

# Vehicle Blackbox 1080p

## DVR dashcam

March, 06, 2018 (ver. 1.0)

### Common operations

#### Button functions



- (A) - On/Off button and quick access lamp functions
- (B) - Status LED
- (C) - Start/Stop recording / Take a photo and Confirm button
- (D) - Mode button (Video-Photo-Playback) and force the current sequence to save it
- (E) - Settings,back menu and quick save video
- (F1) - Menu UP and digital ZOOM IN
- (F2) - Menu DOWN and digital ZOOM OUT and Quick switch micro on/off
- (G) - Switch on/off parking mode

#### General Settings

##### Operations

To access the 'General Settings', start the camera by pressing the on/off button (A) shortly. If you are connected to an external power source, the camera will immediately begin to record. Stop the recording by pressing the button (C). Now press 2 times the button (E). The 'General Settings' menu is displayed. When a menu is highlighted, press the (C) button to enter the submenu. Use the (C) button to move within the parameters or the (F1) and (F2) buttons to scroll up or down.

##### First page



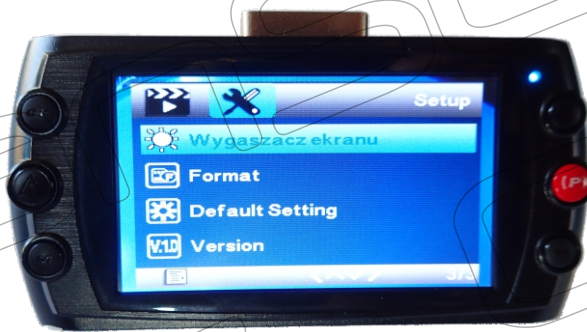
- Date/Time : sets the correct date and time as well as the display format
- CarNum : For Info only : Here you can set your vehicle registration plate
- Auto Power Off : (off,3,5,10 minutes). I suggest to set this parameter to 'off', else the camera will power off, no matter if it is recording or not
- Beep sound : (on/off). When you start the camera or when using the buttons, a sound is audible

## Second page



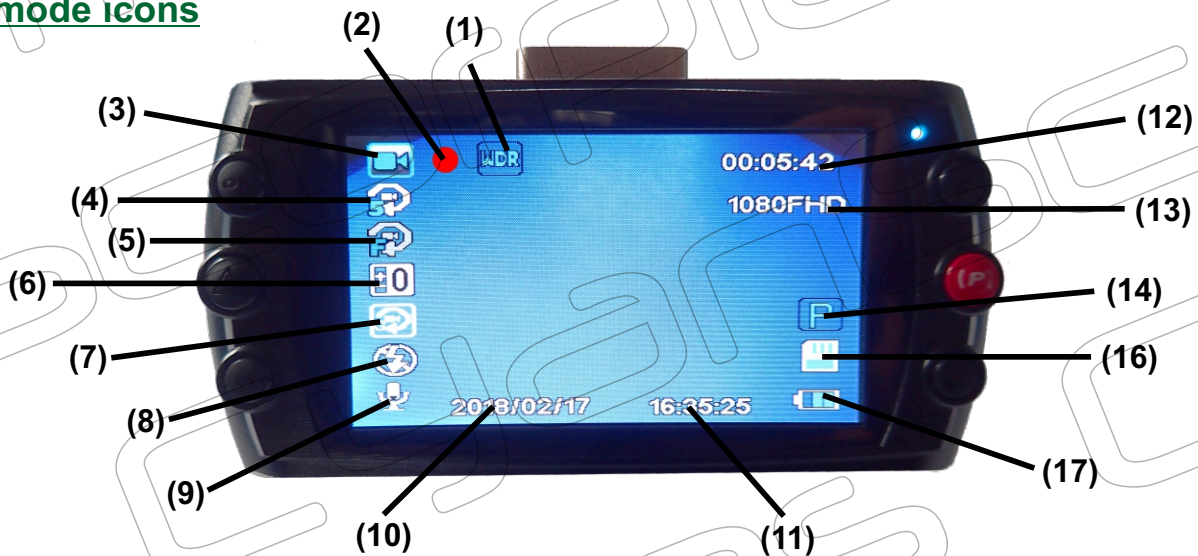
- Languages : 14 languages are available
- TV Mode : NTSC or PAL
- Frequency : depending your location (50Hz or 60Hz)
- IR LED : (off,on, auto) Note : it is not an IR LED, only a LED lamp. Can also be quick accessed by shortly press the on/off button (A) when the camera is active

