BLACK BOX DASH CAM + REAR CAM

- LOW LIGHT EXPOSURE COMPENSATION
 1080P FULL HD VIDEO RECODRING
- GPS SPEEDOMETER DISPLAY
- 140° FRONT VIEW CAMERA
- 140° REARVIEW CAMERA

- LOOP RECORDING
- G-SENSOR





BLACK BOX DASH GAM + REAR GAM BY DEST BY DEST



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BBLACK BOX BASH GAM + REAR GAM



IMPORTANT PRODUCT AND SAFETY INSTRUCTIONS

By using this dash cam, you confirm that you have read and agreed to our terms of use. Please read this Guide for important safety and health information about the BBX2

A WARNING:

If you fail to properly set up, use or maintain this dash cam, the risks of serious injury, death and property damage may be increased, or related accessories of the dash cam may be damaged. Please always pay attention to the surrounding conditions to avoid injury to yourself or to others.

- 1. Please keep these instructions properly.
- 2. Please pay attention to all warnings.
- 3. Please follow all instructions.
- 4. Please protect the power supply from being trampled or squeezed, especially for plugs, sockets and external power cords.
- 5. Please hand over all maintenance work to qualified personnel. No matter what form of damage to the device, such as plug damage, liquid or objects getting into the device, inability to work normally or damage by fall, it needs to be repaired.
- 6. Do not drop, dismantle, open, squeeze, bend, change shape, pierce, cut, dry or burn with microwave oven and electric hair dryer.
- 7. Do not insert the foreign matter into any opening of the dash cam, such as USB port, etc.
- 8. Use the original charger that is standard from the factory.
- 9. Please find a professional to modify the power cord.

ATTENTION:

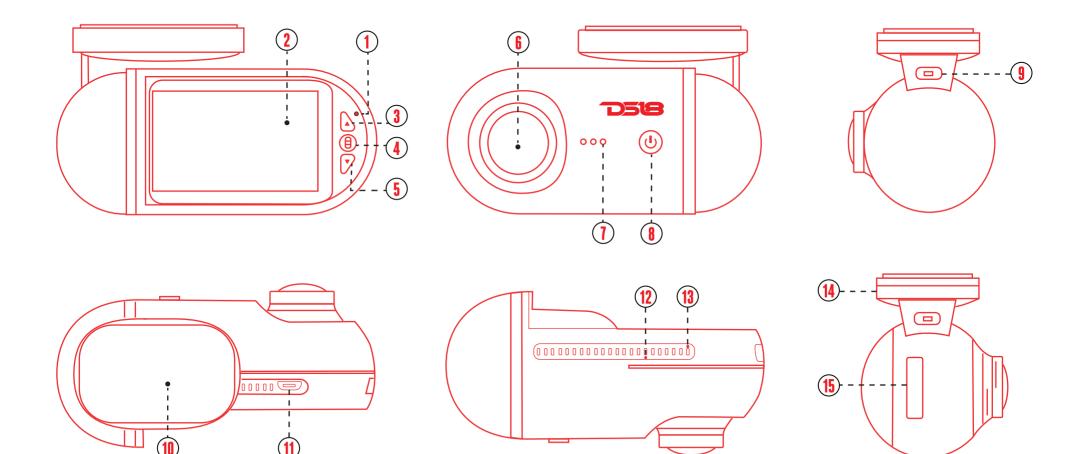
The limit working environment of this dash cam is: -20~70 °C, Extreme temperatures will cause abnormality to the dash cam. Please turn on the air conditioner in time after getting on the car and wait for the appropriate temperature before plugging in the power and starting to work.



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BBX2 BLACK BOX DASH CAM STRUCTURE AND KEY FUNCTION:



- 1- Working Status Indicator
- 2- Screen
- 3- Up Key

- 4- Menu / Mode
- 5- Down Key
- 6- Lens

- 7- Horn Hole
- 8- Power / Enter
- 9- Power Interface
- 10- Bracket
- 11- AV-IN
- 12- Reset Button
- 13- Microphone
- 14- GPS Antenna
- 15- Memorie Card slot

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SCREEN AND DISPLAY ICONS:

