

**FIRSTECH, LLC.**  
Computrack **CT-501-PA**

**Installation Manual**



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Please visit [www.computracklive.com](http://www.computracklive.com) for additional installation resources

### Installation Technician Notice

- Do not use test lights. Use digital multimeters to test all wires.
- All outputs must use relays. This is true unless connecting to a Firstech series control module.
- All output circuits must be isolated by wiring through a standard Bosch SPDT-style relay.
- The CompuTrack may be damaged or operate improperly if relays are not used.
- If you must invert the polarity you must use a relay - do not use a solid state inverter.

Firstech, LLC. and Ayantra Inc. requires you not to install the CT-501-PA with a fuel or ignition interrupt. Doing so may result in damage to the vehicle and/or driver.

Firstech, LLC. nor Ayantra Inc. will not assume any responsibility for improper use and/or installation.

Green - Negative Door Lock Wire	DOOR LOCK COMMAND - This is a conventional negative door lock output designed to be connected via a relay to factory or aftermarket door lock actuators. This output can also be connected to Firstech alarm and/or remote starters.
Blue - Negative Door Unlock Wire	DOOR UNLOCK COMMAND – This is a conventional negative door unlock output designed to be connected via a relay to factory or aftermarket door lock actuators.
White - Positive Alarm Sense	THEFT ALARM – Alarm trigger sense input – Alarm sounding devices are powered by 12 volts positive. The CompuTrack GPS unit monitors 12 volt positive and/or negative input. When the Siren sounds for 15 or more seconds it causes the CompuTrack to send an alert message to the owner. To prevent unintended messages from being sent, only one message is sent to the customer per event per 24 hour day.
Violet - Negative Alarm Sense	
Yellow - Positive Ignition Input	IGNITION – Ignition ON/OFF sense input - The YELLOW wire detects a positive 12V signal when the ignition is turned ON and a LOW signal when the engine is turned OFF. If the option is enabled, this will allow the unit to send an Engine ON/OFF message to the customer. <b>This wire must be connected.</b>

<p>Grey - Negative Car Finder</p>	<p>CAR FINDER HORN/LIGHTS – This pulsating negative output drives relay(s) to sound the vehicle’s horns and flash its parking lights. For dual circuit parking lights connect a second light relay that is driven off the first one, otherwise one relay for lights and one relay for horns. Observe polarities when connecting this wire.</p>
<p>Orange - Negative Starter Interrupt</p>	<p>STARTER INTERRUPT – The ORANGE wire provides a latched ground output signal. When this feature is activated it will send a negative output to a Bosch style relay. This will prevent the vehicle from restarting until another signal is sent to the CompuTrack. This signal removes the ground signal from the ORANGE wire. This wire is designed to interrupt starters, not ignition or fuel pump circuits. Installation of this circuit to interrupt the fuel or ignition circuits places the installing dealer in default of their CompuTrack agreement and makes them fully responsible for any and all actions that may result.</p> <p><b>THIS WIRE SHOULD NEVER BE USED TO INTERRUPT THE VEHICLE FUEL PUMP OR IGNITION AS THE LIABILITY OF A VEHICLE LOOSING STEERING OR BRAKING IS SIGNIFICANT.</b></p>

## Notes

### Back-Up Battery

The back-up battery is built into the monitoring unit, and recharges while the engine is running. If the power is cut, the unit will send an Alert Notification message to the vehicle owner, and the backup battery will power the CompuTrack for up to 2 hours, depending upon usage.

### Basic Installation vs. Advanced Installation

The Basic Installation is described in pages 1 through 15. Pages 22 through 23 details additional information including wiring color codes for optional features.

The Basic Installation provides the following features:

- Location Reports
- Speed Alerts
- GeoFence (Theft) Alerts
- Low Battery Alerts
- Maintenance Due
- Reporting via customized Points-of-Interest

Advanced installations include the above features plus the following below may be installed:

- Door Lock / Unlock
- Starter Enable / Disable
- Honk Horn / Flash Lights
- Roll Windows

**Information you need before you begin:**

Here is an Installation Worksheet. Use it for each new installation.

