# Legal Information and Warnings

## Power Supply

- This car kit supports 12V DC power only. Do not use in vehicles with 24V DC power.
- Connect the power supply only to designated power sources as marked on the product.
- To reduce risk of damage to the electric cord, remove it from the cigarette lighter by holding onto the cigarette lighter adapter rather than the cord.
- Make sure the cord is positioned so that it will not be stepped on or otherwise subjected to damage or stress.
- To reduce risk of electric shock, unplug the unit from any power source before attempting to clean it.

## Children

Do not allow children to play with your car kit as it contains small parts that could become detached and create a choking hazard.

## Copyright Information

# LIMITED WARRANTY

For a period of 90 days from the date of purchase, TerreStar Networks Inc. ("TerreStar") warrants this Product (including any accessories provided in the box) against defects in materials or workmanship. If this Product is determined to be defective within the 90 day warranty period, TerreStar will repair the Product or replace it with a new or refurbished Product, at its option, at no charge to the customer, except as set forth below.

This warranty does not cover cosmetic damage or damage due to misuse, abuse, negligence, acts of God, accident, or modification of any part of the Product. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by TerreStar to service this Product. This warranty is only valid in the United States.

To obtain warranty service, you must receive a Return Authorization from TerreStar and ship the Product at your expense to TerreStar's authorized service facility. You must ship the Product in either its original packaging or packaging affording an equal degree of protection.

This warranty does not cover customer instruction, set up or set up adjustments or network coverage problems.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. TERRESTAR SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. Additionally, this warranty gives you specific legal rights, and you may have other rights which vary from state to state.

# Introduction

Thank you for purchasing the TerreStar GENUS Satellite Smartphone Car Kit.

The TerreStar GENUS® Car Kit is an accessory to the TerreStar GENUS®, the world's first integrated satellite/cellular smartphone. The GENUS Car Kit extends the reach and functionality of the TerreStar GENUS by enabling in-car mobile coverage with continuous power supply.

With the GENUS Car Kit, you can attach to the TerreStar-1 satellite in more challenging conditions (such as in-vehicle mobile or degraded line-of-sight) and stay connected longer. Some of the benefits enjoyed by GENUS Car Kit users are:

- Better performance
  - Improved mobility
  - Powered roof top antenna
  - Improved voice and data signal quality
    - Up to +6 dB gain on transmit path
    - Up to +10 dB gain on return path
  - Improved line of sight to satellite
  - Fewer dropped calls

- Continuous power supply
  - Stay connected longer
  - Cradle for hands free GENUS operation*

- Easy installation
  - Magnetic mount to vehicle roof top
  - Cradle with windshield suction mount
  - Transceiver placement under seat or in center console
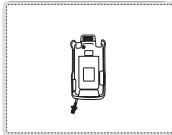  - DC power adapter
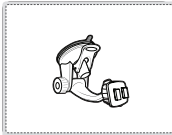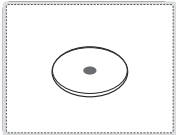
*Microphone, speaker not included in Car Kit.*

# Getting Started

## In the Box
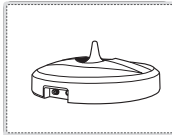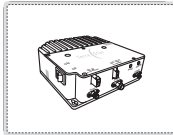
| | | | | |
|---|---|---|---|---|
| **Antenna** | **Transceiver** | **Cradle** | **Suction Mount** | **Dashboard Mounting Disk** |

| | | | | |
|---|---|---|---|---|
| **Receive (Rx) Cable** | **Transmit (Tx) Cable** | **Cradle RF Cable** | **Micro USB Power Cord** | **DC Power Adapter** |

| | | | |
|---|---|---|---|
| **Rubber Sleeves (on cables)** | **Spanner Wrench** | **Installation Guide** | **User Guide** |

