

# NAUTO ® USER GUIDE

Version April 2024









### **NAUTO® USER GUIDE**

Nauto Inc. April, 2024

# THE NAUTO DEVICE SHOULD BE INSTALLED AND MAINTAINED BY QUALIFIED TECHNICIANS.

Only a properly qualified technician should install and maintain the Nauto device. Any electrical work should be performed only by an ASE (minimum T6 & L2), MECP or equivalent certified technician with an expertise in installing and troubleshooting advanced vehicle on-board components including multiplexed circuits. Nauto Inc. disclaims all responsibility for any damages arising from improper installation and maintenance of the Nauto device.

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Nauto Inc. reserves the right to revise the information presented or to discontinue the production of parts described at any time.



### SAFETY INSTRUCTIONS

### SAFETY INSTRUCTIONS

#### **DISCLAIMER & SAFETY INFORMATION**

Due to ongoing development, information and specifications may change at any time without notice. While the information is believed to be accurate, it may include errors or inaccuracies. Nauto shall not be liable for any use of this installation guide or information supplied in it.

The installation of the Nauto Device may adversely affect other vehicle components or safety equipment. Nauto assumes no responsibility and disclaims any liability for any damage to any vehicle components or safety equipment, or bodily injury, that may arise due to installation or use of Nauto's products and services.

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Nauto shall not be liable for any damages, losses, costs or expenses, direct, indirect or incidental, consequential or special, resulting from the use of this installation guide.

This guide is not written for any specific vehicle since the proper wiring and installation of electronics differs for each vehicle. Installation should be completed by qualified individuals who are trained to wire electronics such as the Nauto Device. It is your responsibility to know how to wire in electronics such as the Nauto Device for your specific vehicle. Improper wiring may cause injury or damage and void the warranty. Any changes or modification to the Nauto Device not expressly approved by Nauto or the entity responsible for compliance may void any warranties and your authority to operate the Nauto Device.

This installation guide contains proprietary information that is protected by copyright. All rights are reserved. This guide may not be copied, reproduced, or translated into another language without Nauto's prior written consent.

### **INSTALLATION SAFETY WARNINGS**

WARNING: This equipment may only be located in a position where it cannot interfere with the normal and safe operation of the vehicle or present a hazard to the driver or passengers. When routing all cables ensure that the insulation does not become worn or damaged. All cabling



must be secured utilizing industry standard methods. If you are unsure about the placement or installation of this equipment, stop work, and contact your Nauto representative immediately.

Under no circumstances should any part of the Nauto system be installed inside the engine compartment area.

This equipment should not be operated in hazardous environments or in areas that contain explosive materials or flammable vapors.

#### SAFETY INSTRUCTIONS

This equipment should not be operated in aircraft or in close proximity to medical equipment.

Unauthorized changes or alterations to the equipment may invalidate the Nauto warranty, and may also affect the vehicle manufacturer's warranty.

**WARNING**: Substituting or supplementing components may impair suitability and performance. If you are missing any components contact Nauto Customer Support at **888-628-8690** or email **Support@Nauto.com**.

#### **DRIVER SAFETY WARNINGS**

**DISCLAIMER**: The Nauto AI system is a driver information system. It is not a collision avoidance system and has no control over the vehicle or its driver. The driver is always responsible for exercising independent judgment, retaining control of the vehicle, remaining engaged with the driving task, and driving in a safe manner, at the appropriate speed, with an appropriate distance to other vehicles, and in accordance with current traffic laws and regulations. Overconfidence due to, or reliance on the presence of, a driver information system can lead to serious accidents including property damage, bodily injury, or death.

WARNING: The Nauto AI system cannot detect all types or instances of distractions, drowsiness, fatigue, tailgating, collisions, or other safety events. The Nauto AI system will not issue an alert if a safety event is not detected. Safety events may not be detected due to a variety of reasons, including video obstructions or artifacts, weather conditions, lighting, unrecognized objects, malfunctions, etc. In addition, in certain circumstances the Nauto AI system may not correctly detect the driver's state, may not sound an alert even if a safety event is detected, or the alert even if sounded is inaudible or misunderstood, including due to loud music, misconfiguration, alert timings, etc. The foregoing list does not represent an exhaustive list of situations that may interfere with the proper operation of the Nauto AI system. The Nauto AI system may fail to detect safety events or fail to provide alerts for many other reasons. The driver is at all times solely and independently responsible for the safe operation of the vehicle and the avoidance of all collisions. Unsafe operation of the vehicle or a failure to avoid collisions may result in serious accidents including property damage, bodily injury, or death.



### ADHERENCE TO APPLICABLE LOCAL, STATE, AND FEDERAL LAWS

**WARNING**: Some jurisdictions, regions, or countries have adopted, or in the future may adopt, laws that prohibit objects from being mounted on a vehicle's windshield or in other locations in a vehicle. You are responsible for complying with these laws, and Nauto, Inc. does not accept responsibility for failure to do so.



### **COMPLIANCE STATEMENTS**

### **FCC Statement**

This equipment complies with part 15 of the 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. 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 in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. FCC Note:

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **RF Exposure Information**

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.



### **ISED Notice**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en

### **ISED RF Exposure Statement**

This device complies with ISED RSS-102 RF exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the IC RSS-102 RF exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

Cet appareil est conforme aux limites d'exposition aux rayonnements de la CNR-102 définies pour un environnement non contrôlé. Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio de la CNR-102, la proximité humaine à l'antenne ne doit pas être inférieure à 20 cm (8 pouces) pendant le fonctionnement normal.

