

App-Tronics motto "Details on their own can mean little, together they mean everything" is how this company was started. Seeing that every effort for perfecting every aspect of the products use and performance were never sacrificed for financial gain. When you experience the Stealth Interceptor 2 00is for the first time, you will appreciate the dedication the staff at App-Tronics has continued to give. Making the Stealth Interceptor 2300is the benchmark in integrated radar and laser diffusing protection, that will never be challenged.

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STEALTH INTERCEPTOR



Operational Manual



APP-TRONICS

Mentor, Ohio
Printed in Taiwan
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Caution

Motorists are expected to exercise all due caution while using this product, and to obey all applicable traffic laws.

Stealth Interceptor Systems

Stealth Interceptor 2300is, NDR-23



The Stealth Interceptor comes standard with NDR-23, which is the interior warnings component. It's a GPS locator with red light speed trap database and DVR recorder. It picks up the wireless signals from the front mounted radar detector and laser diffusers. Then displays those warnings.

Stealth Interceptor 2300is, SmartNav 5



App-Tronics SmartNav 5 can be purchased allowing for driver to replace the NDR-23 with our flagship applicational rear view mirror. SmartNav 5 comes with the same wireless technology allowing it to be used as the interior component to the Stealth Interceptor.

Stealth Interceptor 2200is, GPS 109 LEDS



GPS 109 comes with 2 flashing LED's allowing for a discreet appearance with no DVR. It still includes our red light camera and speed trap database.

Contents: parts list



**GPS 109
interior cab
component
GPS
antenna**



**Radar Detector,
bracket, mounting screws
and bolts. Zip ties for tying
off extra wiring**



**Windshield
mounting
clip**



**Power harness
for CPU/Wing
Box**



**power
supply cord**



**2 brackets, 4
bolts, 4 locking
washers and
level**



**CPU/Wing
Box-power
supply for
engine
components**



**2 Laser
Diffusers,
mounted on
front bumper
of vehicle**

Introduction:

DESCRIPTION:

The Stealth Interceptor 2200is is an integrated radar detector and laser diffusing system. Its construction, unmatched performance, and simplicity of installation make it the pinnacle of protection against radar and laser guns used by law enforcement.

The Stealth is designed to take away the financial burden, difficult installation process, and product durability issues that can come with the current available integrated radar laser products. It goes above and beyond customer expectations by supplying competitive pricing, faster install and unmatched warranty along with better performing laser diffusers and radar. It has an updatable red light camera and speed trap database to warn drivers when they are approaching enforceable cameras. With over 2 years in development of filtering bands and collecting laser data, App-Tronics has brought to market the pinnacle in integrated systems.

The GPS 109 replaces our 2300is interior component, the NDR-23. It comes equipped with our red light camera and speed trap database, yet we have gone without the front viewing DVR recorder. It also comes with an extended GPS antenna allowing for discreet placement of the GPS 109. You can place it anywhere inside the vehicle using the 2 LEDs to be placed near dash cluster for visual cue when law enforcement is targeting your vehicle.

Warning

Even though it is easy to install the unit, we still recommend you to find a professional to help if you don't feel comfortable doing it by yourself.

Overview of parts

Engine and front bumper components.



The Engine components include the CPU/Wing Box, 2 Laser diffusers, 1 Radar Detector, wire harness to hook up to cars battery terminals. As well as the brackets, screws and zip ties for mounting.

Interior components, GPS 109, power adaptor and GPS ant.



The GPS 109 is the control panel and audible warning system. The two LEDs placed near dash cluster flash when your car is targeted. Also included in most packaging is a female adaptor for hardwiring into your vehicles electrical system. **Never cut off the provided power adaptor, it is required to regulate different voltages.**