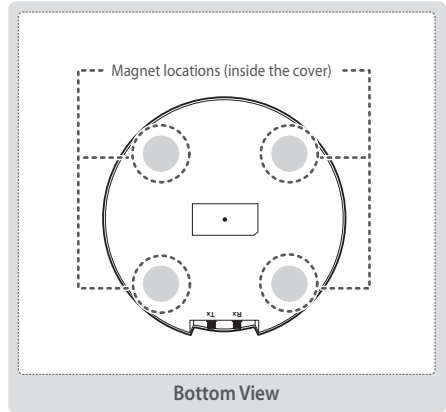| | |
|---|---|
| **Antenna** | Magnetic mount roof top antenna. |
| **Transceiver** | Amplifies the radio signal to and from the satellite. |
| **Cradle** | Holds GENUS device. |
| **Suction Mount** | Mounts cradle to the windshield or dashboard. |
| **Dashboard Mounting Disk** | Adhesive mount for dashboard installation option. |
| **RF Cables** | Transmit (Tx) cable (3 m) connects transceiver to antenna. Receiver (Rx) cable (3 m) connects transceiver to antenna. Cradle RF cable (1.5 m) connects transceiver to cradle. |
| **Micro USB Power Cord** | Power cable from transceiver to GENUS to charge GENUS. |
| **DC Power Adapter** | Supplies 12V DC power to transceiver via vehicle cigarette lighter. |
| **Rubber Sleeves** | Preinstalled on the cables. |
| **Spanner Wrench** | Tool to tighten connectors of RF cable to antenna RF ports. |
| **Installation Guide** | Contains technical specifications, step-by-step installation procedures, diagrams, troubleshooting and Q&A section. |
| **User Guide** | Overview of the GENUS Car Kit functionality and proper use. |
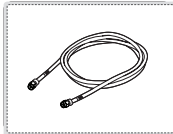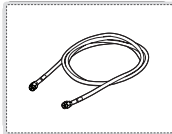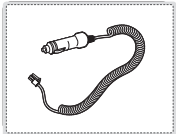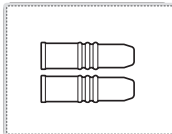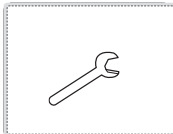
# Getting Started

## Car Kit Device

### Antenna



Rx Port                Tx Port

**Top View**



Magnet locations (inside the cover)

**Bottom View**
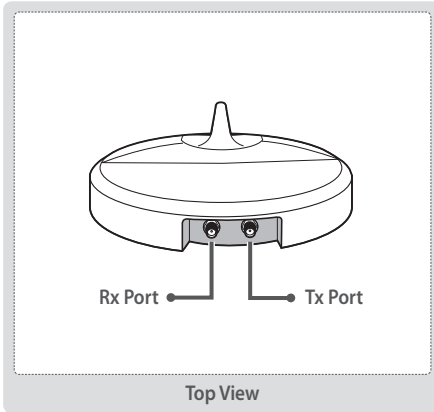
| | |
|---|---|
| **Rx Port** | Connects Rx cable between antenna Rx port and transceiver Rx port. |
| **Tx Port** | Connects Tx cable between antenna Tx port and transceiver Tx port. |
| **Magnet** | Antenna is attached via magnets on the roof of the vehicle.<br>Magnets are inside the antenna cover and are not visible from outside. |

🚫 **NOTE**

*The GENUS Satellite Smartphone Car Kit antenna can only access the TerreStar-1 satellite and is not capable of accessing any cellular signals.*