The device is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range.

L'appareil est réservé à l'intérieur seulement lorsqu'il fonctionne dans la gamme de fréquences 5150 à 5250 MHz



### INTRODUCTION INSTALLER

The purpose of this document is to provide guidelines for the installation of the Nauto device. The installation guidelines, specifications, materials, and examples provided in this document are for information purposes only, are non-exhaustive, and must not be relied upon for the specific installation in any vehicle. This guide is not intended to replace any regulatory requirements in the jurisdiction where the Nauto device is installed or used.

Before starting installation of the Nauto device and configuring the system, ensure that you have read this guide thoroughly.

If you have any questions or concerns regarding the installation of the Nauto device, contact Nauto Support at:

Email: Support@Nauto.com

• Phone: 1•888•628•8690 (5am PST - 6pm PST M-F)

If looking for additional installation content, contact the Nauto Support Team at: **Support@nauto.com**.

### **INSTALLER APP DOWNLOAD**

**Download the Nauto Installer app** from the App Store or Google Play store. The Nauto Installer app is required for every device installation. Follow the QR codes below to download the Nauto Installer app from your respective app store, or from within your app store, search keyword "Nauto Installer."

### **Download the Android App**



Scan this code for the Android download

### Download the iOS App



Scan this code for the iOS download

Once installed, open the Nauto Installer app and login with your Nauto account. If you do not have login information, contact Nauto Support at **1-888-628-8690**.

**NOTE**: It is not possible to complete the installation of the Nauto Device without access to the Installer app.



### **APP DOWNLOAD**



NAUTO EQUIPMENT LIST



## **NAUTO EQUIPMENT LIST**

### **INSTALLATION COMPONENTS - OBD-II**





### **INSTALLATION OVERVIEW**

Once you are ready to install the Nauto device, follow the steps outlined below.

- Ensure all installation components are present
- 2. Route Power Cable
- Make power connections (OBD port for OBD-II installation)

**NOTE**: For Hardwire Installation, refer to the

### Hardwire Addendum.

- Launch Installer App and follow the steps to begin registering device
- 5. Choose windshield mounting location and verify images in installer app
- 6. Mount camera to windshield
- Complete device registration in the installer app
- 8. Complete post installation verification steps

Now let's look at these individual steps in more detail.

### **POWER CABLE ROUTING**

Begin by routing the power cable. To do this:

- 1. Locate the device end of the power cable. (The end with the small black block.)
- Leave 8"-10" of the cable exposed at the rear-view mirror and route the cable safely and securely to the power connection location.
- 3. One way that may be appropriate to do so is as follows:
  - Start tucking the cable under the windshield headliner starting just above the rearview mirror.





- b. The cable should be buried under the headliner so that it will not slide out or drop from the headliner.
- c. Route the cable to the A-pillar (*driver's side of the vehicle*) and remove the A-pillar panel and route the cable around, behind, and away from all airbag components and related vehicle accessories.
- d. Pull the door gasket away from the body of the vehicle and run the power cable into the channel near the pinch weld, but without crossing over the pinch weld, towards the power connection location.

Zip Ties



### **POWER SOURCE CONNECTION**

#### **OBD CONNECTION**

### **OBD Suggested Tools:**

- T5 Torx Bit/Driver
- Panel Pry Tool

**NOTE**: Additional tools may be necessary for specific vehicle installations.

**EXAMPLE**: You can find an example diagram of the OBD connections in Appendix A.

### **OBD Port Connections (with Y-Cable)**

- 1. Locate the vehicle's OBD port, removing vehicle panels as necessary.
- Gently remove the factory OBD plug from the vehicle's OBD port mount.
- 3. Attach the male end of the Nauto Y-cable to the vehicle's OBD port.
- Plug the other male end of the Nauto OBD power cable into the female end of the Nauto Y-cable. Ensure ignition is "Off" when connecting.
- Using the supplied <u>adapter bracket</u>, insert the remaining end on the Nauto Y-adapter into the vehicle's OBD port mount.
- 6. Zip tie all connections to help ensure plugs will not disconnect.

### **OBD Port Connection (without Y-Cable)**

- 1. Locate the OBD Connector port within the vehicle.
- 2. Plug the Nauto OBD power cable into the vehicle's OBD Connector port.



### **INSTALLER APP**

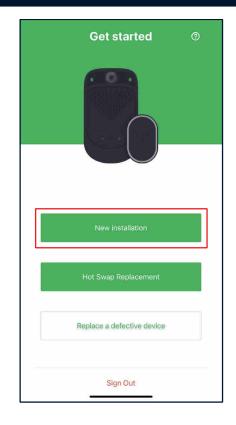
Once you have the device cable routed and power supplied to the device, launch the Installer app you downloaded earlier and follow the directions below. If you need to download the Installer App, follow the directions in the <u>Installer App Download</u> section.

**1. Login -** Use the login credentials provided to you previously to access the Nauto installer app.





2. Select "New Installation"



### → INSTALLER APP

3. Scan the QR Code - The QR code is located on the device. You may also manually enter the serial number, which is located next to the QR code on the Nauto Device.





**4. Review and confirm the fleet name -** If the fleet name listed is the not fleet that the device should be installed to, contact Nauto Support.