## Third page



- Wygaszacz ekranu = Screensaver : (off,3,5,10 minutes). The time the screen is active before turning off. When the camera is on battery only, I suggest to choose a low value. In 'Parking mode', turn the screen saver off.
- Format : formats the SD card. All data will be erased, even the marked files
- Default Setting : returns the menu settings to factory settings
- Version : displays the camera version

## Video mode icons



- |   |  |
|---|--|
| (1) - Wide dynamic range (on/off)           | (9) - Microphone (on/off)                            |
| (2) - Recording indicator                   | (10) - Current date                                  |
| (3) - Mode indicator (Video/Photo/Playback) | (11) - Current time                                  |
| (4) - Loop indicator (Off,2,3,5 minutes)    | (12) - Remaining recording time                      |
| (5) - Motion detection (on/off)             | (13) - Resolution (1080p,720p,WVGA,VGA)              |
| (6) - Exposure                              | (14) - Parking mode (on/off)                         |
| (7) - G-sensor (Off,Low,Medium,High)        | (15) - SD-card (present or not)                      |
| (8) - Lamp (Off, Force,Auto)                | (16) - Source indicator (battery, ext. power source) |

## Video mode settings

### First page



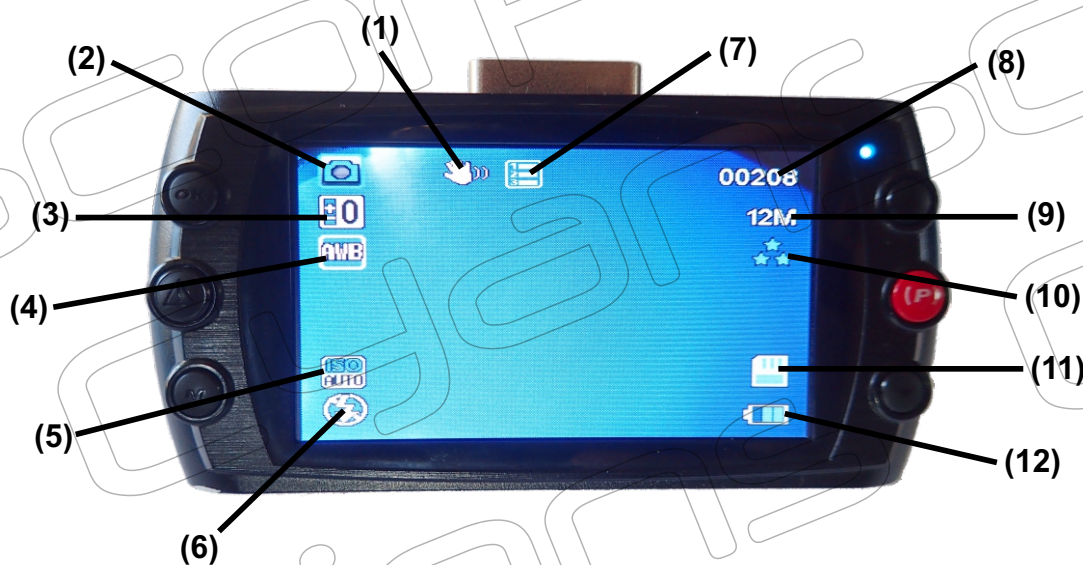
- Resolution : sets the resolution (1080p,720p,WVGA,VGA)
- Loop recording : (off,2,3,5 minutes). Defines the length of each sequence and overwrites the oldest file when the SD card is full. **Note : when choosing 'off', the camera will only record one unique sequence of approx. 4min30. Lower values are better when the camera is in battery mode only.**
- WDR = Wide dynamic range (off/on). If activated, will balance the video lighting for enhanced details.
- Exposure : (+2,+1 2/3,+1 1/3,+1,+2/3,+1/3,0,-1/3,-2/3,-1,-1 1/3,-1 2/3,-2), Sets the amount of light.

