

ENFORCER®

DC-200GQ

Dashboard Camera

Manual



1080p
Resolution

- Built-in GPS sensor
- 1080p HD Video recording
- 140° Wide viewing angle
- 3MP CMOS Sensor
- WDR – Captures clear images even in strong backlight
- 2.7" 16:9 Widescreen display
- Can remove from mount and use as a camera to take still images
- F1.6 aperture for low-light performance
- Store images and video on micro SD card (up to 32GB)*
- Exports as MOV format, HDMI output
- Auto start/stop recording
- G-Sensor for automatic file protection
- GPS Tracker logs camera location and speed while recording
- Software playback with Google Maps™

*Micro SD card not included

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SECO-LARM® SLI

FC CE RoHS

ENFORCER Dashboard Camera

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Parts List:

1x Camera	1x Car mount	1x HDMI cable	1x SL Dash Camera Player CD
1x Car charger	1x USB cable	1x Manual	

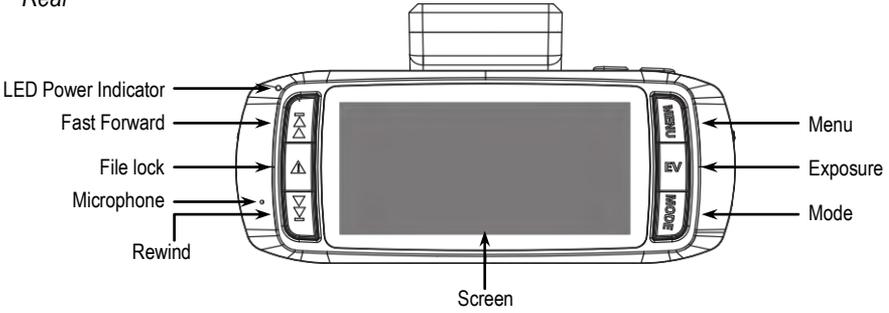
Specifications:

Model	DC-200GQ
Sensor	1/3" CMOS Sensor
Effective pixels	2304 (H) x 1536 (V)
Memory*	Supports Micro SDHC, up to 32GB class 6 or above
Display	2.7" LCD color TFT
Lens	Wide angle fixed focus lens; F1.6, f-3.6mm
Viewing angle	140°
Video resolution	Full HD (1920x1080), 30fps; HD (1280x720), 30fps
Video format	MOV
Snapshot resolution	3MP (2304x1536)
Shutter speed	Electronic shutter; auto: 1/2~1/1000 sec
G-Sensor	3-Axis G-Force sensor
ISO	Auto
White balance	Auto
Microphone	Yes
Speaker	Yes
Interface	Mini USB, Mini C-type HDMI, AV
Battery	200mAh Li-polymer (approximately 10 minutes)
Input power	5VDC
Car charger	Input: 12~24VDC; Output: 5VDC
Power consumption	4.5W
Operating temperature	-4°F~149°F (-20°~65°C)
Operating humidity	20~70% RH
Storage temperature	-4°F~176°F (-20°~80°C)
Dimensions	4 ⁷ / ₁₆ " x 2 ¹¹ / ₃₂ " x 1 ¹⁵ / ₃₂ " (112.5 x 59.5 x 37.2 mm)
Weight	Approx. 3.5 oz. (100g)

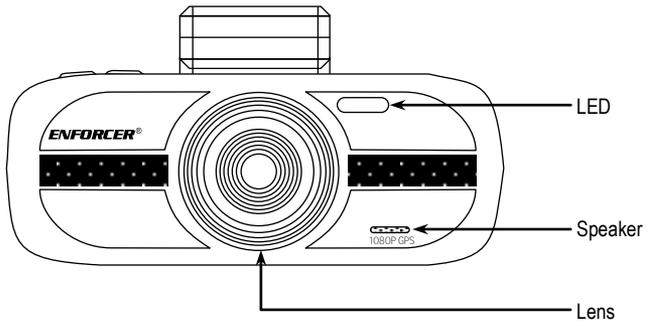
*Micro SD card not included. For best results use class 10 or higher.

