

# AA3110

---

## Owner's Manual

© 2017 Garmin Ltd. or its subsidiaries

All rights reserved. Under the copyright laws, this manual may not be copied, in whole or in part, without the written consent of Garmin. Garmin reserves the right to change or improve its products and to make changes in the content of this manual without obligation to notify any person or organization of such changes or improvements. Go to [www.garmin.com](http://www.garmin.com) for current updates and supplemental information concerning the use of this product.

Garmin® and the Garmin logo are trademarks of Garmin Ltd. or its subsidiaries, registered in the USA and other countries. Garmin Dash Cam™, Garmin Express™, Travelapse™, and VIRB® are trademarks of Garmin Ltd. or its subsidiaries. These trademarks may not be used without the express permission of Garmin.

microSD™ and the microSD logo are trademarks of SD-3C, LLC.

M/N: A03110, AA3110

# Table of Contents

<b>Getting Started</b> .....	<b>1</b>
Installing the Memory Card .....	1
Device Overview .....	1
Installing the Mount onto Your Windshield .....	1
Installing and Setting Up the Dash Cam .....	1
Setting the Camera Placement .....	2
Turning On the Device Manually .....	2
Turning Off the Device Manually .....	2
<b>Dash Cam Recording</b> .....	<b>2</b>
Saving a Video Recording .....	2
Taking a Picture .....	2
Event Detection .....	2
Viewing Videos and Pictures .....	2
Connecting the Device to Garmin® VIRB® App .....	2
Deleting a Video or Photo .....	3
Videos and Photos on Your Computer .....	3
Video Resolution Settings .....	3
<b>Travelapse</b> .....	<b>3</b>
<b>Voice Control</b> .....	<b>3</b>
Controlling the Camera Using Voice Commands .....	3
Turning Voice Control On or Off .....	3
Voice Control Tips .....	3
<b>Red Light and Speed Cameras</b> .....	<b>3</b>
<b>Forward Collision Warning System</b> .....	<b>4</b>
Forward Collision Warning System Performance Tips .....	4
<b>Lane Departure Warning System</b> .....	<b>4</b>
Lane Departure Warning Performance Tips .....	4
<b>Go Alert</b> .....	<b>5</b>
<b>Dash Cam Settings</b> .....	<b>5</b>
Camera Settings .....	5
Driver Assistance Settings .....	5
System Settings .....	5
<b>Device Information</b> .....	<b>5</b>
Support and Updates .....	5
Resetting the Device .....	5
Specifications .....	5
<b>Appendix</b> .....	<b>5</b>
Changing the Fuse in the Vehicle Power Cable .....	5
<b>Troubleshooting</b> .....	<b>6</b>
My camera feels warm while it is operating .....	6
<b>Index</b> .....	<b>7</b>



# Getting Started

## ⚠ WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

## Installing the Memory Card

The camera requires a microSD™ or microSDHC memory card of up to 64GB with a speed rating of class 10 or higher. You can use the included memory card, or you can purchase a compatible replacement memory card from an electronics supplier.

- 1 Insert the memory card ① into the slot ②.



- 2 Press it in until it clicks.

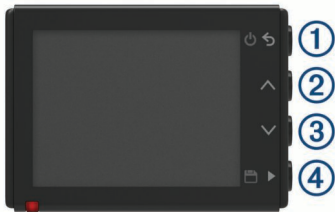
## Removing the Memory Card

### NOTICE

Removing the memory card while the device is turned on can result in a loss of data or damage to the device.

- 1 Turn off the device.
- 2 Press the card in until it clicks.
- 3 Release the card.  
The card ejects from the slot.

## Device Overview



①		Press to turn the device on. Hold for 3 seconds to turn the device off. Select to return to the previous page.
②		Select to scroll through menus or pages.
③		Select to scroll through menus or pages.
④		From the viewfinder, select to save a photo. Hold to save a video clip. Select to choose an option in a menu.

## Installing the Mount onto Your Windshield

### NOTICE

The adhesive mount is extremely difficult to remove after it is installed. You should carefully consider the mounting location before you install the mount.

Before you can install the adhesive mount onto your windshield, the ambient temperature must be from 21° to 38°C (from 70° to 100°F).

