FULL HD
12 MEGA PIXELS PHOTOGRAPH
360° ROTATION CAR USE MINI CAMCORDER
USER MANUAL
Руководствопользователя
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Preface

Thank you for purchasing this high resolution digital camera. This camera has exquisite appearance and unique flip screen function, whose lens can be rotated by 90 degrees. The instruction manual shall provide you information and methods of how to use the camera, including usage, operation, installation precautions and technical specifications, please read this manual carefully before use and keep it properly. We hope this product shall meet your needs and serve you in a long term.

Statement

Copyright of the manual belongs to our company. Without further notice if have alteration. The manual only offers reference for users. Because we devote ourselves to improving clients operation experience constantly, it will cause products inconformity with the manual. In this instance, the real products shall prevail.

Product warranty

This product is approved by international quality management system ISO 9001: 2000 and it is in line with recommendations from authorities like FCC, CE and SGS, which provides security guarantee for the customers.

Product introduction

This product is a subminiature HD digital camera launched for market demand. It has leading functions, such as HD audio & video recording, photography, high-speed USB data transmission, USB charging, it also has a number of invention and technical patent.

Wide range of application lets you record videos any time any where

Product features

- Subminiature flip screen with multi-function makes it videos, take high resolution pictures and capture ultra-clear pictures.
- 2.5 inch LTPS TFT LCD
● 3 inch HD CMOS
● 4 fixed focus lens, focal range is from 10 cm to infinity
● 4X digital zoom
● Night LED fill-in light
● Video specification: TS
● Built-in microphone/speaker
● Rechargeable lithium battery with high capacity
● Support high capacity MicroSD memory card
● HD multimedia jack: TV/HDMI live telecasting and recording, directly connecting to HD TV
● Loop recording function
● Motion detection function easy to record high resolution
● Seamless link function
● Automatic saving after power failure
● Close cover and screen turns off
● Set recording time
● Recoding video while supplying power
● Automatically power on and record when starting the car

### Capacity display

<table>
<thead>
<tr>
<th></th>
<th>1G</th>
<th>2G</th>
<th>4G</th>
<th>8G</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920*1080  (FPS30)</td>
<td>21min</td>
<td>42min</td>
<td>85min</td>
<td>172min</td>
</tr>
<tr>
<td>1440*1080  (FPS30)</td>
<td>30min</td>
<td>63min</td>
<td>128min</td>
<td>266min</td>
</tr>
<tr>
<td>1280*720   (FPS30)</td>
<td>30min</td>
<td>63min</td>
<td>128min</td>
<td>266min</td>
</tr>
<tr>
<td>848*480    (FPS60)</td>
<td>30min</td>
<td>63min</td>
<td>128min</td>
<td>266min</td>
</tr>
<tr>
<td>12M</td>
<td>239photos</td>
<td>478photos</td>
<td>956photos</td>
<td>1912photos</td>
</tr>
<tr>
<td>8M</td>
<td>367photos</td>
<td>739photos</td>
<td>1486photos</td>
<td>2988photos</td>
</tr>
<tr>
<td>5M</td>
<td>517photos</td>
<td>1040photos</td>
<td>2092photos</td>
<td>4208photos</td>
</tr>
<tr>
<td>3M</td>
<td>614photos</td>
<td>1235photos</td>
<td>2484photos</td>
<td>4996photos</td>
</tr>
</tbody>
</table>

The captured quantity shall differ according to different host, memory card brand, document size and other settings

### Product structure

[Product structure diagram]

- Up Down Ok button
- Index LED
- REC button
- Left button
- Right button
- Strap mount
- Card slot
- Tripod fixing interface
- Rotational
- Swivel TFT Panel
- Power button
- Mode button
- Menu button
Usage and installation

- How to install and take out battery
1. Slide the battery cover down so as to open it.
2. Insert the battery into battery holder according to polarity markings on battery and the direction of arrow until the battery is installed in place.
3. Please refer to battery indicator icons
4. Push battery cover open so as to take out the battery.

