

# USER MANUAL

**apexcam** M90 Pro

ACTION CAMERA



Made in China



This device complies with part 15 of the **FCC** Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the **FCC** Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

## apexcam

---

- English: "

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

- French:"

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil n' doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. L'appareil peut être utilisé sans restriction dans des conditions d'exposition portables.

<b>Introduction</b>	<b>04</b>
Part Designations.....	05
<b>1 Getting Started and Basic Camera Controls</b>	<b>06</b>
Getting Started.....	08
Battery.....	08
Using the Waterproof Case.....	09
Quick Guide.....	12
<b>2 Adjust the camera</b>	<b>13</b>
Video Mode.....	14
Video Playback Mode.....	14
Video Setting Mode.....	15
Photo Mode.....	15
Photo Playback Mode.....	16
Photo Setting Mode.....	16
General Setting Mode.....	17
System Setting Mode.....	17
<b>3 Customizing Your M90 Pro</b>	<b>18</b>
Video Setting.....	19
Photo Setting.....	20
General Setting.....	21
System Setting.....	22
<b>4 WIFI and Other Functions</b>	<b>25</b>
Connecting To The Live DV App.....	26
Playing Back Your Content.....	28
Deleting Videos And Photos.....	28
External Mic.....	29
2.4G Remote.....	30

# Introduction

---

Dear customer,

We really appreciate it that you choose **APEXCAM** among so many brands.

**APEXCAM** has been attaching great importance to product quality and customer satisfaction. We sincerely hope you can make a few suggestions during your use to help us improve our products.

As a professional designer, manufacturer and online seller of electronic products and outdoor supplies, we will publish more and more products in the near future. Stay tuned please.

It is undeniable that electronic products will inevitably produce imperfect products during production and transportation. So if you meet any questions or receive a faulty product, please contact us on time.

- Our after-sales team will immediately get back to you and solve your problems as soon as they receive your email.
- All of our products are covered by one year warranty and 30 days money back without any excuse. We will send you a new replacement once we confirm the faulty product.

So what you need to do when encountering any problem or doubt is just to contact us at [supports@apexcam.com](mailto:supports@apexcam.com)

We are here at your service!

Kind regards,

**APEXCAM** Support

# Part Designations

---





# 1

## **Getting Started and Basic Camera Controls**

---

This chapter describes preparatory steps for shooting and the quick start guide of the camera.



# Getting Started

---

Welcome to your new M90 pro. To capture video and photos, you need a micro SD card (sold separately).

## Micro SD Cards

Use brand name memory cards that meet these requirements:

- 1** micro SD, micro SDHC, or micro SDXC
- 2** Class 10 or UHS-I rating
- 3** Capacity up to 8~ 64GB (FAT32)

### Note

■ Please format the micro SD card first in this camera before using. To keep your microSD card in good condition, reformat it on a regular basis. Reformatting erases all of your content, so be sure to offload your photos and videos first.

# Battery

---

## Charging the battery

To charging the battery

- 1** Connect the camera to USB power supply (5V/1A commended).
- 2** The charging status light remains ON while the battery is charging.
- 3** The charging status light will turn OFF when the battery is fully charged.

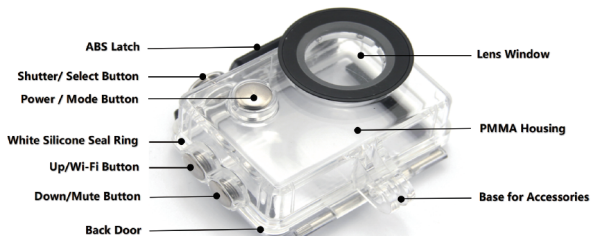
**Note**

- Charging time: 4-hours for 5V 1A power supply.
- Please make sure the camera is shuttled down while charging.
- Charge only with 5V 1A output charger.
- Remove the battery before using as a dash camera and use 5V/1A brand-name car charger.
- Do not store in temperature above 140°F/60°C.
- Do not disassemble, crush, damage or dispose of in fire.
- Do not use swelling battery.
- Stop using the battery after immersed in water.
- please do not throw the camera or its battery to the garbage, find a specific recycling point for it.

