High-definition Entertainment Car Video Recorder

*Product Overview:

This is driving recorder with more specialization and entertainment features, which adopts the most advanced image digital processing technology integration scheme— H.264, the high definition image digital compression technique, and comprehensive software processing way. In addition, it has full functions of a HD mini DVR (mini-type high definition digital video recorder), which supports 1080P recording with Micro SD of large capacity as the saving equipment, so scenery recording along the road won't be missed duringyour driving. Moreover, it is also a camera of 1.2 mega pixels when taking digital pictures and you can replay the pictures or videos directly by connecting its HDMI high definition digital TV interface with the TV set when you are at home after travel.

The three-in-one free switch of dimensional digital recording functions make your travel or family life more convenient. Smart and small size is easier to carry.

* Warning:

- 1. Working temperature: +45°C or -5°C.
- 2. Do not seriously knock it or put heavy objects on it.
- 3. Do not let foreign matter enter the device.
- 4. Do not let the device touch with harsh chemicals such as Benzene, diluents.
- 5. Do not contact with water or heating devices.
- 6. Keep it away from places with heavy dust, moisture or sunshine.
- 7. Do not attempt to dissemble, repair or change it.

* Battery Precautions:

1. Battery is dangerous explosive element, so please do not change it privately. Please go to designated special maintenance and replaces the battery with the same type or equivalent type.

- 2. To avoid the decline of the battery performance, please periodically recharge the battery.
- 3. If you do not use the device for a long time, it may result too low power to boot. Please charge for an hour before use.
- * Thank you for purchasing Entertainment Driving Recorder, the packing box contains the following attachments:
- ♦ 1080P FULL HD car video camera device
- ♦ One USB data cable
- One Manual
- ♦ One Car Adapter

* Button drawing:

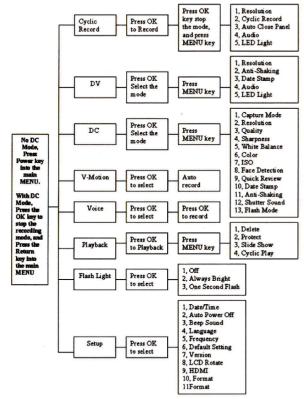
- 1. Up key, Volume + Key: To select next step, increase image, and adjust volume of speaker
- 2. Down key. Volume Key: To select next step, decrease image, and adjust volume of speaker
- 3. Return Key: Exit the current mode
- 4, EV Adjust Key: Adjust the EV
- 5, Manu Key: Enter the Menu mode
- 6, Play/Ok Key: Play the video, and confirm the current action
- 7. Mandatory Recording key: Enter the mandatory recording mode;
- 8. Power Key: Set the unit Power on or Off

* Other Parts:

- 1. TF Socket: To put the TF in the Socket
- 2. HDMI Out: HDMI Out Port:
- 3. Microphone: Microphone Input
- 4. Red LED: Power on LED
- 5. Blue LED: Recording LED
- 6. LCD Screens: 2. 7Inch TFT LCD
- 7. White LED: For right using
- 8. Camera
- 9. USB Connector: For data Port with computer, and charge port
- 10. Speaker



1. Quick Guidelin



- Before using the product, please inset the TF Card with Class 4 or High speed version.
- Before using the product, please set the date and time first!
- In off mode, The unit will auto turn on and into the record loop mode after connected the power of DC via Mini USB:
- In Off Mode, press the POWER() key to turn on the unit, and it will enter the main menu mode; user need to select the mode:

2. Cyclic Record

2.1 Start the record Loop:

- The unit will auto enter the recording mode by turned on the DC power from Off mode;
- With DC and off mode, the unit will auto enter the recording mode after pressed the **POWER** key;
- Without DC and off, user need to press the OK key to start the recording after pressed the POWER key;

After enter the recording mode, the Red Dot will be shows and flash on the top left corner of the screen. The Red Dot is indicating that the unit is working on the recording mode. In the default setting, after one minute, the screen will automatically off.

2.2 Stop Loop Video:

Press the OK key again to stop the recording mode. After stopped the mode, press the return key to enter the main menu mode.

2.3 Record Loop Mode Setting

In stop recording mode, press the MENU key to enter the setting mode, after enter the setting mode, press OK key to select the item you want to set.

2.3.1 Resolution Setting: User can set the resolution in this mode. There are kinds of five mode for user to set: $HD1080P(1920X1080)\ 10fps,\ HD720P(1280X720)\ 30fps,\ WVGA(720X640)\ 30fps,\ VGA(640X480)\ 30fps\ and\ QVGA\ 320X240\ 30fps.$ The default is 720P. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.