**TIP:** You can connect the device to power and hold the device in the preferred mounting location to check the camera's field of view at that location.

- 1 Clean the windshield using water or alcohol, and a lint-free cloth.  
The windshield must be free of dust, wax, oils, or coatings.
- 2 Remove the protective film from the mount adhesive.



- 3 Position the mount over the mounting location.

**TIP:** The adhesive is extremely sticky. Do not touch the adhesive to the windshield until the mount is properly positioned and aligned.

- 4 Press the mount firmly onto the windshield, and maintain pressure for 30 seconds.



- 5 Pull the camera and mount away from the windshield.  
The metal disk remains attached to the windshield.
- 6 Using your finger, press firmly on the disk for 30 seconds.  
This helps to ensure the disc adhesive has proper contact with the windshield.
- 7 Wait **24 hours** before installing the Dash Cam.  
It takes 24 hours for the adhesive to bond properly to the windshield.

## Installing and Setting Up the Dash Cam

### NOTICE

Before installing the Dash Cam, you must install the mount and allow the adhesive to bond to the windshield for **24 hours**. Failure to allow adequate bonding time may cause the mount to detach from the windshield, which could result in damage to the product or mount.

- 1 Place the camera and mount onto the magnetic disc.
- 2 Plug the vehicle power cable into the USB port on the device.



- 3 Route the power cable to your vehicle power outlet.  
The included vehicle power cable is designed to be routed out of sight. It is long enough to route around the windshield in most vehicles, and you can hide the thin cable along or behind the trim or headliner.
- 4 Plug the other end of the vehicle power cable into a power outlet in your vehicle.
- 5 If necessary, turn on the vehicle ignition switch to provide power to the power outlet in your vehicle.  
The device turns on.
- 6 Follow the on-screen instructions to complete the initial device setup.  
The camera view appears.
- 7 Adjust the position of the camera to capture the desired field of view.

## Setting the Camera Placement

You can mount the device in the left, center, or right of your windshield. For the best performance, you should set the Camera Placement option to indicate the location of your device in the vehicle.

- 1 Select **Settings > Driver Assistance > Camera Placement**.
- 2 Select **Horizontal Placement**, and select the horizontal placement of your camera.
- 3 Select **Vehicle Height**.
- 4 Select an option:
  - If you are driving a large vehicle, like a full size van or truck, select **Tall**.
  - If you are driving a car, select **Normal**.

## Turning On the Device Manually

**NOTE:** When the device is connected to an ignition-switched power outlet, it turns on automatically when you turn on the vehicle.

Select .

The device turns on.

## Turning Off the Device Manually

**NOTE:** When the device is connected to an ignition-switched power outlet, it turns off automatically when you turn off the vehicle.

Hold  for 3 seconds.

The device turns off.

# Dash Cam Recording

### NOTICE

Some jurisdictions regulate or prohibit use of this device. It is your responsibility to know and comply with applicable laws and

rights to privacy in jurisdictions where you plan to use this device.


Before you can record video, you must install a camera memory card (*Installing the Memory Card*, page 1).

By default, the device immediately starts recording video when it turns on. It continues recording, overwriting the oldest, non-saved video until it turns off.

## Saving a Video Recording

By default, the device uses a sensor to detect a possible incident and saves video footage automatically before, during, and after the detected event. You can also save video files manually at any time.

Hold .

The device saves the video footage before, during, and after you select .

The memory card has limited storage. After you save a video recording, you should transfer the recording to your computer or other external storage location for permanent storage (*Videos and Photos on Your Computer*, page 3).

## Taking a Picture

You can take a picture with this device.

From the viewfinder, select .


The device saves the picture to the memory card.

## Event Detection

By default, the device uses a sensor to detect possible incidents and saves video footage automatically before, during, and after the detected event. The video footage is stamped with the time, date, and location of the event.

## Viewing Videos and Pictures

**NOTE:** The device stops recording and alerts are disabled while viewing videos or pictures.

- 1 Select  > **Gallery**.
- 2 Select an option:
  - To view videos you saved, select **Saved Videos**.
  - To view parked videos you saved, select **Parked Videos**.
  - To view saved photos, select **Pictures**.
  - To view Travelapse™ video footage, select **Travelapse**.
  - To view recent video footage that has not been saved, select **Unsaved Videos**.
- 3 Select a video or photo.