### Second page



- Motion detection : (on/off). Become active when a motion in front of the lens is detected
- Record Audio : (on/off). Records or not the audio
- Date Stamp : (on/off). Displays the date and time in the recorded video
- G-sensor : (off,low,medium,high). Become active in case of a crash or when the car is moved

## Photo mode icons



- |  |  |
|--|--|
| (1) - Anti-Shaking (on/off)                        | (7) - Sequence 3 photos (on/off)                     |
| (2) - Capture mode (single,1s,2s,5s,10s timer)     | (8) - Remaining photo shots                          |
| (3) - Exposure                                     | (9) - Resolution (5M,8M,10M,12M)                     |
| (4) - White Balance (auto,daylight,cloudy,tunsten) | (10) - Quality (fine, normal,economy)                |
| (5) - ISO (auto,100,200,400)                       | (11) - SD-card (present or not)                      |
| (6) - LED lamp (off,on,auto)                       | (12) - Source indicator (battery, ext. power source) |

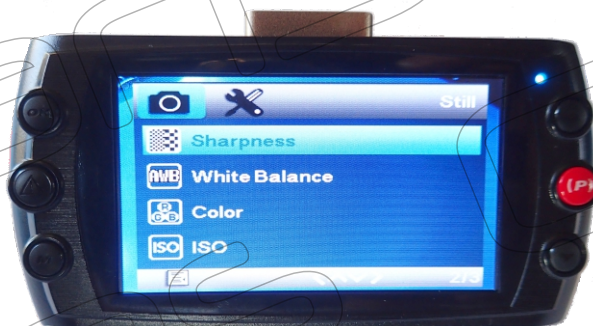
## Photo mode settings

### First page



- Capture Mode : (single, 2, 5, 10 seconds timer). Captures after x seconds an image
- Resolution : (5M, 8M, 10M, 12M). Sets the photo resolution
- Sequence : (on/off). Captures a series of three photos
- Quality : (fine, normal, economy). Defines the quality of the image

### Second page



- Sharpness : (strong, normal, soft). Defines the grain
- White Balance : (auto, daylight, cloudy, tungsten). Defines the environment light
- Color : (color, black&white, sepia) The color for artistic shots
- ISO : (auto, 100, 200, 400)

### Third page



- Exposure : (+2, +1 2/3, +1 1/3, +1, +2/3, +1/3, 0, -1/3, -2/3, -1, -1 1/3, -1 2/3, -2), Sets the amount of light.
- Anti-Shaking : (on/off). Stabilize the image
- Date Stamp : (off, date, date and time). Displays the current date/time on the photo

## Playback icons



Info : Use the Mode button (D) to switch to Playback mode

- (1) - Selected playback item (video or photo)
- (2) - Information
- (3) - Photo/Video folder/number and resolution

- (4) - Power status
- (F1) - Display folder content and volume up
- (F2) - Scroll down to display photos / videos and volume down

## Playback operations



Select folder (F1) and scroll down (F2), then select video/photo (C)



Play video (C). Adjust volume (F1) and (F2), or display folder (F1) or scroll (F2)

## Edit Playback



Select a video or photo to delete or protect. Select the (D) button to enter the Edit Playback menu. Choose to edit or protect the selected video/photo by scrolling up and down (F1) and (F2). To delete a video/photo, press the (C) button. Now you can choose to delete the current video/photo or to delete all. Press again the (C) button. Another submenu is showing a confirmation window. Here you can cancel the operation or confirm. Press (C) to execute the desired function. **Note : a protected file can not be deleted. If you try to delete such a file, a warning message is indicating that this file is protected.** To protect a file, select the Protect icon and validate with the (C) button. You have now 4 choices : Lock Current, Unlock Current, Lock All and Unlock All. Choose the desired action and validate again with the (C) button. No message is displayed when one of these 4 actions is executed. A protected file is indicated by a key icon in the individual display as well in the folder display.

# Camera operations

## Charging the battery

Connect the camera with the provided USB cable on an external power source (ex. : car charger, wall charger, power bank or PC). **Note : when connected to an external power source, the camera will immediately begin to record. Stop recording and power the camera off.** The camera is equipped with a 200mAh LiPo which is intended to be used in relation with the 'Parking mode'. The battery recording time is limited to ~13 minutes. Therefore, if you use the camera without an external power source or in relation with the 'Parking mode', be sure to set the screen saver to off and the sequence length to a minimum. Charging time, depending the selected charger is about 50 minutes. When the battery is in charge, a red LED will light. Once the battery is fully charge, the red LED goes off. When the camera is recording and the battery is in charge, a blue/red LED will light alternatively.

