



USER GUIDE

Nauto Device & Mark Button





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PURPOSE

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 shall not be relied upon for the specific installation in any vehicle. This guide is not intended to replace other regulatory requirements in the jurisdiction where the Nauto Device is installed or used.

Before starting the Nauto Device installation and configuring the system, please ensure that you have read this guide thoroughly. If you have any questions or concerns regarding the installation of the Nauto Device, please contact Nauto Support at 1 (888) 628-8690 or support@nauto.com.

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 areas that contain explosive materials or flammable vapors.

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

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

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 the installation guide or information supplied.

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, safety equipment, or bodily injury that may arise due to installation or use of Nauto's products and services.

THE INFORMATION ON THIS INSTALLATION GUIDE IS PROVIDED "AS IS" AND TO THE EXTENT PERMITTED BY LAW, IS PROVIDED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. 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.



DO NOT INGEST BATTERY. CHEMICAL BURN HAZARD

The Nauto mark button supplied with the N3 device contains a coin/button cell battery. If the coin/button cell battery is swallowed it can cause severe internal burns in just 2 hours and can lead to death.

Keep new and used batteries away from children.

If the battery compartment does not close securely, stop using the product and keep it away from children.

If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

CAUTION

Risk of explosion if the battery is replaced with an incorrect type.



FCC STATEMENT

NOTE: 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 radiate 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 RF Radiation Exposure Content:

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.*
- 2. This equipment is authorized only for Fixed or Mobile applications and is required to be installed as such.*
- 3. This equipment must be installed and operated with a minimum separation of 20 cm (8 in.) between the equipment and users/bystanders at all times.*

IC STATEMENT

"This device complies with Industry Canada's licence-exempt RSSs. 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." or "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; 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement." Déclaration sur l'exposition aux rayonnements RF
L'autre utilisé pour l'émetteur doit être installé pour fournir une distance de séparation d'au moins 20 cm de toutes les personnes et ne doit pas être colocalisé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.



Installation Tool List

The following tools are recommended to perform installation of the Nauto Device.

- Digital multimeter with sharp leads (or wire piercing leads)
- Razor knife
- 3M Super 33 electrical tape
- Wire strippers (self strippers)
- Wire crimpers (capable of crimping insulated terminals)
- Compact cordless 1/4" impact driver with hex drive
- #2 Phillips drill bit
- Deep 1/4" drive metric sockets (5.5 mm and 7-13mm)
- T5 Torx driver with handle
- Trim panel removal tool
- 8" or 11" black zip/nylon ties
- 18 AWG ring terminals
- #6 x 1/2 in. self tapping screws

The following tools are recommended based on the preferred connection method:

Connection Method	Description	Recommended Tools
Poke & Wrap	This solution requires splicing into a low voltage wire for a connection.	<ul style="list-style-type: none">• 18 AWG nylon butt connectors (2 or 3)
Posi-Tap	This solution requires posi-tap connectors to tap into wires without cutting or splicing.	<ul style="list-style-type: none">• Proper sized posi-taps
Solder	This solution requires a heated tool to bond wires together using a filler metal with a low melting point.	<ul style="list-style-type: none">• Soldering iron

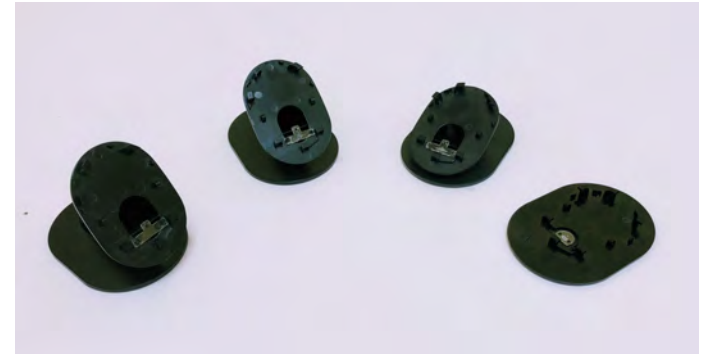


Nauto Device



**12V Power Supply Adapter
(Optional)**

3-wire power supply
with OBD Y-cable connector



Windshield Mount



Mark Button

Note: Do not dispose of small bag
with "MAC address" label.