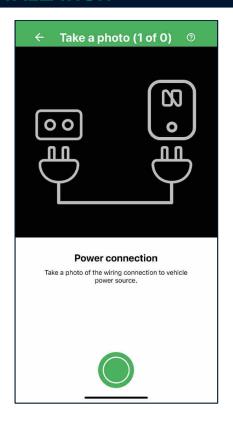
### → INSTALLER APP

5. Perform the installation





6. Take photo of connection and confirm - Take a clear unobstructed photo of the power connections made if hardwired. If connected via OBD, take photo of OBD connection. Once taken the app will ask you to confirm the photo.

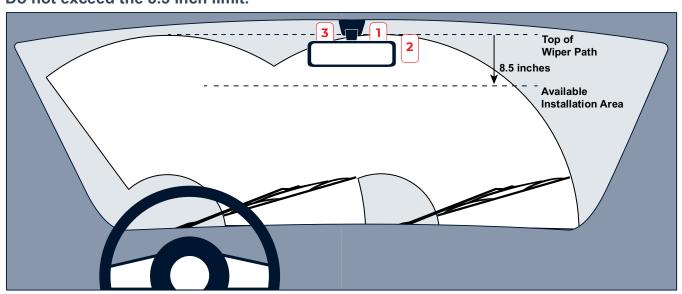


### NAUTO DEVICE WINDSHIELD PLACEMENT

- 1. Connect the Nauto device to power. Insert the power cable end that extends from under the headliner into the device's power port. The Nauto device will now boot up.
- 2. Check for green lights on the device. This can take up to one minute. Blue lights will appear on the device first, which means the device is updating software, followed by solid green lights indicating that it is ready to install.
- 3. Fit the windshield mount to the back of the Nauto device. Select the appropriate angled bracket that provides the best viewing angle. (see <u>Bracket Selection Guide</u>) Do not remove the adhesive backing at this time.
- 4. Locate the small screw on the accessible side of the device. The accessible side of the device is the side opposite of the side closest to the rear view mirror. Rotate the T5 screw clockwise to lock the Nauto device into place. The screw closest to the rear view mirror will not be tightened.
- 5. When you are ready to mount the Nauto device, follow the device guidelines and procedures outlined in the next section to get optimal coverage from both internal and external cameras.

**IMPORTANT NOTE**: The Federal Motor Carrier Safety Administration (FMCSA) allows for installation of the Nauto device up to 8.5 inches below the upper edge of the area swept by the windshield wipers, provided it remains outside of the driver's and passenger's normal line of sight to the road. This may allow you to place a device below the rear-view mirror/monitor. Please confirm this placement is acceptable with the customer's fleet manager.

#### Do not exceed the 8.5 inch limit.



**RECOMMENDED**: Mounting the camera on the passenger side is the preferred location to avoid the driver's visor from blocking the internal facing camera.

Using the live images from the Nauto Installer app as guidance, mark the location for the Nauto Device on the windshield with tape or a marker.



### → INSTALLATION APP

7. Images from the device - The app will now communicate with the device to get live images to help properly align the device. Once image/ placement looks good, select 'They look good'.





For optimal device performance:

- The forward-facing camera should have a clear view of the front of the vehicle with no obstructions
- The forward-facing camera should not be blocked by the window tint or metal film found near the rear-view mirror. If neither side of the rear-view mirror will produce the desired result, please contact Nauto for additional options
- The driver-facing camera should not be easily obstructed by the driver-side visor or other OEM and aftermarket equipment

The image below is an example of an ideal cab view for the Nauto interior facing camera. The driver is fully visible, both hands and face. There is no obstruction either from mirrors, visors, or any other vehicle obstacles.



For optimal Interior view:

- The Driver-facing camera should be located halfway between the rear-view mirror and the headliner
- The cameras should not block any sensors or rear-view mirror functions
- The rear-view mirror should maintain a full range of motion

### MOUNTING THE NAUTO DEVICE

Check the live images via the Installer app.

- Ensure that the top of the Nauto device is not touching the headliner
- If necessary for optimal placement, a small portion of the adhesive can be placed on the frit/metalization







Nauto Camera in an appropriate position

#### **Adhere Device**

Once you have the location for the Nauto device marked, peel the liner from the adhesive on the windshield mount. Slowly align the device into position marked. Press and hold the mount completely to the windshield for at least 15 seconds. This is the minimum time for the adhesive to adhere properly.



Failure to properly secure the Nauto Device may cause it to detach from the windshield, which may lead to catastrophic damage or injury.

From the outside of the vehicle, verify that the bracket adhesive is completely attached. If it is not completely attached, press and hold for an additional 15 seconds.



**Poor Attachment** 



**Poor Attachment** 



**Proper Attachment** 

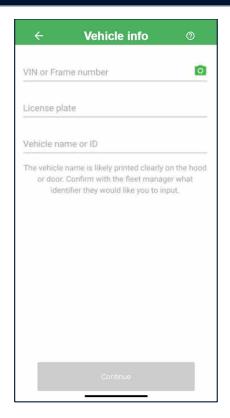
#### COMPLETING THE INSTALLATION

Next, return to the Installer app to complete the installation.

**NOTE**: Images will be uploaded via an LTE connection, unless you connect to a Wi-Fi network.



8. Enter the vehicle license plate and vehicle name - Confirm with the fleet manager the vehicle identifier for Vehicle Name or ID.



 Scan the VIN bar code - If vehicle is equipped with VIN bar code, select the camera option to scan the bar code, otherwise manually enter the VIN.