## Using the Waterproof Case

### Waterproof Case

Specially designed for diving, surfing, snorkeling and other water sports activities. The waterproof case does not only offer greater waterproof protection to your camera, it also offers extra protection against dust, scratches and shocks. Light and easy to carry, excellent PMMA material endows it with high quality. With the use of the waterproof case, you can record activities even 30M under water and it won't damage the shooting effect, clear and vivid. Your movement and photographic effect won't be affected by anti-surf pressure. Convenient to link camera with other accessories mount through this waterproof case.



## Open The Waterproof Case

Step 1



Step 2



## Close The Waterproof Case

Step 1



Step 2



 **Note**

- In order to capture a clear video or photo, please tear off the lens protection film of the waterproof shell before use, and protect well the lens window from scratch after use.
- Before sealing the waterproof case, keep the camera housing's White Silicone Seal Ring clean, a single hair or grain of sand cause a leak. You can test by closing the case without inserting the camera. Submerge the case completely in the water for about a minute. Remove the case from the water, dry off its exterior with a towel, and then open the case. If the interior is dry, the case is safe for use under water.
- Before sealing the waterproof case, make sure the waterproof case is sealed well before use. If the white silicone sealing ring is found to be hardened, deformed or damaged, please stop using this water tank and replace the new waterproof shell in time.
- Please dry it in time after use, otherwise the waterproof shell metal button will dust and reduce the waterproof performance. After use in in seawater or seaside, you will need to rinse the outside of the housing with fresh water and then dry. This will prevent corrosion of the hinge pin and salt buildup in the seal, which can cause failure. Do not flush the interior with water.
- When use the camera with the waterproof in low temperature, such as Winter, Rainy Day, Underwater and so on, please do the anti fogging treatment so as to avoid the blurred video. It is recommended to add anti-fog film; insert the anti-fog film into the waterproof case to prevent the lens from fogging in low temperature or humid environment;
- Keep it safe from falling and dropping and high temperature above 80°C.
- Waterproof shell is vulnerable product, we strongly recommend , according to the usage of the environment and frequency, to replace the waterproof shell in time.

# Quick Guide

---

## 1 POWERING ON + OFF

■ **To Power On:** Press and hold the Mode button for three seconds.

The camera beeps while the camera status light is on. When information appears on the LCD display or the camera status screen, your camera is on.

■ **To Power Off:** Press and hold the Mode button for three seconds.

The camera beeps while the camera status light is off.

## 2 SWITCHING MODE

■ **To Switch Mode:** Press the Mode button to switch the mode.

## 3 EXITING MODE

■ **To Exit Mode:** Press the Mode button to exit mode.

# 2

## Overview Of Modes

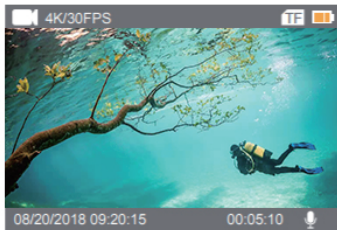
---

There are 8 modes: Video, Photo, Video Playback, Photo Playback, Video Setting, Photo Setting, General Setting and System Setting.

## Video Mode

---

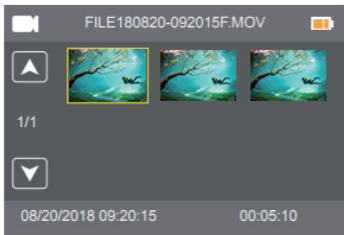
Video Mode is the default mode when you turn on the camera. In Video Mode, Press Shutter button, the camera starts recording video. Press Shutterbutton to stop recording video.



