

User Manual

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Version B

Part No. 480-957-P



### **Important Information**

#### Safe Driving

Motorists, as well as operators of emergency or service vehicles, are expected to exercise all due caution while using this product, and to obey all applicable traffic laws.

Security of Your Vehicle Before leaving your vehicle, always remember to conceal this device in order to reduce the possibility of break-in and theft.

#### Privacy

This device may not be used to violate the privacy rights of others. In no way will Cobra Electronics or its subsidiaries be responsible for inappropriate use of this product. It is the sole responsibility of the buyer to consult legal counsel for the interpretation of any laws applicable to the area of intended use of this product.

# For Customer Service, Please Contact:

Cobra Electronics Corporation 6500 W. Cortland Street Chicago, IL 60707 www.cobra.com



1080P FHD DASH CAM

### **Record Your Drive**



#### Customer Assistance

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Protect • Re-live • Share



# **Controls, Indicators and Connections**

### **Controls, Indicators and Connections**





# Product Features

NOTES

Congratulations! You've made a smart choice by purchasing a Drive HD Dash Cam from Cobra. This booklet describes the simple steps for mounting, setting up, and using your dash camera.

#### **Camera Features**

Records everything you see and hear in 1080P Full HD with high dynamic range that optimises video during day or night.

Continuous Loop Recording overwrites old footage unless you want to save it. A time/date stamp is embedded on all recordings so you'll never miss an event while driving.

Ready to use out-of-the-box. Includes a heavy-duty suction cup to mount the camera to your windshield and an 8GB Micro SD card to record your drive.

Wide angle view gives you a full view of the road without any edge distortion.

3-axis G-Sensor senses sudden accelerations and collisions and automatically protects footage surrounding the incident.

### **Additional Features**

Emergency Record Button

Motion Sensor

Built-in Microphone & Speaker

Auto-Record and Auto-Power Off

Adjustable Movie Clip Time

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## What's in the Box



Dash Cam (Model # CDR 840)



**Heavy Duty Suction Cup Mount** 



**Cigarette Lighter Adapter** 



**Product Manual** 



8GB Micro SD Card (installed)



Mini USB to USB Cable

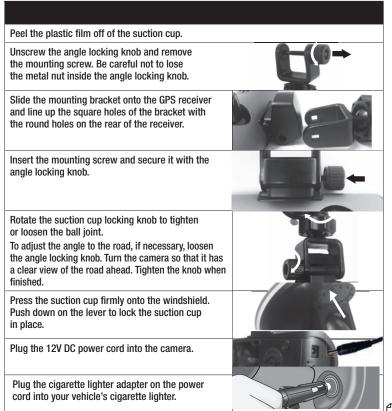


## Installation

## Where to Mount Your Unit

You will get optimum performance from your camera if you **mount** it on the front windshield, behind the rearview mirror. This will minimise the impact on the driver's line of sight. You'll also want to keep the camera centred and to angle the bracket to optimise the camera's view of the road ahead.

#### Windshield Mounting





# Powering the Device On and Off

To turn the device on, press the **POWER** button.

To turn the device off, press and hold the **POWER** button for three seconds.

# Charging the device

You can charge the device with the included car charger, or with a USB cable. The device will also run off of its own internal battery for a short time.



**NOTE:** When the car charger is connected, the device will automatically power on and start recording video.

**Battery:** The battery in this unit is intended to operate the unit after power loss due to an accident or crash. Note that while recording may continue, the device was not intended for long-term recording on battery power.

# Inserting and removing the Memory Card

Your camera comes with an 8GB Memory Card preinstalled, but it can be upgraded with up to 32GB with a different memory card (not included.)

To remove the memory card, push the memory card forward gently until you hear a click, and the card should release.

To insert a different memory card, orient the card with the "bumpy edge" facing down and press it in until you hear a click, then release.