- 2.3.2 Cyclic Record: It is for record timing setting mode, user can set the record timing for each file, after end of this timing, the unit will save the current file and set next file. ere are kinds of five mode can be set: on/off, 3minutes, 5minutes, 10minutes and 15minutes. The default is 3 minutes. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- 2.3.3 Auto Close Panel: The unit is support the Auto off the screen feature, and user can set the feature is on or off after time out to off the screen, the default time out timing is one minute. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- **2.3.4 Audio:** It is for setting the voice recording on or off. After set off, the unit will not record the talking voice in the Car during Video recording mode. The default setting is on. Using the **up** and **down** key to set the item, and then press the **OK** key to save the selection and exit the previous level.
- 2.3.5 LED Light: It is using for increasing the brightness for night recording function, the unit will auto detect the brightness, if is not enough, the LED in the front will be turn. Use can set the feature on or off in the setting. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous 2.3.6 G-Sersor Efforts to select: When the car suffered a great impact then the machine will automatically save the current and previous once video segment to event folder. There are high, medium and low select.
- 2.3.7 Standby videos: In case the car doesn't move for more than 5 mins, the device will enter the "Motion detect" mode by VGA 640x480@15FPS video resolution. it wil return automatically to user seting when the car starts to move. Off by default level.

3. DV

3.1 Start the record:

In main menu mode, press the UP or Down key to select the DV item, and press the OK key to enter the DV mode, press OK key to start the recording. After enter the recording mode, the Red Dot will be shows and flash on the top left corner of the screen. The Red Dot is indicating that the unit is working on the recording mode. In the default setting, after one minute, the screen will automatically off.

3.2 Stop Loop Video:

Press the OK key again to stop the recording mode. After stopped the mode, press the return key to enter the main menu mode.

3.3 DV Recording Mode Setting

In stop recording mode, press the MENU key to enter the setting mode, after enter the setting mode, press OK key to select the item you want to set.

- 3.3.1 Resolution Setting: User can set the resolution in this mode. There are kinds of five mode for user to set: $HD1080P(1920X1080)\ 10fps,\ HD720P(1280X720)\ 30fps,\ WVGA(720X480)\ 30fps,\ VGA(640X480)\ 30fps\ and\ QVGA\ 320X240\ 30fps.$ The default is 720P. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- $3.3.2\,Anti$ -Shaking: The unit is support the Anti-Shaking feature, and user can set the feature is on or off. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- 3.3.3 Date Stamp: User can set the date/time is showing or not during DV recording mode by menu. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- 3.3.4 Audio: It is for setting the voice recording on or off. After set off, the unit will not record the talking voice in the Car during Video recording mode. The default setting is on. Using the \mathbf{up} and \mathbf{down} key to set the item, and then press the \mathbf{OK} key to save the selection and exit the previous level.
- 3.3.5 LED Light: It is using for increasing the brightness for night recording function, the unit will auto detect the brightness, if is not enough, the LED in the front will be turn. Use can set the feature on or off in the setting. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.

4. DC (Digital Camera)

In main menu mode, press the UP or Down key to select the DC item, and press the OK key to enter the DC mode, press OK key to take a photo.

4.1 DC Mode Setting

In DC mode, press the MENU key to enter the setting mode, after enter the setting mode, press OK key to select the item you want to set.

- **4.1.1 Capture Mode:** In this mode, user can set: Single, 2S, 5S, 10S or Sequence. After selected 2S,5S or 10S, the unit will auto take the photo after timeout. If selected the Single or Sequence, need press the **OK** key to take a photo.
- **4.1.2 Resolution Setting:** User can set the resolution in this mode. There are kinds of four mode for user to set: 12M, 8M, 5M, 3M. Using the ${\bf up}$ and ${\bf down}$ key to set the item, and then press the ${\bf OK}$ key to save the selection and exit the previous level.
- 4.1.3 Quality: user can set the quality with: The beat, Fine or Normal. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- **4.1.4 Sharpness:** user can set the item with: Strong, Normal or Soft. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- **4.1.5 White Balance:** User can set the white balance according the weather status with: Auto, Daylight, Cloudy, Tungsten or Fluorescent. Using the \mathbf{up} and \mathbf{down} key to set the item, and then press the \mathbf{OK} key to save the selection and exit the previouslevel.
- **4.1.6 Color: user can set the color of photos as:** Normal, Black & White or Sepia. Using the \mathbf{up} and \mathbf{down} key to set the item, and then press the \mathbf{OK} key to save the selection and exit the previous level.
- 4.1.7 ISO: user can set the ISO with: Auto, 100 or 200. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- **4.1.8 ISO:** user can set the ISO with: Auto, 100 or 200. Using the **up** and **down** key to set the item, and then press the **OK** key to save the selection and exit the previous level.
- 4.1.9 Face Detection: user can set face detection for: Off, Face Detection and Smile Detection. Using the up and down key to set the item, and then press the OK key to save the selection and exit the previous level.
- **4.1.10 Quick Review:** User can set the time for keeping the photo has been taken it. There are kinds of three for setting: Off, 2S and 5S.. Using the **up** and **down** key to set the item, and then press the **OK** key to save the selection and exit the previous level.
- **4.1.11 Date Stamp:** User can set the date/time is showing or not during DV recording mode by menu. Using the \mathbf{up} and \mathbf{down} key to set the item, and then press the \mathbf{OK} key to save the selection and exit the previous level.

