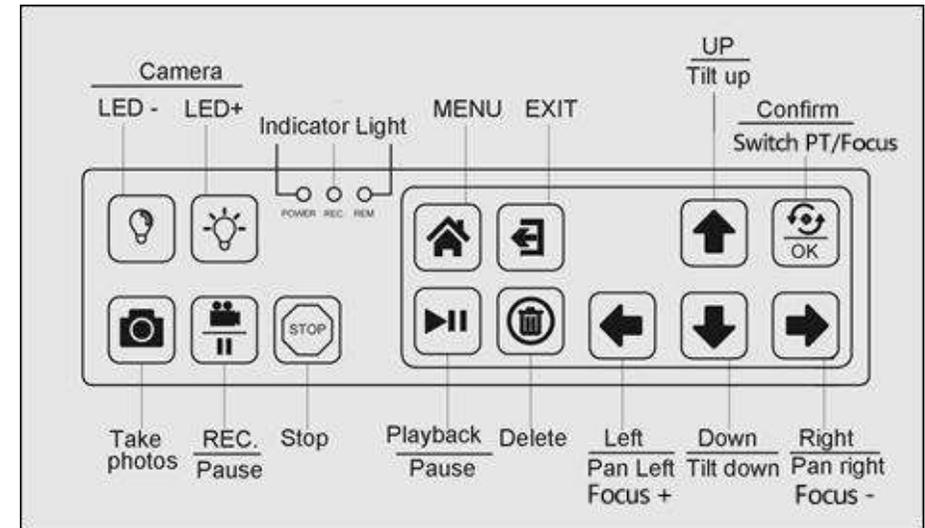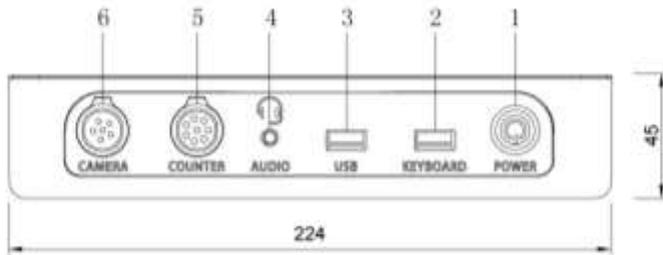
No	Name	Function	How to use
1	POWER	On/Off	Press the button for 3 seconds to turn on /off the control box
2	KEYBOARD	Connect wireless /wired keyboard	Insert 2.4G wireless keyboard adaptor
3	USB	Connect USB disk	Insert external USB disk to record and save the video& picture files. Please don't remove the USB flash disk when it is recording.
4	AUDIO	Earphone/Microphone	Insert the 3.5mm earphone
5	COUNTER	Meter counter port	Use 8pin link cable,one port to "COUNTER"port, the other to cable reel "Meter counter port".
6	CAMERA	Signal input port	Connect 6pin link cable to cable reel
7	CONTROL PANEL	DVR MENU	Details reference picture(1-1)
8	MONITOR	Display the image	8inch HD screen
9	LED DIMMER	Adjust the camera LED brightness	Adjust 18mm, 23mm,29mm,40mm and 55mm camera LED brightness
10	DC IN	Charge for the battery	Connecting extra charge adaptor
11	RESET	Restart the DVR unit	When the system is halted

（1-1）

Remote controller

Button	Function
REC	Recording video
SNAP	Screenshot / Photography
▲	Up / Zoom in
▼	Down / Zoom out
◀	Left/Backward(Playback Model)
▶	Right/Forward(Playback Model)
OK	Confirm
MENU	DVR menu
STOP	Stop recording
ESC	Exit
PLAY	Playback the video
DEL	Delete the video or picture file

Meter counter device part

No.	Function	Details
1	RESET	Press this button ,the counter is zero
2	M/F	Switch Meters and Feet ; Default value is Meter

Reel brake

Lock : Put it down   Unlock: Pull it up

Keyboard

1.Open the back cover of the keyboard, insert the battery, and take out the USB connector

