



T3 Vehicle Security Tracker

Installation Guide



SAFETY-- SECURITY-- SIMPLICITY!™

911Tracker.com



T3 Vehicle Security Tracker Installation Guide

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T3 Vehicle Security Tracker Installation Guide IG1709A (1.3)

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Introduction

Welcome to the T3 Tracker Installation Guide. This manual will guide you through the steps required to successfully install your T3 Tracker in your vehicle. Prior to installing your T3 in your vehicle, you must register your T3 with 911Tracker. Please review the User Guide included in the packaging and 911Tracker.com for information on how to set T3 mode and T3 Emergency Contacts.

General Safety

This installation manual covers installation of the T3 Tracker and should be used to ensure a safe and functional T3 installation. This equipment generates, uses and can radiate Radio Frequency (RF) energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. See T3 User Guide for additional information.

Vehicles Equipped with Airbags

DO NOT place objects, including communication equipment, in the area of the airbag or in the airbag deployment area.

- If the communication equipment is improperly installed and the airbag inflates, this could cause serious injury.
- Airbag wiring is generally marked by use of a yellow plug, yellow wire loom, yellow tape and/or yellow tag. The Installer must use caution to identify any airbag wiring and avoid cutting, testing or tapping into airbag wiring. Failure to comply may cause airbag to inflate; this could cause serious injury.
- Contact vehicle manufacturer's corporate headquarters for specific airbag information for the vehicle.

Tools Suggested for Installation

- Screwdriver set
- Torx socket set
- Wire cutter/stripper
- Pliers
- Flashlight
- Multimeter

Equipment List

T3 Tracker (Front View)



Connector

Terminal 1

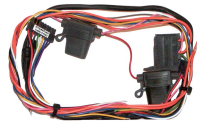
T3 Tracker (Side View)



Red (G)

Green (C)

Cable C1302



Battery B1302



Installation Kit (Velcro set, zip-ties, wire connectors)

Install your Tracker

Step 1 – Register your T3 Tracker

Prior to installing your T3 Tracker in your vehicle, you must register your Tracker by visiting www.911Tracker.com or calling 911Tracker Customer Support at 1-877-744-3361. You will need to provide the T3 Serial Number that can be found on the bottom of the T3 (18 characters). You will also need to provide the phone number for your mobile phone that will be assigned as the Owner phone.

If T3 is being installed at an installation shop, please see Step 7 and T3 Security Information.

Step 2 – Select Your Installation Location

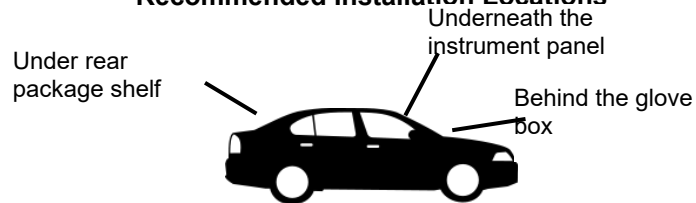
Find a location to mount your T3. The location can either be in a completely hidden location (preferred) such as behind the glove box or behind the instrument panel or under a seat or under a rear package shelf.

T3 may also be installed in a hidden location such as in the glove box or in a console, which is accessible by the Owner. The T3 should be securely fastened using the supplied Velcro and/or zip ties. When mounting the T3:

- Make sure the positioning of the T3 does not interfere with any of the vehicle components or impede safe operation of the vehicle.
- Make sure that when the vehicle is reassembled that the Cable is secure and cannot be pulled loose.

To ensure proper operation, 911Tracker recommends the T3 be installed in one of the three following concealed locations.

Recommended Installation Locations



- Make sure you can route the Cable to the intended location of the vehicle power source (usually the under-dash relay/fuse box)
- DO NOT mount the T3 under the hood of the vehicle
- DO NOT mount the T3 where it will be exposed to moisture
- DO NOT mount the T3 in a spot that will impede safe vehicle operation

Step 3 – Mount T3

T3 Tracker package includes the T3 Tracker, T3 Installation Cable, backup Battery, and T3 Installation Kit. You should first mount the T3 Tracker, then install the Cable, then plug in the Cable, and then plug in the backup Battery. T3 must be mounted with the **911Tracker label pointed up** so the internal GPS antenna is toward the sky.