# **Device Operation**

# Video Record, Still Photo, and Playback Modes

The camera has four separate modes:





Still Photo Mode

Video Playback Mode



Still Photo Playback Mode

To toggle between the modes: Press the **MODE** Button:





**NOTE:** You cannot switch modes or enter menus while the camera is recording video.



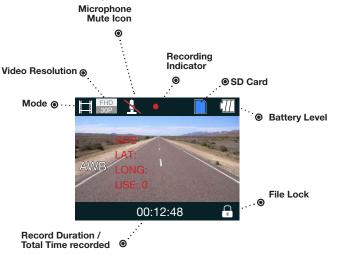
 Mode Indicator





# Video Mode

Video Mode is the primary function of this device and allows you to easily record HD video of the road ahead of you.



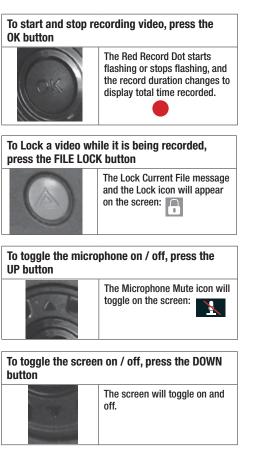
**Continuous Cyclical Recording:** Once the memory card is full, this camera will continuously overwrite the oldest footage recorded. To protect a clip so that it will not be overwritten, press the **FILE LOCK** Button. The **i** icon will show on the screen. Files can also be locked from the playback menu in **Video Playback Mode**.

**G-Sensor:** The G-Sensor is an accelerometer that can detect an impact caused by an accident. If the G-Sensor is triggered, the current video segment will automatically be locked so that it is not overwritten by cyclical recording.

The sensitivity of the G-Sensor can be adjusted in settings.



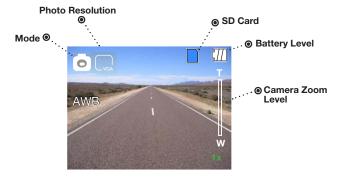
# **Device Operation**





### **Still Photo Mode**

This device can be used to capture high-resolution still photos using its builtin camera. The images are stored on the removable SD Card memory.



To take a picture	
Press the <b>OK</b> button.	The screen flashes black and the image briefly freezes to show that a picture was taken.

To digitally zoom in or out	
Press and hold the UP or DOWN buttons.	The image zooms in or out, and indicates the zoom factor on the screen. (1x - 4x)



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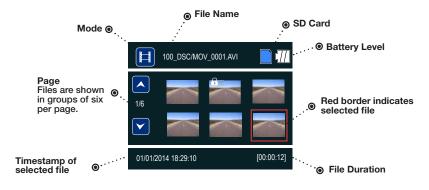
# **Device Operation**

## **Video and Photo Playback Modes**



This device stores video and pictures on its removable SD Card memory. Playback mode will allow you to review the saved video and photos, and play back the video with sound.

# **File Selection Screen**

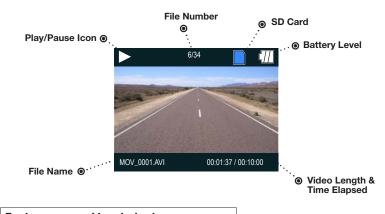


#### To move forward or backward in the list of saved files

To play a selected file:	
Press the <b>OK</b> button while on the file selection screen.	The video will begin playing.



# Video Playback Screen



To play or pause video playback	
pause pla	will begin playing or yback, and the Play / n will toggle.

To fast forward or rewind the video	
Press the UP or DOWN buttons.	The video will begin playing faster or rewind, and the playback speed will show on the screen as 2X, 4X, etc.



# **Device Operation**

# To return to the list of saved files while in the middle of video playback

Press the MODE button.	You will be returned to the video selection screen.

### To adjust the playback audio volume

Press MENU to bring up the Playback menu. Make sure VOLUME is highlighted, and press OK.