2..Insert the USB connector into Control box" keyboard" port.
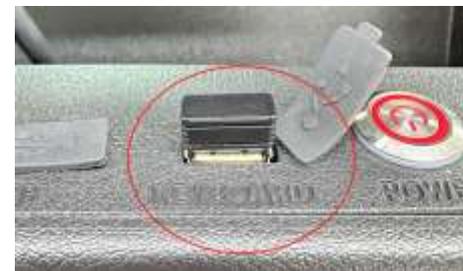
F8----Display the character
F9--- Hide the character
F10-- Clear all characte

DVR recording video & photography function instructions

Operating instruction

1.Insert the USB disk to USB port.

2.**Record the video:** press " ⏸ " button to record the video, press it

   again ,pause recording and press " STOP " button to stop recording.

3.**Record the auido:** Insert the external micrphone to MIC port.When it is

recorded the video, you can record the audio at the same time.

4.Take pictures: Press remote control "SNAP" button or control box

" 📷 " to take picture (No matter whether it is recording or not)

5. Press MENU button to enter the main menu ,and choose "VIDEO" to

play the video.

6. Press MENU button to enter the main menu ,and choose "PICTURE" to

scan the pictures.

7. Rotation camera head: press the direction arrows to pan tilt rotation

8.Adjust the focus manually : Press " 🔄OK " to switch pan tilt rotation

and manual focus. Then press   " ← " / " → "   to adjust the focus.

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DVR menu instructions

   Press menu button to enter the main menu
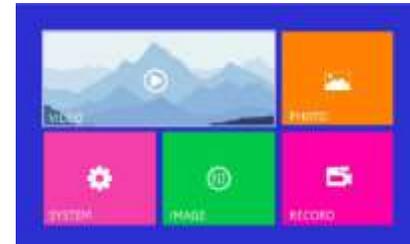
 1. Video: Playback the video file

 2.PHOTO： Playback the picture file

 3.SYSTEM: Setting language,date,time …

 4. IMAGE: Image setting,such as CVBS out, HDMI

Resolution,brightness,chroma, contrast, noise reduction

 5.RECORD: Video setting, such as video clip time, frame rate, compress,

photo quality, record model,overwrite.

Operating instruction

1) Press menu button to enter main menu, then press

   UP/DOWN/LEFT/RIGHT arrow to choose the submenu

2) Press 🔄OK button to confirm.

3) Press 🔙 button to exit the submenu

System Setting

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1、**LANGUAGE:** Setting the menu language.
   The box has 9 languages.(English,Chinese,French, Espanol
   German,Polish,Korea,Russian and Italian.

2、**ENCODER**：Setting the counter value
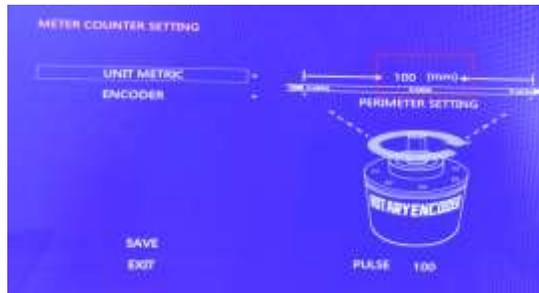
The PREMITER SETTING value is different for different cables.
For 7mm/9mm/11mm fiberglass cable, the value is 100m.

3、DISK: Format the USB flash driver.

The default value is "DISK1".