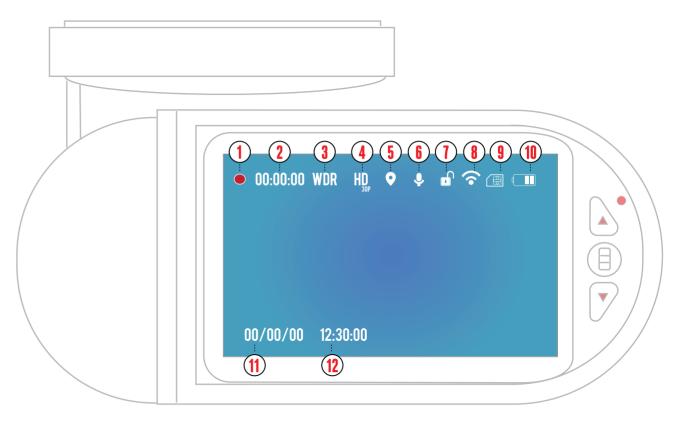
- 1. [] Video icon, which means the video recording mode.
- 2. [00:00:00] White font (remaining video recording time of the memory card/Red font) current segment recording time; After the memory card is inserted, the recording time of remaining space of the memory card is displayed in the standby

mode and white font is displayed;

After the memory card is inserted, the video recording time of the current segment is displayed in the process of recording, and red font is displayed.

3. Wide dynamic icon. When the icon is displayed on the left side of the screen, it indicates that the function has been started. Wide dynamic indicates that the images will automatically adjust the brightness value according to the

particularly bright and dark parts of the scene, so that the dark place can also be seen clearly. The wide dynamic range is the ratio of the brightest brightness signal value to the darkest brightness signal value that can be resolved by the image.



- 4.[HD] Video resolution icon; Displays the currently selected video resolution.
- 5.[•] GPS status icon. It will be displayed after GPS module is inserted into the device, and the vehicle speed will be displayed after the signals are searched.
- 6. [4] Icon that sound recording function is on. [4] Icon that sound recording function is closed. Turn on or turn off the sound recording function in the settings menu and display this icon synchronously, indicating the sound recording function is currently on or off. Short press the key during the video recording process to quickly turn on and turn off the sound recording.

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7. [•] Icon displayed when video is locked. When G-Sensor senses startup and manually press the lock key, a key icon

will be displayed on the screen to indicate the current video is locked.

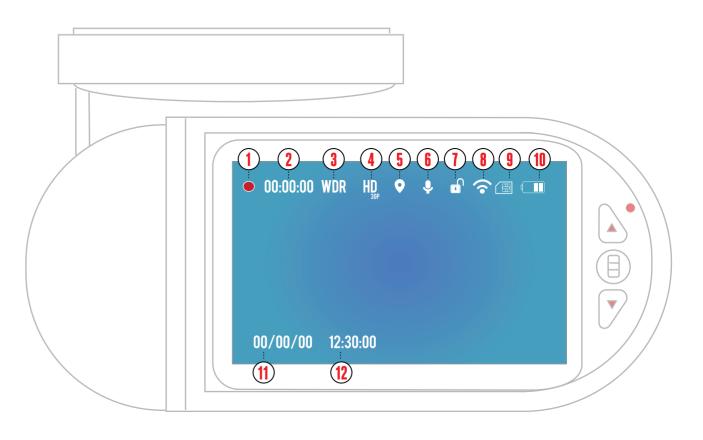
8. [] WIFI function icon; The display icon is on for WIFI function. [] Display as WIFI function turned off. Short press up to turn WIFI on and off quickly

9. [] Memory card status display icon. Icon displayed after inserting the memory card. [] Icon displayed when the memory card is not inserted.

10.[\bigsize]Battery level and status icon. Displays when power cord is connected to the car charger and charging.[\bigsize]Displays current power quantity.

11.[12:30:00]Time display, which displays the current standard time. Please set it up initially before using it.

12.[**00/00/00**]Date display, which displays the current standard date. Please set it up initially before using it.



SETTING TIME AND DATE:

Settings of Time and Date:

- 1. Since the device has the function of automatic video recording upon starting up, you need to short press the [**U**] power key to pause the video recording and the dash cam will enter the standby mode.
- 2.Then long press [♠] key to eject the menu, and short press [♠] key once; short press [▼] Down key or [♠] Up key to select the date/time, and then short press [♣] key to enter into settings.
- 3. Short press $[\blacktriangledown]$ Down key or $[\blacktriangle]$ Up key to adjust the value, and then short press $[\circlearrowleft]$ power key to confirm after selecting the required value and then enter into the next field. After setting the date and time, press $[\circlearrowleft]$ to exit.

Note: This dash cam is of four-button operation. In the operation process, it includes long press and short press, and each key is a combination key. Please remember that the long press time is three seconds and the short press time is one second.