We suggest mounting the T3 underneath the instrument panel or behind the glove box using the supplied zip ties to adhere the Tracker to the bundle of vehicle wires. You may also mount the Tracker on a flat horizontal surface using the supplied Velcro set. Just be sure the 911Tracker label is pointed toward the sky. The GPS receiver works fine if the satellite signal passes through glass or plastic but does not work if the signal tries to come through metal.

Note that most installations underneath the instrument panel or glove box installations can be accomplished by removing several screws that secure the plastic panel under the instrument panel or attach the glove box assembly to the vehicle dash. Those screws may require a Phillips screwdriver or a Torx socket. When the glove box has been loosened, temporarily unplug one or more connectors that connect to courtesy lights or switches that are mounted on the glove box assembly.

When the T3 is mounted, do not re-install the glove box or plastic panel at this time and do not plug in the Cable, as you need to route the Cable first.

Step 4 -- Routing Cable

USE CAUTION WHEN PROBING WIRES IN THE VEHICLE. AVOID HARNESS GOING INTO AND AROUND THE AIRBAG MODULES. AVOID ANY HARNESS TAPED IN YELLOW OR BEARING YELLOW "SRS" (SUPPLEMENTAL RESTRAINT SYSTEM) TAGS.

Use wire ties to secure wiring from being pulled out of the T3 and to ensure that the Cable does not interfere with any vehicle components.

Cable has four wires to be connected:

Black – Ground

Red – 12v Power

White – Ignition

Yellow – Vehicle Alarm

Cable also has four optional wires that may be connected if the Owner wishes to have the T3 outputs control vehicle functions (See Step 5). These wires are:

Pink -- Out #1 12v Power

Orange (2 wires) – Relay contacts for starter solenoid

Blue – Out #2 Control for selected vehicle functions

Step 5 – Connecting Cable

Determine connection points in the under-dash relay box for all four wires before attaching any of the wires. When you are sure of connection points, you may cut the Cable to a shorter length, but be sure to leave some extra length. If the Cable is too short, you can add extra length by carefully splicing, soldering, and using electrical tape.

You can use the shop manual for your vehicle or access online diagrams from online websites such as Mitchell 1 (Division of Snap-On™) at www.eautorepair.net

Usually the three connection points are available in the under-dash relay block and vehicle chassis ground point is nearby.

Ground (black) – Near the relay block you will find a vehicle chassis ground bolt with numerous black wires. Attach the **black** wire to that bolt and make sure the bolt is retightened properly.

Ignition (white) – Using the shop manual diagram locate the relay connection that provides a 12-volt level **only** when the ignition key is turned On [called HOT IN RUN]. Locate the relay coil connection (such as a back-up light relay) that receives 12-volts when the key is On (will show on your multimeter). Connect the T3 **white** wire to the existing vehicle wire using one of the T3 Installation Kit wire connectors to capture the vehicle wire and use pliers to squeeze tightly.

Step 5 – Connecting Cable (continued #2)

Vehicle Alarm (yellow) -- Using the shop manual diagram locate the wire from the vehicle security module that sounds the alarm horn. Use the Installation Kit wire connector to attach to the **yellow** wire going to the T3. **Be sure to review Step 7 -- Testing.**

Note: If your vehicle does not have a vehicle alarm or if the vehicle alarm does not work or if you don't want the vehicle alarm to alert the T3, you can leave the **yellow** wire unconnected and cover the end with electrical tape. If your vehicle does not have a vehicle alarm but has a keyfob "Panic" button, you can connect the security module output to the **yellow** wire to alert T3 if you press the panic button for more than 8 seconds.

12v Power (red wire with fuse) -- Using the shop manual diagram, locate the relay contact connection that provides a constant 12-volt level (shown on your multimeter) regardless of whether the ignition key is On or Off. The manual may say, "HOT AT ALL TIMES." Note: Standard OBD diagnostic connector adjacent to the steering column has the HOT AT ALL TIMES on pin 16. Connect the T3 **red** wire to the existing vehicle wire using one of the T3 Installation Kit wire connectors to capture the vehicle wire and use pliers to squeeze tightly.

Step 5 – Connecting Cable (continued #3)

Optional Outputs

T3 provides two output connections that may be used if desired by the Owner:

Out #1 for engine starter disable / enable relay

Out #2 for brief pulse operation that maybe used for door unlock, door lock, flash headlights, sound horn, etc.

