AC1080 Professional Sports Action Camera

User Manual
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PRECAUTION
Failure to follow these steps each time may result in damage to your camera, and could possibly destroy your camera. Your warranty does not cover accidental damage or issues caused by user error.

*The camera is not drop resistant, therefore please avoid unnecessary roughness when handling the camera. Try to avoid dropping or damaging the camera in any way.
*Don’t keep the camera in moist circumstances for long periods of time.
*Don’t keep the camera in high temperatures as it may cause damage of external and internal components.
*Use a specialized cloth to clean the camera lens and wipe away fingerprints or dust.
*For the best and most efficient usage of your battery, we suggest using it in 0-40 °C.
*When inserting or removing the micro SD card, please keep the camera turned off to avoid damage of the card or saved files.
*Store the camera in a dry place and remove the micro SD card if storing for long periods of time.

About the SD card:
*Please use a Class 4 or higher speed micro SD card.
*Please use genuine micro-SD cards. The non-genuine or OEM cards may cause issues, such as the failure of buttons, invalid video/photo issues, turning the camera off during recording, causing the camera to die, and so on.
About the waterproof case:
*Please keep the rubber seal clean, even a single hair or grain of sand can cause a leak. It is best to clean it with a dusting cloth.
*For every use of the case in salt water, you will need to rinse the outside of the housing with fresh water and dry the case. Failure to do this will eventually cause corrosion of the hinge pin, and salt will build up in the seal, which can cause failure.
*Please do not to remove or reset the seal. Doing so may cause leaks and damage your camera.

About adhesive mounts:
*Please mount on clean and smooth surfaces only. Only attach a mount in room temperature conditions 24 hours before use.

ACCESSORIES

<table>
<thead>
<tr>
<th>X-game cam+LCD</th>
<th>waterproof case</th>
<th>Remote controller</th>
<th>USB cable</th>
<th>1/4 tripod mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery</td>
<td>Flat adhesive mount</td>
<td>Vented adhesive mount</td>
<td>Manual</td>
<td>*Headbelt mount</td>
</tr>
<tr>
<td>*Helmet mount</td>
<td>*Bike mount</td>
<td>*Surfboard mount</td>
<td>*Chest harness mount</td>
<td>*Car suction cup mount</td>
</tr>
</tbody>
</table>

Noted: *marked are optional accessories.
CAMERA STRUCTURE
1. Video button
2. Photo button
3. Micro SD card slot
4. Microphone
5. Lens
6. Speaker
7. AV OUT
8. HDMI
9. Right button
10. USB
11. Power/playback
12. Red/status indicator
13. Green/power indicator
14. Up button
15. Left button
16. Operation buttons
17. Down button
18. Menu/delete

CAMERA FEATURES
* Mini size 2.6 x 1.8 x 1.3 inches, about 90g
* FULL HD 1080P recording
* Integrated 1.5 inch LCD screen
* Waterproof case 60M (196 FT), shockproof 2M and dustproof
* Waterproof remote controller, remote distance 15-20M
* Fast forward, Slow-motion
* Digital Image Stabilizer (DIS)
* Contrast, ISO, Metering adjustment
* One button back to pre-record mode
* Pause and seamless recording
* 180 degree upside down video/image
* Sound-recognition
* 4x digital zoom under 720p
* View angle: 170 degree
* Video: HD resolution
  1080p: 1920x1080, 30fps
  720p: 1280x720, 60fps;
  720p: 1280*720, 30fps
*12M picture
* Lithium battery: max 2.5 hours, 1000mAh
* H.264 advanced compression, HDMI output
*OSD Language: English, German, French, Italian, Russian, Spanish, Portuguese, Japanese, Korean
**TWO-WAY REMOTE CONTROL**

The remote control has a red indicator. It sends out signal but also gets signal feedback from the camera as well. When the remote controls sends out signal, it will flash once. When the camera receives signal (executive command) successfully, the red indicator will flash again. If the camera does not get signal, the remote control will only flash once. Using this information, you can check the camera status by following the indicator, usually when you cannot see the camera easily.

![Two-way remote control](image)

**OVERVIEW**

Main Buttons:

<table>
<thead>
<tr>
<th>Power/playback button</th>
<th>Menu/delete button</th>
<th>PHOTO button</th>
<th>Video button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo mode</td>
<td>Video mode</td>
<td>Advanced setting mode</td>
<td>USB mode</td>
</tr>
<tr>
<td>Video resolution, Default 1080p</td>
<td>Photo resolution default 5M</td>
<td>Micro SD card inside</td>
<td>Metering status Default central</td>
</tr>
<tr>
<td>Self-shot</td>
<td>White balance</td>
<td>Time stamp</td>
<td>Power</td>
</tr>
</tbody>
</table>

Time on LCD (for example):
02:46:48 ----- The remaining video record time
2014-1-1 08:09:10 ----- Actual real-time clock
BASIC OPERATIONS

When using the camera for the first time:

A. Insert a micro SD card. Without the micro SD card, the green indicator will flash. The camera is compatible with high speed micro SD cards (class 4 or higher)

B. Insert the battery into the camera (Located on the bottom of the camera).

C. Turn the camera on.

Press and hold the POWER button for 3 seconds, you will see the startup screen, and the green LED indicator will turn on.
Press and hold the POWER button for 3 seconds when your camera is on to turn it off.
In standby mode, the red LED indicator is off.