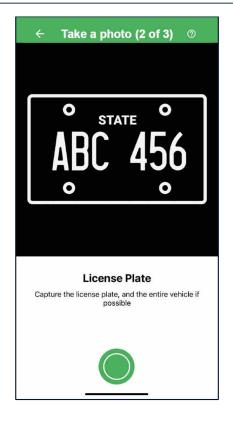
### **> COMPLETING THE INSTALLATION**

10. Take a photo of the camera location and confirm - From the driver's seat, capture a photo of the camera position on the windshield. Once taken the app will ask to confirm the photo.



11. Take a photo of the license plate and confirm

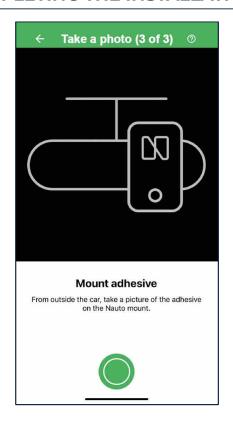
- From the back/front of the vehicle, capture a photo of the license plate. Once taken the app will ask you to confirm the photo.



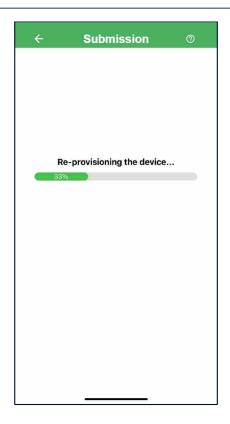


### **> COMPLETING THE INSTALLATION**

**12. Take a photo of the Mount adhesive -** From the outside of the vehicle, capture a photo of the mount adhesive. Once taken the app will ask you to confirm the photo.



**13. Submit Installation -** Once all steps are completed, submit the installation for completion.





### POST INSTALLATION VERIFICATION

Once you have completed all the steps in the Installer App, conduct a post installation verification as follows:

- 1. Ensure all vehicle panels are replaced and secure.
- 2. Ensure all wire connections are secured and zip-tied away from any moving OEM components (e.g. Brake/Gas/Clutch Pedal, Steering column, Parking Brake, etc.).
- 3. Ensure all wiring is secured and non-visible.
- 4. While sitting in the drivers seat in a normal driving position, ensure the interior camera lens is not blocked by the normal use of the rear-view mirror and driver's visor.
- 5. Ensure external facing camera is not blocked by anything on the windshield.
- 6. Ensure camera external LED is green.



### **INSTALLING THE MARK BUTTON**



The mark button is a Bluetooth device that may be included with the Nauto device. The button is designed to enable drivers to initiate uploads of video to the cloud.

- Turn Mark button ON. Locate the switch on the back side of the device and toggle it to the "On" position. It may take up to 30 seconds for the Mark Button to connect to the Nauto Device via Bluetooth.
- Confirm connection. Review the LED light on the Mark button when pressed. A green LED should activate upon press.
  - a. If the LED begins blinking, the Mark button has not been paired correctly. You will need to activate manual pairing by pressing both volume buttons on the Nauto Device for at least 5 seconds or until the LED lights on the device flash blue. The Nauto Device will then search for a Mark button to pair with. Confirm the connection by pressing the Mark button until the green light no longer blinks.
- Clean and dry installation location. Ensure the area
  where the Mark button will be placed is thoroughly cleaned
  and dried with an alcohol swab prior to attaching the Mark
  button.
- **4. Attach the Mark button**. Using the provided Velcro, mount the Mark button in the vehicle. Consult with the fleet manager for preferred Mark button placement.

**NOTE:** The image to the right indicates button in the 'on' position.







### **NAUTO DEVICE REMOVAL**

**IMPORTANT**: It is recommended to have the Nauto device removed by a professional installer to minimize both the risk of damage to the vehicle or the Nauto camera as well as injury to yourself. Contact <a href="mailto:Support@Nauto.com">Support@Nauto.com</a> or call **1(888)628-8690** for assistance in scheduling a removal by a qualified Nauto installer.

### **SUPPLIES NEEDED**

- Acetone wipes
- Panel removal tool
- Adhesive tape removal tool
- Razor blade

A kit can be supplied by Nauto Support if needed. Vehicle specific tools may be required.

To remove the Nauto device:

 Remove device from mount using the T5 Torx driver. Only one screw should have been tightened per the installation instructions. Disconnect the power connection and set the camera aside.



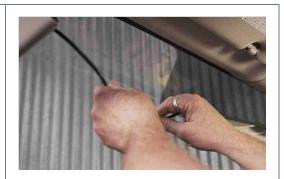


2. Using the adhesive tape removal tool, start at the top of the mount work the line between the adhesive and the windshield back and forth in a sawing motion down the adhesive behind the mount.



# N nauto®

3. Carefully, remove the power cabling down from the headliner to where it goes down the vehicle's A pillar.





### NAUTO DEVICE REMOVAL

4. Pull down the A pillar panel while being sure to not damage any of the retaining clips. Some vehicles may have screws holding the panel, so proper care must be taken to ensure the panel is opened without damaging it. A panel removal tool may be helpful in releasing the clips. Once the cabling is free from the A pillar, re-secure the A pillar panel.

**NOTE**: If the cable was incorrectly routed around the airbag it is critical to remove the cable in a manner that does not disrupt any of the vehicle's equipment.



5. Remove the rest of the cabling following it to its three wired connections. You will need to remove the three wires from their connection points. This may leave a vehicle wire exposed. If this is the case, wrap exposed portion with electrical tape, and secure the tape with a zip tie. The ground wire (black) might be secured to a metal location with a self tapping screw, simply remove this.

