



# **PROPT20**

## **Installation Guide**



## Installation Guide For:

# TWO-WAY TELEMATICS MODULE PROPT20

The tracking unit is a GPS-Cellular based telematic module which will not only locate your vehicle in case of theft but, based on certain available options, allow the consumer to access the vehicle and control specific functions from the Internet, or from a touch-tone phone. All connections of this interface unit must be made and tested in accordance with the instructions provided. Once the unit has been installed and tested, you must advise your customer that the unit will not operate unless they activate the unit as described in the documentation provided. Once the personal information on the form is completed the form must be sent via FAX. The tracking unit must be connected to a host alarm, alarm/remote start or ASPTUGM in order for the customer to receive automatic door violation.

**WARNING:** While this device is in operation, a separation distance of at least 20 centimeters (7.87 in.), must be maintained between the radiating antenna and the body of all passengers in the vehicle in order to meet the FCC exposure guidelines:

### **WIRING:**

#### **2 Pin Power Connector Red/Black:**

**Red: (+12 Volts)** Connect the Red wire of the 2-pin connector to a constant on + 12 volt source using the supplied fuse holder.

**Black: (Ground)** Connect the Black wire of the 2-pin connector to a clean metal surface of the vehicle, or to a known chassis ground.

### **Antenna:**

#### **Cellular:**

The control module houses the internal cellular antenna. To ensure best operation, the control module must be mounted **covertly** near or above the belt line of the vehicle. High up behind the dashboard is the preferred mounting location.

### **GPS:**

The GPS antenna, which must also be **covertly** mounted, and must have a clear view of the sky for operation. This means the rounded surface must point toward the sky without obstruction of any metal object. Ideal mounting locations are the rear package shelf under the carpet or plastic padding, or under the top dashboard cover below the plastic padding.

The antenna comes with 10' of cable so it must be located within that distance of the control module. When connecting the antenna, use caution not to overtighten the terminals as the fittings are press fit and may loosen or break from the module. Be certain that the antenna is not located on or near any other intentional radiator such as the vehicle radio antenna or a paging antenna that might have been added to the vehicle. Once the location is chosen, using the cleaning pad, wipe the area clean, remove the backing from the double sided adhesive mounting pad and stick it to the antenna. Remove the second backing from the double sided mounting pad and press in place. Route the connector to the control module and attach to the GPS terminal.

The PROPT20 can be installed in 3 different configurations:

1. The first configuration is stand-alone mode and is not connected to any external vehicle functions.
2. The second configuration is using the 5-pin auxiliary I/O connector. There is one ground trigger input, three ground outputs and one ground source. The chart on page 3 shows the operation of each wire.
3. The third configuration is using the 4-pin data harness connected to a host control device such as an Alarm, Alarm/Remote Start or ASPTUGM. Connect the 4-pin data harness into the PROPT20 and the alarm/remote start module or ASPTUGM. The customer will receive automatic door violations and theft notification when the host system is armed or locked.

**REMEMBER:** This unit is a tracking module, locating the components in such a manner as they cannot easily be found is the best defense against a thief circumventing your efforts.

## 5-Pin Auxiliary Input/Output Wiring

**Pin 1 Blue wire-** If connected to the Horn Wire of a vehicle's theft deterrent system, when 10 negative pulses occur within 15 seconds while the vehicle is not running, the unit will send a "Vehicle Alarm Trigger Notification" to the vehicle owner's predefined event notification e-mail addresses and or phone numbers. 300mA max output

This wire can accept a negative input only, if the vehicle switches + to the horn, a relay must be used to invert the pulse to negative before connecting to this input.

**Pin 2 Green wire -** This wire provides a pulsed ground output whenever the Arm or Lock command is sent. Typically this wire will connect to the vehicle's negative door lock wire. 300mA max output.

**Pin 3 Brown wire -** This wire provides a pulsed ground output whenever the Disarm, Disarm/unlock or unlock only command is sent. Typically this wire will connect to the vehicles negative unlock wire. 300mA max output.

**Pin 4 Orange wire -** This wire provides constant ground whenever the Arm /lock or Activate Disable vehicle command is sent. This wire goes open when the Disarm/unlock or deactivate "disable vehicle" command is sent. Typically this wire is used for a starter interrupt relay. Follow the diagram on page 3 for wiring of the relay.

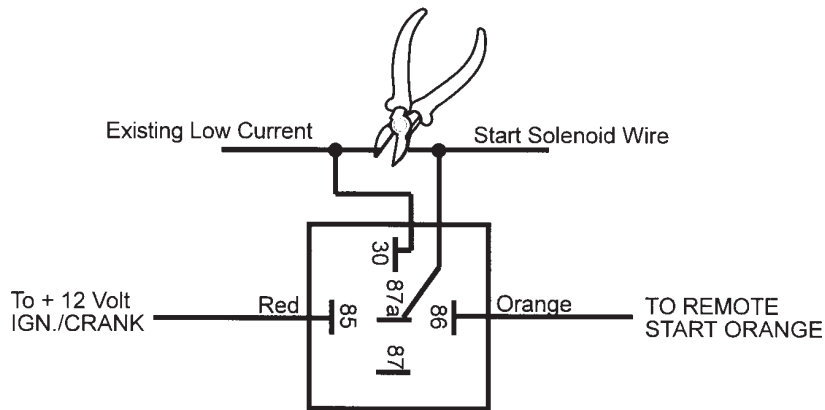
**Pin 5 Black wire -** This wire provides low current constant ground. 300mA max output.

