

# USER GUIDE

Product Information • Installation • Registration  
Using Your Device

## DASH REEFER



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**trackmate**gps™

[www.trackmategps.com](http://www.trackmategps.com)

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# Introduction

Welcome to a new dimension of safety and security for your vehicles with your purchase of the TrackmateGPS DASH REEFER and its advanced technology. You are now able to have control of your vehicles, whether you operate a business with company cars, a fleet of limousines, or you are a parent of a teenage driver. The DASH REEFER lets you know where your car is at all times. It can even signal you if someone exceeds your pre-determined speed limit or enters an area where you prefer the driver not be.

The DASH REEFER is ideal for commercial or personal use, simple to install and easy to use.

***\*Read the Installation section of this guide carefully before installing your new DASH REEFER.***

***NOTE:*** *The latest version of this guide is available at [www.trackmategps.com](http://www.trackmategps.com). The guide's version number is on the cover, and can be compared with the online version.*

# Technical Information

<b>Specifications</b>	
Power Supply	+9v--- +40v / 1.5A
Internal Battery	3.7v - 300mAh Rechargeable lithium-ion battery Temperature durability up to 176°F (80°C)
Normal power consumption	2W, 12.5W at peak
Working Current	60mA- 100mA
Dimension	4.8×3.6×1.25in (23×92×32mm)
Weight	9.3oz (263.65g)
Operating temperature	-22° to 176° F (-30° to 80° C)
Bands	LTE FDD:B2/B4/B12 WCDMA: B2/B4/B5
GPS Module	GT1612-MT/ATGM332D
GPS Sensitivity	-165dBm
Receiver type	50 Channels   GPS L1 frequency, C/A Code   SBAS: WAAS, EGNOS, MSAS
Horizontal position accuracy	GPS 2.5 m   SBAS 2.0 m   SBAS + PPP7 < 1 m (2D, R50)8   SBAS + PPP7 < 2 m (3D, R50)8
Velocity Accuracy	0.1 m/s
Reacquisition	1 sec., average
Heading accuracy	0.5 degrees
Button	One SOS Button supported
Transmission power	≤10dBm

# Registration

If this is your first TrackmateGPS™ tracking device you will need to create an account at [www.trackmategps.com](http://www.trackmategps.com).



**Figure 1 - “REGISTER YOUR ACCOUNT” button as it appears on the homepage**

1. On the Sign Up page, you will be prompted to fill out an account information form.
2. Next you will be prompted to enter your credit card information. You will not be charged at this point, but we will run verification on the card. You will not be able to register a new device without a valid card on file.
3. You will be redirected to the “Register Device” page where you will be able to enter your device’s serial number which can be found on the device and on the box.

4. On this page you will be prompted to select one of the service plans:
  - A. BASIC
  - B. PREMIUM
  - C. PLATINUM
5. Due to the possibility that you may be tracking an asset in a different country, you will select the country where your device is located.
6. Any subsequent devices may be registered by navigating to the “Register Device” page located under the “Devices” section of the website’s header menu.

Failure to provide the correct information will cause the activation to fail.

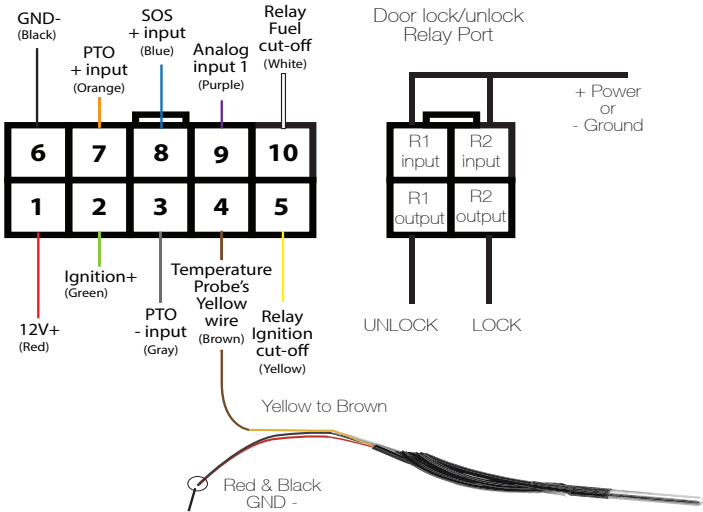
## Installation

The estimated time required for installation is 30 to 45 minutes for an experienced installer.