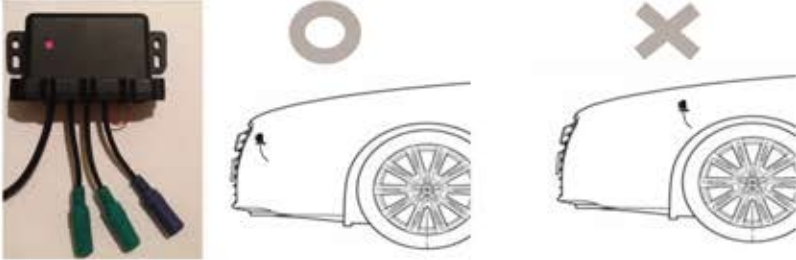
Interior windshield mount



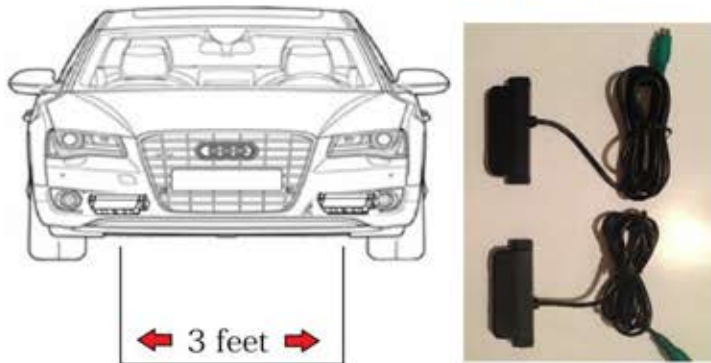
One windshield bracket with two suction cups to secure your GPS 109 to the interior windshield. You can also use double sided tape to place the unit in any desired location. Read further for recommended mounting locations.

Installation: Laser diffusers and CPU

1. Install CPU/Wing Box in Front of Vehicles radiator be sure the cables are **FACING DOWNWARD**. Use the supplied screws and or zip ties. **The CPU/Wing Box is heat sensitive, so it's critical it stays in front of radiator and out of the engine compartment. Do not install power harness yet.**

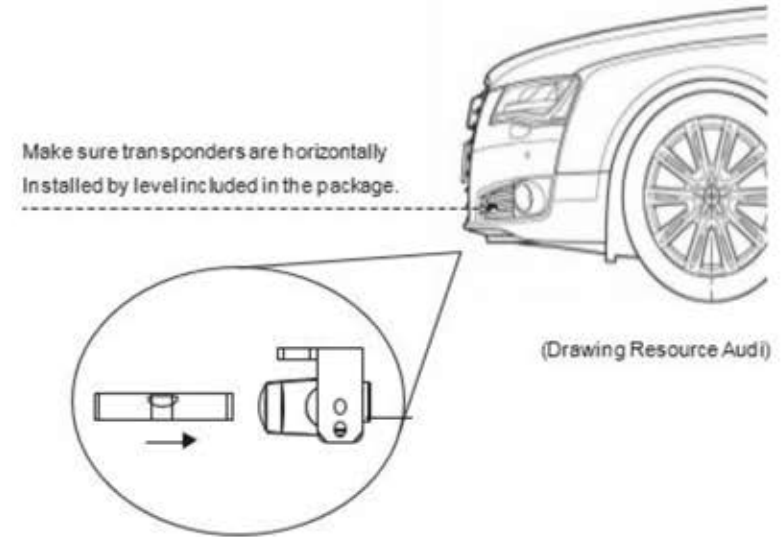


2. Next install the two (2) Laser diffusers, try and maximize the spacing between them up to 3 feet. Depending on the vehicle spacing it may be limited to a certain distance. The less distance between the Laser Diffusers the lower the maximized protection. **They must be flush with bumper to avoid the laser diode from having its projection blocked.**



3. Make sure the laser diffusers are positioned horizontal with the larger bulb to your left, use the screws and lock washers provided to secure the diffusers to their brackets. Use the level provided to ensure they are completely level for maximized protection.

Make sure transponders are horizontally installed by level included in the package.



4. Connect the green connectors from each diffuser to the green connectors on the CPU/Wing Box. **Be sure to match up the green arrows labeled on each of the connectors.** Use the provided zip toes to secure the extra wiring.

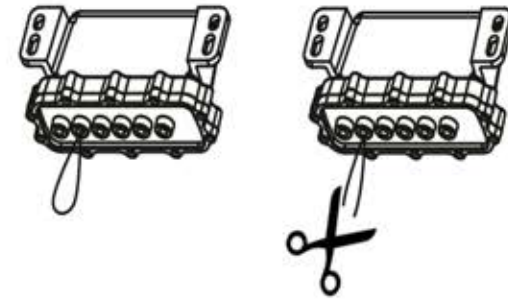


Optional Rear Laser Diffusers

App-Tronics does not recommend installing Laser Diffusers on rear of vehicle. If you are engaged by law enforcement please check your speed and remain at or below posted speed limits at all times. Law enforcement will try and retarget your vehicle as you pass them. If you live in an area were Law Enforcement routinely targets just the back end of vehicles, then it may be a needed component.