- The CompuTrack serial number:

\_\_\_\_\_ (This is the 20-digit number on the unit label - write it down!)

- The CompuTrack Mobile Identification Number:

\_\_\_\_\_ (This is the unit's 10-digit "phone number" listed on the label - write it down!)

- The Vehicle Identification Number (VIN) and its license plate:

\_\_\_\_\_

- The vehicle description: Make, Model, Year, and Color

Year: \_\_\_\_\_ Make: \_\_\_\_\_ Model: \_\_\_\_\_

- The customer's full contact info, including name, address, cell phone number and cellular service provider, and email address:

Address: \_\_\_\_\_

Cellular (Optional): \_\_\_\_\_

Email / Login: \_\_\_\_\_

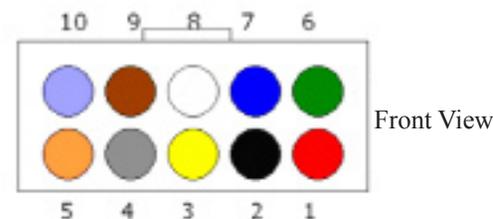
- Internet access is required to register your newly-installed unit. If you do not have Internet access, you can register it BEFORE installing it. Use the Installation Worksheet to ensure that accurate vehicle information is assigned to each unit.

- Your cell phone must be capable of sending and receiving text messages. This is optional as you can use it for testing the CompuTrack.

**Advanced Installation Information**

**Please review the color codes below before you continue.**

**Remove wiring harness before you continue.**



#	Color	Connection	Pol	In/Out	Current	Comment
1	Red	12V	Pos	In	N/A	Main power
2	Black	Ground	Neg	In	N/A	Main ground
3	Yellow	Ign/Acces.	Pos	In	N/A	Engine Sense
4	Gray	Horn/Lights	Neg	Out	250 mA	Use relays
5	Orange	Start Int.	Neg	Out	250 mA	Use relay
6	Green	Lock/Start	Neg	Out	250 mA	Use relays
7	Blue	UnLock	Neg	Out	250 mA	Use relay
8	White	Alarm	Pos	In	N/A	Pulse or Steady
9	Brown	Not Used	-	-	-	-
10	Violet	Alarm	Neg	In	N/A	Pulse or Steady

delivery delays - allow up to ten minutes to receive the Location Report.

Receipt of the Location Report indicates that the CompuTrack unit is operating properly.

Note:

Other commands are also available. The full list of commands and their “command codes” are as follows:

Locate	1
Door Lock / Remote start	2
Door Unlock	3
Honk Horn / Flash lights	4
Track Vehicle	5
Starter Disable	6
Starter Enable	7
Recover Vehicle	8

All commands follow the same format: password, followed by a blank space, followed by the command digit.

Please note that the Door Lock, Door Unlock, Starter Disable/Enable, Recover Vehicle, and Honk Horn/Flash Lights commands require an Advanced Installation.

**Congratulations! You’ve completed the physical installation, the registration, and final test. You are now ready to deliver the system to your customer.**

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## Step 1: Online Registration

Online registration is easy, and can be completed in less than ten minutes. During the registration process, you will configure each new GPS system specifically for each new customer. You can also set up a temporary account to send and receive test messages.

### A. Login

Using an Internet browser, go to the CompuTrack GPS website at: [www.computracklive.com](http://www.computracklive.com). Click on Access my CompuTrack, and then click where it says “New Customer Registration:”

The login page will look something like this:

Click This Tab



**Configuration:** During the online registration process, you must use the Configuration Page to specify the cell phone for sending and receiving messages. After the cell phone number has been set on the Configuration Page, you can use it to send a “Locate Now” command to the CompuTrack unit.