# Car Kit Device

## Transceiver
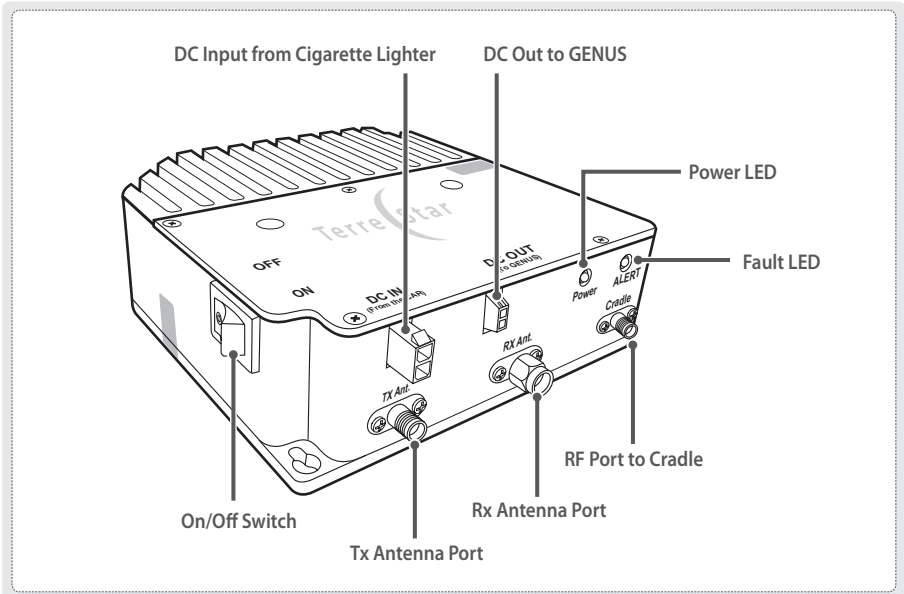


| | |
|---|---|
| **On/Off Switch** | Powers on and off the transceiver. |
| **DC Input** | Provides power to transceiver via DC power adapter. |
| **DC Out to GENUS** | Provides power to GENUS via micro USB cable. |
| **Tx Antenna Port** | Connects antenna to transceiver Tx port. |
| **Rx Antenna Port** | Connects antenna to transceiver Rx port. |
| **RF Port to Cradle** | Connects RF cable to cradle. |
| **Power LED** | When on, green LED is illuminated. |
| **Fault LED** | When red LED is illuminated, indicates fault. See troubleshooting. |

## Getting Started

# Car Kit Device

## Mounting Hardware
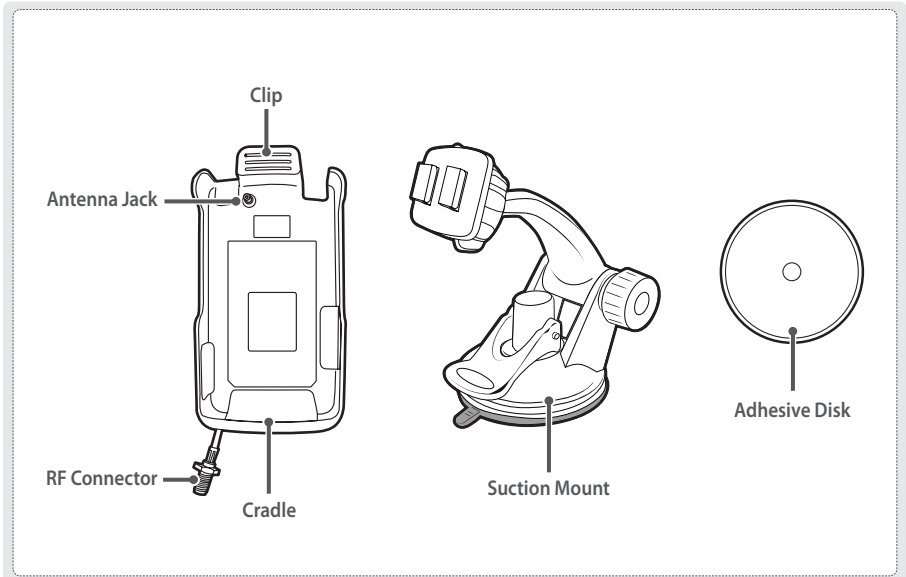


| | |
|---|---|
| **Cradle** | Holds GENUS device. |
| **Antenna Jack** | Attaches GENUS to external antenna port. |
| **Clip** | Secures GENUS device in cradle. |
| **RF Connector** | Connects cradle to transceiver via RF cable. |
| **Suction Mount** | Affixes cradle to windshield or adhesive disk. |
| **Adhesive Disk** | Enables suction mount to be adhesively mounted to dashboard if desired. |