Fuse Holder

with 3.5amp fuse



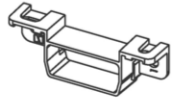
**Hardwire Power Cable
(12v and 24V)**



OBD Adapters

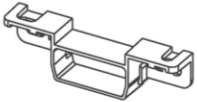
[See reference guide on page 6.](#)

The OBD adapters included with the Nauto Device allows 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.



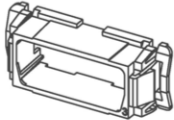
North American Flange Mount

- Ford
- GM
- Chrysler



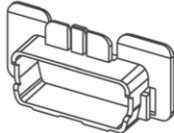
North American Extended Flange Mount

- Ford



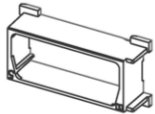
North American Snap-In Mount

- Chrysler



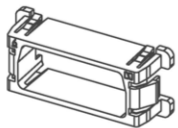
North American Side & Lock Mount

- Ford
- GM



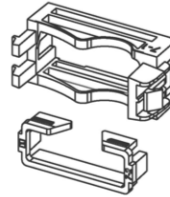
European Lock Mount

- Mercedes
- BMW



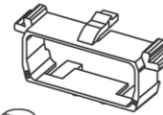
Asian Snap-In

- Toyota
- Hyundai
- Kia
- Ford



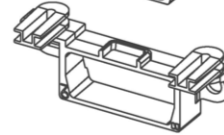
European Latch & Snap

- Fiat
- Citroën
- Peugeot



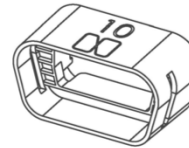
VW Snap-In

- Volkswagen
- Audi



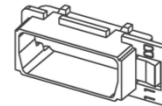
BMW Slide & Lock

- BMW



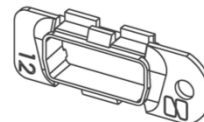
Ford Round Snap-In

- Ford



Iveco Slide & Lock

- Iveco



Volvo Slide Mount

- Volvo



IMPORTANT: When searching for the correct wires, **DO NOT** use a test light style circuit tester. Damage to vehicle computers and vehicle air bag restraint systems result from the use of a test light causing a short circuit.

Note: N3's OBDII cable only supports connectors with 12V. If a vehicle has an OBDII port with 24V, the hardwire cable must be used instead.

One Method for Locating Correct Vehicle Wires

1. Use a multimeter.
2. Set your multimeter to DC voltage.
3. Attach the negative (-) probe to the vehicle chassis ground.
4. Probe the wires you suspect of being the constant and ignition power sources.



Constant +12V Power Connection (Nauto Device Red Wire)

1. Find a source of constant +12V DC under the dashboard of the driver side of the car.
 - a. There are multiple places where this can be found, and locations vary between vehicles. Plan your installation according to your needs. You may find specific wiring details by specific vehicle online, such as on [The 12 Volt](http://www.the12volt.com) (www.the12volt.com).
 - b. Ensure that the wire you choose is a **constant** source of +12V. If you use a multimeter, it should show approximately 12V or better between your source and chassis ground regardless of the ignition switch position, open or closed doors, on or off lights and other accessories, etc.
2. Using your preferred connection method (poke & wrap, solder, or posi-tap), connect the red wire from the Nauto power supply to the source of +12V. Be sure **NOT** to permanently disconnect the 12V source from other circuits in the vehicle and take care to make a strong connection to survive vibration and temperatures.

Ground Connection (Nauto Device Black Wire)

1. Crimp or solder a ring terminal at the end of the black wire.
2. Connect it directly to a suitable metal spot on the vehicle's chassis to create a solid ground. One method that may be appropriate is using a self-tapping screw. The driver's kick panel under the dashboard is a common grounding area, or any painted metal surface.