## Connecting the Device to Your Computer

You can view videos and photos on your computer using a micro-USB cable.

- 1 Plug the small end of the micro-USB cable into the port on the device.
- 2 Plug the larger end of the micro-USB cable into a port on your computer.  
Depending on your computer operating system, the device appears as either a removable drive or a removable volume.

## Connecting the Device to Garmin® VIRB® App

You can save pictures and video recordings by connecting your smartphone or tablet to the free Garmin VIRB App. To download the Garmin VIRB app, or for more information, go to [garmin.com/VIRBapp](http://garmin.com/VIRBapp).

- 1 From the application store on your mobile device, install the Garmin VIRB app.
- 2 From the main menu on the Dash Cam, select **Gallery > Share Gallery**.

The Dash Cam displays the network name and network password.

- 3 From your mobile device, select the Dash Cam Wi-Fi® network.
- 4 Enter the network password.  
Your Dash Cam shares saved photos and video to your mobile device.
- 5 On your mobile device, launch the Garmin VIRB app.

### Updating the Camera Using the Garmin VIRB App

You can update the camera software using the Garmin VIRB mobile app. After you pair the app with your camera, the app checks for updates automatically and displays a message when an update is available.

- 1 From the Garmin VIRB app, when an update is available, select **Download**.
- 2 Follow the on-screen instructions to complete the update process.

### Deleting a Video or Photo

- While viewing a video, select **III** > **Delete** > **Yes**.
- While viewing a photo, select **III** > **Yes**.

### Videos and Photos on Your Computer

**NOTE:** Some media players might not support high-resolution playback.

Videos and photos are stored in the DCIM directory on the camera memory card. Videos are stored in MP4 file format, and photos are stored in JPG format. You can view and transfer photos and videos by connecting the memory card or the device to your computer (*Connecting the Device to Your Computer*, page 2).

The videos and photos are sorted into several folders.

- 100EVENT:** Contains videos saved automatically when the device detects an incident.
- 101PHOTO:** Contains photos.
- 102SAVED:** Contains videos saved manually by the user.
- 103PARKM:** Contains videos saved while parked.
- 104TLPSE:** Contains Travelapse videos.
- 105UNSVD:** Contains unsaved video footage. The device overwrites the oldest unsaved video when the storage space for unsaved videos is full.

### Video Resolution Settings

You can change the video resolution on your camera. Resolution is the height of the video in pixels. Higher resolution video settings require more memory card space than lower resolution settings.

Select **Settings** > **Camera** > **Resolution**.

**1440p, 30fps:** Records video in 1440p resolution at 30 frames per second.

**NOTE:** 1440p resolution at 30 frames per second is not available for the Garmin Dash Cam 45 product model.

**1080p, 60fps:** Records video in 1080p resolution at 60 frames per second.

**NOTE:** 1080p resolution at 60 frames per second is not available for the Garmin Dash Cam 45 product model.

**1080p, 30fps, HDR:** Records video in 1080p resolution at 30 frames per second using high dynamic range (HDR) imaging. HDR imaging records multiple exposure levels for each frame and can improve video clarity in high contrast or low-light conditions.

**NOTE:** 1080p resolution at 30 frames per second using high dynamic range (HDR) imaging is not available for the Garmin Dash Cam 45 product model.

**1080p, 30fps:** Records video in 1080p resolution at 30 frames per second.

**720p, 30fps:** Records video in 720p resolution at 30 frames per second.

## Travelapse

The Travelapse feature captures a fast-motion video of your trip, which allows you to share a short video of all the places you traveled. This feature captures video frames at a set distance interval. For example, it can capture one video frame for every kilometer or mile you travel. The device varies the rate of capture based on your speed.

**NOTE:** Recording Travelapse does not stop dash cam recording.

## Voice Control

**NOTE:** The voice control feature is not available for the Garmin Dash Cam 45 product model.

The voice control feature allows you to control your camera by saying words and commands.