BLACK BOX DASH GAM + REAR GAM



PHOTO OPERATION:

When the dash cam is in standby mode, short press [Θ] key once to switch to photo mode and photo icon is displayed on the upper left corner of the screen. Short press [Θ] key to take a photo, and the screen flashes once with a click sound when taking the picture, indicating that the photo is completed.

VIDEO/PHOTO PLAYBACK OPERATION:

- 1. In video recording mode, short press the [$\boldsymbol{\psi}$] power key to stop video recording.
- 2. Short press [🗎] key for two times to switch to playback mode, and playback [🕮] icon is displayed on the upper left corner of the screen.
- 3. Short press [▼] Down key or [▲] Up key to select files in the memory card.
- 4. Short press [$oldsymbol{\psi}$] power key to play or view the video file or photo selected; short press [$oldsymbol{\psi}$] power key once to pause the playing.

MENU SETTING OPERATION:

- 1. If it is in video recording mode, short press the [$\boldsymbol{\psi}$] power key to stop video recording.
- 2. Long press [♠] key to call out Settings Menu and short press [▼] Down key or [♠] Up key to turn the page of Menu.
- 3. Select the menu option that needs to be changed and short press [$oldsymbol{\upsilon}$] power key to enter to change.
- 4. After the setting is completed, short press [♠] key to exit and enter into standby mode.

SPECIAL FUNCTIONS:

1. Gravity Sensing Function

Long press $[\mbox{\ensuremath{\ensuremath{\square}}}]$ key to call out the Settings Menu, and then short press $[\mbox{\ensuremath{\ensuremath{\nabla}}}]$ Down key to find gravity sensing option, short press $[\mbox{\ensuremath{\ensuremath{\square}}}]$ power key to enter to change (it is recommended to select the intermediate level). When gravity sensing is started, the device will automatically save the video recorded as an undeletable file; the icon $[\mbox{\ensuremath{\Omega}}]$ appears on the screen after turning it on.

Note: If the gravity sensing sensitivity is set too high, there will be too many files in the memory card and it will be unable to record the video.





2. Parking Monitoring Function

After the parking monitoring is turned on, when the vehicle is turned off and the dash cam enters the automatic switch-off program, if the vehicle body receives the vibration generated by external force, the dash cam will automatically start the video recording and automatically shut down after recording for 15 seconds; when the vehicle body vibration is detected again, the video recording function will be started again.

Note: The parking monitoring function must be set after the dash cam is switched on and automatically powered on, and it will not be started until the power is switched off automatically after the setting is completed. If the settings are made under manual power-on and power-off, this function will not be turned on.

3. Motion Detection Function:

After the motion detection is turned on, when it detects the object motion, the dash cam starts video recording; the startup time of the motion detection is 10 seconds, it will continue the video recording if the motion is detected again within 10 seconds, and the device will automatically enter the motion detection standby mode after the video recording is completed and no motion is detected again for 10 seconds; when an object is detected to move again, the video recording function will be started again!

Note: This function should not be used by non-professional users, which may result in users being unable to normally use the dash cam functions.

4. USB Mode:

Connect USB cable to the computer and the driving dash cam will automatically pop up the USB menu with the following options:

1-Memory and 2- PC camera

In this mode, video files or photo files can be accessed. Selecting this mode will pop up the USB video device, which can be used as a PC camera for real-time network photos or video chat.

5. Battery Instructions:

For battery quantity indication, please refer to the diagram:









Sufficient power

Slightly low

Low power

Insufficient power

After the car is powered on, the red charging indicator will be on during the charging process, the entire charging time is about 180 minutes, and the red charging indicator will be off automatically after the battery is fully charged.

Note: This device is designed to work with the time when the car is running. The built-in battery is only designed for saving files while parking and switching off, so the working time of the battery is limited. Please connect the vehicle power supply during daily use.





6. RESET:

If the device has abnormality or switch-off while using, the reset key can be pressed by a small needle through the small hole of the housing to reset the device.

7. Number Marking:

[▼] Down key to find the switch option of plate number and choose to turn it on. When recording the video, the plate number will be marked at a fixed position of the video.

8. GPS Positioning:

There is a GPS module in the machine bracket. When recording the video, the speed and driving position of the car will be displayed on the current video for viewing.

9. WIFI Mobile Phone Wireless Interconnection:

This function is to create WIFI hot spots inside the dash cam and transfer files inside the dash cam to the mobile phone through WIFI, thus realizing wireless interconnection between the dash cam and the mobile phone. This WIFI signal cannot be connected to the Internet. To use this function, you need to search for "DVR-N3" in the mobile phone application market or browser to download the latest version of APP that matches the mobile phone system and install it to the mobile phone.