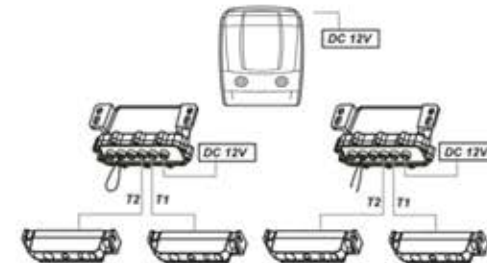
4-transponder CPU/Wing Box

1. If you are installing 4 transponders with two CPU/Wing Boxes, cut the ID wire on one of the CPU boxes, so the system will differentiate them from each other.
2. Follow the same steps as above section when installing second CPU/Wing Box.
3. You can install second CPU/Wing Box in the trunk of your vehicle and route the laser diffuser(s) to the back end of vehicle.
4. Depending on the style of vehicle location preference is subject to the design of that vehicle. Near or around the license plate is typical location. Though some have had success with both Laser Diffusers located on the rear windshield back shelf.
5. Keep all the same installation requirements in use when installing.
6. Refer to the power supply connection section after the Radar installation to learn how to connect your power supply for the secondary CPU/Wing Box.



Wiring a Wireless System

Make sure RED wire is connected to + pole and BLACK wire is connected to - pole of a vehicle battery.



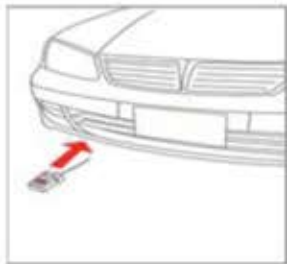
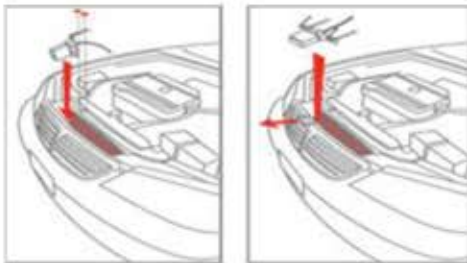
Here is a collection of laser/lidar guns we have tested. Our laser jammer works for other similar ones. The coverage is increasing and we always keep our products promptly updated.



Installation: Radar Detector



1. Install Radar Detector with screws and bracket provided in locations seen below.
2. Make sure there is no metal blocking the direct site of the Radar Detector.



3. Secure the extra wiring with cable ties provided.
4. Then connect the radars **blue connector to the blue connector on the CPU/Wing Box.** (From previous Chapter)



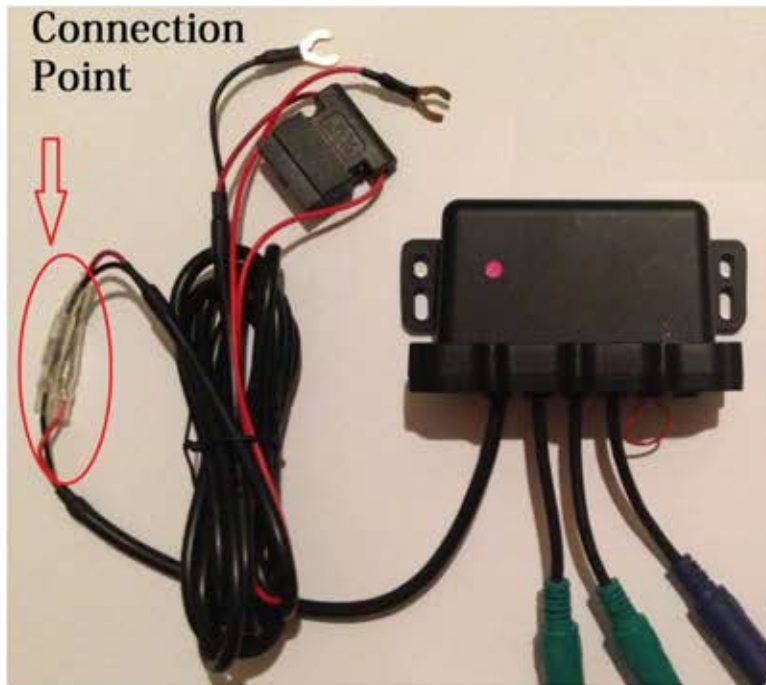
Warning

Even though it is easy to install the unit, we still recommend you to find a professional to help if you don't feel comfortable doing it by yourself.

Power Supply Connection : CPU/Wing Box

The final step for the Exterior components is connecting the CPU/Wing Box to your vehicles battery terminals. If your battery is located in trunk you should still be able to connect to the positive jump post and ground post. (See cars manual for locations).