- Battery charging
1. Charging with charger: In shutdown state, connect one end of USB cable with USB port of the charger and another end with USB port of the camera, the charging indicator light shall light up at this moment, which shall go out after fully charged.
2. Car charger Charging: connect car charger with camera, the camera shall automatically power on and start recording after launching the car, and the battery is being recharged at the same time.

- How to install and take out memory card
1. Insert the memory card into card slot according to the indication direction until the memory card is fixed to the card slot.
2. Lightly press down memory card, take the card out after it pops up.

Notes:
1. Please install Micro SD memory card before use.
2. Please note the insertion direction of memory card, the camera and memory card may be damaged if the memory card is inserted up side down.
3. When the memory card is incompatible with camera, please re-insert the memory card or change the card.
Operating instructions

• Set menu mode

1. Under camera/record/playback mode, press ‘MENU’ button to access its corresponding menu settings, please open setting list for details.
2. Under menu settings of any mode, press OK button to access the next menu, press UP/DOWN button for corresponding settings, and press OK button for confirmation, and then press MENU button to exit menu.

• Camera power on/off and auto power off settings

1. Press POWER button for 1 second to power on, and press POWER button for three seconds in bootup state so as to power off.
2. For saving battery power, set auto power off/Close screen time in menu. The camera shall power off/Close screen automatically when there is no operation within the set time.
3. Power on, press MODE button third to switch to setup mode, press DOWN button to select ‘Auto power off/Close screen then press OK button to access next menu, the auto power off/Close screen time can be set to be ‘OFF, 1 Min, 3 Min, 5 Min’.

• Set date and time

1. Power on, press MODE button third to switch to setup mode, press DOWN button to select Date/Time? press OK button to access year, month, day, hour, minute, second, press UP/DOWN/LEFT/RIGHT button to select the desired item and then press OK button, press UP/DOWN button for adjustment when the current item displays as red and then press OK button to exit, press DOWN button to move to “✓” and press OK button again for confirmation.

• Record mode

1. Power on, after the camera completes the starting up procedure, record mode displays on screen and record mode icon ‘’ appears on top left corner, the camera has accessed record mode at this moment.
2. Press ‘REC’ button to start recording and press ‘REC’ button again to stop recording.
During recording, red icon ‘REC’ and timer shall display at the bottom of the screen, the red icon ‘REC’ and timer shall disappear when recording stops.

3. Fill-in light
When the surrounding light is dark, press RIGHT button to turn on fill-in light

4. White balance
In general condition, you could choose Automotive mode and the best white balance. In accordance with different scene, selecting different white balance will show different color effect.

- Camera mode

1. Power on, after the camera completes the starting up procedure, press ‘MODE’ button under record mode and camera mode icon ‘REC’ appears on top left corner, the camera has accessed camera mode at this moment.

2. Aim the camera at the subject to be captured, press UP/DOWN button to do digital zoom, hold the camera and don’t shake at this moment.

3. Press ‘REC’ button, the camera makes a ‘Click’ sound and one picture is taken.

4. Self-timer function
Press ‘MENU’ button under camera mode, then press DOWN button to select ‘Self-timer’, and then press OK button to select to set the time to be ‘OFF, 5s, 10s’.

Tips:
1. Under record/camera/playback/setup mode, press ‘MODE’ button to cyclically switch among record, camera and setup mode.

2. Under record and camera mode, press ‘Preview’ button to return to playback mode.

3. Under record and camera mode, press LEFT button to quickly switch AWB.

4. The screen shall access sleep mode automatically after closing the cover.
**Playback mode**

1. Power on, press MODE button twice to switch to playback mode. Press UP or DOWN button so as to respectively access picture playback and video playback. Press OK to enter. Press LEFT or RIGHT button to select picture or video for browsing. When browsing video files, press REC button to play or stop playing, and press preview button for pause.