Attentions:

- 1. When the car engine is started, the device will start automatically and start recording; when the engine is turned off, it will automatically stop recording and automatically enter the switch-off program, or short press [] power key to stop recording manually.
- 2. The cigarette lighter interface of many vehicles is normally powered and will continue to power when the engine is turned off. In case of such a situation, please take the following steps: turn on/off the device manually or unplug the car charger from the cigarette lighter.
- 3. The loop video recording time is 1, 3 or 5 minutes, which will be saved once. Please adjust it through the loop video recording menu (it is recommended to use the system default). The video in memory card will be saved in loop video recording mode. If the memory card is full, the earliest files in the memory card will be automatically overwritten. For gravity sensing or locked files in emergency, the videos cannot be automatically overwritten and need to be deleted manually.
- 4. Locked files in emergency

Note: If the gravity sensing function is started and a collision is detected, the device will automatically lock the current recorded video from being overwritten, which is called locked file in emergency.

BBLACK BOX DASH GAM + REAR GAM



SETTING MENU:

Menu Options	Description	Available Options
Resolution	Sets the definition of video	1080FHD, 720P
Loop viedo recording	Sets the time length of each segment video file	1 minute, 3 minutes, 5 minutes, turn off. If you choose to turn off, the card will not be automatically overwritten when it is full.
WDR	Wide Dynamic auto brightness adjustment	ON, OFF, and suggest to turn it on
Exposure compensation	Under exposure, dim picture and need fill-in light	+0.0,-1/3, -2/3, -10, -4/3, -5/3, -2.0, +2.0, +5/3, +4/3, +10, +2/3, +1/3
Motion detection	In satndby mode the video recording will aunto-start when motion is detected	ON, OFF
Sound recording	Sound recording is On or Off	ON, OFF
Date display	Date display on the video recorder	ON, OFF
Gravity sensing	Video record upon collition will never be overwirtten	OFF, High, Moderate, low
Parking guard	After Parking and power-off, if the car body recieves vibration caused by external force, the driving dash cam will turn on the video recording	ON, OFF
Date/time	Date and time	Can set the year, month, date, hour, minute, seconds, and order of year, month and day





SETTING MENU:

Menu Options	Description	Available Options
Auto Switch-off	Automatic Switch-off without video recording or any operation	OFF, 1 minute, 3 minutes, 5 minutes
Screen Saver	Turn off the screen at the set time	OFF, 1 minute, 3 minutes, 5 minutes
Key Sound	Whether the key has sound feedback when be pressed	ON, OFF
Language Settings	Languages of the operating menu	Traditional Chinese, Russian, Japanese, French, Italian, German, Spanish, English, etc.
Light source frequency	Light flashing frequency	50Hz and 60Hz
Plate number	Plate number of the vehicle can be entered and displayed in the video file	Up to 8 characters
Format	Data on the memory card can be deleted	Micro SD card
Default settings	Restore Factory Defaults	Cancel, Confirm
Screen saver	The screen is automatically off while the dash cam is working	ON, OFF
Version	Factory software version	Software version number





SPECIFICATIONS AND PARAMETERS:

FEATURES	DESCRIPTION
Body	Zinc alloy
G-sensor	Built-in (urgently save when the car is in emergency and will not be deleted)
Screen	2.45 inch / LCD screen
Lens	140 degree A+ grade high resolution ultra wide angle lens
Languages	Russian, English, Chinese, Japanese, German, etc
File format	MOV
Recording resolution	1920*1080P1280*720P
Recording video format	H. 264, Audio: AAC
Color effect	Standard
Nonstop video recording	Seamless nonstop video recording without a second missing
Startup and switch-off with the car	Support start by car ignition and turn off by power-off
Motion detection function	Support
Date and time	Support Day, month , year, Hour, minute, seconds

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SPECIFICATIONS AND PARAMETERS:

BBX2	Features
Carrier media	Built-in 64 MB memory
Photo Mode	12 million
Photo Format	JPEG
Memory Card	TF (Max support 64 GB)
Microphone	Support
Built-in stereo	Support
GPS	Support
WiFi	Support
Current Frequency	50Hz/60Hz
USB Function	USB-Disk / PC-Camera
Power interface	5V 2.5A
AV-Input	Rear Camera
Rear Camera HD	720P@30fps
Back Up Camera Trigger	Yes
Battery	Built-in 100mAh





TROUBLESHOOTING:

UNABLE TO TURN IT ON: Check whether the dash cam is properly connected to the car charger and whether the battery is too low for charging. If there is a program problem, the factory settings can be restored by pressing the RESET key.