## Video recording

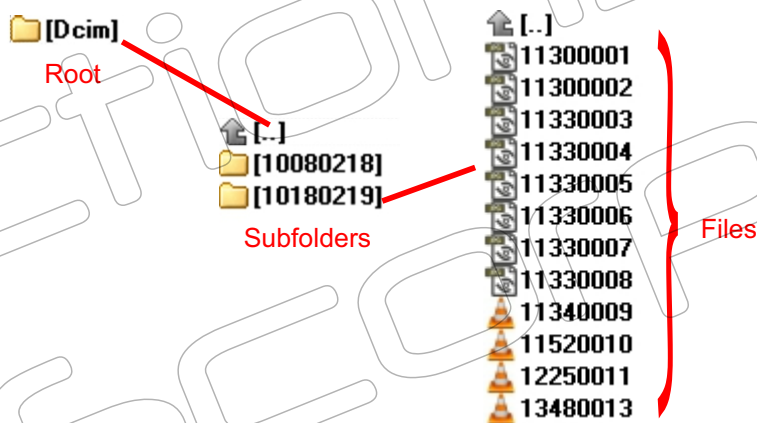
### Normal operations

First, do not forget to insert a class 10 micro-SD card (max 32GB)

When you connect the camera to an external power source, recording starts immediately. On battery only, you must press the (C) button to start recording. Press the (C) button again to stop recording.

**Note: When the G-sensor or motion detection is active, it will be difficult to stop the recording. In this is the case, do not move the camera and turn the lens to a dark surface to stop recording.** The camera will use the settings you have defined in the general settings and in the video settings. **Pay attention to choose a value for the sequence length (Loop recording), else if set to 'off', the camera will only record one unique sequence of 4min30.** If set to 'Loop recording', the camera will overwrite the oldest file. When connected to an external power source, like a car charger, the recordings automatically stops when the motor is turned off (except if the camera is connected to a permanent car plug).

### Folder structure



The camera will create a new folder every day that will contain videos and photos. The name of the subfolders is a bit strange. In any case the last four digits are indicating the month and the day. The name of video and photo files is represented by the recording time as well as by a consecutive number of 4 digits.

### LED info

#### On battery :

When you turn on the camera, a blue LED is lighting, then goes off and returns to solid blue. When recording, a blue LED is blinking. The interval of blinking during different recordings may vary. When the battery is nearly empty, the battery icon is showing an 'X'. A warning message is displayed a few seconds later and the camera goes off. The last sequence nevertheless is saved.

#### On external power source :

As soon as an external power source is connected, a blue/red LED is blinking. The recording begins immediately. As long as the recording is active, a blue/red - red LED is blinking. The interval of blinking during different recordings may vary. Once stopped, the LED returns to solid blue/red. If the external power source is interrupted, the camera goes off or in standby mode.

## Additional functions

### Gravity-sensor

The gravity sensor is useful when a crash occurred. In this case, the camera will automatically lock the recorded file to prevent from deleting. There exists 4 different possibilities to setup the sensitivity of the G-sensor : (off,low,medium,high). When set to 'low', a heavy shock must occur to trigger the recording. When set to "high", even if you only move the camera, recording is triggered. If a shock is registered during recording, the recorded file is marked as undeletable. **Note : even if the G-sensor is set to 'off', a very heavy shock can trigger a recording.** The G-sensor function can also be applied to trigger a recording when someone is moving your car. The only condition when the camera is off, a permanent power source must be connected.

#### Camera behavior :

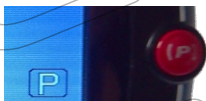
##### **On external power source :**

When the camera is plugged into an external power source and a recording is in progress, in case of a shock, the current file will be marked as undeletable. When the camera is off and connected to a permanent external source, in case of a shock or when someone move your car, the camera starts recording, but the file will not be marked as undeletable. If there is no permanent external power source, the G-sensor will not work.

##### **On battery :**

When the camera is powered by the battery only and a recording is in progress, in case of a shock, the current file will be marked as undeletable. When the camera is off, the G-sensor will not work.