- It is recommended that you use a professional car electrician to install your tracker. However, if you are familiar with auto electronics, you may choose to install it on your own.

Tools needed for installation:

- Voltage tester/meter
- Wire stripper
- Electrical Tape or heat shrink tubing
- Wire connectors
- Fuse taps (optional)
- The first step is to locate a good place to mount your device. [Figure 4 on page 16](#) offers some suggestions.



**Figure 2 - Wiring Diagram**

- The tracker must be connected to a power source providing 9V-40V DC and requires a constant power source. The power consumption is minimal (<30mA) and should not affect your vehicle battery unless the vehicle is not used for an extended period (several weeks), or the vehicle battery is in poor condition. An optional sleep mode can be activated on the platform in these cases.
- Safety is our number one concern. Before you begin stripping, splicing and connecting wires it is important that you use your voltmeter to locate a ground, constant power and accessory or ignition powered wire (**It is important to test that this wire remains powered for the entire time that the ignition is on**), as well as any

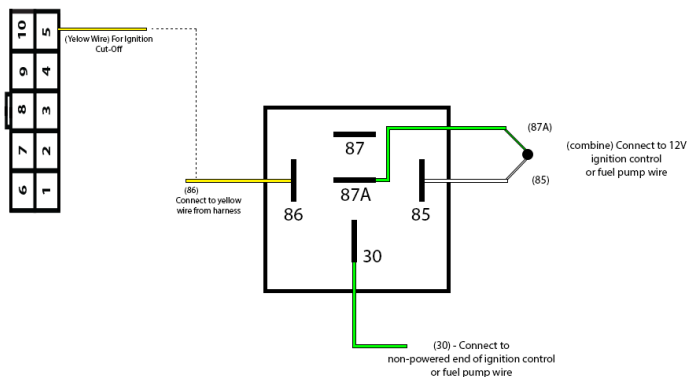
other connections you will be using.

- Mark these wires and disconnect the ground terminal of your vehicle's battery. We are now ready to begin.
- The wiring harness as shown in [Figure 2 on page 7](#) has 10 wires (approximately 3ft long).
  - Ensure that your contact points are exposed and are accessible. If your contact points are wires, use your wire stripper to expose a section of wiring large enough for you to work with.
  - Connect the black wire (PIN6) to ground.
  - The red wire (PIN1) should be connected to a constant power source providing between 9V and 40V. 12V is most common in vehicles.
  - Connect the green wire (PIN2) to the ignition powered contact.
  - Connect the red and black wires of the temperature probes to ground.
  - Connect the device's brown wire (PIN4) to the temperature probe's yellow wire.
  - The probe's wires may be extended with 32-36 gauge wires.
  - PTO (power take-off) can be connected to any peripheral device to get information regarding its current state. The grey wire (PIN3 takes grounded input) and orange wire (PIN7 takes positive input) can be used for this out of the box when connected to a device's output. Common uses for this are:
    - School bus stop signs
    - Open doors, trunks
    - Emergency lights, sirens
    - Hydraulic lifts, tow/tailgate,



etc.

- The analog inputs can read the working voltage of a peripheral device. This can be useful to monitor power failures on such devices.
- Optional Door LOCK/UNLOCK: The port immediately to the right of the main port labeled “Relay” is a pulse emitter, and it can be used to control the door locking system.
  - The two top wires (R1 input and R2 Input) are to be combined and connected to power (+) for (+) locking systems or ground (-) for (-) locking systems.
  - The bottom left wire (R1 Output) connects to the unlock control.
  - The bottom right wire (R2 Output) connects to the lock control.