1. Connect the wire harness to the CPU/wing Box, be sure to push in firmly and use the clear housing to cover your connections.



If you look at the front of the CPU/Wing Box while car is running and in park, you should faintly see a red LED glowing. This indicates power has been successfully supplied to system.

A Few Quick Notes:

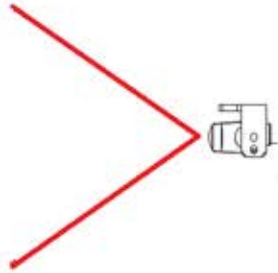
Before you start on your interior installation of the GPS 109, double check that all your connection points are firmly pushed in and sealed, and that any extra wiring is secured neatly and out of the way of any moving parts.

Custom installation is not recommended for the Stealth Interceptor 2200is. The installation we recommend is to give you maximized protection. We are aware of some installation procedures that have become more and more widely used. If you choose to do these variations below, be aware that you are not getting the full intended capabilities of our components.

1. If you choose to use 3M double sided tape to secure your diffusers instead of provided brackets, be sure to use the level and get them as close to level as you can. Trying to streamline the appearance of the diffusers is ok as long as you stay within the guidelines listed.
2. Our Stealth Laser diffusers consist of 1 high powered laser diode in each of the diffusers. If you choose to put behind your cars grilles (example BMW) please not that if you block the diode with even plastic it will not intercept law enforcements laser. If you must install this way try installing vertically within the grilles giving as much separation as possible with them being flush with the outside part of the grille.

2. Route the CPU/Wing Box power harness to your power source, in this case it will be the cars battery terminals. The **Stealth Interceptor 2200is was designed not to draw from the cars battery till its started**. It must reach above 13 volts before it will turn on and draw the needed power to run the system. This was part of the easy installation process. There is no need to splice into any of your vehicles wiring to get power.
3. Loosen your battery terminals and attach to the corresponding positive (red wire) and the negative (black wire). Tighten your battery terminals down after each step.

3. Our Laser diffusers emit or cast their light beam in the shape of a V, therefore anything blocking the beam will effect the performance of the diffusers to disrupt law enforcments laser. Be sure to keep your diffusers flush with the front end of the vehicle so not to cut off the projection of the diffusers.
4. If you for example set the laser heads to far back inside the over hang of the front bumper, the broadcast of the light beam will be narrowed, not allowing it to pick up the incoming laser.



Installation: GPS109

Interior component GPS 109

Introduction to your GPS 109; The GPS 109 was designed for those who have chosen to go without the DVR recording abilities of our 2300is Stealth interior component the NDR-23. This interior kit comes with the GPS 109 which acts as your control, speaker box and display screen warning you when your car is targeted by law enforcement or you are approaching a red light camera or speed trap database that has been stored in our updatable database. Simply place the GPS 109 in the desired location, for example underneath the steering wheel or center console, you can even use the provided suction cup bracket to mount to windshield. Or remove the suction cups and use the 2 screws provided to mount to any desired location within the car. Then route the 2 LEDs provided to the dash cluster and either plug directly into your cars power outlet or use our female adaptor kit and hardwire the GPS 109 into the cars electrical system.

1. Decide whether or not you want to use the suction cup bracket or mount the GPS 109 in a more hidden location.
2. The suction cup process begins with cleaning windshield area then slip the clip into the slot on the top side of the unit. Then place in desired windshield location.
3. If you choose the hidden location you remove the suction cups from bracket, use the 2 screws provided and mount the bracket to desired location. Then slide the GPS 109 into the bracket. Or you can simply place the GPS 109 using double-sided tape to any other specific area best suited for your vehicle and your needs. **(Below are sample locations for mounting)**



4. If you choose to place the GPS 109 in an area where the GPS signal is not reaching the unit, use the provided antenna cord and route the antenna to the back shelf of rear windshield or even tightly place in corner of front windshield by tucking the wire into weather stripping or removing the weather stripping then replacing after wire has been routed..

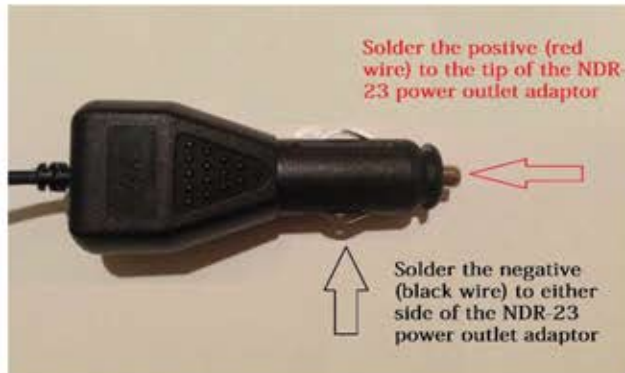


Warning Even though it is easy to install the unit, we still recommend you to find a professional to help if you don't feel comfortable doing it by yourself.