Overview:

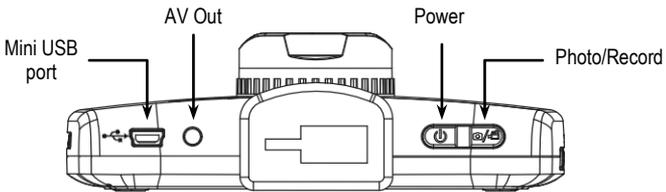
Rear



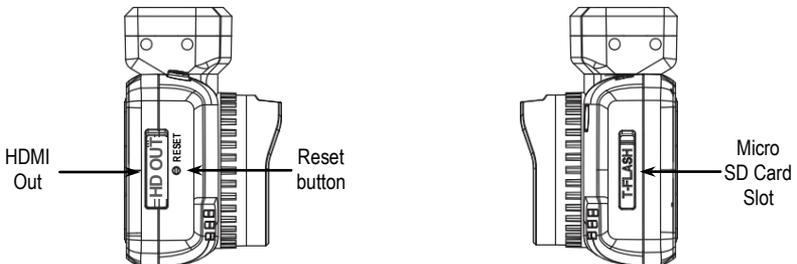
Front



Top



Sides



Mounting:

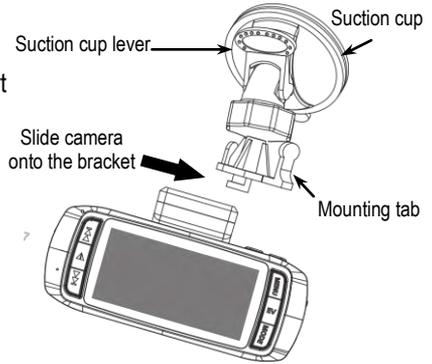


IMPORTANT

Users and installers of this product are responsible for ensuring that the installation and configuration of this product complies with all national, state, and local laws. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or codes.



1. Before installing, insert a micro SD card (not included) into the micro SD card slot (T-FLASH) on the side of the camera. The camera will support micro SD cards up to 32GB, class 6 or above.
2. Slide the camera onto the bracket until it clicks.
3. Determine how the camera will be powered. If powering via cigarette lighter, make sure the mini USB cable is in reach of the cigarette lighter. If powering via optional fuse box connector, please see *Powering the Camera: Optional Fuse Box Connector* below.
4. Determine where on the windshield the camera will be mounted. Be sure that the camera will not obstruct the driver's view.
5. Clean the area on the windshield where the camera will be mounted, making sure to remove dust or any other particles.
6. Lift the suction cup lever and place the suction cup on the windshield.
7. Push down on the suction cup lever to lock the bracket into place.
8. Connect the camera to power.
9. Adjust the camera to ensure proper viewing angle.

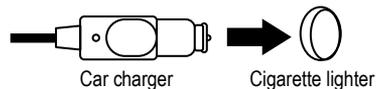


Note: To remove the camera from the bracket, squeeze the Mounting tab and slide the camera in the opposite direction until it releases.

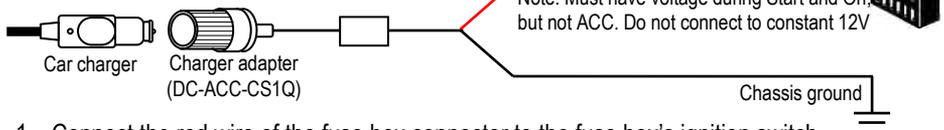
Powering the Camera:

Cigarette Lighter

1. Plug the car charger into the car's cigarette lighter.
2. Connect the charger's mini USB connector to the camera's mini USB port.



Optional Fuse Box Connector



1. Connect the red wire of the fuse box connector to the fuse box's ignition switch.
2. Connect the black wire of the fuse box connector to chassis ground.
3. Plug the car charger into charger adapter of the fuse box connector.
4. Connect the charger's mini USB connector to the camera's mini USB port.