**NOTE**: If device was connected to the OBD port with a Y-adapter, remove the Y-adapter and replace the OEM OBD connector to the OEM mount location.

**NOTE**: Depending on the version of your device, you may need to also remove the power box, which will be in-line between the camera and the power connections.



6. Using a razor blade, remove any excess adhesive from the windshield.





7. Use acetone wipes to remove any adhesive residue from the windshield.



NOTE: Please refer to <a href="mailto:nauto.com/uninstall">nauto.com/uninstall</a> for a video example of the removal process.

### **NAUTO DEVICE VEHICLE MOVE**

### NAUTO DEVICE VEHICLE MOVE

Once you have uninstalled the Nauto device, open the installer app and follow the instructions below to move the device to a new vehicle.

1. Select "New Installation"

New installation

Hot Swap Replacement

Replace a defective device



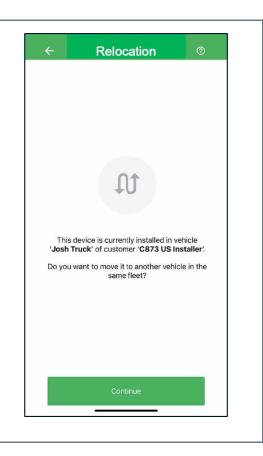
2. Scan the QR Code - The QR code is located on the device. You may also manually enter the serial number, which is located next to the QR code on the Nauto Device.





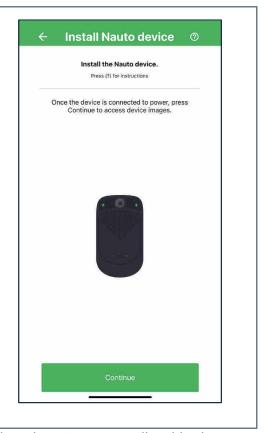
### **NAUTO DEVICE VEHICLE MOVE**

3. Confirm Relocation - Confirm the information is accurate. By confirming, you will be removing the previous vehicle from the fleet.





4. Perform the installation



When you are ready to proceed with installation, please follow the steps as outlined in the <u>Device Installation</u> section.

### **NAUTO DEVICE TROUBLESHOOTING**

### **NAUTO DEVICE DESCRIPTION**

The Nauto Device is not ignition based. The device will power on after the vehicle has started to move, and will enter a sleep state 5 minutes after the vehicle has come to a complete stop. If you are unable to move the vehicle, the device can be powered on by motion. Once the device is powered on the outward facing LED will remain lit as long as the device is connected to a power source. You have approximately 5 minutes before the device will enter a sleep state. If no lights are present, verify that the device is plugged in. If the outward facing light is not illuminated after attempting to wake the device, contact Nauto Customer Support for further assistance.

If remounting a device, see Nauto Device Vehicle Move.

### INWARD FACING LED DEFINITIONS

| LED          | Description   | Device |
|--------------|---|--------|
| Green LED    | The camera is powered on and ready to capture events.   |        |
| Blue LED     | The camera is receiving updates.  |        |
| Red LED      | The camera is experiencing an issue. See 'Troubleshooting Steps'.                                 |        |
| Yellow LED   | The camera is searching for an LTE signal. The vehicle should be moved to another location.       |        |
| Dark/Dim Red | Camera is in 'night' mode for night time recording (should only be seen in low light situations). |        |



# NAUTO DEVICE TROUBLESHOOTING

### **TROUBLESHOOTING STEPS**

The Nauto device requires little maintenance and has limited options for customer self-service troubleshooting. To troubleshoot the Nauto device, the following actions should be taken.

### **N2 TROUBLESHOOTING STEPS**

| ISSUE  | Camera External Green LED is off   |          |
|--|--|----------|
| POSSIBLE CAUSE   | TROUBLESHOOTING ACTION   | EXAMPLES |
| Device is not receiving the correct voltage for operation. | <ol> <li>Confirm the white power plug is fully seated into the back of the camera. (fig A)</li> <li>Confirm the harness is connected to the power converter under the dash. (fig B)</li> <li>Confirm there is no physical damage to the power harness between the camera and power converter connections.         <ol> <li>If physical damage is identified contact Nauto Support.</li> </ol> </li> <li>Confirm Green LED on power converter is illuminated. (fig C)</li> <li>*If all above troubleshooting actions are confirmed to be correct, contact Nauto Support.</li> </ol> | A B      |

### → N2 TROUBLESHOOTING STEPS

| ISSUE          | Power Converter LED is off |          |
|----------------|----------------------------|----------|
| POSSIBLE CAUSE | TROUBLESHOOTING ACTION     | EXAMPLES |



# NAUTO DEVICE TROUBLESHOOTING

|   | IROUBLESI  | 1001III0 |
|---|--|----------|
| Power converter is not receiving the correct voltage for operation. | <ol> <li>Verify the wiring is properly connected.</li> <li>a. Red wire is connected to 12v constant.</li> <li>b. Yellow wire is connected to a switched Ignition source.</li> <li>c. Black wire is connected to a solid ground source.</li> <li>If in-line fuses were used, verify fuse is in good working condition. (fig D)</li> <li>If add-a-fuse circuits were used, verify all fuses, including OEM fuse, is in good working condition.</li> <li>*If all above troubleshooting actions are confirmed to be correct, contact Nauto Support.</li> </ol> | Good Bad |
| ISSUE   | Internal LEDs are Yellow   |          |
| POSSIBLE CAUSE  | TROUBLESHOOTING ACTION   | EXAMPLES |
| Device is<br>searching for<br>cellular network/<br>LTE.             | <ol> <li>Ensure the vehicle is in an area that has adequate cellular coverage.</li> <li>Ensure the vehicle is outdoors.</li> <li>Drive the vehicle to help the device find cellular coverage.</li> </ol>   |          |

### → N2 TROUBLESHOOTING STEPS

| ISSUE             | Internal LEDs are Red  |          |
|-------------------|------------------------|----------|
| POSSIBLE<br>CAUSE | TROUBLESHOOTING ACTION | EXAMPLES |

\*If all above troubleshooting actions have been completed, contact Nauto Support.



