

# APP-TRONICS NDR-23



**DVR**  
**Personal**  
**Driving Recorder**

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### **Caution**

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



## NDR-23 Personal Driving Recorder

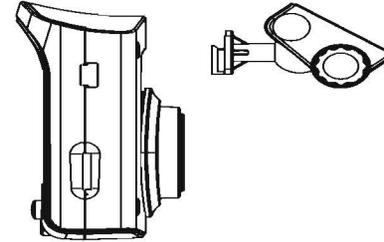
This Manual covers all the abilities of the NDR-23, within this manual you will read how the NDR-23 can alert you to Law enforcement Radar guns and diffuse their Laser guns. You must purchase the complete 2300is system or the Stealth Upgrade Kit to receive those wireless alerts through the NDR-23. One radar detector, 2 super high powered laser diode diffusers and the power supply come with the Upgrade Kit. please look at the Stealth Interceptor 2300is for further details on the complete system.

## 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.
3. Hang NDR-23 on the bracket. Try to insert the hook all the way to the end. Adjust angle and fasten the screw.



4. 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.
5. 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.
6. 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.

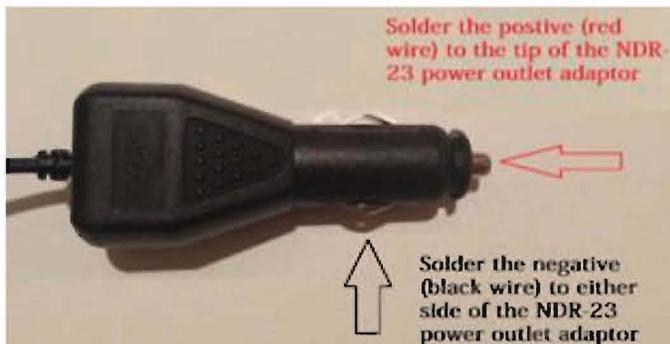
**Warning** Even though it is easy to install the unit, we still recommend you to find a professional to help if you don't feel comfortable doing it by yourself. **DO NOT CUT THE POWER ADAPTOR FROM THE HARNESS**, its needed to regulate different voltage needed.

1. 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 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.

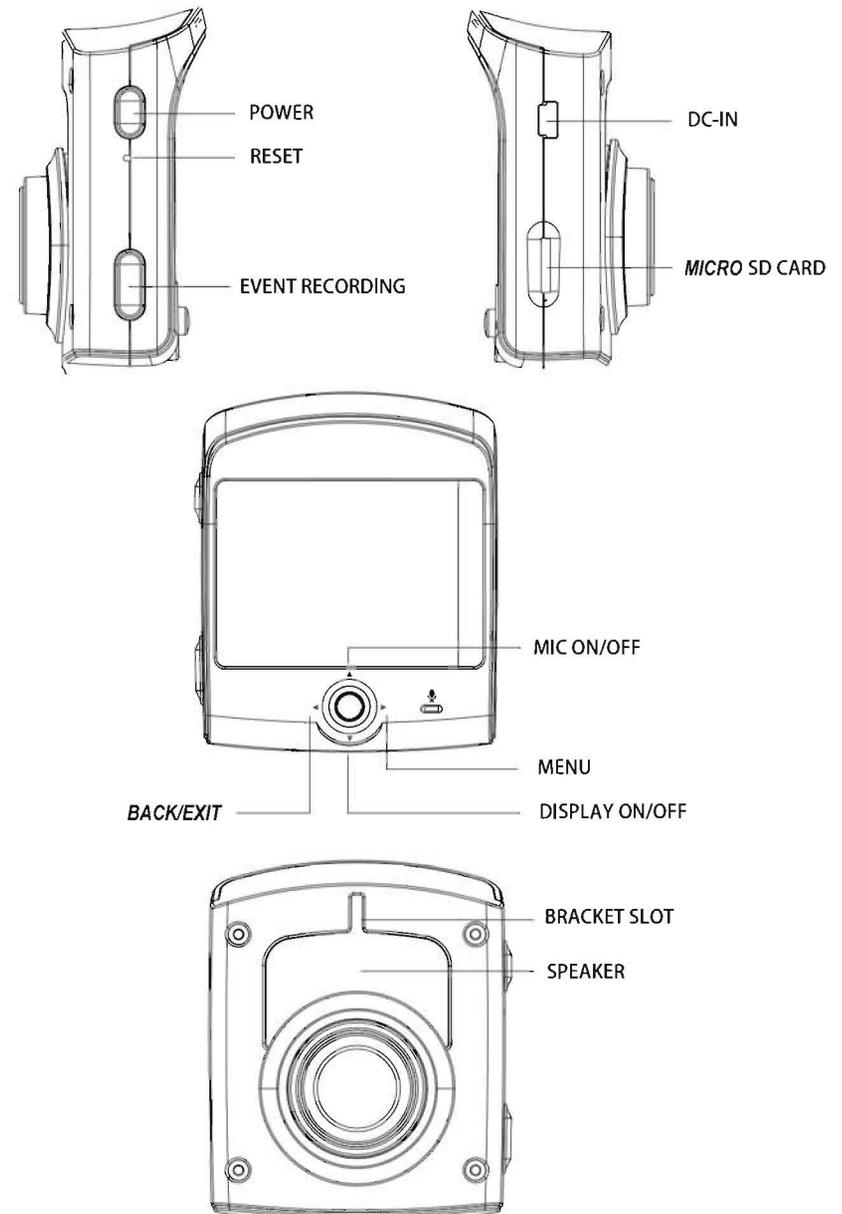


**Female adaptor kit to hardwire your NDR-23 into your vehicle (Not always supplied)**

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 2300is).