**Message Format:** The format for the “Locate Now” command consists of the password, followed by a single blank space, followed by the digit 1.

- The password was previously specified on the Configuration Page; for new customers, the password is always set to 1234

- A single blank space should separate the password from the command

- The command for “Locate Now” is the digit 1.  
The message format for a new customer sending a “Locate Now” command message from a cell phone is therefore as follows:

1234 1

**Phone Number:** the text message should be directed to the CompuTrack unit’s Mobile Identification Number (this is its 10-digit “phone number”).

Using a text-enabled cell phone, send the “Locate Now” command to the CompuTrack unit. Again, the message should consist of the following:  
1234 1

You should receive the Location Report message on the cell phone within three to five minutes. The message will originate from “Notification1@ayantra.com” and it will include the vehicle’s location, as well as the date and time of the message. At times, network congestion may cause

box marked “Get Location Now.” The system will inform you that you are about to send a message to the remote unit, and it will ask you to confirm your decision. Click “Yes” within approximately one minute. A NEW Location Report will appear. An accurate Location Report will verify that the CompuTrack unit is operating properly and can be delivered to the customer.

**Congratulations! You’ve completed the physical installation, the registration, and final test. You are now ready to deliver the system to your customer.**

Note:

If you submitted any personal information - such as your own cell phone number during the registration process, don’t forget to remove it before delivering the system to your customer.

## B. Using a Cell Phone to Test the Unit

Note:

This guide does not include instructions for creating and sending text messages. This guide assumes that you are already familiar with text messaging. This guide provides the necessary information to enable a reader with text-messaging skills to send commands to a remote monitoring unit and to receive reports from it.

If you are already familiar with text-messaging, you can also use a text-enabled cell phone to test the CompuTrack GPS unit. The test will consist of using a cell phone to send a “Locate Now” command to the remote CompuTrack unit, and receiving a response from it on a cell phone. Here’s how you use a cell phone to perform the final test:

You will find the section for New Customers in the lower left corner. Click on the Register Here button.

## C. New Customer Registration

The new Customer Registration page looks something like this:

The screenshot shows a web form for 'New Customer Registration'. At the top, there are two tabs: 'Sign in' and 'New Customer Registration'. Below the tabs is a blue header with the text 'REGISTER YOUR CAR NOW:'. Underneath this header is a section titled 'New Client Registration' with a note: '\*Required information needed to complete your registration process.\*'. The form contains several input fields: 'First name \*', 'Last name \*', 'Address' (with sub-fields for 'Street \*', 'City \*', 'State \*', and 'Zip \*'), 'Sign in information' (with sub-fields for 'Email Id \*', 'Password \*', and 'Re-type Password \*'), and 'CompuTrack unit information' (with a field for '20 digit serial number as on the label \*').

From the Installation Worksheet, input the customer contact information in the spaces provided.

Note:

If the customer contact information is not available, you can fill the fields with dummy info and update it later. In other words, for the contact info you can enter “John Doe, 123 Any Street, Any Town, Any State, 00000”, and for the email address, you can enter anyone@anymail.com. This information must be updated later.