Out #1 12v Power (pink wire with fuse) – Connect the T3 **pink** wire to same the same vehicle wire [HOT AT ALL TIMES] that was used for the T3 **red** wire. The included relay provides two **orange** wires for the normally closed (NC) contacts. Using the shop manual diagram locate the vehicle wire from the ignition switch that feeds the starter solenoid when the key is turned to start. Cut that wire and connect the two **orange** wires so that starter power must go through the relay contacts. Under normal conditions, the starter will operate normally. If the Owner sends a secure SMS to the T3, the T3 Out #1 energizes the relay, which disables the starter. Review Step 6 and Step 7.

Out #2 Pulse (blue wire) – This T3 output is normally at 12v and goes to zero volts for 1 second if the Owner sends a secure SMS to the T3. Maximum sink current is 250 mA. Depending on the function desired by the Owner, the Installer will decide if they need to add a relay or can use this digital signal from the **blue** wire to trigger a logic function in the appropriate vehicle module. In some cases, the Installer may use a data transponder module to connect to the vehicle control buss. Review Step 6 and Step 7.

Step 6 – Testing Cable

Do not plug the Cable into the T3 Connector.

Using your multimeter or computer-safe logic probe, check the following at the 10-pin connector of the Cable [be careful not to enlarge or damage the small terminals] –

- Confirm that **terminal 4** with the **black** wire is connected to vehicle ground using the ohm setting on your multimeter.
- Confirm that **terminal 3** with the **red** wire reads a constant 12-volts whether the ignition key is On or Off using the voltage setting on you multimeter.
- Confirm that **terminal 6** with the **white** wire reads 12-volts only when the ignition key is On.
- If you have connected the yellow wire, confirm that **terminal 7** with the **yellow** wire reads 12-volts and changes to zero volts **only** when the horn is sounding. Try this by arming the vehicle alarm and causing it to sound or using the keyfob panic button (if provided). **If terminal 7 changes** from zero volts to 12-volts when alarm is sounding, **you will need change T3 configuration in Step 7.**

If you have connected Out #1 or Out #2, perform the following checks **[Do not plug the Cable into the T3 Connector]**:

- To verify Out #1 operation, carefully touch a test wire connected to vehicle ground to **terminal 5** with the **green** wire to see that the relay energizes and that the starter does not operate when the key is turned to start.

Step 6 – Testing Cable (continued)

- To verify Out #2 operation, carefully touch a test wire connected to vehicle ground to **terminal 8** with the **blue** wire to see that the desired operation occurs (door unlock, door lock, flash headlights, sound horn, etc.).

If all Cable tests are confirmed, then --

Plug the Cable into the T3 Connector.

After a few seconds, T3 green LED (labeled **C**) and the red LED (labeled **G**) will turn On. After a couple minutes, the red LED will start flashing, showing GPS satellite lock.

Now plug the backup Battery into the 2-pin connector with red and black wires going to **terminal 1 and 2**. Use a zip tie to secure the battery to a nearby vehicle cable.

Once you have all connections properly tested, use the small tie-wraps to secure the Cable to nearby vehicle cables. Confirm that the **911Tracker label is pointed up** so the internal GPS antenna is toward the sky.

Step 7 – Testing Basic T3 Operations

If T3 is being installed at an installation shop, please take note: Each T3 has it's own phone number. The Owner is provided this number when they register with the 911Tracker Service. **The Owner needs to tell the Installer the T3 number.**

Turn On vehicle ignition and confirm (if visable) that the green LED is On and the red LED starts to blink. Note:

The red LED may take a few minutes to start blinking.

Installer uses any cell phone to send T3 a text message **12345 gps** (note space after PIN) and checks to verify that the T3 replies with a location text message.

Installer uses any phone to call T3 and listens to the message, presses '1', and listens to further message.

Then Installer presses '9' and T3 makes a 3-party conference call to a special 911Tracker **test number** and the Installer is able to hear a response confirming success. T3 will send a confirming text message.

Do not press #, since T3 will call 911.

Installer can then send T3 a text message: **12345 at*user=0,InstallerMobileNumber,1** (note space after PIN).

T3 will respond to the Installer with the message: OK.

Step 7 – Testing Basic T3 Operations (continued)

Now the Installer can turn Off vehicle ignition and trigger the vehicle alarm (or keyfob “Panic”) for at least 8 sec. The T3 can be programmed by SMS to detect an alarm signal that is either high (12v) or low (0 v). When T3 receives the correct high or low alarm output signal, Installer will receive an Alarm Sounding text notification. This confirms that the alarm connection is proper. **If terminal 7 goes to 12v for alarm**, Installer needs to send: **12345 at*alarm=1** (note space after PIN). **12345 at*alarm=0** changes the alarm detection from high to low (note space after PIN).