4、RESET：Restore the factory default Settings
5、TIME SETTING：Setting the time,date
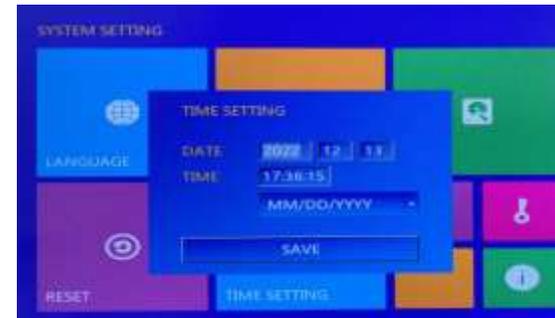
Press UP/Down/Left/Right arrows to set the date and time.
Press"Save "to save the setting
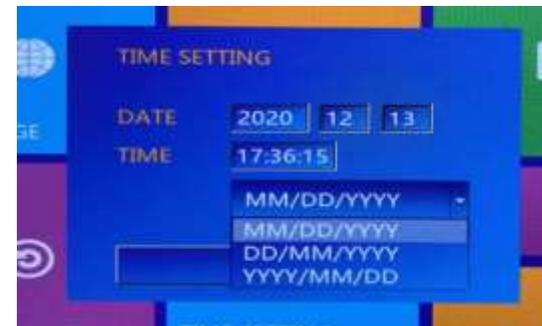
**For date format, it has 3 different ways.**

IMAGE SETTING
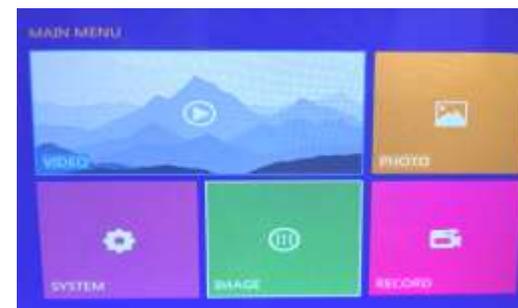
Adjust the LCD screen brightess,Contrast
Default resolution:1280x720_60
Usually we suggest the customers don't change these value

RECORD Setting
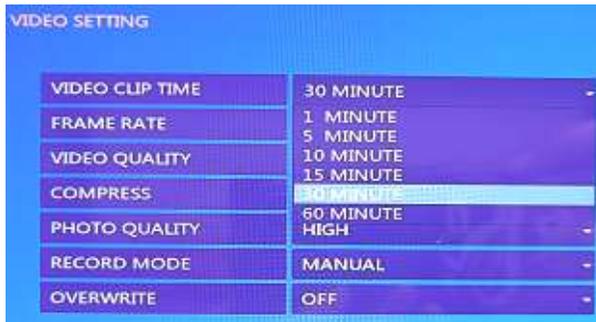
Video clip time:1 MINUTE   / 5 MINUTE / 10 MINUTE
15 MINUTE / 30 MINUTE / 60 MINUTE
Default value: 30 MINUTE
FRAME RATE:NTSC 30FPS / PAL 25FPS
Video Quality: It has 5 options. Usually we choose Level 3.
The level is bigger, the video resolution is higher
Compress:H265
Photo Quality: High / Middle / Low
Default Value : High

Record Mode: Manual / Auto
Default Value : Manual
Overwrite:OFF/ON
Default Value : OFF

Troubleshooting guide

Q：All parts are connected well ,but there is no image on the screen.

   A:

   Find 1m test cable, connect camera to control box directly, please check if the camera has image.

Q: I can't typewrite words

A: 1. Check the wireless keyboard battery is full or not.

   2. Check the wireless keyboard receiver if it is inserted well .

   If not , please restart the system after reinserting

   3. Please press below keys on the keyboard

   F8----Display the character

   F9--- Hide the character

   F10-- Clear all characters

Q:The control box can't read USB flash disk

A： Please use another USB flash disk to test. If the product still can't read this , please contact with us.

Q: The meter counter is not accurate

A: Please check if the counter value is correct or not.

Packing List

Item	Name	Quantity
1	Camera head	1pcs
2	Cable reel	1pcs
3	DVR control unit	1pcs
4	Video Link cable(6pin)	1pcs
5	Meter counter link cable(8pin)	1pcs
6	Camera skid	1set
7	Keyboard	1pcs
8	32G USB flash drive	1pcs
9	Charge adaptor	1pcs
10	User manual	1pcs