Switched / Ignition Source (Nauto Device Yellow Wire)

1. Locate the wire that you have verified will have ignition (switched) power.
2. If you use a multimeter, probe the yellow wire with the meter lead to check:
 - a. There should be zero voltage.
 - b. With the key turned to the "ON" position in the ignition (do not start the vehicle), the wire should show 12 volts DC or more.
 - c. With the meter lead still probing the wire, start the vehicle. While the starter is cranking, the wire's voltage should not drop by more than 2 volts.
 - d. Turn the key to the "OFF" position. The voltage should return to 0.

WARNING: Do not plug harness into the Nauto Device while making connections.



OBD Port Connection

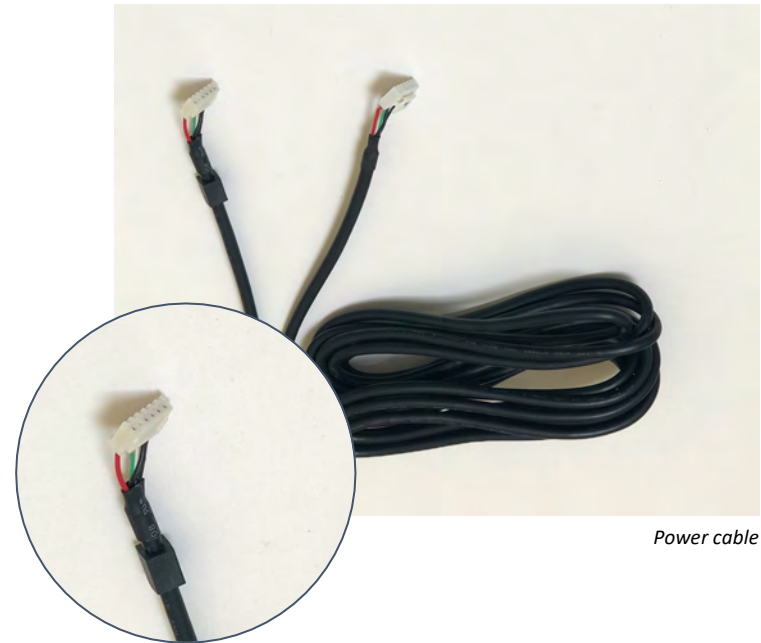
1. Locate the OBD port within the vehicle, removing vehicle panels as necessary.
2. Gently remove the factory OBD plug from the mount.
3. Select and install the vehicle-appropriate adapter from Nauto's OBD Adapter Kit ([page 6](#)).
4. Using the appropriate adapter, replace the vehicle's OBD port with the female end of the Nauto Y-cable.
5. If there was existing device in the vehicle's OBD port, please reconnect it utilizing the Nauto Y-cable.
6. Plug the male end of the Nauto Y-cable into the vehicle's OBD port.
7. Zip tie all connections to help ensure plugs will not disconnect.

After making proper power and ground connections, properly secure all loose and extra wiring. A slot built into the side of the power supply unit can help to secure excess wiring to conceal and secure the wires of the harness, and trim or bundle up unused wires.



Power Cable Connection

1. Locate the power end of the power cable, or the end with the small black block (see image for reference).
2. Leaving 8-10" of the cable exposed, start tucking the cable under the windshield headliner, starting just above the rearview mirror.
 - a. The cable should be buried under the headliner so that it will not slide out or drop from the headliner.
3. Route the cable to the left (driver's side of the vehicle) and remove the A-pillar panel to route the cable around, behind, and away from all airbag components and related vehicle accessories.
4. 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 supply unit.
5. Connect the white clip into the power supply. Bundle and secure all excess wiring so it will not interfere with vehicle and driver controls.
6. Mount the power supply unit and bundled wires in a secure location under the dash of the vehicle with zip ties.
 - a. The power supply is not waterproof and is intended to be placed inside of the vehicle. It is not designed to be mounted externally or under the hood of a vehicle.