If Out #1 has been connected, the Installer should check by sending: **12345 relay on** (note space after PIN and space after relay). The T3 will turn on the relay and the starter will be disabled. Then the Installer should send: **12345 relay off** (note space after PIN and space after relay). The T3 will turn the relay off and the starter will function normally.

If Out #2 has been connected, the Installer should check by sending: **12345 pulse** (note space after PIN). The T3 will cause Out #2 to pulse for 1 second, which should activate that function (door unlock, door lock, flash headlights, sound horn, etc.) that was chosen by the Owner.

Now the Installer should send:

12345 at*user=0,OwnerMobileNumber,1 (note space after PIN). This sets the Owner’s number in the T3.

Installation is now complete.

T3 Security Information

T3 factory default will permit T3 to answer an incoming call from any phone. This is to permit best flexibility so that the Owner may install the T3 or the Owner may arrange for an installation shop to do the installation.

In default state [factory default PIN is 12345], the Installer can use any mobile phone to control T3 using text message (SMS) or by calling T3. When basic installation and basic T3 operations have been verified, then the Installer or the Owner sends a text message that sets the Owner's mobile phone in the T3. Once this is done, T3 will only respond to incoming phone calls from the Owner's mobile phone.

Then the Owner sends a text message that changes the PIN number to a secret PIN that is chosen by the Owner. Once this is done, T3 will only respond to text messages with the Owner PIN.

There are two exceptions –

- If the Owner sends T3 a text message instructing T3 to 'authorize' a particular phone number, T3 will accept certain commands from that phone number (provided the message has the Owner's PIN). This permits the Owner to authorize up to two emergency contact numbers.
- If the Owner (or authorized phone) has commanded T3 to call 911 and the 911 call should be suddenly terminated, T3 permits 911 to call back to T3 and T3 will answer for a prescribed period time. Otherwise T3 will not accept a call from 911 or any other non-authorized number.

Troubleshooting

Issue	Action Required
Both LEDs Off	Check fuse in the black fuse holder on the Cable. The fuse is a regular plug-in automotive fuse, 2 Amp. Temporarily unplug Cable from the T3 and confirm that the red wire on terminal 3 is providing 12-volts.
Green LED continues blinking (not solid On)	T3 is powered On and searching for cellular connection. Check for proper T-Mobile signal.
Red LED is On constantly (not blinking)	GPS is powered On and searching for GPS satellite connection. Note: The red LED may take several minutes to start flashing if T3 power was just applied. Verify that the T3 is mounted with 911Tracker label pointing toward the sky. Move the vehicle to a new location that does not have obstacles directly overhead.
Vehicle alarm lasting over 8-sec does not cause T3 to send SMS	Re-check if terminal 7 goes from zero to 12v when alarm is sounding. If it is, send SMS 12345 at*alarm=1 (note space after PIN).

If the Action Required does not correct the Issue, call 911Tracker Customer Support at 1-877-744-3361.

Warranty Limitations

THIS WARRANTY SHALL BE NULL AND VOID IF THIS PRODUCT: (a) IS MODIFIED, OPENED OR TAMPERED WITH; (b) IS CONNECTED TO WRONG POLARITY POWER OR VOLTAGE OUTSIDE OF SPECIFIED RANGE OR; (c) IS DAMAGED BY NEGLIGENCE, ACCIDENT, UNREASONABLE USE OR OTHER CAUSES UNRELATED TO DEFECT IN MATERIAL OR WORKMANSHIP.

Water Resistance

The T3 Tracker is to be placed inside of the vehicle in a location that is not exposed to precipitation. T3 Tracker is not waterproof and will not function when exposed to water.

Battery Caution

The Li-ion backup battery has been custom made; it includes a protection and charging circuit. **Do not** try to use any third-party battery with the T3.

- Do not put the battery in a charger or equipment with wrong terminals connected.
- Avoid shorting the battery
- Do not immerse in water.
- Keep out of the reach of children.
- Dispose in accordance with local regulations

Contacting Customer Support

Need help with operating your T3 Tracker?

Contact 911Tracker Customer Support via the Internet at www.911Tracker.com, or call toll free 1-877-744-3361, 8:00am to 6:00pm Pacific, Monday – Saturday, to speak to a Customer Support representative.