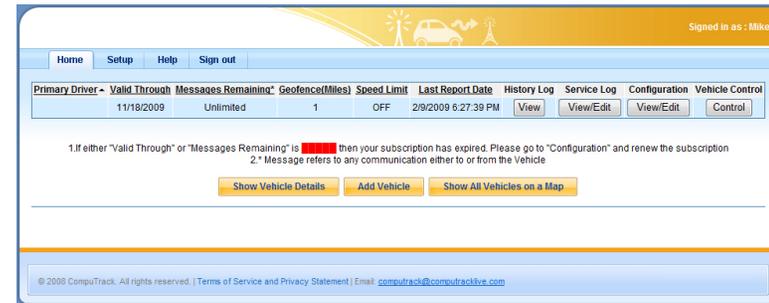
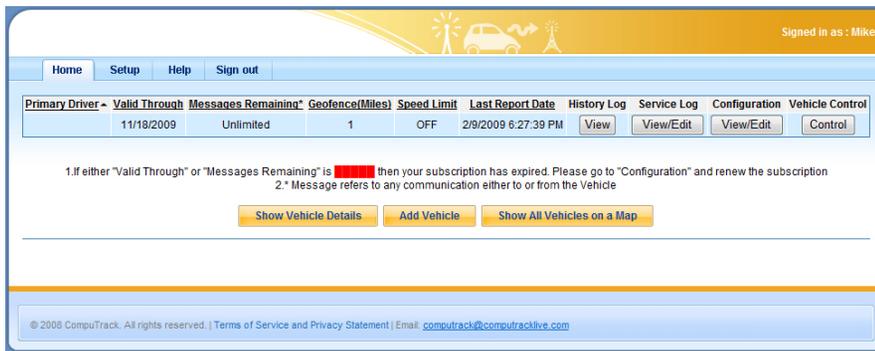
For the Login Information, enter the following password:  
1234. Re-type the password as requested. The customer can change his  
password at any time in the future. New customer registrations should use the  
password 1234.

Enter the 20-digit Serial Number in the space provided.

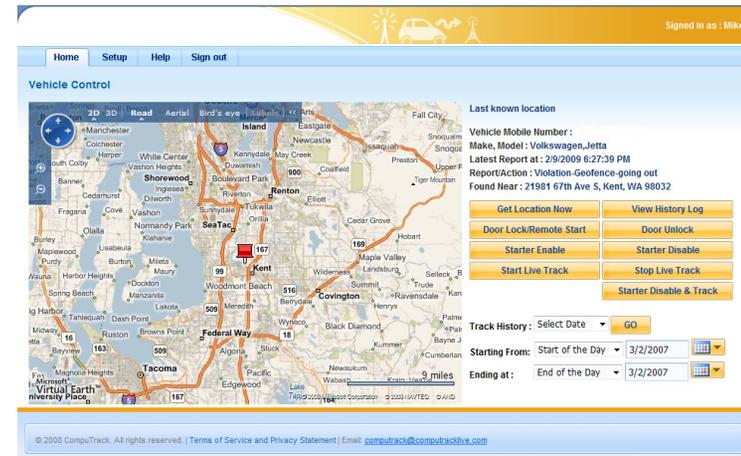
Click on the “I Agree” button at the bottom of the page to complete the regis-  
tration.

### C. Configuration

After completing the registration, you will be taken to the customer’s Home  
Page, which will look something like this:



Check the information to verify that the vehicle description is accurate. Move  
the cursor to the far right side of the page to column marked “Vehicle Control,”  
and then click on the field marked “Control.” You will then be taken to the  
Vehicle Control Page, which looks much like this:



This page allows users to locate, track, and remotely control their vehicle. The  
features are easy to use and generally self-explanatory.

The final test for each newly installed CompuTrack unit is to request its current  
location. Simply click on the

### 3. Final Testing

Each CompuTrack unit should be tested before delivery to the customer. You can test the unit either by using an Internet browser or sending a text message. Both methods are described below.

#### A. Using an Internet browser to test the unit

Use your browser to go to the following site: www.computracklive.com. Click on the Access your CompuTrack tab, and then click where it says, click here. The page will look something like this:

This is the same website that was previously used for registering the new customer. This time you will log in as an Existing Customer. Under the “Existing Customers” section, input the customer’s email address and the password (1234). You will then be taken to the customer’s Home Page. The Home Page will look much like this:

Move the mouse towards the right side of the page to the column marked Configuration, and click on the field marked “View/Edit”. You will then be taken to the Configuration Page, which looks like this:

The Configuration Page enables you to customize the CompuTrack GPS system for each new customer. Using the information from the Installation Worksheet, fill in the fields in the sections marked “Vehicle Data,” Features Installed,” and “Alert Notifications will be sent for”.

