

SPORT DV product specifications

1. Product picture:



2. Product features:

1. Allwinner V3 solution with high performance price
2. Sensor OV4689
3. 170-degree high-definition wide-angle lens
4. Maximum video resolution : 1080P, 60 frame
5. 2.0-inch high-definition colorful screen
6. Unique slow shooting functions
7. high reproduction of color and good permeability of image
8. Low power consumption and WIFI video work more than 1.5 hours
(based on actual prototypes date)

3. Hardware Specifications:

Model number	SDV-105, SDV-106, SDV-107, SDV-108, SDV-109
DSP	V3
Sensor	OV4689
Resolution of videos Recorded	1920*1080 60fps /1920*1080 30fps /1280*720 120fps / 1280*720 60fps /1280*720 30fps
Resolution of Photos	16M /4M /2M /10M /8M/ 5M
Lens	170 HD wide-angle lens
Exposure	-3, -2, -1, 0, 1, 2, 3
ISO	Auto, 100, 200, 400, 800, 1600
white balance	Automatic (default) 、 Sunny day 、 Cloudy、 Incandescent Light、 Fluorescence
Zoom	4X
Photo Mode	General photos; Timed pictures; Auto photos; Motion pictures

Video Mode	General Video; Recycling Video; Time-lapse video
Slow shooting	1080p 60fps、 720p 120fps (Default)
Display screen LCD	2.0" LCD (960*240)
Image Format	JPEG
Video Format	MP4
Video Compression Format	H.264
Data Connections	Micro USB2.0, HDMI (Optional)
Extend Memory	MAX to 64G, Micro SDHC
Power supply	5V/1A
LED	Blue:working LED, Yellow:WIFI LED, Red: charging LED
MIC	built-in
SPK	built-in
Battery Capacity	900MAH
Recording Time	1080P/About 90 minutes (based on actual prototypes date)
Charging Time	About 2 hours
WIFI	802.11b/g, 802.11n(H20), 802.11n(H40)
Language Options	English, Simplified Chinese, Traditional Chinese, Ko rean, Russian, French, German, Italian, Spanish, Po rtuguese, Japanese
OS of working	Windows XP/7/8 SP3/Vista and Mac 10.5 or above
Size	59*41*29mm
Weight	44g(without batteries),58g with batteries
Working temperature	-10°C~+55°C
storage temperature	-20 °C+70°C
relative humidity	5% ~ 95% (No frost)
waterproof	30M can work underwater
Accessories	Waterproof case, 3M adhesive tape, adapter, bandage, base 1, base 2, bicycle stand, charger, clip, Data wire,Fixed base, Helmet base, Open waterproof shell, ribbon, switch support 1, switch support 2, switch support 3, wiper, wire rope, manual
Applications	Extreme Sports, Outdoor Sport Activities,Bicycle, Diving,Home security etc

4.Product Definition



LED light:

Working LED light (Blue)	<ol style="list-style-type: none"> 1. When the device is starting-up, the blue light flashes quickly three times. 2. Recording video, the blue light is flashing, if exiting the video, the blue light flashes for seconds and then stays steady blue. 3. Screen savers and file playback, steady blue light. 4. When closing the device, the blue light flashes quickly, Guangping blue light goes out.
WIFI LED light (Yellow)	<ol style="list-style-type: none"> 1. When opening WIFI, yellow light flashing; 2. After WIFI opened, steady yellow; 3. close the WIFI, the yellow light goes out.
Charging LED light (Red)	<ol style="list-style-type: none"> 1. when charging , Steady red; 2. Full, the red light goes out.



Interface Description:

USB interface	USB2.0, Charging by Connecting the charger with USB cable, but also connects PC (choose "U disk mode" to manage TF card data, "DV mode" side by side rechargeable DV, "charging mode" to charge).
HDMI interface	With an HDMI cable (optional), and even high-definition TV (HDTV) DV images and sound can be output to an HDTV.
TF deck	Maximum support 64G, and support hot plug function.

Introduce of Key features:

Power key (MODE)	<ol style="list-style-type: none"> 1.press for 3 seconds to boot, and then press for 3 seconds to shut down. 2. Under boot mode, shortly press to switch mode (video, pictures, slow photography, file playback, settings); 3. parameter settings, file playback, photo browsing, shortly press to exit to return.
Confirm key (OK)	<ol style="list-style-type: none"> 1. video / take photos/ Slow Photography / file playback / parameter setting interface, shortly press to start the selection; 2. file browsing, shortly press to play / pause; 3. Under file playback screen, press the OK button for seconds, you can delete the file.
Up key (WIFI)	<ol style="list-style-type: none"> 1. On the settings/file playback interface, shortly press to choose a previous menu or option 2. On the the video, photographs, slow photography interface, shortly press to open/close the WiFi, press for seconds to enlarge the zoom ;

	3. In the file video playback screen, long-press to rewind.
Down key	1. On the video, photographs, slow photography interface, long-press to lessen the zoom. 2. On the settings/file playback interface, shortly press to choose a previous menu or option. 3. In the file video playback screen, long-press to fasten.