### Parking mode



Push the 'P' button. A 'P' icon is displayed on screen

When the 'Parking mode' is activated, the camera enters in standby mode when the external source is turned off. If a shock occurs, the camera wakes up and a short sequence of 15 seconds is recorded. After that, the camera goes back to sleep mode. **Note : in 'Parking mode', the recorded file is not marked as 'undeletable'. 'Parking mode' and 'G-sensor' have two different behaviors, but you can activate both.**

### Motion detection

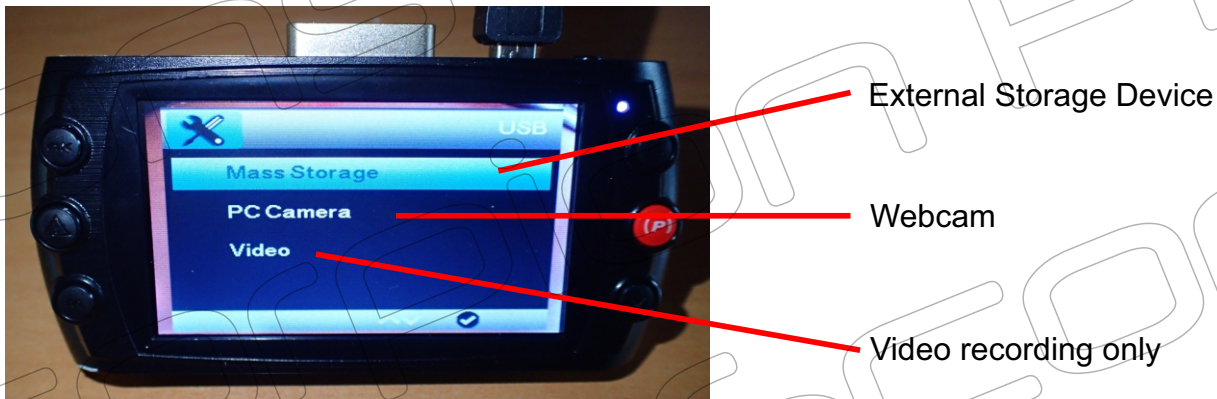
When 'Motion detection' is set to 'on', **and the camera is on**, as soon as a movement is detected, the camera is recording a sequence of 10 seconds. When a new movement is detected, the camera again begins to record another sequence of 10 seconds. In case of perpetual motion, the camera will record as long as a motion is detected (plus 10 seconds). **Note: 'Motion Detection' does not work when the camera is turned off. In addition, no protected file will be created in this mode.** To turn off the 'motion detection', keep the camera still, enter the settings and turn off the function. 'G-sensor', 'Motion detection' and 'Parking mode' can be used together.

## TV playback

You can playback videos and photos on TV using the HDMI or AV output of the camera. Simply connect the HDMI or AV cable to your TV like shown in the video. For the HDMI connection, you need a HDMI to mini HDMI cable. For the AV connection you need a 2.5mm male jack to 3 cinch (RCA) male. **Pay attention for the AV output: either the camera has only a two wire plug or the wires have been soldered inversely. Try to use the red connector as the video input instead of the yellow one if it does not work in the normal state.**

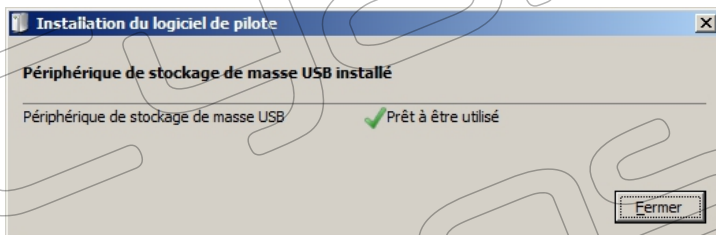
# PC connection

Directly after connecting the camera to a USB port on the PC, the camera turns on and displays a menu.



## External Storage device

When you select 'Mass Storage', you can directly access the SD card of the device. Before you can access the directory of the SD card, all the necessary drivers will be installed.



You can now use your camera to view, edit or transfer your files

## Webcam

When you select 'PC Camera', you can use your dashcam as a Webcam. Possible applications are 'Skype' or any other surveillance or video editing program. Additional drivers will be installed.