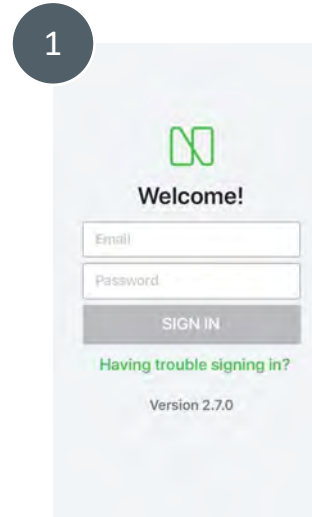
Power cable

Power end of power cable

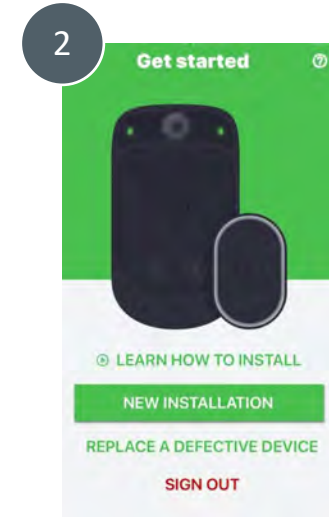


Download the Nauto Installer App from the [App Store](#) or [Google Play](#) store.

1. **Log in.** Your username and password will be provided to you prior to installation.
2. **Select “New Installation.”**
3. **Scan the QR code 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.**



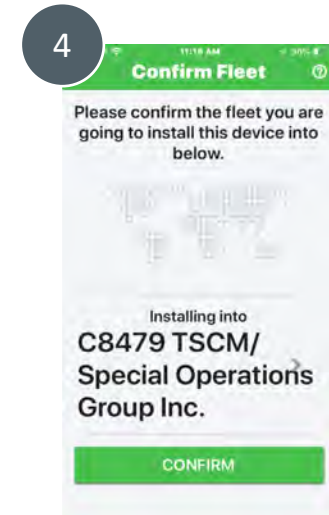
Login screen



Get Started screen



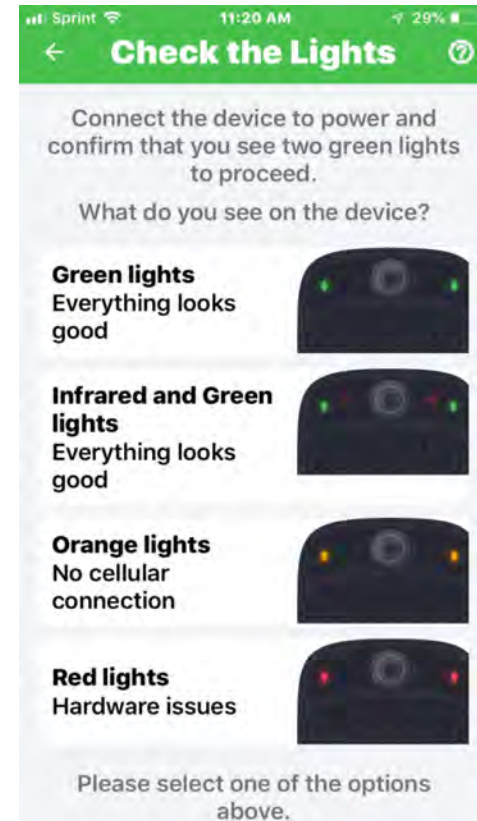
Device provisioning screen



Confirm Fleet screen



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, meaning the device is updating software, followed by two green lights.