D. Recording video.

When the camera is on, press the VIDEO button and your camera will begin to record video.
The red LED indicator will flash. It also can be controlled by the VIDEO button on the remote controller.
Note: During recording, you can only use the PHOTO button after pressing the VIDEO button on the remote controller.

E. Taking photos.

When your camera is on, press the PHOTO button and the camera will take a photo.
The red LED indicator will flash once. You can also take a photo by pushing the PHOTO button on the remote controller.

**F. One button back mode.**

When you are setting options in the menu or reviewing files, just press the VIDEO button once, and your camera will go back to the pre-record mode.

**G. Playback mode and delete.**

By pressing the playback button, you can see all video files. Press the PHOTO button to switch between seeing videos and photos. The data in the top right corner shows the file number. Choose the video or photo you would like to view by using the 4 directional buttons. When viewing videos or photos, press the M button to delete the file.

**H. Pausing and seamless recording.**

During recording, pressing the UP button will allow you to see the recording time. The LCD will actually pause, but the red indicator will stay on. When you press the UP button again, the camera will start recording again. Doing this in succession allows you to record seamless footage as one file.

**PHOTO AND VIDEO**

**Photo**

*Press the MENU (M) button; you will see the photo icon.
*Press the OK button to go into the photo’s setting menu.
*Press M or VIDEO button to go back.

<table>
<thead>
<tr>
<th>Photo settings</th>
<th>3M</th>
<th>5M</th>
<th>8M</th>
<th>12M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self shot</td>
<td>Off</td>
<td>5 sec</td>
<td>10sec</td>
<td>20sec</td>
</tr>
<tr>
<td>Triple shot</td>
<td>ON/Off</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If choosing a Timelapse interval, when you press the PHOTO button once, it will take photos continuously.
The red indicator will flash once each time a photo is taken.
Press the PHOTO button again to stop.

**Video**
*Press the MENU (M) button; you will see the video icon.
*Press the OK button to go into the video settings menu.
*Press the M or VIDEO button to go back.

<table>
<thead>
<tr>
<th>Resolution</th>
<th>1080P/30fps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>720P/60fps</td>
</tr>
<tr>
<td></td>
<td>720P/30fps</td>
</tr>
<tr>
<td></td>
<td>WVGA/60fps</td>
</tr>
<tr>
<td></td>
<td>WVGA/30fps</td>
</tr>
<tr>
<td></td>
<td>VGA/30fps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Video setting</th>
<th>Motion detection</th>
<th>OFF/on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Video duration</td>
<td>Any duration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30sec</td>
</tr>
<tr>
<td></td>
<td></td>
<td>180sec</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300sec</td>
</tr>
<tr>
<td></td>
<td>Loop recording</td>
<td>Off/ON</td>
</tr>
<tr>
<td></td>
<td>Upside down</td>
<td>Off/ON</td>
</tr>
</tbody>
</table>

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**Note:** Enabling “upside down” will cause the LCD to go black for a few seconds, which is normal.

*Sound recognition:
When the camera begins to record, you will only hear one *beep* noise.
When the camera stops recording, you will hear two *beep* noises.
This helps recognize the recording status easily.

*4x digital zoom:
During 720p recording, you can zoom the video by using the LEFT and RIGHT buttons.

*Fast forward, Slow-motion:
When playing back video, press the LEFT button to choose slow motion.
Press the RIGHT button to fast forward.

**Playback**
Pressing the PLAYBACK button allows you to view your files. Press the directional buttons to choose your video. Press the OK button for a preview and press the MENU/DELETE buttons for your deletion options. When playing video, press the LEFT/RIGHT buttons to fast-forward and rewind. Press the PHOTO button to switch between photos and videos.

**ADVANCED MENU SETTINGS**

Menu settings:
Using the SETUP feature, you can customize the camera's functions based on your personal preferences.

*Press the MENU button; navigate to the Settings icon (third from the left).
*Press the OK button to go into the settings menu.
*Press the M or VIDEO button to go back.

<table>
<thead>
<tr>
<th>Advanced setting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firmware version</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Time setup</strong></td>
<td>year/month/day, time</td>
</tr>
</tbody>
</table>
| **LCD off** | off  
5sec  
10sec  
2min |
| **Volume** | 11 10 9 8 7 6 5 4 3 2 1 0 |
| **Default** | Yes/No |
| **Format** | No/Yes |
| **Language** | English, German, French, Italian, Russian, Spanish, Portuguese, Japanese, Korean |
| **TV standard** | NTSC /PAL TV |
| **Date/time stamp** | On/ Off |
| **Beep sound** | on/ off |
### Scene mode
- **Auto**, **Night**, **Sports**, **Landscape**
- **Portrait**

### Frequency
- **50HZ/60HZ**

### Contrast
- **Standard**
- **Hard**
- **Soft**

### AE ISO
- **Auto**
- **100**
- **200**
- **400**
- **800**

### Metering mode
- **Standard**
- **Hard**
- **Soft**

### Auto power off
- **off**
- **1min**
- **2min**
- **5min**

### UPLOADING FILES

When connecting the USB with the camera successfully, there will be a visible ‘connection’ icon on the screen.