1. Some or most of the Stealth Interceptors now come with a female adaptor, simply plug your GPS 109 power outlet adaptor into the female adaptor socket. Then take the positive wire (red wire) and tie it into your accessory only power source (only receives power when car is on). Next take the negative wire (black wire) and attach to a good ground source (attached to unpainted metal of the body frame usually a pre-existing bolt).
2. You can find your accessory power source with a volt meter. Make sure the power source does not receive power when car is off, you do not want constant power.



3. Or you can solder as in picture below. (App-Tronics will warranty any adaptors that have been modified this way, only if done by one of our approved Authorized Dealers. we offer this information as a courtesy to those who need a hardwired solution to their installation of the Stealth Interceptor 2200is).



Features of the GPS 109

Features

1. Fixed Pole Speed/ Red Light Camera Alerts

A voice alert is activated while you are approaching a camera spot whose coordination data is stored in the database. To minimize driver distraction, 109 only reacts to cameras targeting the traffic flow you are in. The display will start to count down the distance to the spot, and a speeding alert will be activated if current speed is beyond the local speed limit in the case of approaching a speed camera spot. You will hear a chime when the countdown reaches zero. The higher the speed limit is, the longer the countdown distance will be.

2. Mobile Speed Camera/ Point-to-point Speed Zone Alerts

A voice alert is activated when you are approaching a mobile speed camera spot or a point-to-point speed zone whose coordination data is stored in the database.

3. "Drive with Caution" Spots

A voice warning is activated while you are approaching a dangerous intersection, a school or a railway crossing. School zone warning is only activated in school zone hours.

4. Highway Exit Voice Reminder

A voice announcement is activated while you are approaching an exit on a primary highway with grade separated junctions.

5. GPS Time/ Location/ Direction/ Speed Indicators

Please refer to following chapters for more information.

6. User Programmable Spots

User can add speed enforcement spots by him/herself. Please refer to Operation Guide- Setting up User Spots for more information.

7. Over Speed Warning

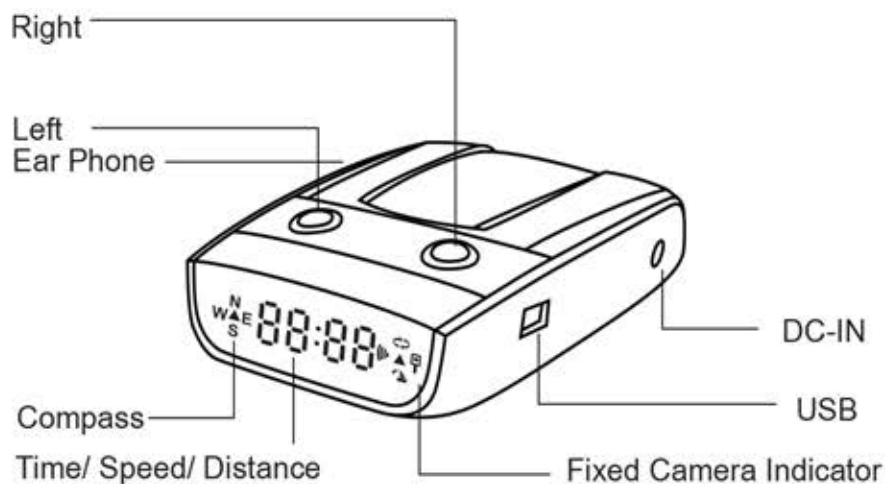
A warning is activated once the vehicle exceeds a user defined speed. Please refer to Operation Guide- Acquiring Additional Information and Customizing GPS Settings for more information.

8. Battery Voltage Indicator

Please refer to Operation Guide- Acquiring Additional Information and Customizing GPS Settings for more information.

Controls and use of GPS 109

Controls, Connections & Indicators



<<Quick Reference>>

	Left		Right
Click	Vol Up/Forward		Next
Double-click	Vol Down/Backward		Function On/Off User Spot On/Off
Hold	Mute		Back to Top
Hold & Power-on			User Spot Reset

Turning On/ Off

Always turn on and off 109 by pressing the red button on the power plug. Unless you hard wired using the provided female adaptor.

