

F890LS Operating Instructions

Contents

Preface.....	3
Summary.....	4
Features.....	5
Configuration.....	7
Operation and installation	8
Operation guide.....	9
File storage and video play.....	14
Key function and function icon.....	15
Menu setting.....	17
Product specification.....	18
Accessories contained.....	19
Troubleshooting.....	20
Bracket installation instruction.....	21

Preface

Thank you for purchasing DOD series product. This product F890LS has the limit action snap of 60 photos to capture moving picture in high speed and high image quality 5 million-pixel photographic lens, and 1080P high-resolution video recording and unique lens reversing function. This product is applicable to safety recording during automobile driving and DV recording/taking photos. It has exquisite appearance, patents and certifications. F890LS will make your life more colorful.

This user's manual will describe how to use it in detail and provide detailed information including use, operation, installation cautions and technical specification. Please read it carefully and keep it appropriately before use. We hope that this product can meet your need and serve you for a long-term!

Summary

This product is a high image quality driving record to meet the market demand. This product has advanced high-resolution audio-visual recording, shooting, high-speed USB data transmission, USB charging and automobile charging.

Wide Range of Application, User-friendly Video Recording, Able to Memorize Every Wonderful Moment.



Features

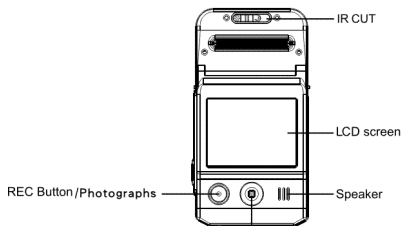
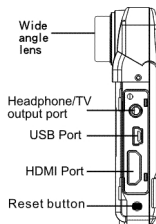
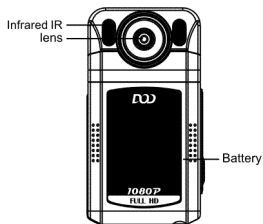
- Mini size screen rotation function design with multi-function enables easy high-resolution video recording and shooting and capturing high-definition pictures at will in any situations.
- 2.0 inches TFT LCD
- 1/2.5" high image quality sensor
- 4 prime lenses. Focal length ranges from 10 cm to infinity
- 8X digital zoom
- Infrared IR
- Video specification: TS (H.264)
- Built-in microphone/speaker
- High-capacity rechargeable lithium ion battery
- High-capacity SD (SDHC) memory card
- High-resolution multi-media socket: TV/HDMI, suitable for high definition TV
- Loop video recording functions.
- Mobile monitoring function
- Seamless connection function
- Automatic power-off protection
- Set the video recording time
- Video recording while charging
- Automatic starting video recording when the automobile starts
- G-SENSOR gravity sensing function (collide with sensing recorder)
- SOS emergency locking file function (emergency manual forced recording)
- Manual Day&Night Conversion Function

Capacity display

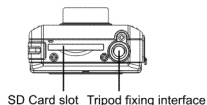
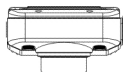
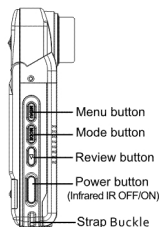
	1G	2G	4G	8G
1920*1080(FPS30)	11min	22min	45min	90min
1440*1080(FPS30)	17min	34min	69min	139min
1280*720(FPS60)	16min	32min	65min	130min
848*480(FPS60)	18min	36min	73min	146min
12M	287photos	574photos	1148photos	2296photos
8M	354photos	708photos	1416photos	2832photos
5M	572photos	1144photos	2288photos	4576photos
3M	1003photos	2006photos	4012photos	8024photos

The number of shot photos varies with the camera, memory card brand, file size and other settings.