**Note:** Before inserting the USB cable, please turn on the camera. When the camera is off, the cable is for charging only.

### FIRMWARE UPDATE

*Usually the software can be updated by using a micro SD card.*

*Copy the software into card’s root folder, then insert the card into the camera and turn it on.*

*Choose YES, and the camera will refresh automatically. Restart the camera, and it will update successfully.*

### BATTERY

The lithium-ion battery included in the packaging comes only partially charged. For a full charge, when
the camera is off, connect the camera to a computer using the USB cable for charging.

*Active battery time runs about 2.5 hours.
*The battery will charge up to 80% in 1-2 hours, and should reach 100% in 4 hours.
*When the camera is off, the red indicator is turned on during charging. After becoming fully charged, the green indicator will be on.
* You can also charge the camera using a car charger or USB power bank.

SYNC THE REMOTE CONTROL:

* Open the remote controller (RC) and take off the battery.
* Press and hold the PHOTO button of the remote controller, then install the RC's battery. Next, turn on the camera (when turning on the camera, you will still need to press the PHOTO button).
* After turning on the camera, release the PHOTO button.

CAMERA AND ACCESSORY ASSEMBLY

To assemble the waterproof case, please follow the below steps outlined in the image. Note that the buckle will not move after fixing the thumb screw.

To attach your camera to the mount, you only need to slide it in to install and slide it out to uninstall.
**Tips:**

*Clean the surface first. Wax, oil, dirt, and other debris will reduce adhesion which can result in a weak bond or even losing your camera.*

*Please also keep your waterproof case's rubber door clean.*

*Only attach a mount in room temperature conditions. It will not bond well in very cold or damp environments.*

*The adhesive mounts can only be mounted to a smooth surface.*

*For best results, please attach your mount at a minimum of 24 hours before usage.*

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**SPECIFICATIONS SHEET**

<table>
<thead>
<tr>
<th>Video resolution</th>
<th>1080P (1920*1080)</th>
<th>720P (1280*720)</th>
<th>WVGA (848*480)</th>
<th>QVGA (320*240)</th>
</tr>
</thead>
<tbody>
<tr>
<td>frames</td>
<td>1080P/30fps, 720P/60fps, 720P/30fps, WVGA/60fps, WVGA/30fps, QVGA/60fps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video format</td>
<td>MOV (H.264 advanced compression)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCD size</td>
<td>1.5&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote distance</td>
<td>15-20M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterproof</td>
<td>IP68,60M (196 FT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>Micro SD/MMC (Max 32GB SDHC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage capacity (32GBmicro SD card)</td>
<td>Photos: 3M(26080) 5M(15280) 8M(11180) 12M(8940) Video: H.264 1080p: about 5.5 hours; H.264 720p: about 5.5 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoom</td>
<td>4x digital zoom (720P mode)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV OUT</td>
<td>Support NTSC/PAL, HDMI output</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC port</td>
<td>USB2.0 (U-disk)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microphone</td>
<td>Built-in MIC and Speaker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>400mA @ 3.7V (MAX)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery capacity</td>
<td>1000mAh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery life</td>
<td>About 2.5 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery charge</td>
<td>About 2.5 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation system (1080P)</td>
<td>Windows XP SP2/Vista or Above/Mac OS/Win 7/APP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU</td>
<td>&gt;=Pentium 4 1.5GHZ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAM</td>
<td>&gt;=1GB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>68<em>46</em>33mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camera weight</td>
<td>90g (with LCD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20°C—50°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working temperature</td>
<td>-10°C—50°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working humidity</td>
<td>15~85% RH</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TROUBLESHOOTING:

Please refer to the below solutions if there are problems under normal operation.

* Can’t record photos or videos.
  Check the memory left on your Micro SD card.

* “File error” shows up when playing back photos and videos.
  Caused by corrupted storage, we recommend formatting your Micro SD card. Formatting the card will delete the data in micro SD card permanently, including protected files. Therefore, please copy important data before formatting.

* Dim Videos.
  Try using a specialized cloth to remove away blots, fingerprints, and dust before recording.

* The micro SD card is not compatible with the camera.
  Try formatting your micro SD Card using a computer. Formatting the card will delete the data in micro SD card permanently, including protected files. Therefore, please copy important data before formatting.

* Cannot upload data to the PC when using a USB cable.
  Please check to see if the camera is turned on. When the camera is off, it is only charging, and will not transfer files or recordings.

For any other questions or inquiries, please don’t hesitate to contact us directly:

Foscam Digital Technologies LLC
E-mail: support@foscam.us
Phone: Toll Free – 1-800-930-0949