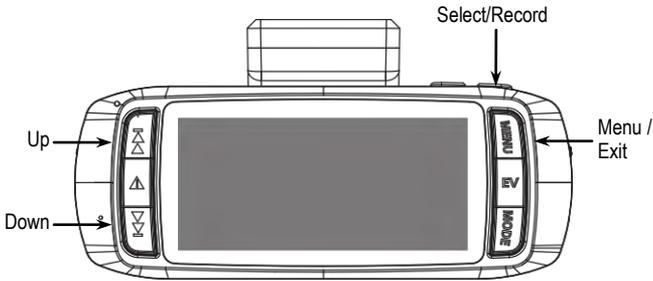
Turning the Camera On:

1. If the camera is connected to power, whenever the ignition is turned on, the camera will automatically turn ON and begin recording.
2. If the camera is not connected to power, press the power button on the top of the camera. Once the camera is on, press the record button to begin recording.

Note: If the car's cigarette lighter/power port continues to power the camera even when the ignition is off, use the power button to turn the camera ON and OFF to avoid battery drain.

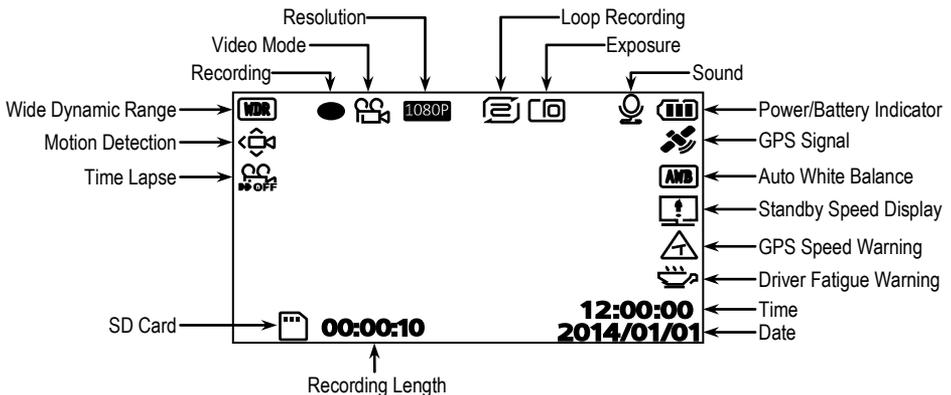
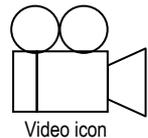
How to Navigate the Dashboard Camera Menus:

1. In order to access the Dashboard Camera's menu, make sure the camera is not recording. Check to see if the red "recording" dot is shown on the screen. If it is, press the record button once to stop recording.
2. Press the menu button in order to access the menu.
3. Press the up and down buttons to cycle through the menu options.
4. To select an option, press the record button.
5. To exit the menu, press the menu button.



Video Mode:

- Look at the top of the screen. If the camera is in video mode, the video icon will be at the top of the screen (see right).
- If the camera is not in video mode, press the mode button until the video icon is on the top of the screen.
- In order to start recording a video, press the record button.



Video Setting Menu:

Wide Dynamic Range (WDR):

This function is not programmable. WDR is always set to ON.

Resolution:

This function is used to set the camera's resolution. The resolution settings are listed from highest to lowest. The lower the resolution, the less room a recording will occupy on the micro SD card.

1. Select Resolution on the video menu screen.
2. Select the desired recording resolution setting. (1080FHD, 720P, 720P 60FPS, WVGA, VGA)
3. After the selection is made, you will automatically return to the video menu screen.

Exposure:

This function is used to manually adjust the shutter speed.

1. Select Exposure on the video menu screen.
2. Select the desired exposure setting. (+3, +2, +1, +0, -1, -2, -3)
3. After the selection is made, you will automatically return to the video menu screen.