When using the camera as a Webcam, choose 'J1455' as your default camera in the program

## Video Recording

Connected to your PC, you can also use the camera to directly record to the SD-card. In this case, the camera is powered by the USB port and all the functions, like the 'Motion detection' and G-sensor function can be used. **Note : in this mode you can not transmit a live image to your PC**



# Camera features

This products Car power can only be used in 12V/14V

Remark: when appear crash because of improper operation, we can remove battery or press "reset" button to restart.

## ● Products specifications

Features	HD camera, HD video recording
G-sensor	Built-in (car accident case of emergency save, will not be deleted)
LCD screen size	2.7 LTPS
camera	170 A + grade high-resolution ultra wide-angle len
Language	Russian, Japanese , French, Italian, German, spanish, English, Chinese (simplified), Chinese (Traditional), Korean, etc...
Files format	AVI
Resolution	Max 1080P
Recording video format	MOV
Color	standard
Continuous loop video	seamless loop recording, don't leak second

Automatically power on/off	Support auto ignition boot, turn off shutdown
Motion Detection Function	support
Time synchronization	Support (Y/M/D/H/M)
Carrier media	Built-in memory ( total:64MB)
Photo mode	12million
Photo format	JPEG
Memory card	TF (max 32GB)
MIC	Support
Built-in stereo	Support
Infrared night vision	Support
Video output	AV-OUT/HDMI
Video format	PAL/NTSC
Current frequency	50HZ/60HZ
USB function	1: USB-Disk 2: PC-Camera
Power interface	5V 1A
Battery	Built-in 200mAh

## Video data

```

Format : MPEG-4
Format profile : QuickTime
Codec ID : qt 0000.00 (qt )
File size : 469 MiB
Duration : 5 min 1 s
Overall bit rate : 13.1 Mb/s
Encoded date : UTC 2004-01-01 00:00:00
Tagged date : UTC 2004-01-01 00:00:00

Video
ID : 1
Format : AVC
Format/Info : Advanced Video Codec
Format profile : High@L4
Format settings : CABAC / 1 Ref Frames
Format settings, CABAC : Yes
Format settings, RefFrames : 1 frame
Format settings, GOP : M=1, N=15
Codec ID : avc1
Codec ID/Info : Advanced Video Coding
Duration : 5 min 1 s
Bit rate : 11.9 Mb/s
Width : 1 920 pixels
Height : 1 080 pixels
Display aspect ratio : 16:9
Frame rate mode : Constant
Frame rate : 30.000 FPS
Color space : YUV
Chroma subsampling : 4:2:0
Bit depth : 8 bits
Scan type : Progressive
Bits/(Pixel*Frame) : 0.191
Stream size : 426 MiB (91%)
Language : English
Encoded date : UTC 2004-01-01 00:00:00
Tagged date : UTC 2004-01-01 00:00:00

Audio
ID : 2
Format : PCM
Format settings : Little / Signed
Codec ID : s0wt
Duration : 5 min 1 s
Bit rate mode : Constant
Bit rate : 512 kb/s
Channel(s) : 1 channel
Sampling rate : 32.0 kHz
Bit depth : 16 bits
Stream size : 18.4 MiB (4%)
Language : English
Encoded date : UTC 2004-01-01 00:00:00
Tagged date : UTC 2004-01-01 00:00:00
    
```

## Photo data

```

Bits Per Sample: 8
Color Components: 3
Encoding Process: Baseline DCT, Huffman coding
Exif Byte Order: Little-endian (Intel, II)
File Type Extension: jpg
File Type: JPEG
Image Height: 3024
Image Width: 4032
MIME Type: image/jpeg
Y Cb Cr Sub Sampling: YCbCr4:2:2 (2 1)

[-] InteropIFD
Interopability Index: R98 - DCF basic file (sRGB)
Interopability Version: 0100

[-] Thumbnail
Compression: JPEG (old-style)
Resolution Unit: inches
Thumbnail Length: 10583
Thumbnail Offset: 910
X Resolution: 72
Y Resolution: 72

[-] Composite
Aperture: 1.8
Focal Length: 0.0 mm
Image Size: 4032x3024
Light Value: 9.0
Megapixels: 12.2
Shutter Speed: 1/100
    
```