# Car Kit Device

## RF Cables
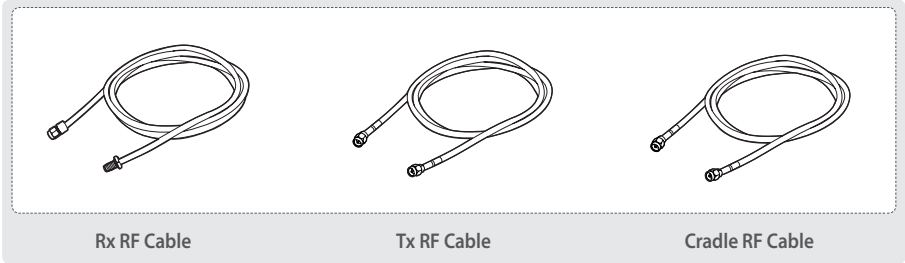


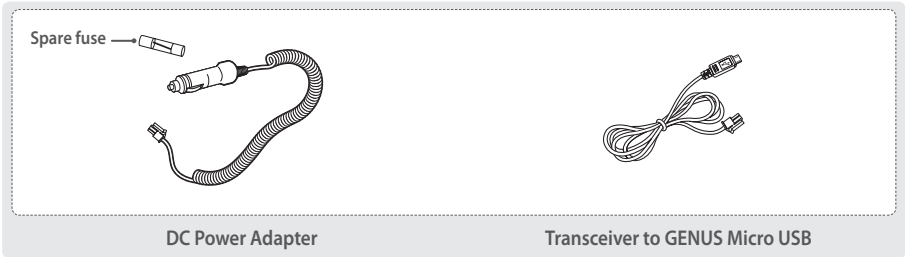| Rx RF Cable | Tx RF Cable | Cradle RF Cable |

| | |
|---|---|
| **Rx RF Cable** | Receive (Rx) cable (3 m) connects transceiver to antenna. "RX" is marked on the neck of the cable. |
| **Tx RF Cable** | Transmit (Tx) cable (3 m) connects transceiver to antenna. "TX" is marked on the neck of the cable. |
| **Cradle RF Cable** | Cradle RF Cable (1.5 m) connects transceiver to cradle. |

## Car Kit Device

### Power Cables



|  | |
| --- | --- |
| **DC Power Adapter** | **Transceiver to GENUS Micro USB** |

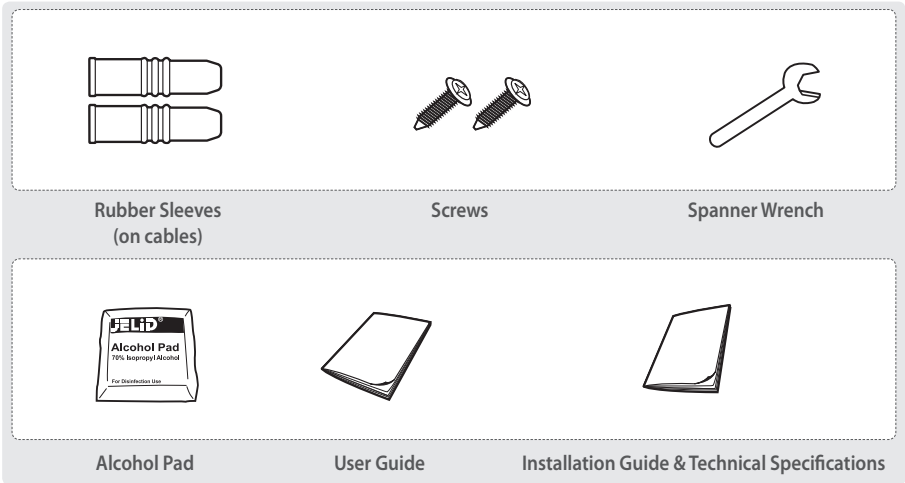| | |
| --- | --- |
| **DC Power Adapter** | Supplies 12V DC power to transceiver via cigarette lighter. 1 spare fuse is enclosed. |
| **Transceiver to GENUS Micro USB** | Allows charging of GENUS from transceiver. |