2. **Delete one**

   During picture or video playback, press MENU button to select delete one and press OK button to confirm so as to access delete one mode, and press OK button again to delete the current picture or video file, after accessing delete one, press LEFT/RIGHT button for browsing, directly press OK button for deleting when the desired file is being browsed.

3. **Delete all**

   During picture or video playback, press MENU button to select delete all, press OK button and submenu ‘x’ shall pop up, select ‘X’ and press OK button for confirmation so as to return to main menu, select ‘✓’ and press OK button so as to delete all picture or all video files.

4. **Protection**

   During picture or video playback, press MENU button to select protection, then press OK button to access protection settings, press LEFT/RIGHT button for browsing, directly press OK button for confirmation when the picture or video file desired to be protected is being browsed, and icon ‘f’ shall display on current file which indicates the file is protected, press OK button again so that icon ‘f’ shall disappear which indicates the current file is unprotected.

5. **Auto play**

   During picture playback, press MENU button to select auto play, and press OK button to confirm to start playing automatically.

**Tips:**

1. **The protected file cannot be deleted but formatted.**

2. **There is no auto play function during video file playback.**

   - **Recoding video while supplying power**

     In shutdown state, connect car charger with camera, the camera shall automatically power on and start recording after launching the car, and the battery is being recharged at the same time.
Note: After the car stopped, the camera shall use battery automatically until it powers off because of low battery.

- Screen sleep mode
  After closing the screen cover, the screen shall automatically access sleep mode so as to save power, and it shall restore to normal working mode when open the cover again.

- Screen flip

Storage and video replay
- USB backup mode
  In bootup state, connect camera to computer with a USB cable, the screen shall display as MASS STORAGE, which indicates the camera accesses USB mode, open 'My computer' on desktop so as to find the stored images through 'MEDIA/DCIM/100MEDIA'.

- Connect to TV video signal play
  1. Connect camera with HD TV by HDMI cable so as to access record/camera/browsing pictures and videos.

2. Connect camera with TV by TV cable so as to access record/camera/browsing pictures and videos.

Tips: No need to install driver, the camera can be used as removable disk only in boot-up state.

Key functions

Record/Camera mode
- Power button
- Shutter button
- Up button
- Down button
- Left button
- Right button
- OK button
- Menu button
- Mode button

Playback mode
- Power button
- Shutter button
- Left button
- Right button
- OK button
- Menu button
- Mode button
Function icons

- There are a lot of function icons for this camera, below icons particulars shall help you to know how to use this camera better and faster.

- **Record mode**
- **Video Playback**
- **Sunshine**
- **Tungsten**
- **Night On**
- **3M image**
- **12M image**
- **Traditional Chinese**
- **Grade I**
- **Grade IV**

- **Camera Mode**
- **Setup mode**
- **Cloudy**
- **WVGA**
- **Color**
- **Confirm**
- **5M image**
- **English**
- **Russian**
- **Grade II**
- **Grade III**

- **Photo Playback**
- **Auto**
- **Fluorescence**
- **1080I**
- **Black&W**
- **Cancel**
- **8M image**
- **Simplified Chinese**
- **G-sensor**
- **Grade IV/Grade III/Grade I/Grade 0FF**