Press the arrow keys to select a volume level, 0-10. The selected volume level will have a red box around it. Press **OK** again to confirm and close. Finally, press **MENU** to exit.



### To delete a file

Press the **MENU** button to bring up the Playback menu. Press the down arrow to highlight **DELETE**, and press **OK** to confirm.

To delete just one file, highlight the icon with just one item in the trash, and press OK to confirm. You will then see the "select a file" dialog. Use the arrow keys to highlight the file you want to delete with the red box, then press OK to confirm. The "Delete Selected File" dialogue will appear. Make sure YES is selected, and then press OK to confirm. The file will be deleted and you will return to the video selection screen.





# **Video Protection Screen**

To lock a video or image while in playback	mode
Press the MENU button to bring up the Play- back menu. Press the down arrow until PRO- TECT is highlighted, and press OK to confirm.	
To protect just one file, highlight the <b>book and</b> <b>key icon</b> , then press <b>OK</b> to confirm. You will then see the "select a file" dialogue. Use the arrow keys to highlight the file you want to protect with the red box, then press <b>OK</b> to confirm. You'll see the " <b>Protect Selected File</b> " dialogue. Press the <b>UP</b> arrow to ensure that <b>YES</b> is selected, then press <b>OK</b> to confirm.	

The selected picture will now show a lock icon:

This means this file will not be overwritten by continuous loop recording in Dash Cam mode.



# Adjusting Camera Settings

# Language Selection

While in Video or Still Photo mode, press the MENU button, scroll to the language menu, and press OK to enter the Language Selection menu.



Use the UP or DOWN arrows to select the desired language, and then press OK to confirm.

The following languages are supported:

English
Spanish
Portuguese
Russian
Chinese
Simplified Chinese



# Adjusting Camera Settings

## **Video Settings**

Note: If you are currently recording video () you'll need to stop recording with the CAMERA button first.

While in VIDEO mode, press the MENU button once to enter the menu selection screen. Verify that Video Settings is selected, then press OK to confirm.

Press the UP and DOWN arrows to select the setting you'd like to modify, then press the OK button to confirm.

A window on the right edge of the screen will display the available options. Use the **UP** and **DOWN** arrows to make your selection, then press **OK** to confirm.

A list of the settings and their meanings are shown on the next page.



# **Adjusting Video Settings**

Video Se	ttings
Video Settings	This sets the level of detail in the video. FHD will give you the best image, but will take up the most memory.
Movie Quality	Select between Super High Quality (SHQ) and High Quality (HQ).
Movie Clip Time	This selects the length of the video clips the system records. Options range from 1 minute to 10 minutes.
Auto Power Off	Once power is removed from the device, it automatically shuts down. This option lets you set how many seconds to continue recording video after power is removed.
Motion REC Time	When the Motion Event REC feature is turned on, the camera will analyse the image and determine when the image has changed substantially, and automatically start recording for you. Leave this feature on if you want to record video when you're moving, and stop recording video when stopped.
Microphone	If you do not want this device to record audio with its internal micro- phone, turn this setting off.
MIC sensitivity	Set the sensitivity of the microphone.
Scene	Select between Auto, Sport, Portrait, Landscape, Snow, Beach, and Fireworks.
Exposure	In very bright environments, use a positive EV. In dark environments use negative EV. Options between -2 and +2 are available.
White Balance	You can adjust the white balance based on the ambient lighting. Options include: Auto, Daylight, Cloudy, Fluorescent 1, Fluorescent 2, and Fluorescent 3.

Your Dash Cam

# **To adjust General Settings**



NOTE: If you are currently recording video () you'll need to stop recording with the OK button first.

While in **VIDEO** or **STILL PHOTO** mode, press the **MENU** button once to enter the menu selection screen. Press the down arrow until **General Settings** is highlighted, then press **OK** to confirm.

Press the UP and DOWN arrows to select the setting you'd like to modify, then press the OK button to confirm.