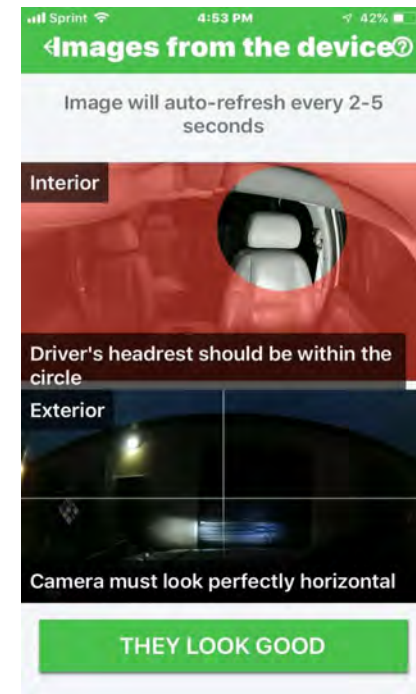
Device lights guideline



3. **Fit the windshield mount to the back of the Nauto Device.** Do not remove the adhesive backing at this time.
4. **Review live images from the Nauto Device.** The Nauto Installer app will show live images from both interior and exterior cameras. This can take a few minutes.
5. **Determine the optimal mounting location** based on the live images and recommended locations (see image on right).
6. **Locate the small screw on the accessible side of the device (exposed side from the rearview mirror).** Rotate the T5 screw clockwise to lock the Nauto Device into place. The other screw will not be tightened.
7. **Clean the desired location using the provided swab.** Dry the area with a clean paper towel, removing all film and residue.
8. **Mark location for the Nauto Device.** Using the live images as guidance, mark the location for the Nauto Device on the windshield with tape or marker. For optimal device performance:
 - a. The forward-facing camera should have a clear view of the front of the vehicle with no obstructions.
 - b. The forward-facing camera should not be blocked by window tint or metal film found near the rearview mirror. If neither side of the rearview mirror will produce the desired result, please contact Nauto for additional options.
 - c. The driver-facing camera should not be easily obstructed by the driver-side visor.
 - d. The cameras should not block any sensors or rearview mirror functions.



Recommended mounting locations



Live images screen



9. **Peel the liner from the adhesive on the windshield mount.**
10. **Slowly align the device into position**, checking the live images on the app. If your view is properly aligned, gently press the whole assembly to the windshield.
11. **Press and hold the complete mount to the windshield for at least 15 seconds.** 15 seconds 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.
12. **Verify that the mount and Nauto Device are securely attached.**
13. **Secure all dash panels.** Make sure all cables are secure and out of the driver's view and movement.



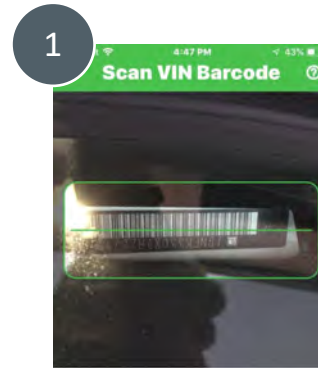
Interior view of Nauto Device



Exterior view of Nauto Device



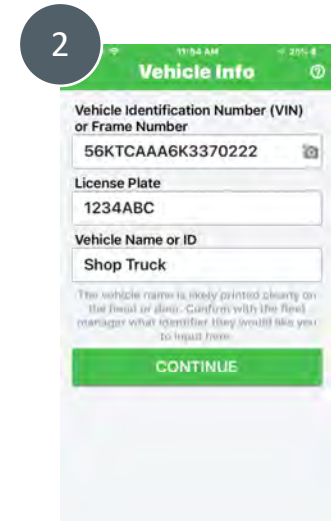
1. **Scan the VIN barcode** located in the vehicle.
2. **Enter the vehicle license plate and vehicle name.**
 - a. Confirm with the fleet manager the vehicle identifier for Vehicle Name or ID.
3. **Follow additional prompts** to confirm that the device is powered even when the vehicle is locked.



Point to VIN Barcode

Usually located on driver's side door.

Scan VIN



Vehicle Info screen



Installation Review screen



The Mark Button is a Bluetooth device included with every Nauto Device. The button is designed to enable drivers to initiate uploads of video to the cloud.

- 1. 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.
- 2. 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 after you release, 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.
- 3. Attach the Mark Button to the vehicle using the provided Velcro.** Consult the fleet manager for preferred Mark Button placement.