Menu setting

<table>
<thead>
<tr>
<th>Mode</th>
<th>Menu</th>
<th>Settings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio</td>
<td></td>
<td></td>
<td>ON/OFF: The card shall delete the first recorded file and continue recording when the card is full</td>
</tr>
<tr>
<td>Archive type</td>
<td></td>
<td></td>
<td>ON: The camera starts recording when moving picture is detected</td>
</tr>
<tr>
<td>Move detect</td>
<td></td>
<td></td>
<td>ON/OFF</td>
</tr>
<tr>
<td>Record cycle</td>
<td>Auto/sunshine/cloudy/fluorescence/tungsten</td>
<td>1Min/3Min/5Min/45Min/5Min/45Min</td>
<td></td>
</tr>
<tr>
<td>White balance</td>
<td></td>
<td></td>
<td>Auto/sunshine/cloudy/fluorescence/tungsten</td>
</tr>
<tr>
<td>Resolution</td>
<td>Auto/sunshine/cloudy/fluorescence/tungsten</td>
<td>1920<em>1080/440</em>480/520/720<em>480</em>480</td>
<td></td>
</tr>
<tr>
<td>Effect</td>
<td>Color/Black &amp; White/Seppia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Night mode</td>
<td></td>
<td></td>
<td>ON/OFF</td>
</tr>
<tr>
<td>White balance</td>
<td></td>
<td></td>
<td>Auto/sunshine/cloudy/fluorescence/tungsten</td>
</tr>
<tr>
<td>Resolution</td>
<td>12M/8M/5M/3M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect</td>
<td>Color/Black &amp; White/Seppia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Night mode</td>
<td></td>
<td></td>
<td>ON/OFF</td>
</tr>
<tr>
<td>Selftimer</td>
<td>OFF/5 Seconds/10 Seconds</td>
<td>Press Camera button and the camera shall automatically take a picture after the set time.</td>
<td></td>
</tr>
<tr>
<td>Capture period</td>
<td>OFF/5 Seconds/10 Seconds</td>
<td>After setting the time, the camera shall automatically take one picture after each set interval.</td>
<td></td>
</tr>
<tr>
<td>Delete one</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protect</td>
<td>Auto play</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto power off</td>
<td>OFF/3Min/5Min/8Min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCD backlight</td>
<td>OFF/5Min/3Min/5Min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV standard</td>
<td>NTSC/PAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Default</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>EN/TC/SCRU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>50Hz/60Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date/Time</td>
<td>Year/Month/Day/Hour/Minute/Second</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version</td>
<td></td>
<td></td>
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</tbody>
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Product specifications

CMOS: 5 Megapixel CMOS
Lens: 7.3mm
Focal range: 10em - infinity
LCD screen: 2.5"LTPS TFT LCD

Video output:
- HD media connection: HDMI CTS1.2, support 1080P/1080I/720P/720P/720P output format
- TV synthetic signals: NTSC/PAL

Picture format:
- Picture format: JPEG
- Maximum output: 12M 4000x3000

Video format:
- TS

Video:
- 1920*1080(30 FPS)
- 1440*1080(30 FPS)
- 1280*720(30 FPS)
- 848*480(60 FPS)

Zoom: 4X digital zoom

Recording media:
- External: MicroSD Card (Maximum 32G)

Audio:
- Built-in microphone/Speaker (Mono)

Shutter:
- Electronic shutter
- Shutter speed: 1/2 - 1/1,000 sec

White balance:
- Auto/sunshine/cloudy/fluorescence/tungsten

LED light:
- ON/OFF

Connection:
- USB2.0/HDMI/TV

Battery:
- External lithium battery, 3.7V 800mAh

USB:
- USB 2.0 high speed transmission

Size:
- 130.7 x 60.1 x 40.3 mm

Working temperature/humidity:
- -10°C - 60°C / 10% - 80%

Packaging and Accessories:

Warm tips: Please check the accessories according to pictures when buying this product so as to avoid any loss to you!

Camcorder
Camcorder Pouch
User manual
Lithium-ion Rechargeable battery
Charger

HDMI cable
USB Cable
Hanging Strap
TV Cable (Optional)
TF Card (Optional)

Vehicle power charger (Optional)
Bracket (Optional)
USB cable (long) (Optional)
Trouble shooting

- Cannot take pictures or record videos
Please change resolution of photograph or recording or replace memory card with enough capacity.

- No image displays on HD TV screen
Please make sure HDMI cable is fully inserted, please use HDMI cable provided with the camera.

- The captured pictures and recorded videos are not clear
Please wipe the lens before use.

Operation tips
This camera is similar to computer, if there is no action of the camera, take out the battery and reinsert it, and then restart the camera.