Adjusting Volume

1. Click left button to increase volume.
2. Double-click left button to decrease volume.
3. Press and hold left button to mute.

Setting up User Spots

Use right button to set up user programmable spots.

1. Double-click right button at the spot you want to set up. 109 will store the data and activate a warning voice next time when you approach that spot.
2. To delete a user spot, double-click right button while you are driving in the warning zone of such spot.
3. To delete all user spots, turn 109 off first. Press and hold right button and turn the power back on.

Adjusting Time

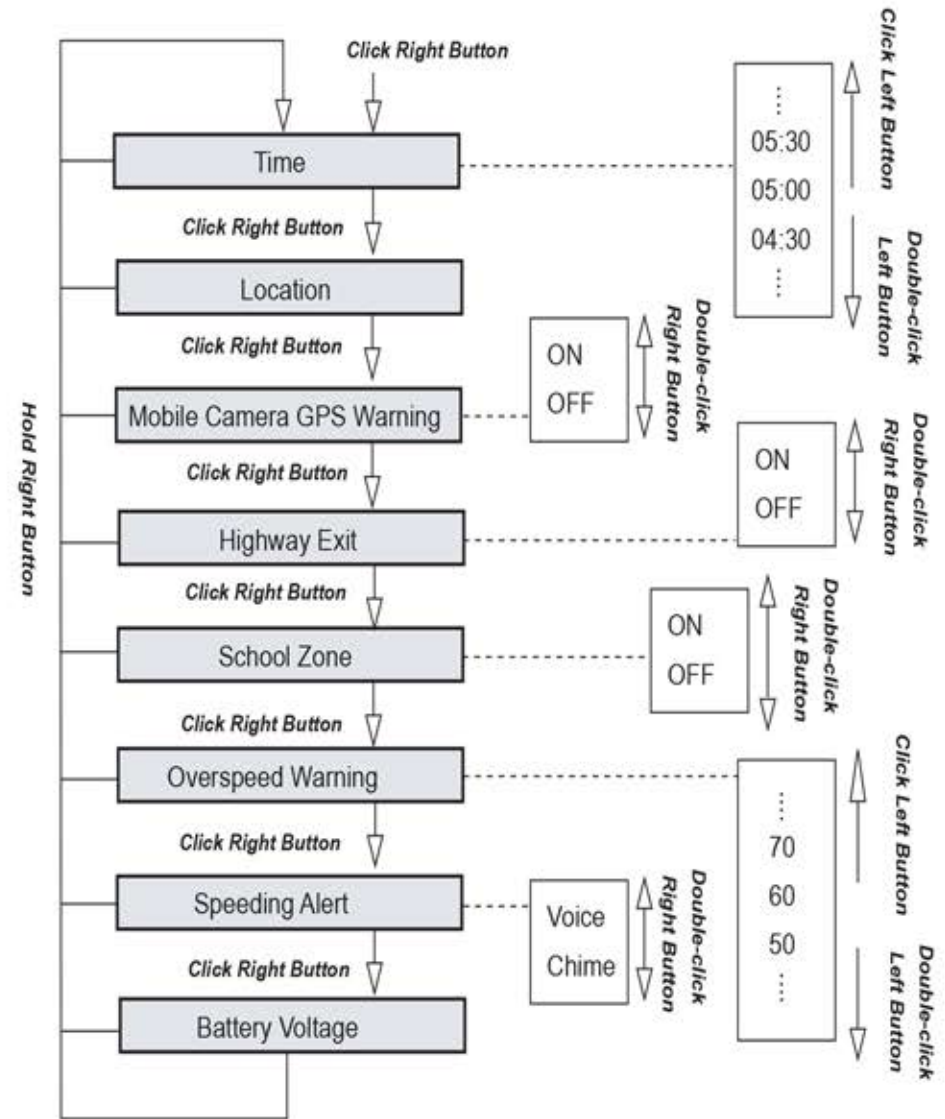
Use right and left buttons to adjust time when daylight saving time is applied.

1. Click right button to make 109 show and pronounce time.
2. While 109 is pronouncing time, click left button to adjust the clock forward or double-click left button to adjust the clock backward.

Acquiring Additional Information and Customizing GPS Settings

Use right button to acquire additional information and customize GPS settings.

