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 2300is 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.











APP-TRONICS

Mentor, Ohio Printed in Taiwan Copyright 2013 Www.app-tronics.com **Operational Manual**

Table of Contents

Optional Interior components (product and services)	1
Contents and Parts List	2-3
Introduction to your Stealth Interceptor 2300is	4
Over view of Parts	5
Installation of CPU/Wing Box and Laser Diffusers	6-7
Optional Rear Diffusers	8-9
Radar Detector Installation	10
Power supply Installation to CPU/Wing Box	11-12
A Few Quick Important Notes	13
Installation of NDR-23	14
Overview of NDR-23	17
Main Features of NDR-23	18-19
Getting Started	19
Specifications	24
Warranty information and registration	26-27

⚠ Caution

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

APP-TRONICS Stealth Products

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 2300is.

Stealth Interceptor 2200is, GPS 109LEDS



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





NDR-23, interior cab component GPS DVR recorder



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



Windshield mounting clip



Power harness for CPU/Wing Box



NDR-23 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 2300is is an integrated radar detector and laser diffusing system with front viewing DVR. 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 detector with DVR continuous recording. 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.

App-Tronics motto "Details on their own can mean little, together they mean everything" is how this company was started. Perfecting every aspect of the products' use and performance has always been our goal. When you use the Stealth 2300is for the first time, you will appreciate the dedication the staff at App-Tronics has put into this product. Making it the benchmark of integrated radar detectors and laser diffusing systems with DVR.

$\Delta_{Warning}$

Even though it is easy to install system, we still recommend you 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, NDR-23 and power adaptor.



The NDR-23 interior DVR warning system, includes the power cord with power outlet adaptor and windshield bracket. 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.

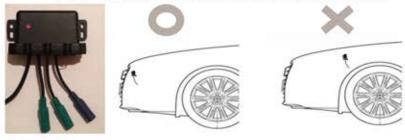
Interior windshield mount



One windshield bracket with double sided tape to secure your NDR-23 to the interior windshield. Read further for recommended mounting locations.

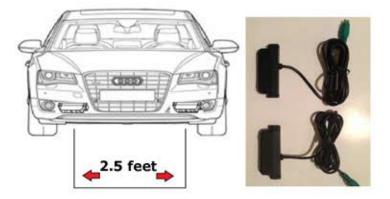
Installation: Laser diffusers and CPU

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.

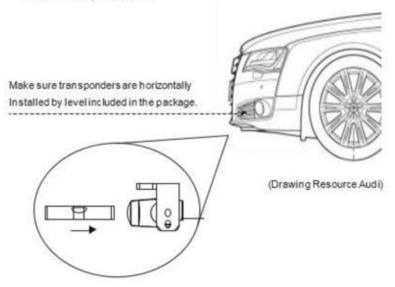


Next install the two (2) Laser diffusers, try and maximize the spacing between them up to 2.5 feet. Depending on the vehicle spacing it may be limited to a certain distance.

They must be flush with bumper to avoid the laser diode from having its projection blocked.



 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.



 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.

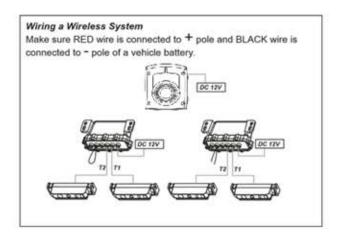


Optional Rear Laser Diffusers

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 where Law Enforcement routinely targets just the back end of vehicles, then it may be a needed component. If that is the case, simply install one more set of CPU/Wing box and diffusers on the rear of the vehicle. Our system will communicate wirelessly.

4-transponder CPU/Wing Box

- If you are choosing to install a secondary CPU/Wing Box with laser diffusers on the rear of the vehicle, follow the below procedures.
- Follow the same steps as above section when installing second CPU/Wing Box.
- 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.
- 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.
- Keep all the same installation requirements in use when installing.
- 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.