**NOTE:** Pay close attention to the numbers. Colors may differ for relay wires.  
 For ignition cut-off: A constantly powered ignition control wire will need to be spliced (cut).  
 For fuel cut-off: The constantly powered fuel pump wire will need to be spliced (cut).  
 The relay will connect the two ends with the green wires (87a and 30).

**Figure 3 - Relay Diagram**

- If you are installing a relay for ignition cut-off, follow the diagram above (Figure 3). When doing so, pay attention to the numbers for the wires as the colors may vary.
- If you need to use more inputs or outputs, please contact our support team for customized account settings at no extra charge.
- Your tracker is shipped with the SIM card pre-installed and the back-up battery depleted. Secure the GPS antenna (square shaped antenna) to the GPS/BD port and the cellular antenna (long flat antenna with 3M sticker) to the GSM/4G port.
- Plug the harness into the device's "Main" port. Once connected to a 12V source, the LEDs located above the SIM card will begin flashing.

- The following tables describe the behavior of the LED status indicators.

<b>Red LED – Power</b>	
Off	No external power source
On	Connected to external power source
<b>Blue LED - GPS Module</b>	
Off	Searching for GPS signal
On	GPS fixed
<b>Green LED - Communications Module</b>	
Off	Module did not power on (or is in Deep Sleep mode)
On (Blinking 1 time in 4 seconds)	Connected to network and server
On (Blinking 2 times in 4 seconds)	Device has established a network connection, but is not connected to the server

- You can test your device before installing it by connecting the wires to a 12V power source and checking off the “Installed” checkbox or pressing the “Test” icon online under “My Devices”. Your device will usually start tracking within the hour.
- Upon completion of your test, you should uncheck the “installed” box if you don’t intend to finish your installation on the same day.
- Optimal installation locations are below the dash board or behind the glove compartment. For additional installation options, view the attached image. For best results, the GPS antenna should be exposed, however, as long

as the antenna is not blocked by metal, it will track well. **IT IS CRITICAL TO INSTALL THE GPS ANTENNA HORIZONTALLY**, with the (black side) top skywards. Installing in the engine compartment is not recommended, because the extreme temperatures can potentially affect the life and performance of the device.

*In the event the tracker does not begin tracking, please contact us by phone at 718-878-4056 or email us at support@trackmategps.com with your username in the subject line. We will assist you promptly.*

## **Free Trial Period**

Your purchase includes a free trial period for 7 days from the date of activation for your first device. At the time of activation, the quarterly fee will be put on hold on your credit card.

**please note:** Adding additional devices to your account is viewed as a confirmation that you are satisfied with your trial run and will end the free trial period.

**No contract or service agreement is required. The tracking fee is billed automatically every three months or once annually. No-fee cancellation can be done online. Prepaid tracking fees greater than one month will be refunded.**

# Troubleshooting

Most electronic devices that rely on software to operate occasionally become unresponsive (freeze) and require re-booting. This reboot can in most instances be done remotely by us. However, occasionally the device has to be rebooted manually.

To reboot your device:

1. Unplug the wiring harness from the device.
2. Pop the SIM card tray out by pushing the yellow button near the tray. Once the tray is out and the harness is unplugged, the LED indicators will shut off.
3. After 60 seconds push the SIM tray back in and then plug the wiring harness back in. Refer to the table on [page 10](#) of this document for the LED indicators.

In the event that your device doesn't send data at regular intervals or shows the wrong location:

1. Ensure that both antennas are connected securely to their proper ports.
2. Ensure that both antennas are clear of any surrounding metal.
3. Ensure that both antennas are laying horizontally and flat.
4. If the antennas are connected to the wrong ports:
  1. Shut off the device by unplugging the wiring harness and removing the SIM tray.