A window on the right edge of the screen will display the available options. Use the UP and DOWN arrows to make your selection, then press OK to confirm.

A list of the settings and their meanings are shown on the next page.



# Adjusting Camera Settings

General S	ettings
Beep Sound	If you don't want the device to beep on every button press, turn this option OFF.
Idle Power Off	Once power is removed from the device, it automatically shuts down. This option lets you set how many seconds to wait before shutting down.
Date/Time	Use this to set the current time and date.
Date Format	Sets the date format.
TV System	Lets you choose between NTSC (United States) and PAL (Europe)
HDMI Output	Lets you choose between 720P and 1080P on the HDMI Output.
Screen Flicker	This sets the screen refresh rate. Options include 50 Hz and 60 Hz.
USB Function	If you want your camera to behave like a Mass Storage device (flash drive) when connected to a computer, select MSDC. If you want to use it as a webcam with your computer, select PCAM.
Screen Rotate	Allows you to flip the screen vertically for upside down operation.
Screen Saver	Allows you to set a timeout for the screen to go black when not in use. Options include 1 minute and 3 minutes.
G-Sensor Level	Sets the sensitivity of the G-Sensor, from 0 (off) to 4 (max).
Motion Detector	Sets the sensitivity of the motion sensor, from 0 (off) to 3 (max).
GPS Status	This allows you to view the raw data from the GPS satellites that are available in your area.
Time Zone Select	Set the time zone you're currently in.
Restore Defaults	Resets the system to its default settings.
Format SD Card	If you want to completely erase all the movies and files on the SD card, select this option. Be careful; all your data will be lost.
SD Card INFO	See how much space remains on the SD Card.
FW Version	Get the firmware version information.



# Adjusting Camera Settings

# **Still Photo Mode Settings**

While in **Still Photo** mode, press the **MENU** button to enter the menu selection screen. Verify that **Still Settings** is selected, then press **OK** to confirm.

Press the  ${\bf UP}$  and  ${\bf DOWN}$  arrows to select the setting you'd like to modify, then press the  ${\bf OK}$  button to confirm.

A window on the right edge of the screen will display the available options. Use the **UP** and **DOWN** arrows to make your selection, then press **OK** to confirm.

Still Photo Mode Settings		
Still Image Size	This sets the level of detail in the photo. Higher M indicates more megapixels, which will give you a sharper image, but take up more memory. Options between 1M and 14M are available.	
Still Quality	Select between Super High Quality (SHQ) and High Quality (HQ)	
Scene	Select between Auto, Sport, Portrait, Landscape, Snow, Beach, and Fireworks.	
Exposure	In very bright environments, use a positive EV. In dark environments use negative EV. Options between -2 and +2 are available.	
White Balance	You can adjust the white balance based on the ambient lighting. Options include: Auto, Daylight, Cloudy, Fluorescent 1, Fluorescent 2, and Fluorescent 3.	
ISO Sensitivity	Increasing ISO will make the camera more sensitive to light. Try increasing ISO in low-light conditions, or leave it set to "Auto"	
Colour	Adjusts colour saturation. Options include: natural, bright, and grey.	
Effect	Photo effects include: normal, retro, black and white, relief, negative, drawing, painting, crayon.	



# **Connecting to a Computer**

# To connect your camera to a computer

Connect the camera to your computer using the included USB to Mini-USB Cable.

By default, your device connects to your computer in Mass Storage mode, and acts like a flash drive. Videos can be viewed with any standard video player that supports .avi files.



NOTE: Quicktime, the native video player for Mac, only supports specific types of .avi files and cannot playback this camera's videos. For links to third party players that will work on Mac, visit www.cobra.com/support/ software-downloads.

Movies that are locked begin with "SOS\_" and movies that are not locked begin with "MOV\_".