Configuration



Direction Button (5 directions)
 UP(Zoom in) . Down(zoom out) .
 Left(White balance) . Right(EV) .
 Ok(SOS)



Operation and installation

● Battery installation and removal

1. Slide the battery cover downward to open it.
2. Install the battery into the battery container according to the “+/-” symbol on the battery until it is installed properly.
3. For battery capacity indication, refer to the following figures:



4. Battery removal. Push the battery cover and take the battery out.

● Memory card installation and removal

1. Insert the card into the card slot along the indication direction until the card is fixed in the card slot.
2. To take out the card, press the card gently and take it out after the card ejection.

Notes:

1. **Install SD memory card before use.**
2. **Make sure that the write-protection switch on the card is turned on before use of SD memory card.**
3. **Note the insertion direction of memory card. Incorrect insertion direction may damage the machine and memory card.**
4. **If the memory card and machine are incompatible, insert it again or change another card to retry.**

Operation Guide

● **Setting menu mode**

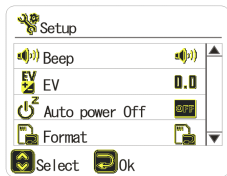
1. Under the mode of “camera/video/replay”, press MENU key to enter corresponding menu for setting. See setting contents for details.
2. Under any mode, press OK key to enter next menu. Press up and down key to select corresponding setting. Press OK key to confirm and press MENU key to exit.

● **Video camera on/off and auto off setting**


1. Press the power key for about 1 second to automatically start the machine. In the “On” status, press the power key for 3 seconds and then release it to shut down the machine.
2. To save the energy of battery, set the auto off time in the menu. If there is no operation within the setting time, the video camera will shut down automatically.
3. Turn on the power. Press the MENU key twice to switch to the setting menu. Press down key to select “Auto Off”. Press OK key to enter next menu to set the auto off time to be “OFF, 1min and 3 min”.

● **Setting data and time**

1. Turn on the power. Press “Menu” to setting mode. Press the down key to select “Date /time”. Press “Ok” key to enter year, month, day, hour, minute and second. Press up, down, left and right key to item to set and then press Ok key. Current item is red. You can adjust it with up and down key. After adjustment, press OK key to exit. Then move the down key to “√” and press OK key to finish setting.





● Video mode

1. Turn on the power to start the video camera. The screen displays the video mode, i.e. “” symbol appears in upper left corner of the screen. At this moment, it enters the videomode.




2. Press “REC” button to start video recording and then press down “REC” button to stop video recording.

During video recording, the red “” and timer will appear in upper part of the screen. When stopping video recording, red “” and timer disappear.

3. Infrared IR

When the external light is dim, set the night shoot menu to be “ON” to enhance the image brightness. After the night camera mode is on, if the image is still dark, press power key to start Infrared IR.

● Photograph mode

1. Turn on the power to start the video camera. In the photograph mode, press “MODE” key. At this moment, the photograph mode “” symbol appears in the upper left corner of the screen to enter the photograph mode.



2. Alignment the video camera to the subject to be taken picture, using direction key to adjust the focus. At this moment, hold the video camera firmly without vibration.
3. Press down the “REC” button. The camera makes a sound and the sound indicates that the recording is finished.
4. Self-shoot

Under the photograph mode, press down “MENU” key and press down key to select “self-timing” and then press OK key to select self-shooting time to be “OFF, 5s and 10s”.

Tips:

1. During video recording/shooting, press “MODE” to switch over the mode “video”/ “camera” circularly.
2. Under the mode “video”/ “camera”, “press” key to enter playback mode.
3. During video recording/shooting, press left key to rapidly switch to AWM under the mode of “camera”.

● Playback mode

1. Under the mode of “video” or “camera”, press preview key to replay the pictures and video. Press left key or right key to select picture and video to browse. When browsing the video recording file, press REC key to play or stop playing. Press preview key to stop.


2. Delete

During replaying the pictures and video files, press MENU key to select one picture or video to delete. Press OK key to confirm, i.e. enter mode of “Delete”. At this moment, press OK key to delete current picture or video file. In the mode of “Delete”, press left and right key to browse. Press OK key to delete when you are browsing the file to delete.