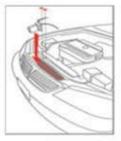
Here is a collection of laser/lidar guns we have tested. Our laser jammer works for other similar ones. The coverage is increasing and we always keep our products promptly updated.

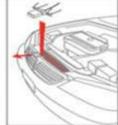


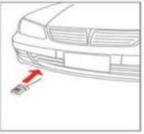
Installation: Radar Detector



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







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



Δ Warning

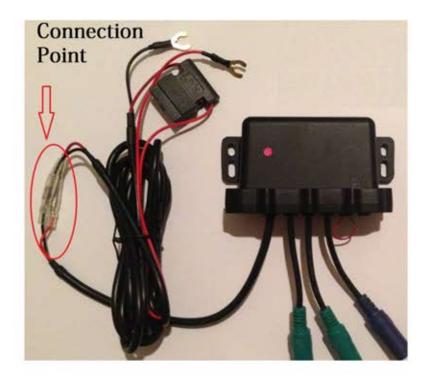
Even though it is easy to install the unit, we still recommend you find a professional to help if you don't feel comfortable doing it by yourself.

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).

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



- 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 2300is was designed not to draw from the cars battery till its started. It detects the voltage noise from a generator before it will 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.
- 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.

If you look at the front of the CPU/Wing Box you should faintly see a red LED glowing. This indicates power has been successfully supplied to system.

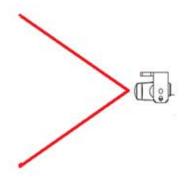
A Few Quick Notes:

Before you start on your interior installation of the NDR-23, 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 2300is. 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.

- 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 note 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.

- 3. Our Laser diffuses emit or cast their light beam in the shape of a V, therfore anything blocking the beam will effect the performance of the diffusers to disrupt law enforcements 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.
- 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.

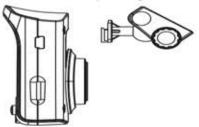


Installation: NDR-23

Interior component GPS DVR recoder

Introduction to your NDR-23 The Stealth Interceptor system comes with the NDR-23, which is a GPS driving recorder (DVR), that protects you from insurance trouble, including accidental liability, vandalism, and speeding tickets. We encased all the interior components into one. The GPS antenna, DVR, control panel, display, speaker and warning system, can now fit into the palm of your hand. It can be hardwired in, plugged into vehicles power outlet or you can use its rechargeable battery and be taken with you. It receives warnings wirelessly from the Radar(X, K, KA, KU) dialed into the set frequencies used by law enforcement to reduce false alerts and receives signals from the super-high-power diode laser diffusers that work against variable pulse rate(VPR) laser guns.

- 1. Wipe windshield with cleaner.
- 2. Remove sticker cover and press the hook against windshield.
- Hang NDR-23 on the bracket. Try to insert the hook all the way to the end. Adjust angle and fasten the screw.





- Organize the wire as shown above. Simply tuck into headliner and follow down which ever pillar takes you easiest to your power source. When coming down pillar simply remove the weather stripping and tuck behind and then put back in place.
- Route the wire under your dash to your cigarette lighter plug.
 Tucking and hiding wire as you go. Use provided zip ties to bundle any extra wiring.
- Optional installation can be done by a trained ASE certified technicians. The power outlet adaptor is crucial to running the NDR-23. Do not cut the wire and hard wire it in. The NDR-23 needs 5 volts and 12 volts to run the multiple components within.

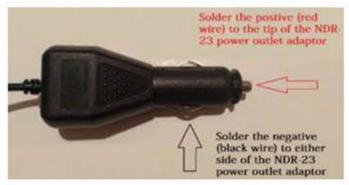
Warning Even though it is easy to install the unit, we still recommend you to find a professional to help if you don't feel comfortable doing it by yourself. DO NOT CUT THE POWER ADAPTOR FROM THR HARNESS, its needed to regulate different voltage needed.

- Some or most of the Stealth Interceptors now come with a
 female adaptor, simply plug your NDR-23 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 preexisting bolt).
- 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.