Note that if the memory card gets too full, videos that are not locked will be overwritten to make room for new videos. If you want to save any videos that begin with "MOV\_" you should copy them to your computer, or lock the files.

#### To switch the camera's USB function

If you prefer to connect your camera to your PC as a web or video camera, you can change this setting in the settings menu.

Disconnect the camera from your PC, enter General Settings, and change the USB Function to PCAM.

Then, when you reconnect your camera to your PC, it will use this function.



**NOTE:** Start your web cam application before connecting the camera.



Name
DATA
V DCIM
100_DSC
MOV_0035.AVI
MOV_0036.AVI
MOV_0039.AVI
PICT0011.JPG
PICT0023.JPG
PICT0024.JPG
SOS_0002.AVI
SOS_0003.AVI
SOS_0004.AVI

If you want to review the videos alongside the GPS position on a map, then you'll need to download Cobra's video player from:

www.cobra.com/ dashcamsoftware See the next page for how to use this software.



# Using Drive HD<sup>™</sup> Dash Cam Software

The Drive HD Dash Cam player allows you to view your videos along with recorded GPS location, speed, direction, and G-Sensor data. To download Drive HD Dash Cam player on your PC please visit www.cobra.com/dashcamsoftware and select the software link for the CDR 840.



Install and open Drive HD Dash Cam player.

Click on the folder icon and look for "**Removable Disk**" or point to the directory or file you'd like to play back.



To erase a file, click on the **RECYCLE** icon.



To pause or play video, or skip to the next / previous file, click the track navigation buttons at the bottom.



# **Using Cobra's Dash Cam Software**



The player will group together files that were shot sequentially. Those files are displayed in the "group" list at the bottom left.

Individual files are also shown in the list in the bottom right.

The **Map View** in the upper right shows the route you took for the duration the file was recorded.



# **Camera Specifications:**

Visual Angle
Sensor
Video Resolution 1080P 1440x1080 30 fps
Video Format
GPS LoggingSupported
Picture Resolution
Picture Format JPEC
White Balance Auto
Colour Effect Auto
Continuous Loop Recording Supported
Motion Detection Supported
Date and Time Supported
Media Supported SD Card - 8GB Included (32GB Max
Languages English, Spanish, Portuguese, Russian, Chinese
Sound Recording Synchronous video and sound record
Sound Recording can be disabled Supported
Player Software Use Operating System's video player or Cobra Drive HD player
USB Interface USB 2.0
USB Web Camera Supported
USB Mass Storage Supported
Display Screen

Capacity of Battery	310 mAh
Charging Current	100 mA
Charging Time	3 hours

### **Camera Capacity:**

1080P Recording time with 8GB card (included)	120 minutes
1080P Recording time with 16GB card	240 minutes
1080P Recording time with 32GB card (max)	480 minutes



# Troubleshooting, Trademark Acknowledgement & Licensing

# Troubleshooting

If your unit does not appear to be operating properly, please follow these troubleshooting steps:

- Make sure the power cord is properly connected.
- Make sure the socket of your vehicle's cigarette lighter is clean and free of corrosion.
- Make sure the power cord's cigarette lighter adapter is firmly seated in your cigarette lighter, and the Status LED is on.
- Check the power cord fuse. (Unscrew the ribbed end cap of the cigarette lighter adapter and examine the fuse. If required, replace it with a 2-amp fuse only.)

For detailed and up-to-date FAQ's, please visit www.cobra.com/support/faqs.

### **Trademark Acknowledgement**

Cobra", Cobra Electronics Corporation<sup>™</sup>, Drive HD". Nothing Comes Close to a Cobra", and the snake design are trademarks of Cobra Electronics Corporation, USA.

**NOTE:** This device complies with part 15 of 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.



**CAUTION:** Modifications or parts not approved by Cobra Electronics Corporation may violate FCC Rules and void authority to operate this equipment.

This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference. CANADA 310 CAN ICES-3B/NMB-3B.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.