# NAUTO DEVICE TROUBLESHOOTING

|  |   | ·       |
|--|---|---------|
|  | Perform a soft pin reset.     a. Locate the small pin hole on the front of the device.                    |         |
|  | b. Using a small pin, insert the pin into the hole and depress the button for 3 seconds. (fig E)          |         |
|  | c. If LEDs return to red, perform a hard reset.   | n " " r |
|  | 2. Perform a hard reset.  |         |
| Device has identified a potential issue. | a. Using a T5 Torx bit, release the device from the windshield bracket.                                   |         |
|  | <ul> <li>b. Locate and unplug the white<br/>power plug from the back of the<br/>device.</li> </ul>        | E       |
|  | <ul> <li>c. After 5 minutes, plug the white<br/>power plug into the back of the<br/>device.</li> </ul>    |         |
|  | <ul> <li>d. Reattach the device to the<br/>windshield bracket and secure<br/>with T5 Torx bit.</li> </ul> |         |

### **N3 TROUBLESHOOTING STEPS**

| ISSUE                   | Internal LEDs are Off  |          |
|-------------------------|--|----------|
| POSSIBLE CAUSE          | TROUBLESHOOTING ACTION                                       | EXAMPLES |
| Device is in sleep mode | Turn the vehicle on, and drive the vehicle to create motion. |          |
| POSSIBLE CAUSE          | TROUBLESHOOTING ACTION                                       | EXAMPLES |



# NAUTO DEVICE TROUBLESHOOTING

|  | <ul> <li>OBD Connection</li> <li>1. Confirm OBD is fully plugged into vehicle OBD port.</li> <li>Hardwire Connection</li> <li>2. Confirm the white power plug is fully seated into the back of the camera. (fig A)</li> <li>3. Confirm there is no physical</li> </ul> | A    |     |
|--|--|------|-----|
| Device is not receiving the correct voltage for operation. | damage to the power harness  | Good | Bad |
|  | between the camera and power connections.  |      |     |
|  | a. If physical damage is identified contact Nauto Support.   | В    |     |
|  | Verify the wiring is properly connected.   |      |     |
|  | a. Red wire is connected to 12v constant.  |      |     |
|  | b. White wire is connected to a switched Ignition source.  |      |     |
|  | c. Black wire is connected to a solid ground source.   |      |     |
|  | 5. If in-line fuses were used, verify fuse is in good working condition. (fig B)   |      |     |
|  | 6. If add-a-fuse circuits were used, verify all fuses, including OEM fuse, is in good working condition.   |      |     |
|  | *If all above troubleshooting actions are confirmed to be correct, contact Nauto Support.  |      |     |

# → N3 TROUBLESHOOTING STEPS

| ISSUE          | Internal LEDs are Yellow |          |
|----------------|--------------------------|----------|
| POSSIBLE CAUSE | TROUBLESHOOTING ACTION   | EXAMPLES |



# NAUTO DEVICE TROUBLESHOOTING

| Device is<br>searching for<br>cellular network/<br>LTE. | <ol> <li>Ensure the vehicle is in an area that has adequate cellular coverage.</li> <li>Ensure the vehicle is outdoors.</li> <li>Drive the vehicle to help the device find cellular coverage.</li> <li>*If all above troubleshooting actions have been completed, contact Nauto Support.</li> </ol>   |          |
|---|---|----------|
| ISSUE   | Internal LEDs are RED   |          |
| POSSIBLE CAUSE  | TROUBLESHOOTING ACTION  | EXAMPLES |
| Device has identified a potential issue.                | <ol> <li>Perform a soft pin reset.</li> <li>a. Locate the small pin hole on the front of the device.</li> <li>b. Using a small pin, insert the pin into the hole and depress the button for 3 seconds. (fig C)</li> <li>c. If LEDs return to red, perform a hard reset.</li> <li>Perform a hard reset.</li> <li>a. Using a T5 Torx bit, release the device from the windshield bracket.</li> <li>b. Locate and unplug the white power plug from the back of the device.</li> <li>c. After 5 minutes, plug the white power plug into the back of the device.</li> <li>d. Reattach the device to the windshield bracket and secure with T5 Torx bit.</li> </ol> | C        |

If the above steps do not yield any results and the device is displaying no lights, please follow the steps in the 'Power Cycling' section.



# NAUTO DEVICE TROUBLESHOOTING

## **POWER CYCLING A NAUTO DEVICE**

Power cycling a Nauto device functions to push the unit through a reboot process. This reboot allows any non functioning unit to run a full diagnostic and pick up any missed updates. Power Cycling is needed if a unit has a "never connected" state or if the unit has no interior LEDs.