3. Delete all

During replaying the pictures and video files, press MENU key to select all files to delete. Press OK key to display the sub-menu “×, √”. Select “×” to press OK key to confirm and return to the main menu. Select “√” and press OK key to delete all pictures and video files.

4. Protection

During replaying picture and video files, press MENU key to select protection. Press OK key to protection setting. Press left and right key to browse. Press OK key when you are browsing the picture or video files to protect. At this moment, current file will display “

5. Automatic play

When replay picture files, press MENU key, select auto play and press OK key to start automatic play.

Tips:

- 1. The write projection files cannot be deleted, but they can be formatted.**
- 2. When replaying video files, it has no automatic play function.**

● **Setting of motion detection function**

After starting of motion detection function, the relative motion in the video picture will be detected automatically. If the object motion exceed the setting motion, the machine will start video recording automatically. The trigger and recording lasts 30 seconds for every time. After recording, the main machine will detect continuously.


In the “ON” status, press MENU key to enter menu motion detection option. Press the up or down key to select ON/OFF. Press OK key to save the option and exit.

● **Setting of G-SENSOR gravity sensing function**

After starting of gravity sensing function, in case of vehicle collision or impact during video recording, it will lock and save current video automatically and set to avoid the previous video and following video files of loop recording cycle from being covered by the loop recording lock of the machine in order to guarantee safety of important video.

In the “ON” status, press MENU key to enter the option of gravity sensing strength. Press up or down key to select ON/OFF. Press OK key to save the option and exit.

● **Setting of SOS emergency file locking function**

After starting of SOS emergency file locking function, you can save the video section you want at will during video recording, which will not be covered during loop recording. Press OK key for a long period in the mode of video mode, the “

● **Mode of “charging while video recording”**

In the “Off” status, connect the vehicle charger with the machine. After the automobile starts, the video camera will start automatically and begin to record video while charging the battery.

Notes: After the automobile stops, the battery will be used for power supply automatically until the low battery capacity to shut down automatically.

File Storage and Video Play

● USB backup mode

In the “On” status, connect the machine with the computer by using USB cable. The screen displays MASS STORAGE which indicates the USB mode. Open “My computer” on the computer desktop. Find the stored movies in the directory of “MEDIA/DCIM/100MEDIA”.

● Connecting the TV to play the video

1. Connect the video camera with high image quality TV by using the HDMI cable to record/shoot/view and play the picture and video.
2. Connect the video camera with high image quality TV by using TV cable to record / shoot / view and play the picture and video.

Tips: No drive is needed to be installed. Removable disk can be used only when the video camera is on.

Key Function

Video recording/shooting mode *

Power key	Power off/Shut down Infrared IR
Shutter key	Video recording/stop video recording/shooting
Arrow key (Up key)	1/2/3/4/5/6/7/8X digital zoom
Arrow key (Down key)	1/2/3/4/5/6/7/8 X digital zoom
Arrow key (Left key)	White balance: Auto/daylight/cloudy/fluorescent/tungsten
Arrow key (Right key)	EV value adjustment
OK key	Ok/SOS emergency recording lock file
Menu key	Menu selection
Mode key	Mode selection
Replay key	Browse picture and recording file

Replay mode *

Power key	Shutdown
Arrow key (Left key)	Previous photo/fast backward
Arrow key (Right key)	Next photo/fast forward
Menu key	Menu selection
OK key	Ok/replay: start/stop
Replay key	Return to record/return to shoot/stop playing

Function Icon

- **When you use this machine, you will find many functional icons. To make your master its use method rapidly, the icons are listed in detail as follows for your retrieval and understanding.**

 Video mode	 Camera mode	 Setting mode	 Auto	 Sunny
 Cloudy	 Fluorescent	 Tungsten	 Color	 Black and white
 Dark brown	 Night shoot off	 Night shoot on	 1080P	 1080I
 720P	 WVGA	 OK	 Cancel	 2048x1536
 2592x1944	 3200x2400	 4000x3000	 Gravity sensing	 Screen reverse
 Simplified Chinese	 Traditional Chinese	 Russian	 English	