## Video Playback Mode

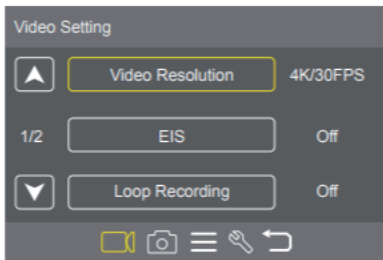
---

Press Mode button several times to switch to Video Playback Mode. In Video Playback Mode, press the Up / Down button to scroll through the video files. Press Shutter button to open video in full-screen view. Press and hold the Up button for 3 seconds to delete the video.



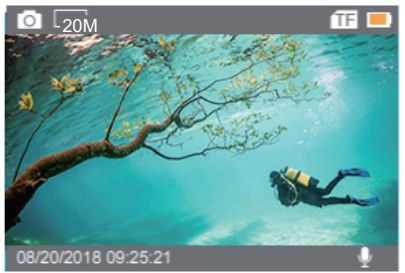
## Video Setting Mode

Press Mode button several times to switch to Video Setting Mode.



## Photo Mode

Press Mode button once to switch to Photo Mode after you turn on camera. In Photo Mode, press Shutter button, the camera takes a photo.





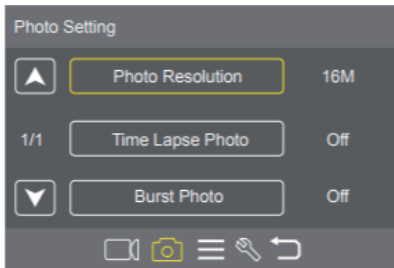
## Photo Playback Mode

Press Mode button several times to switch to Photo Playback Mode. In Photo Playback Mode, press the Up / Down button to scroll through the Photo files. Press Shutter button to open photo in full-screen view. Press and hold the Up button for 3 seconds to delete the photo.



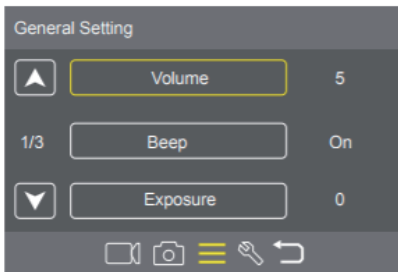
## Photo Setting Mode

Press Mode button several times to switch to Photo Setting Mode.



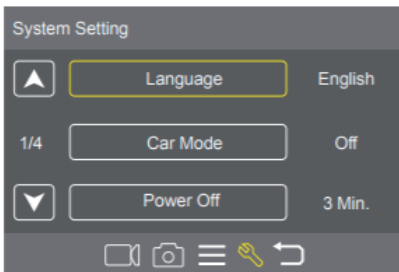
## General Setting Mode

Press Mode button several times to switch to General Setting Mode.



## System Setting Mode

Press Mode button several times to switch to System Setting Mode.



# 3

## **Customizing Your M90 Pro**

---

You can start setting up your M90pro. You can choose the appropriate language, video resolution, camera pixel size, etc.

# Video Setting

---

- 1 Video Resolution:** 4K/30FPS, EIS 4K/30FPS, 2.7K/30FPS, 1080P/60FPS, 1080P/30FPS, 720P/120FPS Default setting is 4K/30FPS.



## Note

■ When capturing video at high resolutions or high frame rates in warm ambient temperatures, the camera may become warm and use more power.

- 2 EIS:** On / Off Default setting is off. This setting adjusts the footage to offset for motion during capture. The result is smoother footage, especially in activities with relatively small but fast motion including cycling, motorcycling, and handheld uses.



## Note

- If you turn on EIS, then select 4K/30FPS, EIS will be turned off automatically.
- If you select 4K/30FPS, then turn on EIS, the video resolution will be EIS 4K/30FPS automatically.

- 3 Loop Recording:** Off / 1 Min. / 3 Min. / 5 Min.  
Default setting is off.