**NOTE**: If the unit is displaying red led lights this indicates possible hardware issues. Power cycling would not be a step in this instance.

- Removing the camera from the bracket. Using a T5 Torx bit and driver, loosen the set screws located on either side of the bracket adhered to the windshield. On some applications, only one of these screws may be tightened. Once the set screws are fully loose, slide the camera up to remove from the bracket.
- 2. Disconnecting the power cable. Once the camera is free from the bracket, locate the white plug. Lightly pull on the power cable to disconnect the white plug from the camera.
- **3. Power cycling.** Leave the power connector disconnected from the back of the camera for at least than 30 seconds.
- **4.** Reconnecting the power cable. Place the white connector from the power cable into the connection point on the camera. You should see a solid green LED displaying directly below the connector location.
- Remounting the camera to the bracket. Align the bracket tabs to the back of the camera. Once aligned, slide the camera down to lock into
  - place. Ensure a flush fit between the camera and the bracket. Tighten one or both of the T5 Torx screws. If one of the T5 Torx screws is inaccessible only one side is required.
- 6. Review the forward facing LEDs. The camera should cycle through its boot up process. You may see some different color LEDs while the reboot process occurs. Once both forward LEDs display solid green, the device is operational.

If the device is still displaying red lights or displaying no lights after Power Cycling, follow the steps in Warranty Replacement Process.







# WARRANTY REPLACEMENT PROCESS

Once determined that the device is malfunctioning or not working as intended, and troubleshooting has failed to correct your issue, reach out to Nauto Customer Support in one of the following ways.

#### **EMAIL**

Email at support@nauto.com.

In your initial email please provide the following information:

- 1. Device Serial Number
- 2. Brief but detailed description of the issue.
- 3. What troubleshooting steps were performed on the device

You will receive an email with your case number.

A Nauto Support Agent will review your case and respond with possible secondary troubleshooting steps. Once all troubleshooting options are exhausted, the agent will assist you with setting up a RMA to receive a Warranty Replacement, if applicable.

You will then receive two separate emails, one containing an RMA and the other containing a return shipping label.

Please use the return shipping label to return your defective device as soon as possible.

#### **PHONE**

If you wish to speak directly with a Nauto Customer Support agent, call Nauto at 1 (888) 628-8690.

Be prepared to provide the agent with the following information:

- 1. Device Serial Number
- 2. Brief but detailed description of the issue.
- 3. What troubleshooting steps were performed on the device

Once all troubleshooting options are exhausted, the agent will assist you with setting up a RMA to receive a Warranty Replacement, if applicable.

You will receive two separate emails, one containing a RMA form and the other containing a return shipping label.

Please use the return shipping label to return your defective device as soon as possible.

Once the defective unit is received and processed the replacement unit will be shipped out.

When you receive the replacement unit, follow the steps in the '<u>Device Installation Guide</u>'.



**APPENDIX** 

# **APPENDIX**

The following section will include ancillary information to assist in the installation and maintenance of the Nauto Device.