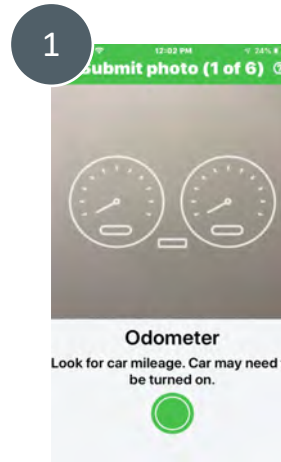
Mark Button Instruction screen



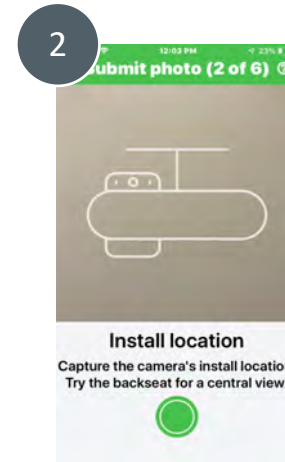
1. Capture installation images. Follow prompts to capture six (6) images of the vehicle.

- a. Odometer
- b. Install location
- c. Front of car
- d. Back of car
- e. Driver side
- f. Passenger side

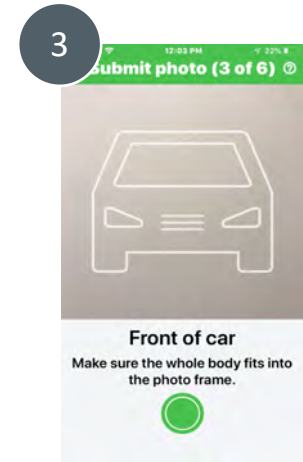
2. Complete installation. Upload images through the Nauto Installer app to complete installation.



Odometer



Device install location



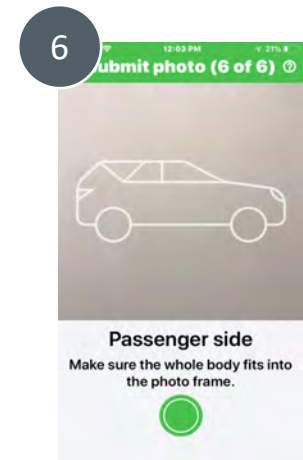
Front of vehicle



Back of vehicle



Driver side of vehicle



Passenger side of vehicle



FREQUENCIES AND EMITTED POWER

N3	
GSM 900	880MHz - 915MHz @ 35dBm
DCS 1800	1710MHz - 1785MHz @ 32dBm
WCDMA Band 1	1920MHz - 1980MHz @ 25dBm
WCDMA Band 8	880MHz - 915MHz @ 25dBm
LTE Band 1	1920MHz - 1980MHz @ 25dBm
LTE Band 3	1710MHz - 1785MHz @ 25dBm
LTE Band 7	2500MHz - 2570MHz @ 25dBm
LTE Band 8	880MHz - 915MHz @ 25dBm
LTE Band 20	832MHz - 862MHz @ 25dBm
Bluetooth	2402MHz - 2480MHz @ 7.29dBm
BLE	2402MHz - 2480MHz @ 4.76dBm
WIFI 2.4G	2412MHz - 2472MHz @ 14.7dBm



Additional Resources

- [the12volt.com](http://www.the12volt.com) (www.the12volt.com)
- [Bulldog Security](http://www.bulldogsecurity.com) (www.bulldogsecurity.com)
- [OBD Port Locator](http://www.fitguide.installernet.com/progressive/progressive.aspx) (www.fitguide.installernet.com/progressive/progressive.aspx)
- [Mitchell 1](http://www.mitchell1.com) (www.mitchell1.com)
- [ALLDATA](http://www.alldata.com) (www.alldata.com)
- Local dealer for vehicle manufacturer

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For any questions or support, please contact Nauto Technical Support:

Phone: 1 (888) 628 8690

Email: support@nauto.com

Hours: Mon-Fri 5AM-6PM PT



Nauto™ Installation Guide

For any questions, please contact us by phone at 1 (888) 628 8690 or email at support@nauto.com .