Introduce of Product Features:

Power ON/ OFF	1. Power ON: Press "MODE" button, hear a beeping sound to boot. 2. Power OFF: Power Press "MODE" button, hear a beeping sound to shuts down.
Switch the mode	Shortly press MODE button, you can switch the mode in the video / camera/slow Photography/file playback/parameter setting.
Ordinary recording video	Boot-up, shortly press "OK" button to start recording, then on the top of the LCD screen, the icons of the time and recorded video displays , and then shortly press "OK" button, the machine stops recording and saves video files, on the top of LCD screen displays the remaining recording time.
Loop-recording	When setting loop-recording parameters (2 minutes / 3 minutes / 5 minutes), the bottom-left of the screen displays loop flag. And then the system will automatically save the file. When the storage is full, the camera will prompt the user whether to overwrite the first paragraph of the file. If selecting the coverage, the device will automatically delete the first paragraph and continue recording. Other like this.
Stop-motion recording	When selecting time-compression recording video parameter (Off, 0.5s, 1s, 2s, 3s, 5s, 10s), on the time-lapse recording interface, the bottom-left of the screen displays the icon of time-lapse and pressing the OK button to save the video to TF card. When playing time-compressed video, it is for the quick action.
Slow photography	When Setting slow photography parameter (1080p / 60fps, 720p / 120fps), into the slow photography, the top-left of the screen displays the icon of slow photography. Seeing slow photography video in the file playback is slow motion.
Ordinary taking photo	In the camera interface, aiming at the object you want to shoot and pressing the "OK" button to take pictures, and the device will automatically save the photos.
Timing taking photo	Set the timing photographing parameters (Off, 3s, 5s, 10s, 20s), in camera mode, press "OK button" to enter timing camera mode interface, the bottom-left of LCD displays timing mark. The system begins to countdown, while the self-timer 1 .
Auto photography	Set up automatic shooting parameters (Off, 3 seconds, 5 seconds, 10 seconds, 30 seconds, 60 seconds), in camera mode, press "OK

	button" to enter the automatic shooting mode interface, automatic camera symbol below the LCD displays, and the system begins to countdown, and then the cycle self-timer.
Trajectory photography	Set trajectory camera parameters (Off, 3P / S, 5P / S, 10P / S, 20P / S), in camera mode, press the "OK key" into the camera burst mode (Example: Set 20P / S, each burst 20 pictures, and so on)
Playback file	Press the MODE button to enter the playback, via the arrow keys, OK button, you can browse deleted pictures, play / fast forward / rewind / pause / delete video files. Recorded video, photos can locally playback or USB cable to connect PC playback. The newest file is defaulted first.
Delete file	In file playback interface, press for seconds "OK button", popping up the dialog box to prompt to delete the current file. Choose Yes, delete this file.
Digital zoom	In settings, open the zoom function, and press "up key" / "down key" on recording, photography, slow shooting mode to zoom in or out the image. Zoom 4 times, LCD displays the changed multiple (X1.0-X4.0).
Image rotation	Set the opening/ closing of the image rotation. After opening the image rotation, the menu screen character displays rotated 180 degrees; After closing the image rotation, view the video and photo files, then the image is highlighted.
LED light control	In settings, the users can open/close light (working light, charging indicator light, WIFI LED light)
Time-mark settings	Support for Time watermark settings (Off, date, time, date - time), after the setting, the picture / video will display the current date and time.
Time and date settings	System supports for time and date settings, factory defaulted time: 2015/01/01 00:00. Under the connection of the wifi, APP can be automatically or manually corrected DV time.
Language option	English, Simplified Chinese, Traditional Chinese, Korean, Russian, French, German, Italian, Spanish, Portuguese, Japanese;
Auto screen saver	Support for screen saver settings (Off, 10 seconds, 20 seconds, 30 seconds)
Auto OFF	support for automatic shutdown and time setting (Off, 1minutes, 3 minutes, 5minutes)
Light frequency settings	Support for light frequency setting (auto, 50HZ, 60HZ)System
Parameter of camera setting	ISO Sensitivity: Auto, 100,200,400,800,1600; White balance: auto, sunny, cloudy, incandescent, fluorescent; Exposure Compensation EV: -3, -2, -1, 0, 1, 2, 3
Sound settings	Support for setting OFF / ON
WIFI switch	the system supports for setting, CLOSE / OPEN the WIFI; after opening, LCD screen will display WIFI information (SSID,