Menu Setting

Mode	Menu	Menu setting	Notes
Video recording	Audio	√/×	√: video recording while sound recording; ×: Video recording instead of sound recording
	Loop video recording	ON/OFF	ON: The earliest files are deleted due to card capacity and it continues to record.
	Mobile monitoring	ON/OFF	ON: Start video recording automatically after picture change is detected.
	Loop video recording cycle	1 min/3 min/15 min	
	White balance	Auto/Daylight/cloudy/fluorescent/tungsten	
	Image resolution	1080P/1080I/720P/480	
	Effect	Color/black and white/dark brown	
	Night shooting mode	ON/OFF	
	Screen reverse	√/×	
Picture	White balance	Auto/Daylight/cloudy/fluorescent/tungsten	
	Image resolution	12M/8M/5M/3M	
	Effect	Color/black and white/dark brown	
	Night shooting mode	ON/OFF	
	Self-timer	OFF/5s/10s	Press shooting button and shoot pictures automatically after the setting time
	Shooting cycle	ON/5 s/10s	Press shooting button and shoot a picture within setting interval time
	Screen reverse	√/×	
Replay	Delete		
	Delete all	√/×	
	Protection		
	Automatic play		
Setting	Prompt tone	√/×	
	EV	-1/-0.5/0/+0.5/+1	
	Auto OFF	OFF/1 min/3 mi	
	Auto screen off	OFF/1 min/3 min/5 min	

	TV output	NTSC/PAL	
	Power saving	√/×	
	Factory setting	√/×	
	Language	English / simplified Chinese/ traditional Chinese/Russian	
	Light frequency	50HZ/60HZ	
	Date/time	YYMMDD/HHMMSS	

Product Specification

Sensor	5 Mage pixels CMOS
Lens	3.4mm
Focusing range	10cm - Infinity
LCD	2.0" TFT LCD
Video output	High image quality multi-media connector: HDMI CTS1.2 support 1080P/1080I/720P/WVGA output mode Composite: NTSC/PAL
Picture format	Picture format: JPEG Maximum output: 12M (4000×3000)
Recording format	TS (H.264)
Video	1920*1080 (30 fps) 1440*1080 (30 fps) 1280*720 (60 fps) 848*480 (60 fps)
Zoom	8 X digital zoom
Recording media	External: Micro SD card (Up to 32G)
Audio	Built-in MIC / speaker (Mono)
Shutter	Electronic shutter
Shutter speed	1/2-1/1000 seconds
White balance	Auto/sunny/cloudy/Fluorescent/Tungsten
Infrared IR	ON/OFF
Port	USB2.0/HDMI/TV
Battery	External lithium-ion battery 3.7V 1000mAh
USB	USB2.0 high speed transmission
Size	98.2 (L)×53 (W)×22.5mm (H)
Workingtemperature/humidity	-10℃ -60℃/10%-80%

Accessories Contained

Notice: Please check the accessories according to above diagram to avoid any unnecessary loss.



F890LS



Operating instruction



Rechargeable lithium
battery



Bracket



Vehicle power charger



HDMI cable



USB cable



AV cable
(optional)

Troubleshooting

● **It cannot take pictures, videos and voice recording?**

Change resolution for shooting or video recording or change for memory card with enough space. Check if the memory card is locked or not.

● **Image cannot be transferred to HDTV screen?**

Please make sure that the HDMI cable is completely plugged into TV's HDMI port. Use the HDMI cable along with this product.

● **Pictures and videos taken are not clear?**

Check if lens is covered with any dirt. If so, clean then lens before use. Or check the focus zone.

Tips for operating

This camera is similar to the computer. If the video camera is not working, please operate as follows:

- 1. Take out the battery. Reinstall it. Restart the video camera.**
- 2. Press the reset button when this video camera is in abnormal condition.**
- 3. Do not press the reset button while the video camera is in normal condition. Otherwise, the data may get lost.**

Bracket Installation Instruction

Installation step:

