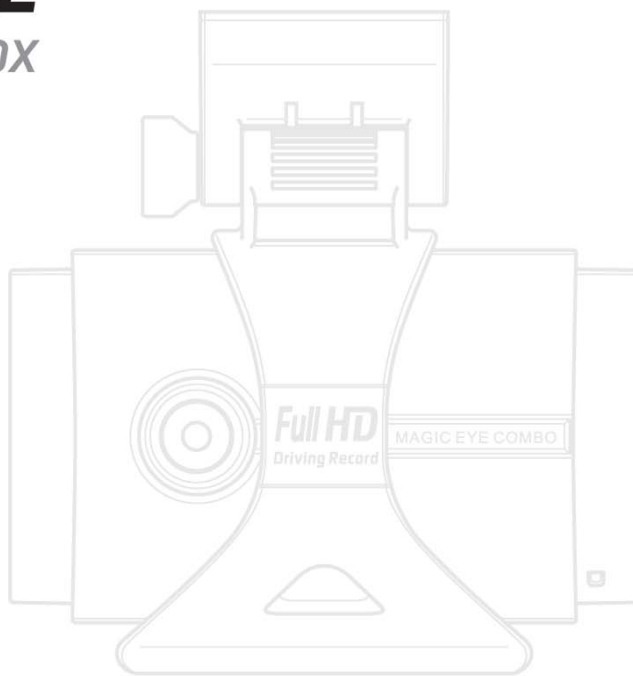


MAGIC EYE
CAR BLACK BOX



1080P Full HD/5 Million camera/H.264 decoding compression

AMPIRE MAGIC EYE
CAR BLACK BOX
FHD3000

1080P Full HD/5 Million camera/H.264 decoding compression

Full HD
1920x1080

Manual



Appearance Patent NO.201230115310.X
Utility Model Patent No.201220167032.7



Preface

This product is full HD DVR. It adopts USA Ambarella sensor and has its unique outstanding characters by cooperating with professional Korean DVR manufacturer. This product can record all process of driving and record or take pictures during travel, with effect same to professional DV device. Before use this product, please read this manual carefully. It will bring you joy.

Product Warranty

This product has passed ISO9001: 2008 and related security act , please feel ease to use.

Warning Against Copyright Infringement.

Please note that this product is for personal use only. It may not be infringed upon or invade the range of domestic or international regulations.

Menu Guide

Features	1
Specification and list	3
Introduce	4
How to mount	5
How to use	6
How to set	7
How to REC	8
How to capture	9
How to playback	10
Extensions(GPS)	11

Features

- ✓ **1080P Full HD**
Adopts USA Ambarella FULL HD solution with record file resolution achieve at 1920x1080P30.
- ✓ **5 Million camera**
Adopt 5million HD sensor and 5million pixel large aperture camera, with clear effect daytime and can see car number plate in night vision.
- ✓ **140° big view angle**
Horizontal 105°, vertical 70° and FOV 140°.
- ✓ **32X fast playback**
2X/ 8X/ 32X fast forward and rewind playback ,and can rewind play, play photos by using PPT.
- ✓ **30 event files locked**
Before or after 25S G-SENSOR event files recorded will be locked ,saving in the new folder totally 30pcs.The earliest files will be deleted once above 30.
- ✓ **6 grid video image preview**
Playback mode, video and photos can be previewed by 6 grid .
- ✓ **5 Pcs continuous shooting**
3 or 5 pcs continuous shooting in photo mode, and 10S seconds self-shooting.
- ✓ **4.5M Motion detection**
Any movement or light changes within 4.5m trigger recording when motion detection on. And it will standby automatically after 25s with no movement or light change.
- ✓ **4x digital focus**
Except 1080P , video mode can be 4X digital zoom, and same as photo mode.
- ✓ **2"LCD display**
2" high resolution LCD digital display (960X240) .
- ✓ **HDMI Output**
1920X1080 HDMI signal output to HD TV.
- ✓ **Mp4 Format**
Mp4 format files, can be used by mostly PC and portable media for playback.
- ✓ **USB2.0**
High speed USB port , can be connected with computers for copy, moving, deleting.
- ✓ **External GPS**
Speed display and Map tracking record

Features

✓ H.264 decoding compression

High data compression ratio, saving storage space while ensuring high-quality video data.

✓ 4 ways for record start

Manual start, car power start, G-sensor start, motion detection start.

✓ No frame and no time be lost

Record with 30fps, record and save simultaneously.

✓ Quickly key for microphone and screen on or off

Build-in microphone for recording the sound. And quickly key for microphone and screen on or off.

✓ Recycling record

Record length has 1, 2 or 3min, it automatically delete old files when storage space is full.

✓ Unique file naming

The video file name include year, month, day, hour, minute and second information, for the files name, the normal ones with "S", motion detection with "M". G-SENSOR with "G".

✓ Delayed shutdown

It will alarm before car power off and delay the shutdown time.

✓ With remote control

Can use remote control to switch the two cameras, on or off recording and display.

✓ Low battery alarm

When the battery is low, the system will alarm.

✓ Anti-shock bracket

Professional anti-shock bracket can ensure good quality video, no shake, no noise.

✓ Multi-language

Support Chinese, English, Russian, Korean etc.

✓ Build-in loudspeaker

Build-in AC-3 loudspeaker, used in playback, key alarm, record state remind, SD almost full and low battery alarm.

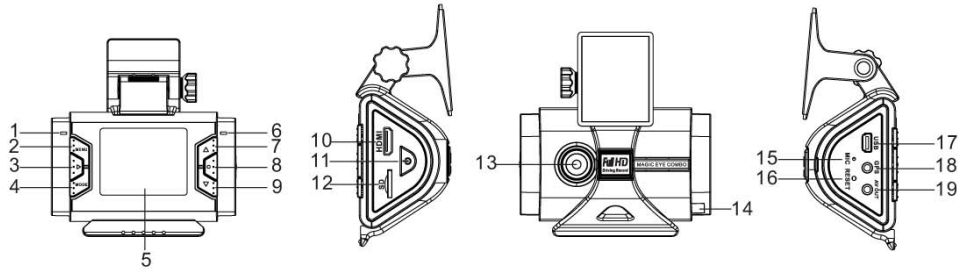
Specification

NO.	Parameters
1. Solution	USA Ambarella FULL HD solution
2. Sensor	USA Micron Sensor.
3. Lens Pixel	5 Million CMOS SENSOR
4. Lens Angle	Fixed lens, H105, V75, FOV140
5. MIN illumination	<0.5Lux
6. Photo Resolution	3M(2048X1536)/5M(2560X1920)/8M(3200X2400)12M(4000X3000)
7. Video Resolution	1920X1080P30/1440X1080P30/1280X720P30/848X480P30
8. Video Format	MP4 (H.264)
9. Photo Format	JPEG
10. Storage Media	Micro SD/MMC (Maximum 32GB SDHC)
11. Photo Storage	4GB SD:3M(3800PCS) 5M(2320PCS) 8M(1540PCS)12M (960PCS)
12. Record	4GB SD:720P/120min WVGA/270min 1080P/90 min
13. Motion sensor	Any movement with 4.5m trigger recording when motion sensor on.
14. G-sensor	1-6Class G-sensor
16. Remote Control	RF remote control
17. GPS	Speed display and Map tracking record
18. LCD	2.0, TFT LCD (960X240)
19. Focus	4X digital zoom.
20. PC Port	USB2.0
21. Power	350mA@3.7V(MAX)
22. Lithium Battery.	600mAh
23. Recording Time	1H (Single battery)
24. Storage Temp.	-20°C-50°C
25. Working Temp.	-10°C-50°C
26. Working Humidity.	15~85%RH

Package List

				
Host	Frame	Cigarette Lighter Car Charger	AVOUT cable	Remote control
	Extension accessories		Extension accessories	
USB data line				
	Micro SD card (4GB)	Manual	MagicEye CD	External GPS