- **4.1.12 Quick Review:** User can set the time for keeping the photo has been taken it. There are kinds of three for setting: Off, 2S and 5S.. Using the **up** and **down** key to set the item, and then press the **OK** key to save the selection and exit the previous level.
- **4.1.13** Anti-Shaking: The unit is support the Anti-Shaking feature, and user can set the feature is on or off. Using the \mathbf{up} and \mathbf{down} key to set the item, and then press the \mathbf{OK} key to save the selection and exit the previous level.
- **4.1.14 Shutter Sound:** user can set shutter sound on or off. Using the \mathbf{up} and \mathbf{down} key to set the item, and then press the \mathbf{OK} key to save the selection and exit the previous level.
- **4.1.15 Flash Mode:** user can set LED on the front is on or off in the taking photo mode. Using the **up** and **down** key to set the item, and then press the **OK** key to save the selection and exit the previous level.

5. V-Motion

There unit support the Motion detection feature, after selected the function, the unit will auto start the recording mode if the data of photo is not static.

6. Voice:

The unit can be used as Voice record, after took the function, the unit will start the voice record function.

7.PlayBack

User can use the playback function to review the video and photo. After enter the playback mode, user can use the Up or Down key to find the photo you want to review, or press the OK key to playing the video file.

- During review mode, user can delete or protect the file by press MENU key.
- User can also set the slide show mode after pressed MENU to set the slide time: 2S, 5S and 8S.
- User can also set the Cyclic Play as on or off after pressed MENU to setting.

8. Flash Light

The unit can be used as flashlight, user can set: off, on or flashing by menu.

9.Setup

There are more setting items in the Setup, after entered the mode, user can set as below:

— Date/Time

- Auto Power Off: Off, 2Min, 5Min and 10Min

- Beep Sound: On or Off:

- Language: English, Deutsch, French, Spain,

- Frequency: 50Hz or 60Hz:

- Default Setting:

Version: software version:

- LCD Rotate: 0 or 180:

- HDMI: HTMI output to TV format: NTSC or PAL.

- Format: Format the TF card.

10.General Key function

10.1: Up and Down Key: During Recording or photo mode, press the Up or Down to adjust the digital Zoom: 1 to 16levels can be set.

10.2: EV Key: Before to start the Recording or photo mode, user can set the EV by pressedthe EV key. Press the Up or Down key to select the EV and press OK key to saved.

10.3 Power key:

- During operation mode, press the Power key once to off the screen, press again to on.
- Press and Hold 3S to on or off the unit.

10.4 Mandatory Key

During Record loop mode, use can press the Mandatory key to protect the file as it is important file of video.

10.5 HDMI Out-put: HDMI plug can offer 1080P resolution out-put. Insert HDMI cable into HDMI port of camcorder, and connect the other end into the HDMI port of TV set, of course, the TV set should be under HDMI mode.

10.6 USB Camera

The unit can be used as a USB Camera after connected to the computer: after connected with detected the computer, the unit will shows the items: USB Camera.

Product Specifications

Sensor	1M CMOS sensor, (1/4)inch
Camera Lens	Wide angle120 degrees, the maximum aperture : F2.0
Lens of low illumination	3300mV/(Lux·sec) sensitivity
Zoom	16x digital zoom
LCD screen	2.7inch 4:3 Resolution: 960X240 TFT LCD
Video Output	HDTV interfaces: HDMI output up to 1920x1080P
Photograph	JPG 12million pixels 4000X3000
Camera Resolution	FULL HD1080P(1920X1080) 10fps HD720P(1280X720) 30fps WVGA (720X480)30fps VGA(640X480) 30fps QVGA 320X240 30fps
Video Format	MOV
Video Compression Format	H.264 Seamless connectivity
Automatic Boot Video	Plug in the power, it will automatically start. Off delay 30 seconds automatically shut down and save.
Standby auto-off time	2 minutes, 5 minutes, 10 minutes, OFF
Audio	Built-in microphone, speaker AAC
Video Manner	Loop Video, Mandatory Video, Motion Detection Video, General Video
Loop Video Time	3minutes, 5minutes, 10 minutes, 15 minutes, OFF
Storage	Device Memory: 1M External media: micro SD (TF) maximum support: 32GB
White Balance	Auto, Sunny, Cloudy, Tungsten, Fluorescent
Flashlight	Electronic automatic video-light (LED)
USB Interface	USB 2.0
HDMI Interface	HDMI V1.3A
Language	10 languages (English, Deutsch, François, Espanola, Italian, Portuguese, Traditional Chinese, Simplified Chinese, Japanese. Russian)
Battery	High-capacity rechargeable polymer battery 3.7V 1100mA
Power Supply	DC 5V