White Balance:

This function is used to adjust the color temperature and image color of the picture.

1. Select White Balance on the video menu screen.
2. Select the desired setting based on the environment's lighting.
(Auto, Daylight, Cloudy, Tungsten, Fluorescent)
3. After the selection is made, you will automatically return to the video menu screen.

Record Audio:

This function is used to set whether or not the camera will record audio.

1. Select Record Audio on the video menu screen.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the video menu screen.

Date Stamp:

This function is used to set whether or not the date stamp will appear in the bottom left corner of the screen during playback.

1. Select Date Stamp on the video menu screen.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the video menu screen.

Loop Recording:

This function is used to set how long the camera will record before starting a new file. If Loop Recording is turned off, the camera will record one continuous video.

1. Select Loop Recording on the video menu screen.
2. Select the desired setting. (Off, 2 Minutes, 3 Minutes, 5 Minutes)
3. After the selection is made, you will automatically return to the video menu screen.

*Video Settings Menu continued***G-Sensor:**

This function is used to set the sensitivity level of the 3-Axis G-Sensor. If the camera experiences an impact, such as in an accident, the camera will lock the current recording to prevent deletion.

1. Select Gsensor on the video menu screen.
2. Select the desired setting. (Off, High, Middle, Low)
3. After the selection is made, you will automatically return to the video menu screen.

Motion Detection:

This function is used to turn the motion detection on or off. When motion detection is on, the camera will automatically start recording when it detects motion.

1. Select Motion Detection on the video menu screen.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the video menu screen.

Plate Stamp:

This function is used to program a license plate number that will appear on the recorded videos when they are played back.

1. Select Plate Stamp on the video menu screen.
2. Push the up and down buttons to cycle through characters.
Press the record button to select a character and move to the next spot.
3. Press the menu button at any time to return to the video menu screen.
4. After the selection is made, you will automatically return to the video menu screen.

**Driver Fatigue Warning:**

This function enables a full-screen driver fatigue warning. Select the amount of time before the driver fatigue warning appears on the camera, or turn the function off.

1. Select Driver Fatigue Warning on the video menu screen.
2. Select the desired setting. (Off, 1H, 2H, 3H, 4H)
3. After the selection is made, you will automatically return to the video menu screen.

GPS Tracker:

This function enables the GPS tracker. If the GPS tracker is turned on, the camera's location will appear on a map when the video is played back.

1. Select GPS Track on the video menu screen.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the video menu screen.

Standby Speed Display:

This function enables a full-screen speed and compass display. Select the amount of time before the speed and compass display appears on the camera, or turn the function off.

1. Select Standby Speed Display on the video menu screen.
2. Select the desired setting. (Off, 15 Seconds, 1 Minute, 3 Minutes)
3. After the selection is made, you will automatically return to the video menu screen.

Video Settings Menu continued

GPS Speed Warning:

This function enables the camera to issue a warning to the driver once the driver hits a certain speed.

1. Select GPS Speed Warning on the video menu screen.
2. Select the desired setting. Units of each setting are determined by which speed units are programmed. See *Speed Units* below. (Off, 40, 60, 80, 100, 120)
3. After the selection is made, you will automatically return to the video menu screen.

World Time Zone:

This function allows you to enter your time zone. Time zones are entered in relation to GMT (Greenwich Mean Time).

1. Select World Time Zone on the video menu screen.
2. Select the desired setting. Times are listed in relation to GMT.
3. After the selection is made, you will automatically return to the video menu screen.

Password Settings:

This function allows you to program a password for your camera. If a password is programmed, when a user tries to access the menu, it will ask for a password.

1. Select Password Settings on the video menu screen.
2. If no password is programmed, you will have the option of programming a password.
3. Push the up and down buttons to cycle through characters.
4. Press the record button to select a character and move to the next spot.
5. Press menu at any time to return to the video menu screen.
6. If a password is already programmed, you will have two different options:
 - Cancel Password: Removes the password. Users will be able to access the menu without entering a password.
 - Change Password: Program a new password.
7. After the selection is made, you will automatically return to the video menu screen.