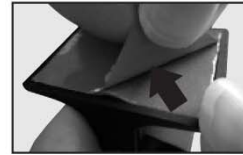
Introduce



- (1) Charge Indicator lamp: Red color means it is on the charge status. Dark red means it's full ;
- (2) MENU : Menu set up button: It is for setting parameter. Set up record parameter and main menu information on record standby status; Set up the photograph parameter from the menu on photograph mode; lock the selected file on play standby status or unlock the locked file ;
- (3) ▶ : Play button, play preview mode, press up, down to select file, press "●" to play or stop, it may do rewind by up button and fast forward by down button when in the process of play status. Press "▶" again it will sign out the play mode ;
- (4) MODE: Mode button, it may switch the record and photograph mode when on standby status. It is used for turn on or off the microphone quickly during recording. It is used to delete single or all storage file when press this button for 2 seconds on the play browse status ;
- (5) LCD screen: 2 inch LCD screen ;
- (6) Record Indicator lamp: Green color means it is open, flashing green color means it is working ;
- (7) ▲ : Up button. It is for the Up function on the menu mode. It may digital zoom in (Max: 4 times) on record mode except 1920X1080P30 mode. It may digital zoom in (Max: 4 times) on photograph mode. It is used for fast forward 2X\8X\32X on play mode ;
- (8) ● : Record button. It is used for start record on the standby record mode or stop recording; it is used for take a photo on photograph mode; Same as "ok" function on the other mode ;
- (9) ▼ : Down button. It is for the down function on the menu mode. It may digital zoom out (Max: 4 times) on record mode except 1920X1080P30 mode. It may digital zoom out on photograph mode. Used for fast rewind 2X\8X\32X on play mode ;
- (10) HDMI interface: high-definition video signal output ;
- (11) POWER: long press for 3 seconds boot or short press shutdown ;
- (12) MICRO SD card holder: load the memory card ;
- (13) Lens: optical components, for video and camera viewfinder, please keep the lens clean;
- (14) IR receive windows: receive from the IR remote control;
- (15) MIC: microphone recording. Voice recording starts once turning on the host recording function with off as default ;
- (16) RESET: reset button for system reset ;
- (17) USB port: standard USB power charging, car charger socket, or a standard USB data transfer;
- (18) GPS port: external GPS module interface for external GPS module, which provides the speed display and map query log;
- (19) AV OUT connector: Used to output the video signal to the other screen or DVD headunit.

How to mount

▶ Paste the bracket to the windshield



1. Tear down the 3M from the bracket



2. To plaster on the car window after selected position



3. Release screw on the bracket and adjust the camera angle, then to tight the screw.



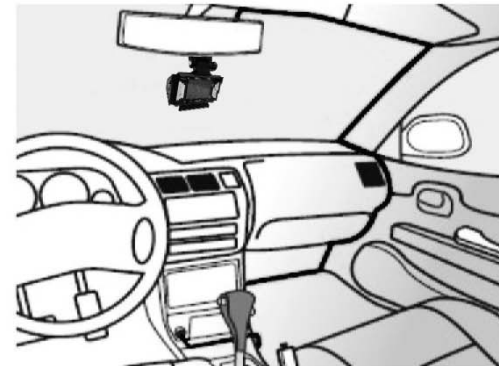
4. Installation finished

▶ Remote control



1. IR transmit window : when using please align the IR receiving window of the machine.
2. PARKING: for quick opening motion detection function when parking.
3. OFF: for quickly shutdown
4. UP KEY : Function same as the machine up key
5. RIGHT KEY : Left function select, and select backward speed (2X / 8X / 32X speed).
6. OK KEY : Enter key ; Playback mode for confirm and pause. It can be used for snapping when recording time except FULL HD(1920X1080) mode.
7. LEFT KEY : Right function select, and select forward speed (2X / 8X / 32X speed).
8. DOWN KEY : Function same as the machine down key
9. REC KEY : start or stop recording .Start or stop shooting in photo mode.
10. LCD ON: Quickly turn off or on LCD
11. PLAY: Change to play mode for preview video or picture.
12. AV OUT: Output video signal to the other displays or in - car DVD display
13. MODE AND Microphone: Change record\play\photo mode. Quickly close or open the microphone when recording
14. MENU: Menu buttons, parameters setting.

▶ Electric Connection



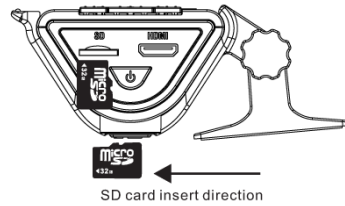
1. Insert the car charger into the cigarette lighter.
2. Plug the car charger in the machine and ensure a good touch.
3. Fix the power cable with wire nail.