Using Loop Recording, you can continuously record video, but save only the moments that you want. For example, if you select a 5-minute interval, only the previous 5 minutes are saved when you press the Shutter button to stop recording. If you record for 5 minutes and do not press the Shutter button to stop recording and save, the camera records a new 5-minute interval by recording over your previous 5 minutes of footage. When the micro SD card is full, the new files will cover the old one if loop recording is on.

- 4 Time Lapse Video:** Off / 1 Sec. / 5 Sec. / 10 Sec. / 30 Sec. / 60 Sec.  
Default setting is off.  
Time Lapse Video creates video from frames captured at specific intervals. This option lets you capture a time lapse event and immediately view or share it as a video. Time Lapse Video is captured without audio.
- 5 Slow Motion:** Off, 1080P/60FPS, 720P/120FPS  
Default setting is off.  
Slow motion is an effect in film-making whereby time appears to be slowed down.

**Note**

If you use Slow Motion function, EIS will be turned off automatically. Slow motion video is captured without audio

- 6 Audio Record:** On / Off  
Default setting is on.  
Turn off Audio Record, the camera does not record audio when you record video.

## Photo Setting

- 1 Photo Resolution:** 20M/16M / 14M / 12M / 8M / 5M  
Default setting is 12M.
- 2 Time Lapse Photo:** Off / 2 Sec. / 10 Sec.  
Default setting is off.  
Time Lapse Photo captures a series of photos at specified intervals. Use this mode to capture photos of any activity, then choose the best ones later.
- 3 Burst Photo:** Off / 3 Photos / 5 Photos  
Default setting is off.  
Burst captures up to 5 photos in 1 second, so it is perfect for capturing fast-moving activities.

## General Setting

---

- 1 Volume:** 0-10  
Default setting is 5.  
Press Up button to turn up the volume. Press Down button to turn down the volume.
- 2 Beep:** On / Off  
Default setting is on.  
Sets the volume of your M90 Pro's alerts.
- 3 Exposure:** 2 / 1.7 / 1.3 / 1 / 0.7 / 0.3 / 0 / -0.3 / -0.7 / --1 / -1.3 / -1.7  
Default setting is 0.  
By default, your camera uses the entire image to determine the appropriate exposure level. However, Exposure lets you select an area that you want the camera to prioritize when determining exposure. This setting is particularly useful in shots where an important region might otherwise be over- or underexposed. When you change this setting, the LCD display immediately shows you the effect on your image. If you change modes, the camera returns to using the entire scene to determine the correct level of exposure.
- 4 White Balance:** Auto/Daylight/Cloudy/Fluorescent/Incandescent  
Default setting is auto.  
White Balance lets you adjust the color temperature of videos and photos to optimize for cool or warm lighting conditions. When you change this setting, the LCD display immediately shows you the effect on your image.
- 5 ISO:** Auto / 100 / 200 / 400 / 800 / 1600 / 3200  
ISO determines the camera's sensitivity to light, and creates a trade-off between brightness and resulting image noise. Image noise refers to the degree of graininess in the image. In low light, higher ISO values result in brighter images, but with greater image

noise. Lower values result in lower image noise, but darker images. When you change this setting, the LCD display immediately shows you the effect on your image.

- 6 Effect:** Normal / Sepia / B&W / Negative  
Default setting is normal.
- 7 Contrast:** -100---+100  
Default setting is 0.
- 8 Saturation:** -100---+100  
Default setting is 0.
- 9 Sharpness:** -100 - +100  
Default setting is 0.  
Sharpness controls the quality of details captured in your video footage or photos. When you change this setting, the touch display immediately shows you the effect on your image.