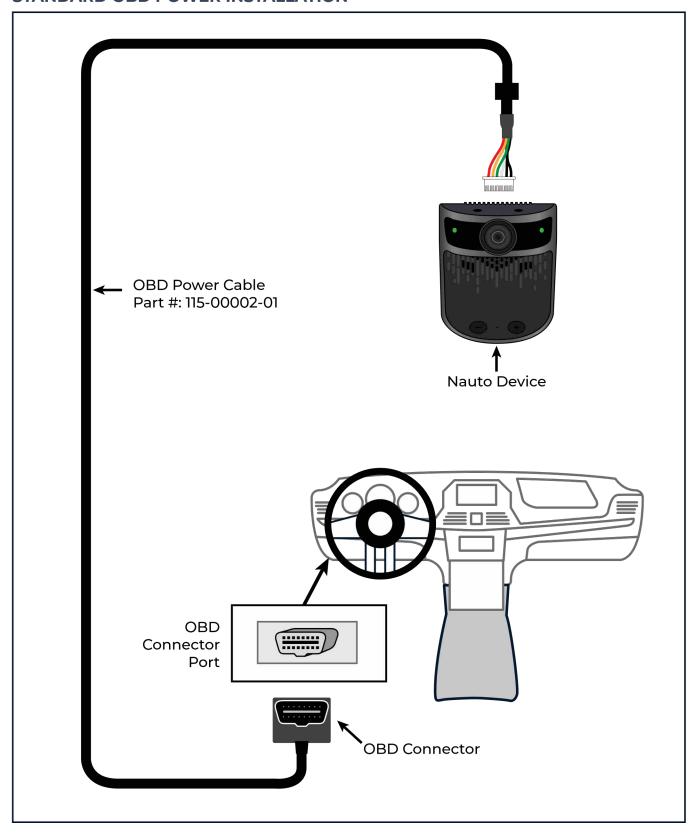


# **APPENDIX A**

12.1

# nauto<sup>®</sup>

# **APPENDIX A - DIAGRAMS** STANDARD OBD POWER INSTALLATION



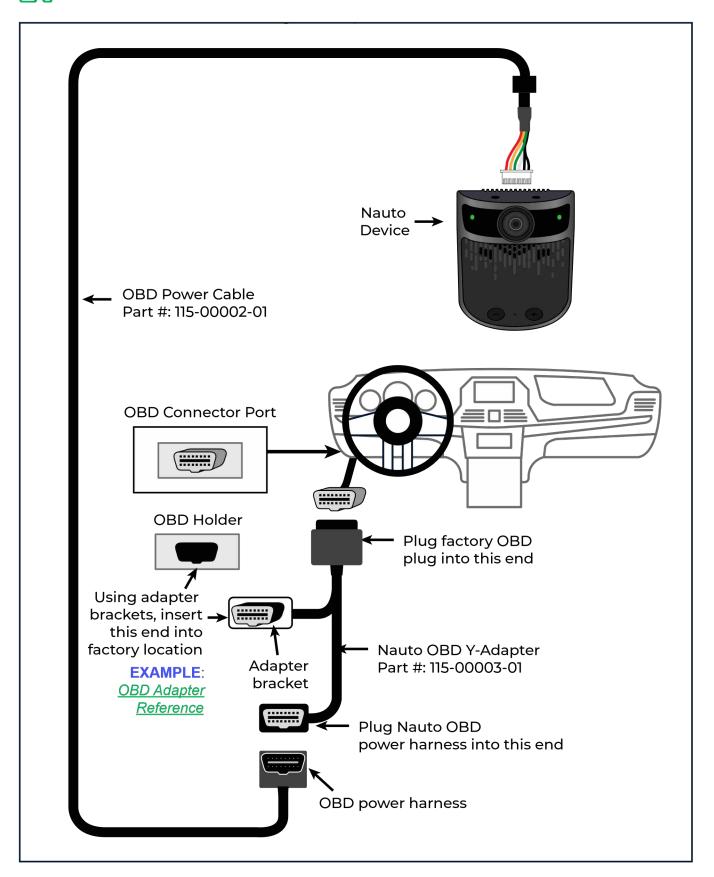
**EXAMPLE**: An installation description can be found in the <u>OBD Connection</u> section.

# APPENDIX A

12.1

**OBD POWER INSTALLATION WITH Y-ADAPTER** 

# N nauto



**EXAMPLE**: An installation description can be found in the <u>OBD Connection</u> section.

12.1



## APPENDIX B

## **APPENDIX B - OPTIONAL INSTALLATION ACCESSORIES**

### **OBD ADAPTER REFERENCE**

The OBD adapters included with the Nauto device allow technicians to install the included Y cable. Use the following adapter reference guide and included instructions to install the Y cable for the Nauto device.

# North American Flange Mount **European Latch & Snap Mount** Ford Fiat • GM Citroën Chrysler Peugeot **North American Extended Flange Mount VW Snap-In Mount** Volkswagen Audi Ford **North American Snap-In Mount BMW Slide & Lock Mount** Chrysler • BMW **North American Slide & Lock Mount** Ford Round Snap-In Mount Ford • GM Ford **European Lock Mount Iveco Slide & Lock Mount** Mercedes • BMW

Iveco



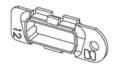
# Asian Snap-In Mount

- Toyota
- Hyundai
- Kia
- Ford



# **Volvo Slide Mount**

Volvo



12.5



## APPENDIX C

## **BRACKET SELECTION GUIDE**

The Nauto device can be used with any windshield angle by using a Nauto angle bracket. Below is an overview of how to determine the correct bracket for each vehicle.

### 0° CORRECTION - PART NUMBER: 810-00002-01

- Used for windshields with up to a 35° angle
- Primarily used on the majority of light-duty vehicles



#### 20° CORRECTION - PART NUMBER: 810-00004-01

- Used for windshields with a 36° to 55° angle
- Primarily used on medium-duty vehicles and some light-duty vehicles with more vertical windshields



## **40° CORRECTION - PART NUMBER: 810-00005-01**

- Used for windshields with a 56° to 75° angle
- Primarily used on heavy-duty class 7 and 8 trucks, as well as vehicles with nearly vertical windshield



# 52° CORRECTION - PART NUMBER: 810-00006-01

- Used for windshields with a 76° to 90° angle
- Most rarely used bracket. Used almost exclusively on buses and some trucks with nearly vertical windshields

# M nauto





# **Nauto 4 Technical Specifications**



# **INWARD/OUTWARD CAMERAS**

FOV (horizontal) 144° / 90°
Resolution Up to 1080p
Frame Rate Up to 30 fps

Video Format H.264 / MPEG-TS
Lowlight Support IR Support, HDR



### **SENSORS**

G Sensor, Gyro, E-Compass,

Ambient Light Sensors +- 16G

GPS Module -148dBm sensitivity | GPS/GLONASS

### CONNECTIVITY

Cellular LTE with HSPA fall back

Bluetooth 5.2 LE / Pre-paired with Mark Button

Wi-Fi 802.11 a/b/g/n/ac/ax – Access Point or Client

### **DEVICE HARDWARE**

Audio Speaker & Microphone

Storage Up to 512GB | Industrial Grade

Processor Qualcomm QCS-6490

Dimensions W 135.3mm x H 71.4mm x D 44.6mm

Weight 199g

Operating Temperature -25°C to +65°C Storage Temperature -35°C to +85°C

### **POWER**

Battery/Power 12V / Max 14W
Connection 3-wire installation

OBD Connection Supported

Additional Features Heat, water, dust resistant



# FOR ADDITIONAL SUPPORT CONTACT NAUTO CUSTOMER SERVICE

Email at <a href="mailto:support@nauto.com">support@nauto.com</a>

or

Call (888) 628-8690 (5am PST - 6pm PST M-F)

# **NAUTO® INSTALLATION GUIDE**

Version April 2024