How to use


▶ SD card usage


Open the plastic cover to insert Micro SD card in. Push SD card to take out it.

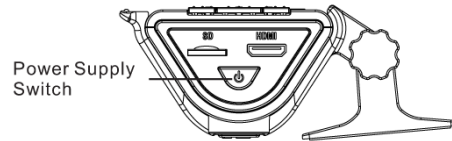
Attention: SD card prior to use with machine firstly then turn on the computer and enter menu to choose a format "YES" for SD card format.



▶ ON/ OFF manually

On : press power  supply 3S after the indicator turning to green.

OFF : press power  supply key after the indicator turn off.



Attention: DVR can alarm in low power condition.

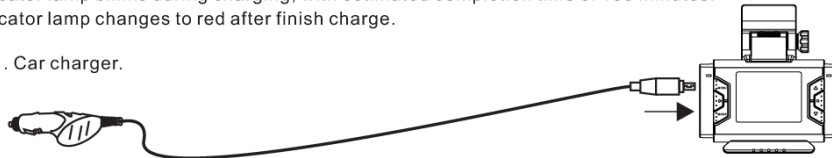
▶ ON/ OFF automatically

Once get power from car charger, DVR will start automatically and enter into recording state.

▶ Battery Charging

Indicator lamp blinks during charging, with estimated completion time of 180 minutes. Indicator lamp changes to red after finish charge.

1. Car charger.



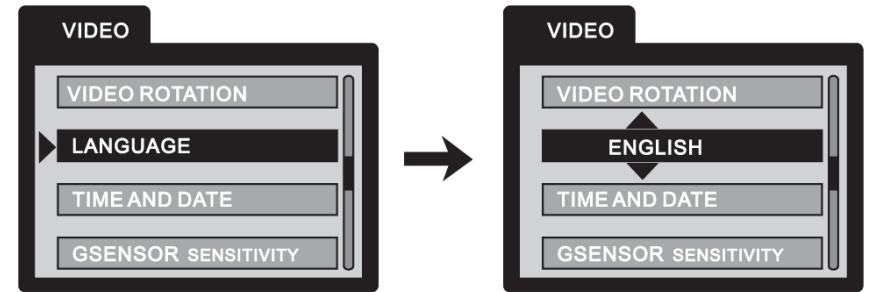
2. Car charger to charge



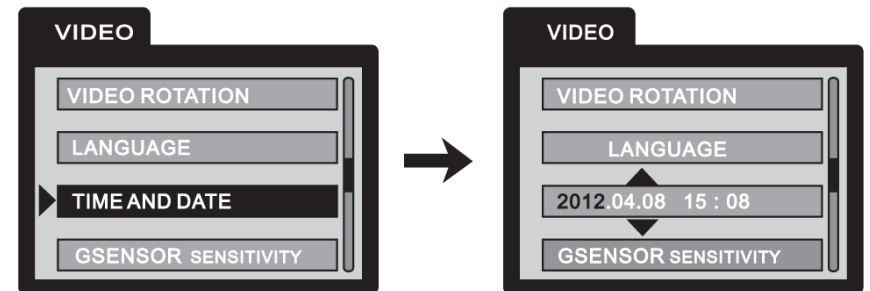
How to set

In standby state, press MENU to set the data. After MENU, press UP or DOWN key to select the needed language, details as below :

【LANGUAGE】 Set the language : Simplified Chinese / Traditional Chinese / Korean / Russian / English.



[Time and Date Setting] Enter into the main menu, use "●" to find out the time setting line and up or down key to select the correct number. Press "●" key to save new settings.



【GSENSOR Sensitivity】 Set G-SENSOR sensitivity : 01/02/03/04/05/06/OFF;

【VOLUME】 Set the volume of the loudspeaker: 1~16 levels and OFF.

【LCD AUTO TURN OFF】 Set automatically shut down time for the screen : 1MIN/3MIN/NEVER.

【POWER Off DELAY】 Set automatically shut down time when the car power off: Off/5m/10m/30m.