## System Setting

- 1 Language:** English / Spanish / German / Italian / French/ 简体中文 / 日本語  
Sets the language that appears on the camera.
- 2 Car Mode:** On / Off  
Default setting is off.  
If you turn on car mode and connect camera with car cigarettelighter, the camera will turn on automatically if you start your car and will turn off if you stop your car.
- 3 Power Off:** Off / 1 Min. / 3 Min. / 5 Min.  
Default setting is 3 minutes.  
Powers off your M90 Pro after a period of inactivity to save battery life.

- 4 Date & Time:** MM / DD / YY, HH / MM / SS  
The date and time are automatically updated when you connect your camera to the Live DV app. However, you can manually change these settings, if needed.

**Note**

- If the battery is removed from the camera for an extended period of time, the date and time will be reset automatically.

- 5 Date Format:** None, YYYY MM DD, MM DD YYYY, DD MM YYYY  
Default setting is MM DD YYYY. If you turn on Date Stamp, this camera adds date stamp to the videos or photos you take. If you select None, this camera will not add date stamp to the videos or photos you take.

- 6 Frequency:** 50 Hz/ 60 Hz  
Default setting is 50 Hz.

- 7 Upside Down:** On/ Off  
Default setting is off.  
This setting determines the orientation of your video or photos to help you prevent upside down footage.

- 8 Screen Saver:** Off / 1 Min. / 3 Min. / 5 Min.  
Default setting is 1 minute. Turns off the LCD display after a period of inactivity to save battery life. To turn on the LCD display again, press any button on the camera.

- 9 Format:** Yes / No  
To keep your micro SD card in good condition, reformat it on a regular basis. Reformatting erases all of your content, so be sure to offload your photos and videos first. To reformat your card, press the mode button to enter system setting, then press down button several times to enter Format > Format Card? > YES.



- 10 Reset:** Yes / No  
This option resets all settings to their default values.
- 11 FM Version:** Brand / Model / Version / Updated You can check the brand, model, version and updated time of your M90 pro.

# 4

## WIFI and Other Functions

---

In this chapter, you will learn how to establish a WLAN connection. how to play back your content on the camera's LCD display, your computer, TV, or smartphone / tablet.

## Connecting To The Live DV App

The Live DV app lets you control your camera remotely using a smartphone or tablet. Features include full camera control, live preview, playback and sharing of content.

- 1** Download Live DV app to your mobile device from the Apple App Store or Google Play.
- 2** Turn on the camera, then press Up button once. Wait for 3 seconds. The screen shows 'SSID:Live DV'.
- 3** Turn on Wi-Fi of your mobile device, connect to the Wi-Fi SSID: 'Live DV'.
- 4** Enter the password: 12345678.
- 5** Open the app Live DV.

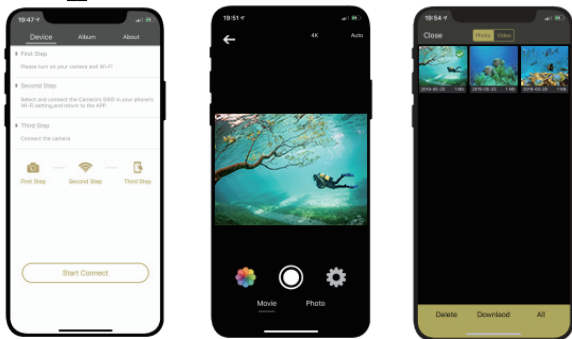
## Offloading Your Content To Smartphone Or Tablet

- 1** Open the 'Live DV' app.
- 2** Tap 'Folders'.
- 3** Tap 'Camera' at the top of the screen.
- 4** Tap the file you want to download.
- 5** Tap 'Save'.

## Note

- If you cannot offload videos or photos to iPhone or iPad, please enter Setting -> Privacy -> Photos , find "Live DV" and select "Read and Write".
- You cannot download 4K or 2.7K video to iPhone and iPad via Wi-Fi app. Please offload 4K or 2.7K videos via card reader.