1. Click right button while 109 is pronouncing time to make 109 pronounce GPS location.
2. Click right button while 109 is pronouncing GPS location to make 109 pronounce "Mobile Camera GPS Warning ON".
3. Double-click right button to turn mobile camera GPS warning off. Double-click right button to turn mobile camera GPS warning back on.
4. Click right button to make 109 pronounce "Highway Exit On".
5. Double-click right button to turn highway exit off. Double-click right button to turn highway exit back on.
6. Click right button to make 109 pronounce "School Zone On". Double-click right button to turn school zone warning off. Double-click right button to turn school zone warning back on.
7. Click right button to make 109 pronounce "Over speed warning at speed of XX miles per hour".
8. Use left button to change warning speed from 20 MPH to 120 MPH. Click left button to increase warning speed. Double-click left button to decrease warning speed.
9. Click right button to make 109 pronounce "You are speeding". Double-click right button to switch speeding warning to chime. Double-click right button to switch speeding warning back to voice.
10. Click right button to show battery voltage.
11. Press and hold right button to go back to the top of menu anytime during the process.



How to update the 109 and database

We provide free database updates for the GPS 109 interior component. Don't install our database onto any product from other manufacturers. Beside copyright issues, unauthorized installation will seriously damage software of such product.

To update database, go to www.app-tronics.com and find Database page.

Caution

Current Software is compatible with Windows 7, VISTA and XP only.

1. The first time you update the database, download following four files from our website, www.app-tronics.com into a new folder and un-zip them.

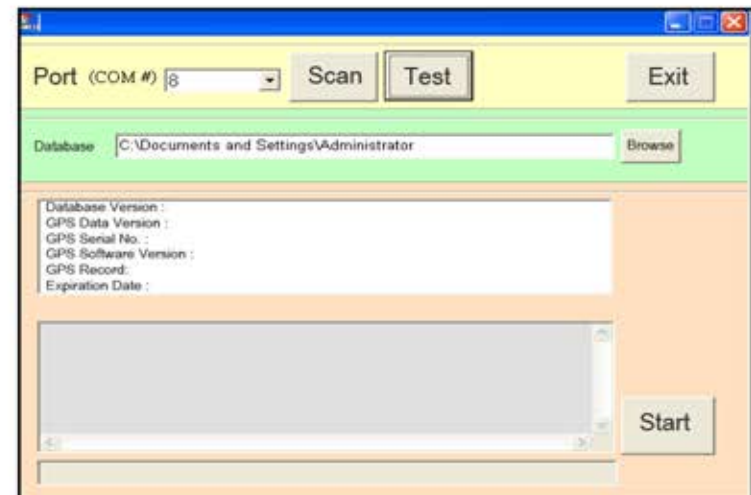
Updater Installation Wizard / Driver 1 / Driver 2 / Database

2. Double click Installation Wizard to install the program GPS_Update_TMG_Plus onto your computer. Follow the instructions on the computer display.

3. Connect 109 to your computer through the USB cable.

4. Direct the computer to look for the drivers.
 - a. Right-click My Computer, click Manage, and then click Device Manager.
 - b. Under Ports(COM & LPT) or others, double-click AT91.
 - c. Choose to install drivers. Don't connect to Windows Update.
 - d. Choose to select from list.
 - e. Direct the computer to look for the drivers. OK.
 - f. Re-start your computer.
5. Launch Updater.
6. Click "Scan". The program will search for 109.
7. Click "Test". The program will test the connection between computer and .
8. Click "Browse" to direct the program to look for the database you just downloaded.
9. Click "Start". It will take a few minutes to update the database.

Next time, you only have to download new Database file, connect to your computer then start from step 5.



Specifications of components

GPS 109

Specifications

Input: DC 12V
 GPS: SiRF III / 1575.42 MHz \pm 1.023 MHz
 Operation Temperature : - 25 oC ~ + 85 oC
 Size: 101*70*23 mm
 Weight: 100 g
 Material: PC, ABS.
 Product Origin: Taiwan

This device complies with part 15 of FCC rules: Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radar Detector

Input: DC 12V
 X band: 10.525 GHz \pm 50 MHz
 K band: 24.050-24.250 GHz \pm 100 MHz
 New K band: 24.125 GHz \pm 100 MHz
 KA band: 33.70 ~ 35.60 GHz
 (Coverage can be adjusted in some regions.)
 LASER: 905nm
 Operation Temperature : - 13 degrees ~ + 125 degrees.

This device complies with part 15 of FCC rules: Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Laser Diffusers

Input: DC 12V
 Laser Wavelength: 905nm
 Operation Temperature : - 13 degrees ~ + 158 degrees



Stealth LaserL3 is a class 3M laser product. Never look at the Transponder closely while powered on!