Speed Units:

This function determines whether kilometers per hour or miles per hour are used to indicate speed through the camera's functions.

1. Select Speed Units on the video menu screen.
2. Select the desired setting. (KMH, MPH)
3. After the selection is made, you will automatically return to the video menu screen.

Image Rotation:

When enabled, this function flips the camera image 180°.

1. Select Image Rotation on the video menu screen.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the video menu screen.

Time Lapse:

This function enables time lapse recording at three different speeds.

1. Select Time Lapse on the video menu screen.
2. Select the desired setting. (Off, 200MS, 500MS, 1S)
3. After the selection is made, you will automatically return to the video menu screen.

Photo Mode:

The camera can also be used to take photos. In order to access the photo mode, do the following:

- Look at the top of the screen. If the camera is in photo mode, the photo icon will be at the top of the screen (see right).
- If the camera is not in photo mode, press the mode button until the photo icon is on the top of the screen.
- In order to take a photo, press the record button.

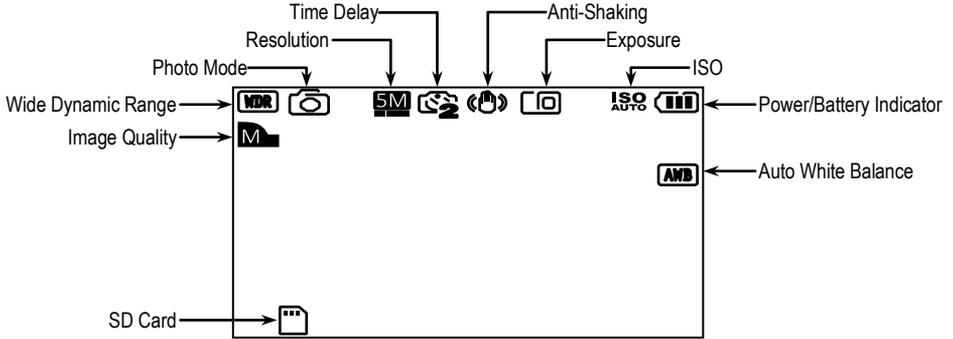
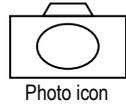


Photo Settings Menu:

Wide Dynamic Range (WDR):

This function is not programmable. WDR is always set to ON.

Image Size:

This function determines the image size of the photos taken with the camera.

1. Select Image Size on the photo menu screen.
2. Select the desired setting. (12M, 10M, 8M, 5M, 3M, 2MHD, VGA, 1.2M)
3. After the selection is made, you will automatically return to the photo menu screen.

Color:

This function determines the color setting of the photos taken with the camera.

1. Select Color on the photo menu screen.
2. Select the desired setting. (Normal, Black & White, Sepia)
3. After the selection is made, you will automatically return to the photo menu screen.

Anti-Shaking:

When enabled, this function stabilizes the image.

1. Select Anti-Shaking on the photo menu screen.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the photo menu screen.

Photo Settings Menu continued

Capture Mode:

This function sets the delay before a photo is taken after the record button is pressed.

1. Select Capture Mode on the photo menu screen.
2. Select the desired setting. If “Single” is selected, a photo will be taken immediately. (Single, 2S Timer, 5S Timer, 10S Timer)
3. After the selection is made, you will automatically return to the photo menu screen.

White Balance:

This function is used to adjust the color temperature and image color of the picture.

1. Select White Balance on the photo menu screen.
2. Select the desired setting based on the environment’s lighting. (Auto, Daylight, Cloudy, Tungsten, Fluorescent)
3. After the selection is made, you will automatically return to the photo menu screen.

ISO:

This function is used to adjust the ISO (International Standards Organization) Setting. This setting affects the camera’s sensitivity to light.