## FOR IOS/FOR ANDROID



The LIVE DV App is compatible with smart phone and tablet listed below:

### For Apple IOS

- \*iPhone5,5s, 6(plus),6s(plus),7 (above IOS10)
- \*iPhone Air & Mini (above IOS10)

### For Android

- \*Android 4x Quad-Core devices ( (above Android 7.0)



App available on:



## Playing Back Your Content

You can play back your content on the camera's LCD display, your computer, TV, or smartphone / tablet.

You can also play back content by inserting the micro SD card directly into a device, such as a computer or compatible TV. With this method, playback resolution depends on the resolution of the device and its ability to play back that resolution.

### Viewing Videos And Photos On Your M90 Pro

- 1** Enter Video or Photo playback mode. If your micro SD card contains a lot of content, it might take a minute for it to load.
- 2** Press the Up / Down button to scroll through the video or photo files.
- 3** Press Shutter button to open video or photo in full-screen view.
- 4** To return to the thumbnails screen, press Mode button.
- 5** To exit the gallery, press Mode button.

## Deleting Videos And Photos

- 1** Enter Video or Photo playback mode. If your micro SD card contains a lot of content, it might take a minute for it to load.

- 2 Press the Up / Down button to locate the file you want to delete.
- 3 Press and hold the Up button for 3 seconds. The screen shows 'Delete Selected File? YES / NO'.
- 4 Press Shutter button, the selected file will be deleted.

## External Mic

Insert the external MIC to DC2.5 MIC port, the camera Will automatically switch to record the sound from the external MIC. This will help to reduce the noise and get better video sound.



### Note

- The external microphone is an optional accessory, please choose according to your actual needs.
- This camera can be compatible with the external Wired Omnidirectional Mono Microphone 2.5mm:

### Specifications:

Style: Collar Clip Mono Microphone

Frequency Range: 30HZ-15000HZ

Sensitivity: 34dB+2dB

Plugging: 2.5mm

SNR: >60dB

Wire Length: approx.1M/3. 28 ft

Communication: Wired

Storage temperature range(°C):-20~+70

Operation temperature range(°C): -10~+55

Polar Patterns: Omnidirectional

Output Impedance: 2.2K Ohm



## 2.4G Remote

### Video

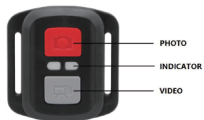
To record Video, verify the camera is in Video mode.

#### ■ To start recording:

Press the Grey Video Button. The camera will emit one beep and the camera light will flash while recording.

#### ■ To stop recording:

Press the Grey Video Button again. The camera will emit one beep and the camera light will stop flashing while recording.



### Photo

To capture a photo, verify the camera is in Photo mode.

■ **To take a photo:** Press the Red Photo Button. The camera will emit a camera shutter sound.

**1** Use a 1.8mm tip screwdriver (not included) to remove the 4 screws on the back cover of the remote, allowing you to open it.



**2** Remove another 4 screws on PCB board.



- 3** Lift the PCB board and slide out the battery, as shown in the picture.



 **Note**



■ Do NOT rotate the PCB board to avoid reversing the camera and video button functions.

- 4** Install the new battery, keeping the "+" pole facing up.

- 5** Install all 4 screws back onto the PCB board.



- 6** Install all 4 screws back into the cover.

 <b>WARNING</b>	
<ul style="list-style-type: none"> <li>• <b>INGESTION HAZARD:</b> This product contains a button cell or coin battery.</li> <li>• <b>DEATH</b> or serious injury can occur if ingested.</li> <li>• A swallowed button cell or coin battery can cause <b>Internal Chemical Burns</b> in as little as <b>2 hours</b>.</li> <li>• <b>KEEP</b> new and used batteries <b>OUT OF REACH OF CHILDREN</b></li> <li>• <b>Seek immediate medical attention</b> if a battery is suspected to be swallowed or inserted inside any part of the body.</li> </ul>	





Download the APP/APK