	password) and WIFI flag, while the yellow LED light of wifi flashes and waits for a link of a photo. If connected,WIFI indicator light is bright continually..
WIFI connection	<p>Before using wifi function, please install X-DV APP program on a smart phone or tablet device.</p> <p>Note: please download it on Google Play if Android smart machine; please download it in the Apple Store if IOS smart machine.</p> <p>Connection procedure:</p> <ol style="list-style-type: none"> 1. After boot-up, shortly press the up key, "WIFI waiting icon" appears on the screen, then wifi light will flash; 2. Open the wifi connection of the phone , search for the WIFI SSID "X10000-686868" and connected (the original password is 66666666); 3. Click to open the XDV APP program, real-time preview the being recording video, remote recording, photography, file playback / download / delete / share on APP.
WIFI SSID settings	APP supports for setting WIFI SSID, the defaulted SSID: X10000-XXXX
WIFI password settings	APP supports for setting WIFI password, the defaulted 66666666
TF card storage format	Maximum support for 64G TF card, hot-plug. The system supports for TF card format.
Default settings	The system supports for the defaulted settings.
Auto OFF and save the data	After automatic shutdown, the system automatically maintains the last parameter; Recording state, automatically shut down due to low power, the system automatically save the video.
Use the compute to check the file	connect the computer and the machine with the the USB cable , open the removable disk which has two folders, PHOTO folder and VIDEO folder. Select any folder and open to view the corresponding files.
checking function of HDMI TV (optional)	Connect High-definition TV with an HDMI cable, adjust the TV to HDMI state, then the LCD screen will shut down, the camera operation can be shown on television, and the display resolution is 1024 * 768.
Charging up the battery	Connect to the computer and power adapter or USB mobile power for charging. Recording video while charging.
Battery protection	When the battery voltage is too low, the screen prompts "Battery Low, please charge" or automatic shutdown.
Software upgrade	Support for APP through WIFI, remote upgrade for the firmware.
Other functions	Hardware electrical connections do against miss-mating protection, over-current and over-voltage protection can avoid crashing system and have self-resetting repair.
APP functions	Support for mobile APP (Android, IOS); remotely operate the DV via WIFI; real-time preview images, video, photographs, recording; document management; share download , setting parameter, remote firmware upgrades and other functions.
Parameter settings:	

Video settings	Video resolution: 1920*1080 60fps /1920*1080 30fps /1280*720 120fps 1280*720 60fps / 1280*720 30Pfps
	Loop recording: Off, 2 minutes, 3 minutes, 5 minutes
	Stop-motion recording: off 、 0.5s、 1s、 2s 、 3s 、 5s、 10s;
	Slow Photography: 1080p 60fps, 720p 120fps
	Recording: OFF, ON
Photography settings	Image resolution: 16M (4608x3456) /14M (4254x3264)/12M (4000x3000)/ 10M (3648x2736) /8M (3264x2448) /5M (2560x1920)
	Timing photography: off、 3s、 5s、 10s、 20s
	Auto photography : off、 3s、 5s、 10s、 30s、 60s
	Trajectory photography: off、 3P/S、 5P/S、 10P/S、 20P/S
Camera settings	Exposure Compensation EV: -3, -2, -1, 0, 1, 2, 3
	White balance: auto, sunny, cloudy, incandescent, fluorescent
	ISO Sensitivity: Auto, 100,200,400,800,1600
	Image rotation: OFF, ON;
	Light frequency: automatic, 50HZ, 60HZ
	LED: OFF, ON;
	WIFI: OFF, ON
	Buzzer: OFF, ON;
	Automatic screen saver: Off, 10 seconds, 20 seconds, 30 seconds
	Auto Power Off: Off, 1 minutes, 3 minutes, 5 minutes;
Time Watermark: OFF, ON;	
Device settings	Languages: English, Simplified Chinese, Traditional Chinese, Korean, Russian, French, German, Italian, Spanish, Portuguese, Japanese
	Time and date settings
	Format
	The default setting
	Version: Model: X1 Software Version: X20150327V01 Update time :27/03/2015 Manufacturer: XDV

5. Accessory table:



waterproof case



bicycle bracket



pedestal 1



pedestal 2



Back clip



fixed base



switch support 1



switch support 2



switch support 3



commutator



helmet pedestal



bandage



shell



ribbon



3M mat



wire cable



data cable



adapter



user manual



cleaning cloth

Application diagram of assemble:



(Tips: some features of the above functions may change, subjecting to the actual prototype, without other notice.)

6.FCC Statement

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.

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.

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