STOP RECORDING AUTOMATICALLY OR DO NOT LOOP RECORD WHILE RECORDING: Due to the huge amount of high-definition video data, it is possible that the memory card cannot keep up with the reading and writing speed. Please use high-speed TF cards such as C10 high-speed cards.

It is also possible that the gravity sensing function is turned on, and all files in the memory card are locked. Please turn off gravity sensing and format the memory card.

EACH SEGMENT TIME FOR CYCLIC RECORDING IS DIFFERENT FROM THAT HAS BEEN SET: Please check whether the motion detection function is turned on or not, because the recording time in the motion detection mode depends on whether the picture is moving.

THE VIDEO IS NOT CLEAR: Please check the lens for stains or fingerprints. Please clean the lens surface before recording to keep the lens clean and tidy.

EFFECTS OF THE VIDEOS PRODUCED SOMETIMES ARE GOOD OR BAD: The recording effect has a great relationship with the recording light environment, such as backlighting, frontlighting and the intensity of light, etc., which will cause the recorded video effect to be different.

STRIPE INTERFERENCE IN THE IMAGE: This is caused by setting the wrong "light source frequency" under the fluorescent lamp, and the average frequency in China is "50HZ".

SHUTDOWN: Please short press the "RESET" reset key to resume the restart after shutdown.

NO GPS SIGNAL: When GPS is inserted, there will be a gray icon. It will take 30 seconds to search for signals when it is used for the first time, and strong GPS signals will need to be obtained in the outdoor open area without shelter of tall buildings WIFI cannot be connected to the mobile phone:

- 1. After the mobile phone has found the WIFI name of the dash cam, confirm the connection by entering the correct password
- 2. After connecting to WIFI, you cannot get access to the Internet. You cannot switch to other networks at this time, or you cannot connect to your mobile phone
- 3. Please verify whether the "DVR-N3" APP on the phone is the latest version, otherwise the images of the dash cam cannot be transmitted to the phone properly after connecting to WIFI when it is not the latest version

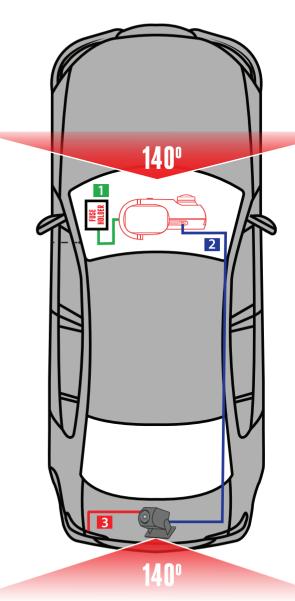
BBX2 BLACK BOX



INSTALLATION:

The installation method may vary between different models and makes of vehicles.

- 1. Please start by locating where the Dash Cam and backup camera will be installed, making sure that it does not block the view of the road and does not interfere with the rearview mirror.
- 2. Determine if there are any pre-drilled holes or spaces through the license plate lighting to fit the backup camera power cable through.
- 3. Mount the BBX2 using the double side tape included and stick it on the Windshield.
- 4. Determine wiring routes for the backup camera cable as well as the USB power supply cable (1).
- 5. Use included clips to route cables or use appropriate trim removal tool to remove interior trims to hide the wires. Use zip ties to secure wires if necessary. Be wary of airbags.
- 6. Once the cables have been routed, plug in the USB power supply cable in on the device. Locate a 12 Volts power source from the factory fuse holder or a 12V outlet socket in your vehicle, connect the red wire to (+) accessory power (not constant) and the Black wire to (-) ground chassis.
- 7. Use trim removal tool to access the reverse light's power cable.
- 8. Once the reverse light's power cable is found, use the multimeter to determine the positive and negative wires of the reverse light power cable.
- 9. Use the wiretap to connect the red cable from the backup camera (3) to the reverse light's power cable (+).
- 10. Attach the backup camera to the center area above the license plate and connect the rear camera cable to the rear camera harness (2).
- 11. Test the wiring by starting up the vehicle and see if the BBX2 can display rear view clearly. Shift into reverse and see if the parking lines appears.
- 12. this should be ending the installation process, after this you can go ahead and setting up the BBX2 and start enjoying your new Dash Cam Recorder.



- 1 Power Input Power Cable (12 Ft)
- 2 AV-IN Rear Cammera Wire Harness (17 Ft)
- **3** Reverse Lamp (Trigger) wire (4 Ft)



FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE WWW.DS18.COM