1. Select ISO on the photo menu screen.
2. Select the desired setting based on the environment’s lighting. (Auto, 100, 200, 400)
3. After the selection is made, you will automatically return to the photo menu screen.

Exposure:

This function is used to manually adjust the shutter speed.

1. Select Exposure on the photo menu screen.
2. Select the desired exposure setting. (+3, +2, +1, +0, -1, -2, -3)
3. After the selection is made, you will automatically return to the photo menu screen.

Date Stamp:

This function is used to set whether or not the date stamp will appear in the bottom right corner of the screen.

1. Select Date Stamp on the photo menu screen.
2. Select the desired setting. (Off, Date, Date/Time)
3. After the selection is made, you will automatically return to the photo menu screen.

Quality:

This function is used to set the photo quality. The lower the quality, the less room a photo will occupy on the micro SD card.

1. Select Quality on the photo menu screen.
2. Select the desired setting. (Fine, Normal, Economy)
3. After the selection is made, you will automatically return to the photo menu screen.

Sharpness:

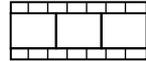
This function is used to set the sharpness of the photo.

1. Select Sharpness on the photo menu screen.
2. Select the desired setting. (Strong, Normal, Soft)
3. After the selection is made, you will automatically return to the photo menu screen.

Playback Mode:

Playback mode is used to play recorded video directly from the camera:

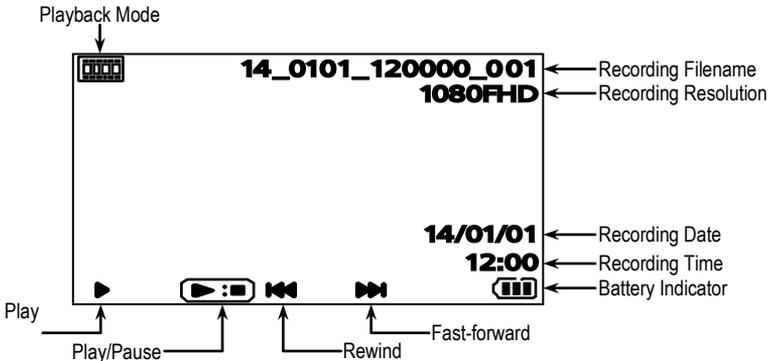
- Look at the top of the screen. If the camera is in playback mode, one of the playback icons will be at the top of the screen (see right).
- If the camera is not in playback mode, press the mode button until the playback icon is on the top of the screen.
- Use the up and down buttons to cycle through available videos or photographs.
- In order to play a video, press the record button.
- If a video is playing then use the up or down buttons to rewind or fast-forward at up to 8x speed.



Video Playback icon



Photo Playback icon



Playback Settings Menu:

Delete:

This function deletes videos or photos.

1. Select Delete on the playback menu.
2. Select the desired option. (Delete Current, Delete All)
3. After the selection is made, you will automatically return to the playback menu.

Note: To return to the playback menu without deleting, select the Menu button.

Protect:

This function protects files from being deleted.

1. Select Protect on the playback menu.
2. Select the desired option. (Lock Current, Unlock Current, Lock All, Unlock All)
3. After the selection is made, you will automatically return to the playback menu.

Slide Show:

This function creates a 2 second slide show of the first shot of each video, as well as any photos saved on the camera.

1. Select Slideshow on the playback menu.
2. Select 2 Seconds.
3. After the selection is made, the slide show will start. Press the record button to stop the slideshow on the image shown.

Main Settings Menu:

The main settings menu contains settings that apply to the camera system-wide.

1. To access the main settings menu, press the menu button to access the menu screen. Depending on the current mode, either the video, photo, or playback menu will open.
2. From the menu screen, press the menu button once more. The menu will shift to the main settings menu.

Format:

This function is used to format the micro SD card so that it is suitable for recording video.

WARNING: Formatting the micro SD card will delete all existing data from the micro SD card.

1. Select Format on the main settings menu.
2. Select the SD Card.
3. The menu will display a warning that all data will be deleted. Select OK.
4. After the micro SD card has been formatted, you will automatically return to the main settings menu.