【FLICKER】 Set frequency : Auto/50Hz/60Hz;

【TV TYPE】 Set TV system : NTSC/PAL;

【TIME STAMP】 Set if record file have timestamp : On/ Off.

【FORMAT】 SD card format: Yes/No. (Be careful of this operation.)

【DEFAULT SETTING】 Restore factory settings : Y/N. (Remark : if click Y , it will restore factory setting.)

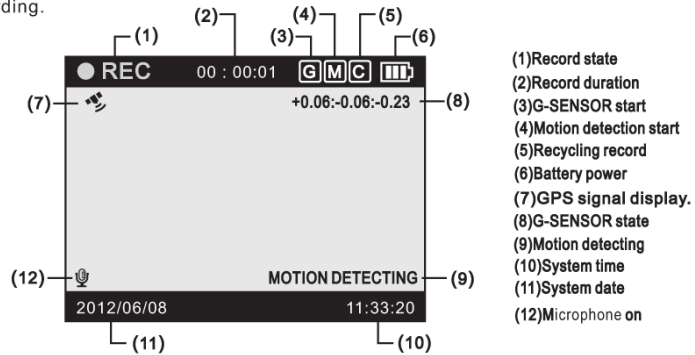
【FIRMWARE Version】 Check the software version.

Click "●" after this setting to save.

How to REC.

► REC. operation

Press "●" to start record with indicator green. Once the right corner appear ●REC mark, press "●" to stop recording and save files. Press "MODE" during recoring can start or shut down audio recording.



► REC. set

Press MODE button to change capture mode, then press "MENU" go into set

- [RESOLUTION]** Setting Resolution : 1920x1080P30/1440x1080P30/1280x720P30/848x480P30.
- [QUALITY]** Set image quality : H/ M/L.
- [RECORD OVERWRITE]** Set cycling record : ON/ OFF.
- [SPLIT MODE]** Set record file length : 1MIN/2MIN/3MIN;
- [MOTION DETECTION]** Set motion detection : ON/ OFF.
- [AE BIAS]** Set exposure : -2.0/-1.7/-1.3/-1.0/-0.7/-0.3/ 0.0/+0.3/+0.7/+1.0/+1.3/+1.7/+2.0;
- [BEEP SOUND]** Set Key Tone : ON/ OFF.
- [INTERNAL MIC VOL]** Set microphone volume : H/M/L.
- [WHITE BALANCE]** Set white balance : AUTO /D4000/D5000 / SUNNY / CLOUDY / FLUORESCENT / INCANDESCENT
- [CONTRAST]** Set contrast: SOFT / STANDARD /HARD.
- [SATURATION]** Set saturatio : SOFT / STANDARD /HARD.
- [HUE]** set chroma : SOFT / STANDARD /HARD.
- [Self-CAPTURE]** set self-capture time:Off /10S.
- [CONTINUE CAPTURE]** Off/ capture 3/ capture 5
- [VIDEO ROTATION]** set image flip : Yes/ No.

► Check videos

Press "►" key once to show video files, and press "●" second time to play files.

► Video deletion

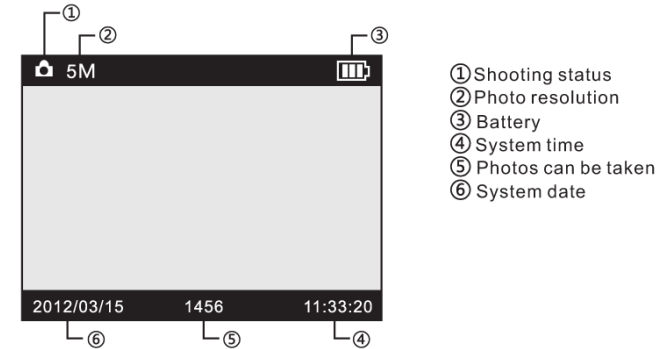
Press "►" and MODE for 3 seconds to DELETE. Choose Yes or All to delete photos.

► Videe protection

Press "►" and MENU, select Yes to protect files or No to cancel protection.