The timing for the AUX1 (green wire) and AUX2 (brown wire) can be changed during the initial installation test. The timing choices are:

1. 700ms
2. 1 second
3. 3.5 seconds
4. Double 1 second pulse

Pos	Color	Operation	Trigger	Result
Pin 1	Blue	Input 1	Ground pulse 10 times within 15 sec when VCC is less then 12.85	"Alarm 1" on web Notification sent
Pin 2	Green	AUX 1 Output	"Arm/Lock" command	Pulsed negative output
Pin 3	Brown	AUX 2 Output	"Disarm/unlock" command "Unlock only" command	Pulsed negative output Pulsed negative output
Pin 4	Orange	AUX 3 Output	"Arm/Lock" command "Disarm/Unlock" command Activate "Disable vehicle" command Deactivate "Disable vehicle" command	Constant ground signal No ground signal Constant ground signal No ground pulse
Pin 5	Black	Output	Constant ground	Constant ground

### Starter Inhibit Wiring Detail



#### **Initial Power Sequence:**

1. Make sure the vehicle is not in an enclosed area (garage or installation bay) and that the antenna has a clear unobstructed view of the sky.
2. Connect 2-pin power connector into the PROPT20.
3. Connect the 4 Pin data harness between the PROPT20 and the Alarm, Alarm/Remote Start or ASPTUGM system if installed.
4. Connect the 5-pin AUX I/O connector if used.
5. On power up the red LED will turn on first and then the green LED will turn on to indicate network availability.
6. The unit must be powered up for 10 minutes before testing.
7. The unit must be tested before customer can register.

# Tracking Device Functional Testing and Configuration

## Voice Prompt Interface (VPI) Installer

**Step 1:** Peel off and place the IMEI and TPC number label included in the product's packaging on the Wireless Service Application form in the designated location. This information may also be copied from the bottom of the device being installed.

**Step 2:** Call **800-705-8766** from any touch tone telephone when you are ready to test the device. You will hear "Welcome to your vehicle command center" Followed by several choices. Select option number **4** for Dealer services. Then enter the installer identification number (8378) for the Automated Dealer Installing and testing the system.

**Step 3: Device Identification:**

You will hear "WELCOME TO THE AUTOMATED DEALER INSTALLATION AND TESTING SYSTEM. PLEASE ENTER THE IMEI NUMBER LOCATED ON THE BOTTOM OF THE DEVICE.

**Step 4: Installer Identification:**

You will hear "NEXT PLEASE ENTER THE TEMPORARY PASS CODE, (TPC), LOCATED ON THE BOTTOM OF THE DEVICE YOU ARE INSTALLING NOW, FOLLOWED BY THE # SIGN."

**Step 5: GPS Receiver Verification:**

Once the device has been configured it needs to be tested to ensure the network's ability to reach the device, and of the device's ability to obtain a valid GPS position from the satellites. This test requires the vehicle to be parked in an open space with a clear view of the sky to maximize the GPS and communication signal. The VPI will introduce the GPS test phase and prompt you to press "1" when you are ready to test. The system will send a locate command to the vehicle as soon as "1" is pressed – this test can take up to three minutes. The system will provide you with the vehicle location.

**Step 6 : Unit Configuration :**

Depending if and which host control system is being installed, you may have not been able to utilize all the available functions of this system. To confirm controls available to your customer you must inform the VPI which functions and features you have installed. It is the responsibility of the installer to record the proper configuration using the Installer VPI to insure the user has a good initial experience with the device.

First you will hear a series of prompts about configuring controls. (A control allows the user to send a command to the vehicle) The VPI will ask if you have installed the door lock feature, for yes press 1, for no press 2. The VPI will then ask you to configure the rest of the control features, which are door unlock, remote start, Auxiliary Output 1 and Auxiliary Starter Interrupt. Follow the same process as noted above. The website and the vehicle command center, (VPI), telephone interface will be dynamically set up to reflect the connected control features.

**Note:** Until the installation is successfully completed, the user cannot register his device. After a successful installation, you will not be able to use the temporary Pass Code to access the device further.

**After a Successful Installation:**

Once you have completed a successful installation with the Installer VPI, make sure you do the following:

- Provide the subscriber all materials associated with the device, including:
- Registration form(s)
- Owner's Guide
- Terms and conditions
- Wireless service agreement
- Inform the user which functions and controls are available in their vehicle

**Note:** It is extremely important to instruct the user to register their device.

Below is a list of all available commands:

**Telephone Interface**

1. Arm/Lock
2. Disarm/Unlock
3. Remote Engine Start
4. Speed Alert On
5. Vehicle Location
6. Speed Alert Off
7. Geo Fence On
8. Geo Fence Off
0. Theft Reset

**Web Interface**

- Arm/Lock
- Disarm/Unlock
- Remote Engine Start
- Unlock Only
- Starter Interrupt
- Theft Reset
- Auto Repair
- Excessive Speed Alert
- Geo Fence
- Low Battery Alert
- Remote Diagnostics