**NOTE:** The voice control feature is not available for all languages. You can use this feature while the interface is set to an unsupported language, but you must speak the commands in English.

### Controlling the Camera Using Voice Commands

**NOTE:** The voice control feature is not available for the Garmin Dash Cam 45 product model.

- 1 Say **OK, Garmin** to activate the voice control feature.  
The camera plays a tone and starts listening for a command.
- 2 Say a command:
  - To save a video, say **Save Video**.
  - To take a photo, say **Take a Photo** or **Take a Picture**.
  - To record audio with the video, say **Record Audio**.
  - To record video without audio, say **Stop Audio**.
  - To start Travelapse, say **Start Travelapse**.
  - To stop Travelapse, say **Stop Travelapse**.

The camera plays a tone when it recognizes your command.

### Turning Voice Control On or Off

Select **∨** > **Voice Control** > **Settings** > **Disable**.

### Voice Control Tips

- Speak in a normal voice directed at the device.
- Reduce background noise to increase the accuracy of the voice recognition.
- Before each command, say **OK, Garmin**.
- Listen for a tone to confirm that the camera successfully recognized a command.

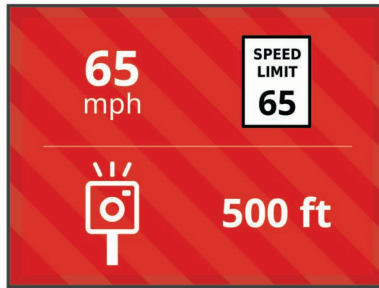
## Red Light and Speed Cameras

### NOTICE

Garmin is not responsible for the accuracy of or the consequences of using a red light or speed camera database.

**NOTE:** This feature is not available for all regions or product models.

Information about red light and speed camera locations is available in some areas for some product models. The device alerts you when you approach a reported speed or red light camera.



- To maintain an updated database of red light and speed camera locations, you must purchase a subscription to download and store safety camera data on your device. Go to [garmin.com/speedcameras](http://garmin.com/speedcameras) to check availability and compatibility, or to purchase a subscription or one-time update. You can purchase a new region or extend an existing subscription at any time.
- In some regions, some product bundles include pre-loaded red light and speed camera data with lifetime updates.
- You can use the Garmin Express™ software ([garmin.com/express](http://garmin.com/express)) to update the camera database stored on your device. You should update your device frequently to receive the most up-to-date camera information.

## Forward Collision Warning System

### ⚠ WARNING

The forward collision warning system (FCWS) feature is for information only and does not replace your responsibility to observe all road and driving conditions, abide by all traffic regulations, and use safe driving judgment at all times. The FCWS relies on the camera to provide a warning of upcoming vehicles and, as a result, may have limited functionality in low visibility conditions. For more information, go to [garmin.com/warnings](http://garmin.com/warnings).

**NOTE:** This feature is not available in all areas or for all product models.

The FCWS feature alerts you when the device detects that you are not maintaining a safe distance between your vehicle and the vehicle in front of you. The device determines your vehicle speed using GPS, and it calculates an estimated safe following distance based on your speed. The FCWS activates automatically when your vehicle speed exceeds 48 km/hr (30 mph).

When the device detects that you are too close to the vehicle ahead of you, the device plays an audible alert, and a warning appears on the screen.



## Forward Collision Warning System Performance Tips

Several factors affect the performance of the forward collision warning system (FCWS). Some conditions may prevent the FCWS feature from detecting a vehicle ahead of you.

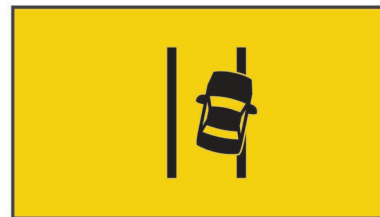
- The FCWS feature activates only when your vehicle speed exceeds 48 km/h (30 mph).
- The FCWS feature may not detect a vehicle ahead of you when the camera's view of the vehicle is obscured by rain, fog, snow, or headlight glare, or darkness.
- The FCWS feature may not function properly if the camera is incorrectly aligned.
- The FCWS feature may not detect vehicles greater than 40 m (130 ft.) away or closer than 5 m (16 ft.).