**WARNING**

*The TerreStar GENUS Car Kit supports 12V DC power only.*
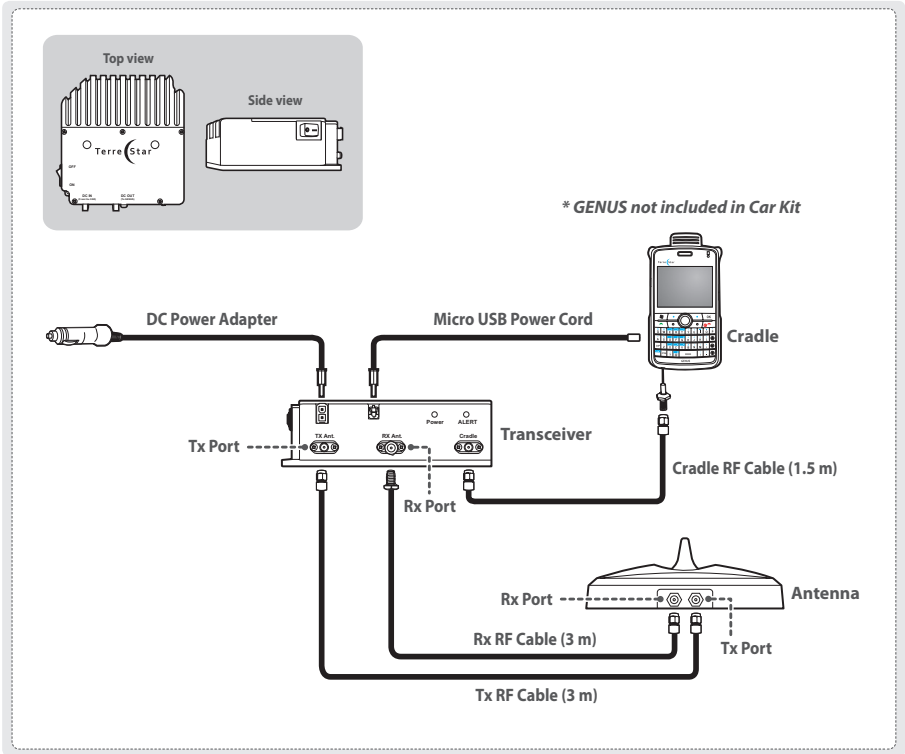*Do not use in vehicles with 24V DC power.*

# Getting Started

# Car Kit Device

## Other Materials

| | | |
|---|---|---|
| **Rubber Sleeves (on cables)** | **Screws** | **Spanner Wrench** |
| **Alcohol Pad** | **User Guide** | **Installation Guide & Technical Specifications** |

Alcohol Pad
70% Isopropyl Alcohol
For Disinfection Use

| | |
|---|---|
| **Rubber Sleeves** | Preinstalled on the cables. |
| **Screws** | Can be used to secure transceiver to vehicle. |
| **Spanner Wrench** | Used to fasten the RF connectors to the antenna or transceiver. |
| **Alcohol Pad** | Included with suction mount to clean windshield prior to mounting. |
| **User Guide** | Overview of the GENUS Car Kit functionality and proper use. |
| **Installation Guide & Technical Specifications** | Contains technical specifications, step-by-step installation procedures, diagrams, troubleshooting and Q&A section. |