Language:

This function changes the language of the camera menu.

1. Select Language on the main settings menu.
2. Scroll through and select the desired language. There are 10 available language options.
3. After the selection is made, you will automatically return to the main settings menu.

Date/Time:

This function sets the camera's date and time.

1. Select Date/Time on the main settings menu.
2. To set the highlighted value, press the up and down arrows.
3. To move to the next value, press the record button.
4. After the selection is made, you will automatically return to the main settings page.

Frequency:

This function adjusts the camera's output frequency.

1. Select Frequency on the main settings menu.
2. Select the desired setting. (50Hz, 60Hz)
3. After the selection is made, you will automatically return to the main settings menu.

LED:

This function turns the front LED ON and OFF. This LED can be used for nighttime pictures.

1. Select LED on the main settings menu.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the main settings menu.

Beep Sound:

This function sets the beep sound that occurs when a button is pressed ON and OFF.

1. Select Beep Sound on the main settings menu.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the main settings menu.

*Main Settings Menu continued***Screen Saver:**

This function sets the amount of time the camera is idle before the screen saver turns on.

1. Select Screen Saver on the main settings menu.
2. Select the desired setting. (Off, 3 Minutes, 5 Minutes, 10 Minutes)
3. After the selection is made, you will automatically return to the main settings menu.

TV Mode:

This function sets the TV Mode for the camera's recording.

1. Select TV Mode on the main settings menu.
2. Select the desired setting. (NTSC, PAL)
3. After the selection is made, you will automatically return to the main settings page.

Speed Stamp:

This function turns the speed indicator ON and OFF when playing back the camera's recording.

1. Select Speed Stamp on the main settings menu.
2. Select the desired setting. (Off, On)
3. After the selection is made, you will automatically return to the main settings menu.

Version:

This option will display the firmware version information.

1. Select Version on the main settings menu.
2. When finished, press the record button to automatically return to the main settings menu.

Default Setting:

This function will restore the camera to its factory default settings.

1. Select Default Setting on the main settings menu.
 2. The menu will display a warning that all settings will return to default. Select OK.
 3. After the selection is made, you will automatically return to the main settings menu.
-

Viewing the Data on a Computer:

There are two ways to view the data on a computer.

Connecting the Camera Directly to Computer:

1. Connect the camera to the computer using the included mini USB cable.
2. A menu will pop up with a single option – Mass Storage. Select Mass Storage.
3. The camera's screen will go blank, except for the words "Mass Storage". The camera and SD card will appear on the computer as a mass storage device.

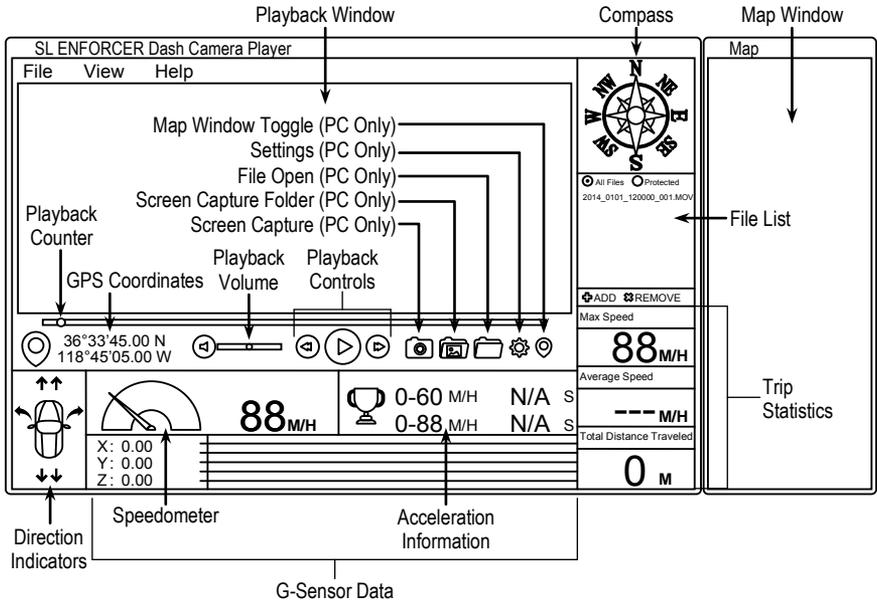
Connecting the Micro SD Card Directly to Computer:

1. Remove the micro SD card from the camera.
2. Plug the micro SD card into the computer.
3. The micro SD card will appear on the computer as a mass storage device.

Installing the SL ENFORCER Dash Camera Player:

1. Insert the included SL ENFORCER Dash Camera Player CD into the computer.
NOTE: Software is also available for download on the SECO-LARM website.
2. Install the files from the CD onto the computer. Software will work on Windows XP and above or Mac OS 10.6.4 and above.
3. Click File, and then click on Open.
4. Browse through the files on the computer for the camera's video files. Import the desired files.

SL ENFORCER Dash Camera Player Overview:



Playback Window:

The playback window is where the recorded footage will play. This window will also display the date stamp and GPS information if available.

Compass:

The compass displays the direction of the vehicle at the time the video was recorded.

Map Window:

The map window shows the location and route of the vehicle at the time the video was recorded using Google Maps™.

File List:

The file list shows the playlist of video files from the camera.

Playback Counter:

The playback counter shows the playtime and progress of the current video being played.

Playback Volume:

This slider controls the volume of the video being played. Press the speaker icon to mute the audio.

*SL Dash Camera Player Overview continued***Playback Controls:**

These controls are used to play, pause, fast-forward, and rewind the video.

GPS Coordinates:

These GPS coordinates show the location of the vehicle at the time the video was recorded.

Screen Capture (PC Only):

This button takes a screen shot of the current image.

Screen Capture Folder (PC Only):

This button opens the folder containing screen shots.

File Open (PC Only):

This button opens a window to select videos to play.

Settings (PC Only):

This button opens the settings window.

Map Window Toggle (PC Only):

This button toggles the map window.

Direction Indicators:

The direction indicators show which direction the vehicle was moving at the time the video was recorded.

Speedometer:

The speedometer shows the instantaneous speed of the vehicle at the time the video was recorded.

Acceleration Information:

This section displays the time taken to reach 60MPH (or 100KPH) and the time taken to reach the maximum speed at the time the video was recorded.

G-Sensor Data:

The G-Sensor data displays displacement of the vehicle in the X, Y, and Z axes at the time the video was recorded.

Trip Statistics:

This area displays the maximum speed, average speed, and total distance traveled over the course of the video recording.

Connecting the Camera via HDMI Cable:

The camera can be projected to a high-definition television or monitor.

1. Connect the mini HDMI connector of the included HDMI cable to the camera's HD OUT port.
2. Connect the larger HDMI connector of the included HDMI cable to the high-definition television or monitor.
3. After a few seconds, the camera screen will go blank and the screen will be projected to the high-definition television or monitor.

Note: Recording video is not possible while connected via the mini HDMI port.

Troubleshooting:

Camera will not turn ON.

- Check that the camera battery is fully charged.
- Make sure that the camera is not in mass storage mode.

Camera will not record video.

- Make sure that the camera is in video mode.
- Make sure that there is enough space on the micro SD card.

Camera will not go into menu when the menu button is pushed.

- Make sure that the camera is not recording video.

Camera will not save videos or images.

- Format the micro SD card.

Camera will not connect to computer.

- Select Mass Storage from the camera's menu.
-

Also Available from SECO-LARM:

Fuse Box Connector
DC-ACC-CS1Q



FCC Statement: Information to the user: 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for one (1) years from the date of sale to the original customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM and the purchaser's exclusive remedy, shall be limited to the replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damage of any kind to the purchaser or anyone else.

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