2. Unscrew both antennas and secure them to their proper ports.
3. Once again ensure that the antennas are not blocked by metal.
4. Turn the device back on by putting the SIM tray back in and plugging in the wiring harness.
5. Ensure that all the wires are connected properly as indicated in [Figure 2 on page 7](#). It is possible that connection came loose.

Feel free to contact us for any assistance or troubleshooting.

When you activate your DASH REEFER unit, you acknowledge and accept the terms and conditions of the service agreement. Should you discontinue service, your SIM will be de-activated.

***We reserve the right to occasionally request that you replace the SIM card with a new card that we may send in order to provide improved tracking reliability.***

# Thank You!

Thank you for purchasing the TrackmateGPS™ DASH REEFER. We are confident you will find the service and features a valuable part of your personal or professional life. If you have any questions, please feel free to contact us at:

**Email:** [support@trackmategps.com](mailto:support@trackmategps.com)

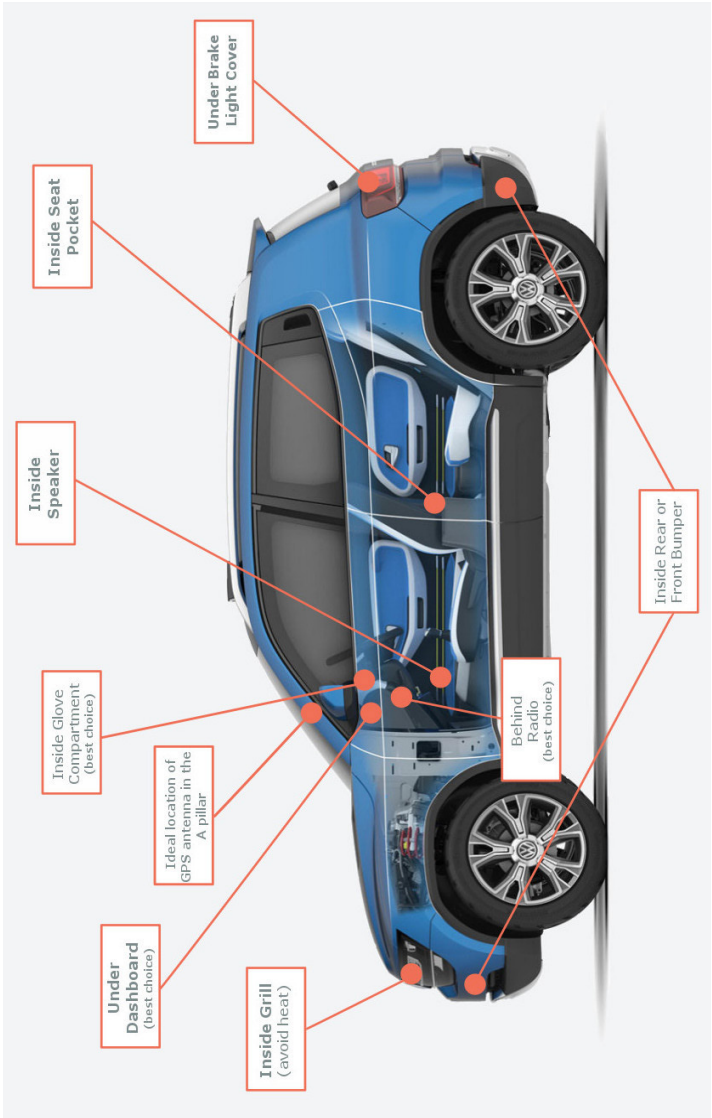
**Phone:** 718 878-4056

**Hours:**

Monday - Thursday **9:00am - 5:00pm (EST)**

Friday **9:00am - 1:00pm (EST)**

We do our utmost to give you a pleasant experience and the best possible service. Please be kind enough to leave a review on [Amazon](#) for this product.



**Figure 4** - Image shows various suggestions for mounting your device