## Lane Departure Warning System

### ⚠ WARNING

The lane departure warning system (LDWS) feature is for information only and does not replace your responsibility to observe all road and driving conditions, abide by all traffic regulations, and use safe driving judgment at all times. The LDWS relies on the camera to provide warnings for lane markers and, as a result, may have limited functionality in low visibility conditions. For more information, go to [garmin.com/warnings](http://garmin.com/warnings).

The LDWS feature alerts you when the device detects you may be crossing a lane boundary unintentionally. For example, the device alerts you if you cross some solid painted lane boundaries or cross into an oncoming traffic lane. The LDWS feature provides alerts only when your vehicle speed exceeds 64 km/h (40 mph). The alert appears on the left or right side of the screen to indicate which lane boundary you crossed.



**NOTE:** For the best LDWS performance, you should set the Camera Placement option to indicate the location of your device in the vehicle.

## Lane Departure Warning Performance Tips

Several factors affect the performance of the lane departure warning system (LDWS). Some conditions may prevent the LDWS feature from detecting lane departures.

- The LDWS feature provides alerts only when your vehicle speed exceeds 64 km/h (40 mph).
- The LDWS feature does not provide alerts on certain types of roads, such as highway ramps or merging lanes.
- The LDWS feature may not function properly if the camera is incorrectly aligned.
- The LDWS feature may not function properly if the Camera Placement option does not correctly indicate your vehicle height or the placement of your device in the vehicle (*Setting the Camera Placement, page 2*).
- The LDWS feature requires a clear, continuous view of the lane divider lines.
  - Lane departures may not be detected when divider lines are obscured by rain, fog, snow, extreme shadows, sun or headlight glare, road construction, or any other visual obstruction.



- Lane departures may not be detected if lane divider lines are misaligned, missing, or heavily worn.
- The LDWS feature may not detect lane departures on extremely wide, narrow, or winding roads.

## Go Alert

The go alert plays a tone and displays an alert when stopped traffic ahead of your vehicle starts moving again. This alert appears only after the vehicle ahead has moved a substantial distance and your vehicle has remained stopped. This can be useful at stop lights or in traffic delays. This feature uses the dash camera to detect the stopped or moving vehicle and requires a clear view of the road.



## Dash Cam Settings

### Camera Settings

Select **^ > Settings > Camera**.

**Resolution:** Adjusts the video resolution.

**Event Detection:** Turns on and off event detection (*Event Detection, page 2*).

**Record Audio:** Turns on and off audio recording. This feature is not available in all areas or for all product models.

**Data Overlay:** Adjusts the type of data displayed on videos and pictures.

**Record After Power Loss:** Sets the amount of time that the device continues to record video after power is turned off.

**Format Card:** Formats the memory card and deletes all videos, photos, and data on the card.

### Driver Assistance Settings

Select **^ > Settings > Driver Assistance**.

**Camera Placement:** Allows you to indicate the placement of your device in the vehicle.

**Forward Collision:** Adjusts the sensitivity of the FCWS feature.

**Go Alert:** Turns on or off the go alert display and audible alerts when traffic starts moving (*Go Alert, page 5*).

**Lane Departure:** Adjusts the lane boundary settings (*Lane Departure Warning System, page 4*).

**Proximity Alerts:** Adjusts the audible proximity alerts.

### System Settings

Select **^ > Settings > System**.

**Volume:** Adjusts the volume of the camera alerts and video playback.

**Brightness:** Adjusts the viewfinder display brightness.

**Color Mode:** Allows you to select day or night color mode. If you select the Auto option, the device automatically switches to day or night colors based on the time of day.

**Display Timeout:** Allows you to specify whether the display turns off during use or after one minute.

**Setup:** Allows you to set the units of measure, time, and language, and restore them to their default values.

**About:** Displays the software version number, the unit ID number, and information about several other software features.

**Regulatory:** Displays regulatory and compliance information.

### Viewing Regulatory and Compliance Information

1. From the system settings, select **Regulatory**.

### Device Setup

#### NOTICE

Deleted or overwritten files cannot be restored.

Select **^ > Settings > System > Setup**.