## Car Kit Device Connection Diagram



**Top view**

**Side view**

Terre Star

* **GENUS not included in Car Kit**

**DC Power Adapter**

**Micro USB Power Cord**

**Cradle**

**Tx Port**

**Transceiver**

**Rx Port**

**Cradle RF Cable (1.5 m)**

**Rx Port**

**Antenna**

**Rx RF Cable (3 m)**

**Tx Port**

**Tx RF Cable (3 m)**

# Establishing a Satellite Connection

### 1. Ensure that the antenna on the roof of the vehicle has a clear view of the southern sky.

The antenna must be able to "see" the entire southern sky. Tall buildings or similar structures, heavily leafed trees and mountains between you and the satellite can degrade performance as they block the signal between the antenna and the satellite. Having a completely open view of the sky plays a very important role in maximizing performance.
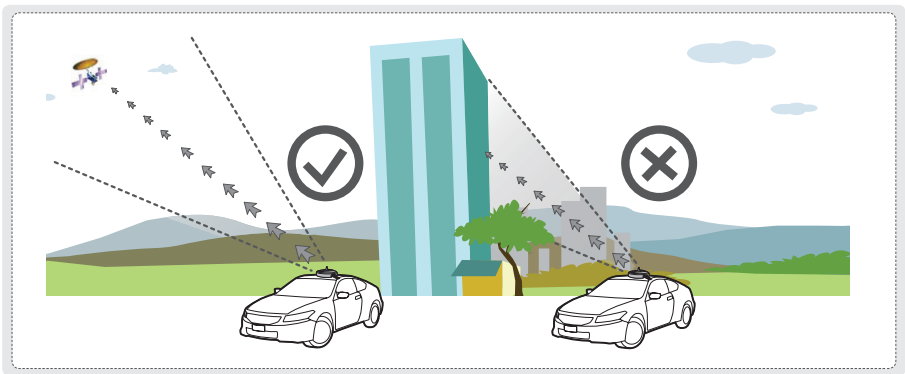


**Note** *Obstructions may prevent achievement of optimal performance.*

### 2. Before Calling

Before calling, Car Kit should be properly installed by following the installation guide.

1. Plug in the DC power adapter to vehicle cigarette lighter.
2. Start the vehicle to supply power to the Car Kit.
3. Check that DC power adapter LED light is on.
4. Turn the transceiver On/Off switch to the On position and check that the LED is green.
5. Power on GENUS and verify that GENUS device charging LED is on.
6. Select External Antenna in the GENUS Windows Mobile User Interface.
   Tap 🔣 > **Settings > Connections > External Antenna**, select **Use external antenna** and press ⬚ᴏᴋ⬚.
7. Reboot the GENUS.

# Satellite Connection

## 3. Connecting to satellite

**Step 1** :  On the **Home** screen of GENUS, tap **switch to satellite** to switch to satellite.
Then tap **Yes** to confirm the switch.

**Step 2** :  The device displays the connection progress.
Wait for the device to display 'Connected to satellite'.

> ⃠ **Note**
> *It may take a few moments to connect to the satellite. The device screen will show connection progress from Initializing Connection, Searching for Satellite, Connecting to Satellite, and Connected to Satellite.*

**Step 3** : You can start using satellite services when **Connected to Satellite** is displayed.
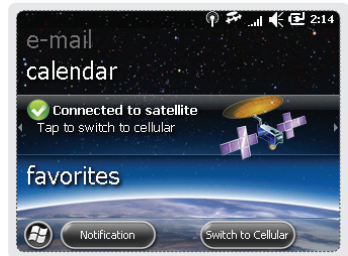
> ⃠ **Note**
> *Once a satellite call is initiated or received, select **Speaker On** on the GENUS screen to enable hands free operation.*

# GENUS Troubleshooting

Support for the TerreStar GENUS is available on the TerreStar website at www.TerreStar.com/support.

## General

| | |
|---|---|
| GENUS device displays Searching for Satellite or Satellite Not Found. | • Check that the RF cables from cradle to transceiver and transceiver to antenna are securely fastened.<br>• Ensure that External Antenna is selected in the GENUS Windows Mobile User Interface. |
| Cannot make or receive satellite calls. | • Ensure that the GENUS is attached to the satellite.<br>• Ensure that the rooftop antenna has a clear view of the southern sky. |

## Cradle

| | |
|---|---|
| Cradle suction mount does not attach to the windshield. | • Clean the suction mount and the windshield where the mount will be attached. |
| Cannot insert the GENUS device into the cradle | • Check that the GENUS external antenna connection rubber cover has been rotated to top of the GENUS before inserting the GENUS device into the cradle. |

## Transceiver

| | |
|---|---|
| Transceiver's green LED is not on. | • Check that the DC power adapter is connected to the car's cigarette lighter and the red LED is illuminated.<br>• If not on, replace DC power adapter fuse. Please use the spare fuse included in the package. <br>• Check that the transceiver's On/Off switch is in the On position. |
| Call dropped and transceiver's red LED is on. | • Check that both cables between the transceiver and the antenna are securely connected. |

# Support Resources

You can find extensive support for your device on the TerreStar website at www.TerreStar.com/support.

For complete car kit installation procedures see the Installation Guide & Technical Specifications.

# Index