How to capture

► Capture operation



► CAPTURE set

Press MODE button to change capture mode, then press "MENU" go into set

- [PHOTO SIZA]** picture size:12M/8M/5M/3M.
- [AE BIAS]** exposure:-2.0/-1.7/-1.3/-1.0/-0.7/-0.3/ 0.0/+0.3/+0.7/+1.0/+1.3/+1.7/+2.0
- [QUALITY]** set picture quality : H/M/L.
- [WHITE BALANCE]** set white balance : AUTO /D4000/D5000 / SUNNY / CLOUDY / FLUORESCENT / INCANDESCENT
- [CONTRAST]** set contrast: SOFT / STANDARD /HARD.
- [SATURATION]** set saturatio : SOFT / STANDARD /HARD.
- [HUE]** set chroma : SOFT / STANDARD /HARD.
- [Self-CAPTURE]** set self-capture time:Off /10S.
- [CONTINUE CAPTURE]** Off/ capture 3/ capture 5
- [VIDEO ROTATION]** set image flip : Yes/ No.

► Check photos

Press "►" show videos, press "►" again, show photos .

► Pictures deletion

Press "►" twice to browse photos. Press MODE for 3S to enter into deletion, select YES to delect current file, or ALL to delect all photos.

► Photos protection

Press "►" and MENU to enter into menu, select CONFIRM to protect the files taken, or NO to cancel protection.

How to Play

▶ Played on DVR

Press "PLAY" to play, press ▲ or ▼ to select the file, and then press ● to play the file. Press again to stop. During playing, ▼ to rewind, ▲ to forward, with both 2X, 8X, 32X three speeds.

▶ Played on HDTV

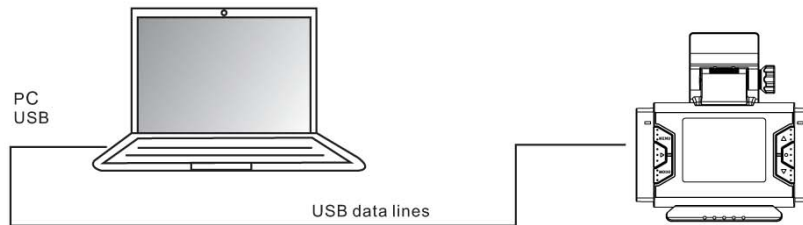
The video can be viewed through HDMI high-definition signal line output to TV.

▶ Played on computer

Two play mode

1. You can take out the SD card and play on the computer.
2. You can use the USB cable to connect to the computer and play on DVR, details refer to the picture below,

Recommend to use Medua Player, KM Player.



When the USB connect to the computer, USB CONNECTING appears, and the the computer will read the SD card to playback, copy, cut, delete, format the files in the card.

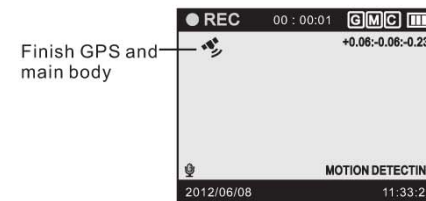
Troubles

1. **[Incapable of videoing or photographing]**
Please modify the resolution of videoing of photographing, or check the memory card has enough space and ensure the memory card has been proper installed.
2. **[No images showed on the TV]**
Please confirm it has been proper connected to the TV and the HDMI faucet has been well connected /contacted.
3. **[Unclear images of videoing or photographing]**
Please check if there's dirt covered the surface of the lens or the auto glasses, and clean with a soft cloth.
4. **[No flicker of the status light or failure of the button during videoing]**
Please press "RESET" to reset the system and press "POWER" to restart.
5. **[Disorder of system settings]**
Please enter the "MENU", and press "DEFAULT SETTING" to resets all the settings to the default.
6. **[No response of operation with remote control]**
Please ensure the launch window of remote control has been lined up to the receive window of the machine, or the battery power of the remote control is enough.

GPS module installation

▶ GPS connection

Connect GPS module to the main body. Once "📶" appears on the screen, it indicates connection finish, it will be working when its color change from white to green. GPS connection graphics as below



Advice to install GPS antenna on the windshield.



Attention please:
Keep the GPS antenna UP to receive the signal easily

▶ GPS play view install

Insert MAGIC EYE CD to your computer, then click Magic Eye 1.0 Setup to install the play view soft. You can enjoy this play view when finish install the program.