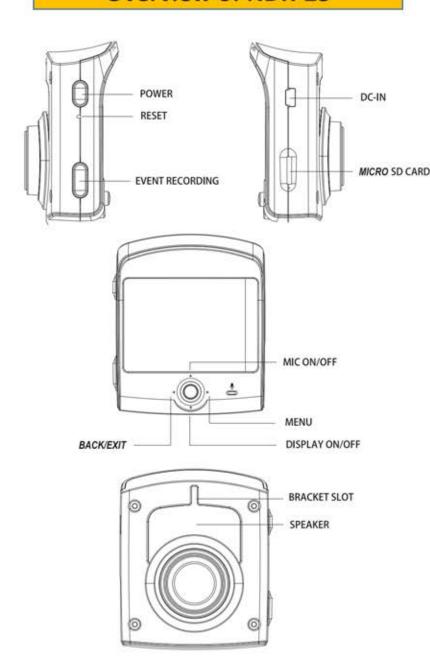


Female adaptor kit to hardwire your NDR-23 into your vehicle (Not always supplied)

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 2300is).



Overview of NDR-23



Main Features of the NDR-23

High Resolution

With professional optical lens, high quality night view is promised. Surroundings are well covered by 110° of viewing angle.

GPS Tracking with Speed Camera Warning

GPS warns you of POI based speed cameras. Replay integrates real time tracking on Google Map. Radar detector is optional for mobile radar detection.

Event Recording

Click event recording button to save video without being overwritten

G-sensor records 3D 【X、Y、Z axis】 G-force simultaneously, and starts event recording when G-force exceeds threshold limit. Permanent files are limited to 10. Old files will still be replaced by new ones.

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, NDR-23 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. Speeding alert will change from "You are speeding." to "Please slow down!" if a radar signal is detected in a camera warning zone to raise extra awareness of a true threat, if you have the optional radar detector installed. You will hear a chime when the countdown reaches zero. The higher the speed limit is, the longer the countdown distance becomes.

Other POI based Warnings

A voice alert is activated when you are approaching a mobile speed camera spot, railway crossing, school zone and dangerous zone whose coordination data is stored in the database.

Built-in Speed Limit Map

NDR-23 "knows" the speed limit of the road you are currently driving on by a built-in speed limit map. NDR-23 activates its optional radar detector only when you exceed speed limit under Adaptive Threshold Mode.

Radar/ Laser Detection

NDR-23's optional radar detector detects X, K, New K, Super Wide Ka bands and laser. Please refer to the Specifications for more information. It also detect pulses shorter than what's generated by an Instanton/Pulsed Radar.

Shake on Feature

Shake On feature. After the vehicle is powered off, NDR still keeps its G sensor powered on by its own battery. Once it is shaken, it wakes up and takes one minute of video. The feature does not activate until 3 minutes after the car has been shut off to allow time to exit the vehicle.

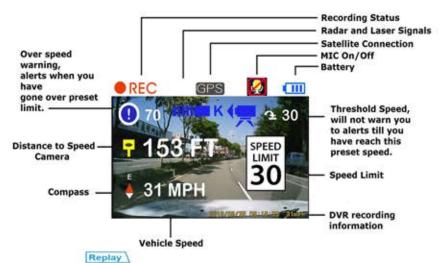
STS (Signal Tracking System, Optional)

Radar signals with increasing intensity will be tracked by NDR-23's optional radar detector, and the alert will not be interrupted by temporary interference to hold user's awareness of a true threat.

Getting Started / Display / Replay

Getting Started

- 1. Insert a SD card (maximum 32G) into DR-1.
- 2. Format the SD card by selecting Formatting from main menu.
- 3. REC blinks while recording.
- 4. After satellites are connected, GPS stops blinking.