The section marked “Points of Interest” should be left blank - the customer can enter this information later.

You will find the section for configuring cell phone services near the bottom of the page. This section will enable you to specify which cell phones are allowed to send messages to the CompuTrack monitoring unit, and to receive messages from it. That section of the page will look something like this:

Alert Notifications from computrack@computracklive.com will be sent to the following email address and phone numbers

Send email to mbenedicto@compus <input type="text"/>	Send Text Message to (ex.510-623-7526) <input type="text"/>	Carrier AT&T Alltel
<input type="checkbox"/> Send a Test e-mail/Text message to above email addresses and phone numbers		

This Vehicle can be controlled only by the following cell phone numbers by using the Password specified below

Cell Phone Number #1 <input type="text"/>	Carrier AT&T
Cell Phone Number #2 <input type="text"/>	Carrier Alltel
Password(4 to 8 numeric digits 0-9) <input type="text"/>	

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Input the customer's information in the section marked "Alert Notifications from AutoVantage@ayantra.com will be sent to the following email address and phone numbers".

You should also input the customer's information in the section marked "This vehicle can be controlled only by the following cell phone numbers by using password specified below."

**Note:**

If you intend to use your own cell phone for testing purposes, you can temporarily submit your own cell phone information. Your cell phone should be capable of sending and receiving text messages if you intend to use it for testing. Remember to return to the Configuration Page to remove your cell phone info when you have completed testing, and before you deliver the system to your customer.

When you've finished inputting the required information, click the "Submit" button at the bottom of the page.

- The wiring harness includes a 5-amp fuse on the RED wire, providing Power. The fuse must be installed close to the 12 Volt source. If you connect the RED wire directly to the vehicle's battery Positive Post, then the fuse MUST be installed within 12 inches of the Positive battery terminal. Optionally, a second 5-amp fuse may also be used at the monitoring unit's mounting location.

It is now time to power-up the unit. Proceed as follows:

1. Make sure the vehicle is parked outside and away from buildings that may block the GPS signals.
2. Make sure the backup battery switch is in the OFF position.
3. Plug the keyed harness connector into its mating receptacle on the monitoring unit. The receptacle is marked "Input/Output."
4. The unit should now have power. The LEDs will start flashing. The GREEN LED will stop flashing within a minute or two, as it achieves signal lock with the AT&T GSM (Global System for Mobile Communications) network. The RED LED will stop flashing when it locks onto its GPS (Global Positioning Satellite) signal, usually within three minutes.
5. Switch the Battery switch to the ON position.

**Congratulations! You've completed the physical installation. It is now time for the final test.**



### **C: Mounting The Unit and Providing Power**

After confirming an appropriate location for the CompuTrack GPS monitoring unit by successfully checking its signal strength, you are now ready to mount the unit in place. Remember, the unit must be positioned horizontally with the label side up.

If the unit is positioned under the seat, you have two options:

- The GPS monitoring unit can be mounted to the floor pan under the seat by using heavy-duty, double-faced adhesive tape, or by using Velcro®. It can even be covered with carpet. Make sure that the unit is securely mounted in a manner that will not strain its wire harness.

#### **OR**

- The GPS monitoring unit can also be mounted underneath the seat frame by using tie strips running through its case holes. Make sure that when someone sits in the seat, the seat structure does not contact the unit, or strain its wire harness.

After the GPS monitoring unit has been mounted, the next step is powering it up. Proceed as follows:

- Disconnect the wiring harness from the GPS monitoring unit. The wiring harness must remain disconnected from the monitoring unit until the last phase of the installation.
- Make sure the battery switch is in the OFF position.
- Connect the BLACK wire from the wiring harness to a known good ground-point. Check with a meter if you are not sure.
- Connect the RED wire from the wiring harness to a known good source of full-time 12-volt positive power. Make sure that the power source has constant 12 volts.