**Units:** Sets the unit of measure used for distances.

**Time:** Sets the time, date, and format for the time stamp.

**Language:** Sets all on-screen text to the selected language.

**Restore:** Restores all settings to the factory default values.

## Device Information

### Support and Updates

Garmin Express ([garmin.com/express](http://garmin.com/express)) provides easy access to these services for Garmin devices.

- Product registration
- Product manuals
- Software updates

### Setting Up Garmin Express

- 1 Connect the device to your computer using a USB cable.
- 2 Go to [www.garmin.com/express](http://www.garmin.com/express).
- 3 Follow the on-screen instructions.

### Resetting the Device

You can reset your device if it stops functioning.

Hold the power key for 12 seconds.

### Specifications

Operating temperature range	From -20° to 55°C (from -4° to 131°F)
Charging temperature range	From 0° to 45°C (from 32° to 113°F)
Memory card	Class 10 or higher microSDHC up to 64 GB

## Appendix

### Changing the Fuse in the Vehicle Power Cable

#### NOTICE

When replacing the fuse, do not lose any of the small pieces and make sure they are put back in the proper position. The vehicle power cable does not work unless it is assembled correctly.

If your device does not charge in your vehicle, you may need to replace the fuse located at the tip of the vehicle adapter.

- 1 Rotate the end piece ① counter clockwise to unlock it.



**TIP:** You may need to use a coin to remove the end piece.

- 2 Remove the end piece, the silver tip ②, and the fuse ③.
- 3 Insert a new fast-blow fuse that has the same current, such as 1 A or 2 A.
- 4 Place the silver tip in the end piece.
- 5 Push in the end piece and rotate it clockwise to lock it back into the vehicle power cable ④.

## Troubleshooting

### **My camera feels warm while it is operating**

It is normal for the camera to feel warm during typical use, especially while it is recording high-resolution video or transmitting a Wi-Fi signal.

# Index

## A

advanced driver assistance system (ADAS) [4](#),  
[5](#)

## C

camera placement [2](#)

cameras

dash cam [1](#)

red light [3](#)

speed [3](#)

computer, connecting [2](#)

customizing, settings [5](#)

## D

dash cam, memory card [1](#)

device overview [1](#)

driver alerts [5](#)

## E

event detection [2](#)

## F

forward collision warning system (FCWS) [4](#)

fuse, changing [5](#)

## G

Garmin Express [5](#)

registering the device [5](#)

updating software [5](#)

## L

lane departure warning system (LDWS) [4](#)

## M

memory card [1](#)

installing [1](#)

microSD card [1](#)

mounting, windshield [1](#)

## P

photos, viewing [3](#)

power cables, changing the fuse [5](#)

power key [2](#)

product registration [5](#)

## R

red light cameras [3](#)

registering the device [5](#)

resetting, device [5](#)

resolution [3](#)

## S

settings [3](#), [5](#)

setup [1](#)

software, updating [5](#)

speed cameras [3](#)

system [5](#)

## T

taking, photos [2](#)

Travelapse [3](#)

troubleshooting [6](#)

## V

video

deleting [3](#)

photos, viewing [2](#)

playing [2](#), [3](#)

recording [2](#)

virb mobile app [2](#), [3](#)

voice control [3](#)

tips [3](#)

# support.garmin.com



1800 235 822



+43 (0) 820 220230



+ 32 2 672 52 54



0800 770 4960



1-866-429-9296



+385 1 5508 272  
+385 1 5508 271



+420 221 985466  
+420 221 985465



+ 45 4810 5050



+ 358 9 6937 9758



+ 331 55 69 33 99



+ 39 02 36 699699



(+52) 001-855-792-7671



0800 427 652



0800 0233937



+47 815 69 555



00800 4412 454  
+44 2380 662 915



+35 1214 447 460



+386 4 27 92 500



0861 GARMIN (427 646)  
+27 (0)11 251 9800



+34 93 275 44 97



+ 46 7744 52020



+886 2 2642-9199 ext 2



0808 238 0000  
+44 870 850 1242



+49 (0) 89 858364880  
zum Ortstarif - Mobilfunk kann  
abweichen



913-397-8200  
1-800-800-1020