## Overview of NDR-23



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 App-Tronics.com for video demo on how to use your ADR player further.



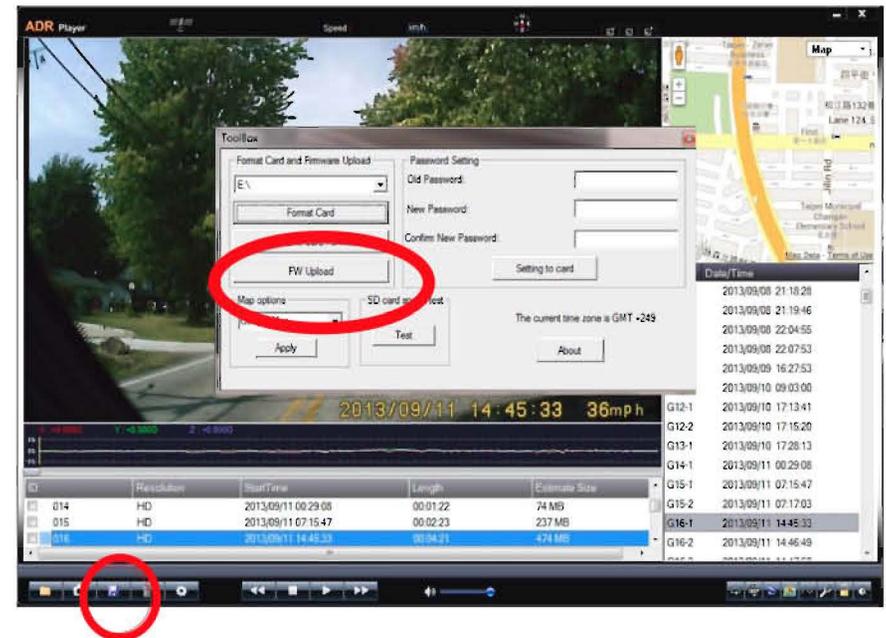
Volume  
Forward  
Play  
Stop  
Reverse  
Tools  
Delete  
Save  
Snap Shot  
Open



Adjustment  
Unlock  
Repair  
G-Sensor  
Map  
KML  
Rotate  
Loop

## Database and Firmware Update

1. Download the latest firmware from our web site ([www.app-tronics.com](http://www.app-tronics.com)), and 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.
7. 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.



## 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 Instant-on/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.

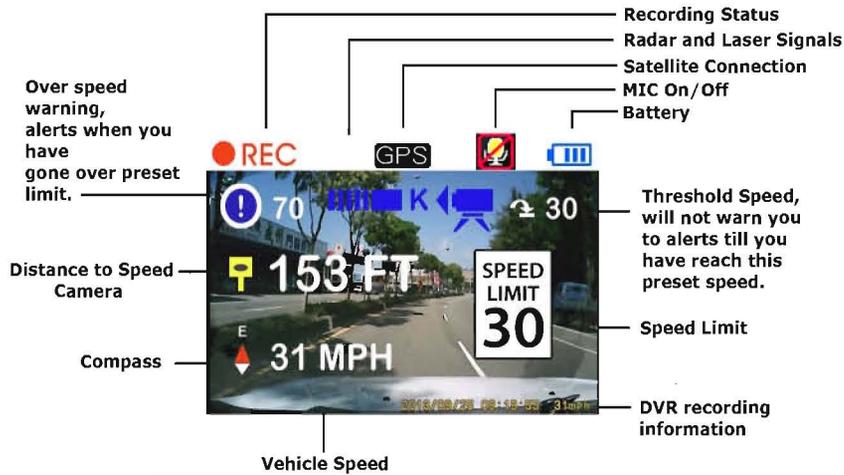
### STS (Signal Tracking System, Optional)

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.



**Replay**

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

**Toggle joystick to the left and cycle thru the 3 different home screens**

**Toggle joystick down and this will darken your display till an alert comes through, after alert, screen goes dark again**

**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

- Time** Adjust time
- Format** Format SD card, must be done when first used
- Beep** Turn the Audible beep On/Off
- REC** Record interior cabin On/Off
- Language** Language
- Display On/Off**
  - Always on
  - Off after 15 seconds
  - Off after 3 minutes
  - Off
- G-Sensor Sensitivity**  L  M  H  Off
- Time Tag** On/Off
- Speed Tag** On/Off
- Display Opt**
  - View Finder
  - GPS Info
- Extended Recording** Recording after Plug-out
  - Off
  - Recording for 15 seconds
  - Recording for 1 minute
  - Recording for 3 minutes
- Vol**  L  M  H  Off
- GPS Warning**
  - All
  - All Speed Cameras
  - Fixed Speed Cameras Only
- Speeding Warning**
  - Full Range
  - Half Range
  - Off
- Default** Default Settings Yes or No
- Shake on** feature-set to low medium high sensitivity, will turn on automatically when G-sensor detects impact while car is off

## Specifications of components

### NDR-23

1. Lens: F/2.8
2. Image sensor: 1.3M CMOS
3. View angle: 110°
4. Built-in lithium battery
5. 2.5" TFT LCD display
6. Compression format: M-JPEG(AVI)
7. Resolution: 1280\*720@30fps
8. Media: Micro SD, Class6~10, up to 32G.
9. 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

## App-Tronics NDR-23 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](mailto: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 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:

1. To any product damaged by accident;
2. In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs;
3. 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.

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