**Congratulations! You've completed the registration process. You are now ready to install the CompuTrack monitoring unit in the vehicle.**

### **2. Physical Installation**

The CompuTrack GPS monitoring unit is extremely easy to install. It does not require an external antenna: both the GPS antenna and the cellular antennas are built-in. Basic Installation requires only three wired connections: RED wire for Power, BLACK wire for Ground and YELLOW for Ignition. The Basic Installation consists of three simple steps: A: finding a place to position the monitoring unit; B: testing for signal strength; and C: mounting the unit in place and providing power.

#### **A: Placement**

First, find a location for the GPS monitoring unit. The unit must be placed in a horizontal position with its label facing up to ensure that the built-in antenna can receive signals. It should not be located directly underneath a metallic cover; however, plastic, fiberglass, glass and cloth coverings are acceptable. There are many places where the GPS monitoring unit can be positioned. Here are some suggestions:

#### **- Under-the-seat option**

The GPS monitoring unit was designed to be mounted under either the front or rear seats, limited only by available space. Check under the seat(s) and make sure that the unit can be installed without coming into contact with any seat mechanisms, tracks or motors. Position the unit in place and proceed to Step B to check the signal strength.

#### **OR**

#### **- Below-the-rear-deck option**

In many cases, the GPS monitoring unit can also be

installed under the vehicle's rear shelf, behind the rear passenger seat and above the trunk. Position the unit in place and proceed to Step B to check the signal strength.

**OR**

- On-or-under-the-dash option

Another option is to install the CompuTrack GPS monitoring unit on or under the dash (space permitting and provided the dashboard deck is non-metallic.)

Position the unit in place and proceed to Step B to check the signal strength.

### B: Check Signal Strength

Make sure the battery switch is in the OFF position (the battery switch is located on top of the unit). The vehicle should be located outdoors and at least twenty feet away from large obstructions that could block GPS signals, such as a tall building. Place the monitoring unit in the desired position, making sure you can see the red and green LEDs.

Provide temporary power to the monitoring unit. There are several ways to provide temporary power to the unit, including:

- Use a cigarette lighter power adaptor equipped with a 5-amp fuse and a 10-pin Molex connector to attach to the CompuTrack GPS monitoring unit.

**OR**

- Use an A/C transformer equipped with a 5-amp fuse and a 10-pin Molex connector to attach to the CompuTrack GPS monitoring unit.

**OR**

- Use the wiring harness that is included with the CompuTrack GPS monitoring unit. Simply disconnect the wiring harness from the monitoring unit, making sure the 5-amp fuse is in place and operational. Temporarily connect the BLACK wire from the wiring harness to Ground, and temporarily connect the RED wire from the wiring harness

to 12-volt Positive Power. Now plug the wiring harness into the mating receptacle on the GPS monitoring unit. The unit should then have power.

When the monitoring unit receives power, the LEDs will begin flashing. The GREEN LED will stop flashing after it has locked onto its cellular signal (usually within 1 – 2 minutes); and the RED LED will stop flashing when it locks onto its GPS signal (usually within 2 – 3 minutes). Signal strength is confirmed when both LEDs stop flashing.

If the LEDs do not stop flashing, the GPS monitoring unit should be re-positioned in another location. Find another location for the monitoring unit and confirm that the signal strength is acceptable before proceeding to the next step.

Notes:

Make sure that the vehicle's windows are not covered with reflective metallic film that could block GPS signals. OEM in-glass defroster grids or antennas do not effect reception.

The windshields and/or windows of certain types of vehicles (including some Mercedes-Benz models and some BMWs) may have coated glass that can prevent radio signals from penetrating the vehicle. If you are not sure about the windows, use the signal test procedure described above to find an acceptable installation position for the CompuTrack GPS monitoring unit.