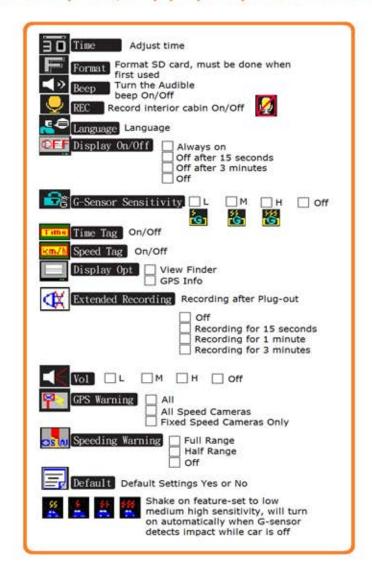
- 1. Hold central stick, the device stops recording.
- Select video clip by pushing stick left or right.
- Click the stick to play or stop.
- 4. Click EVENT RECORDING BUTTON to exit.



Main Menu

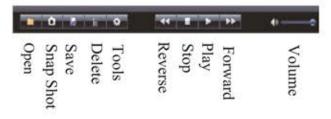
Push central stick to the right to enter menu, click it to confirm and Push it to the left to exit.

To MUTE incoming or current alerts for such reasons as you're on the phone, simply tap the power button once



Insert the Micro SD card provided into the computer and double click the ADR icon. The below interface will appear. You can replay video from the SD card, delete locked files or save and share them from your computer. Go to AppTronics.com for video demo on how to use your ADR player further.

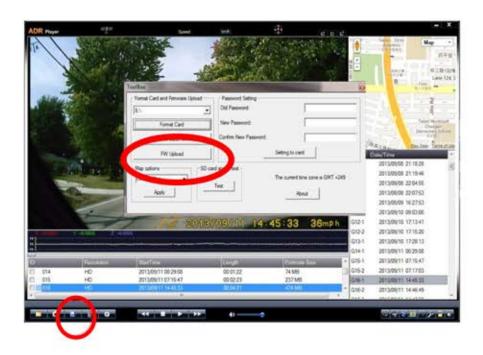






Database and Firmware Update

- Download the latest firmware from our web site (www.app-tronics.com),lanc save it on the desktop.
- 2. Insert SD card into a computer, then open
- 3. Click Tool button.
- 4. Click FW Update. Select the firmware file.
- 5. It will take a few seconds to upload new firmware to SD card.
- 6. Insert SD card into NDR-23.
- Power on NDR-23 and hold central stick until the display shows FW Updating...
- 8. It will take a few minutes to upload firmware to NDR-23.
- 9. After uploading is done, click the central stick.



Specifications of components

NDR-23

Lens: F/2.8

2. Image sensor: 1.3M CMOS

View angle: 110°

4. Built-in lithium battery

2.5"TFT LCD display

Compression format: M-JPEG(AVI)

7. Resolution: 1280*720@30fps

Media: Micro SD, Class6~10, up to 32G.

Loop, seamless recording.

10. Event recording button

11.3 axes G-sensor

12. Language: 11 language supported

13. GPS: Latest GPS module

14. Google Map Integrated replay

15. Speed camera warning

16. Free database update

17. User programmable warning spots

18. Working temperature: -13 to 125 degrees

19. Input: DC12~24V

20. Dimension: 70*65*22mm

21. Weight: 97g

22. Material: PC/ABS

Radar Detector

Input: DC 12V

X band: $10.525 \text{ GHz} \pm 50 \text{ MHz}$

K band: 24.050-24.250 GHz ± 100 MHz New K band: 24.125 GHz ± 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!

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 NDR-23 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

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:

warranty below takes place.

- 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.

App-Tronics, LLC and its licensors shall retain all copyright, trade secret, patent and other proprietary ownership rights in the software and data. The software and data is copyrighted and may not be copied, even if modified or merged with other products. The purchaser shall not alter or remove any copyright notice or proprietary legend contained in or on the software and data. The purchaser may transfer all of his/her license rights in the software, data, the related documentation and a copy of this License Agreement to another party, provided that the party reads and agrees to accept the terms and conditions of this License Agreement. 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 Vehicle owner signature

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.