Trouble Shooting and Maintenance

Devices are designed to give years of trouble-free performance. No routine maintenance is required.

The most common problems are listed below, along with likely causes and solutions. If a solution to your problem cannot be found here, contact your dealer or an authorized Facets Service Agent.

Symptom	Cause	Action
Power doesn't turn on.	The fuse is blown.	Rectify the reason for the fuse blowing, then unscrew the end of power cord plug and replace the old fuse with a new 2-amp one.
Alerts don't stop, or the system doesn't proceed.	System error.	Re-boot the system.
You can not position your vehicle, or the positioning error is large.	Satellite signals are blocked by obstacles.	Keep driving until reception improves. Relocate your device.
	Windshield film is too dark.	Ask for professional help to make a small hole above the device on the film.

App-Tronics Stealth Interceptor Warranty



THIS WARRANTY CARD MUST BE FILLED OUT AND EMAILED OR MAILED TO App-Tronics TO RECEIVE EXTENDED WARRANTY.

EMAIL TO: INFO@APP-TRONICS.COM OR MAIL TO: 1605 COMMODORE COVE, PAINESVILLE OHIO 44077. DEALERS CAN CALL THIS INFO IN AT 1-888-587-4111

Customers who buy and have the Stealth Interceptor 2300is installed by one of our Authorized Dealers will receive an individual components warranty to include the following component and years. This warranty is subject to change without direct notification to the buyer. The Radar Detector receives a 4 year warranty, the GPS 109 receives a 3 year warranty while its internal rechargeable battery receives 2 year warranty. The CPU/Wing Box receives a 3 year warranty and laser diffusers receive 28 months. If purchased and installed by any other entity other than an Authorized Dealer the Standard one year warranty below takes place.

For period of one year from the date of first consumer purchase, App-Tronics, LLC will, without charge, repair or replace, at its option, defective products upon delivery to an authorized Service Agent, accompanied by proof of the date of first consumer purchase from an authorized dealer, such as a duplicated copy of a sales receipt. The customer has to pay shipping charges to deliver the product for service. The return charge will be at our expense, if the product is proven to be under warranty.

This limited warranty does not apply:

- To any product damaged by accident;
- In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs;
- If the serial number has been altered, defaced or removed.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty.

License Agreement

App-Tronics and its licensors grant to the purchaser a non-transferable, non-exclusive license to use the software and data installed on our products and the related documentation solely for personal use only on such products.

The purchaser should not copy, reverse engineer, translate, port, modify or make derivative works of the software and data. The purchaser should not loan, rent, disclose, publish, sell, assign, lease, sublicense, market or otherwise transfer the software and data or use it in any manner not expressly authorized by this agreement. By using this product, the purchaser agrees to be bound by the terms and conditions of this license agreement.

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The software and data are provided to the purchaser "AS IS". App-Tronics and its licensors make and you receive no warranty for the software and data, whether express or implied, and all warranties of merchantability and fitness for any particular purpose for the software and data are expressly excluded.

The software and data is complex. App-Tronics, LLC and its licensors intend to provide their customers the most complete and accurate information available at a reasonable cost from government and private data sources. However, all data sources have limitations and some have inaccuracies or are incomplete in some degree. As such, App-Tronics, LLC and its licensors do not make any warranty regarding the accuracy or completeness of data used by this product and shall not be liable to the user for any incidental, consequential, special, indirect or exemplary damages including any fine, civil or criminal penalties arising from the use of the product.

Warranty is subject to change without direct notice, please contact App-Tronics directly to

Learn of any updated warranty material pertaining to your Stealth Interceptor 2300is.

Stealth Interceptor 2300is serial # _____

Purchased at _____ Phone # _____

Dealer's address _____

City _____ State _____ Zip _____

Vehicle Identification Number _____

Customer Invoice number from Installer _____ Date _____

Vehicle make _____ Model _____ year _____

Customer name _____ Phone # _____

Customer address _____

City _____ State _____ Zip _____

Email address _____

Facility Rep. Signature of professional install _____

Date _____

Vehicle owner signature _____

Date _____

THIS WARRANTY CARD MUST BE FILLED OUT AND EMAILED OR MAILED TO App-Tronics TO RECEIVE EXTENDED WARRANTY.

EMAIL TO: INFO@APP-TRONICS.COM OR CALL 1-888-587-4111 TO SEND IN OTHER WAYS.