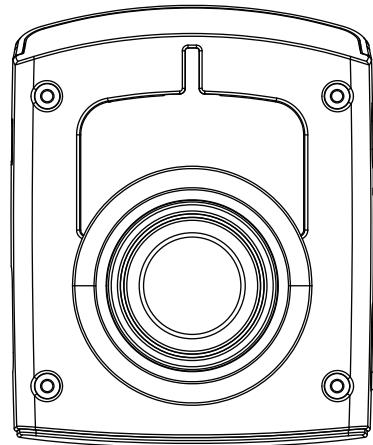


**TMG** *DR-1*

*GPS DRIVING RECORDER*

## Operation Manual



Facets Product Design & Development Ltd.  
**Taiwan Microwave Group**

[www.TMG-FACETS.com](http://www.TMG-FACETS.com)

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## Introduction

Thank you for purchasing DR-1 GPS DRIVING RECORDER, one of the most innovative and sophisticated road safety monitoring systems available today. Please be sure to read this manual to familiarize yourself with the features and operation of this product. Enjoy the trip with TMG and drive safely.



### ***Caution***

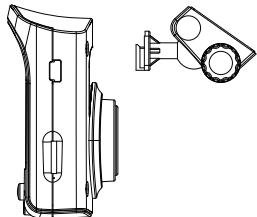
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Motorists are expected to exercise all due caution while using this product, and to obey all applicable traffic laws. To prevent theft, always conceal this product before you leave the vehicle.

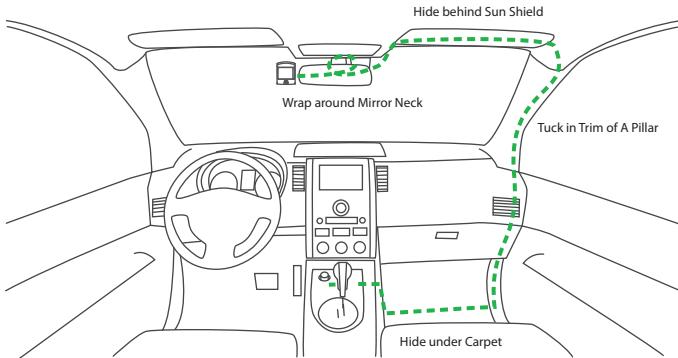
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## Installation

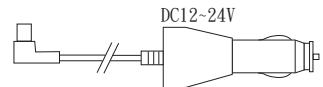
1. Wipe windshield with cleaner.
2. Remove sticker cover and press the hook against windshield.
3. Hang DR-1 on the bracket. Try to insert the hook all the way to the end. Adjust angle and fasten the screw.



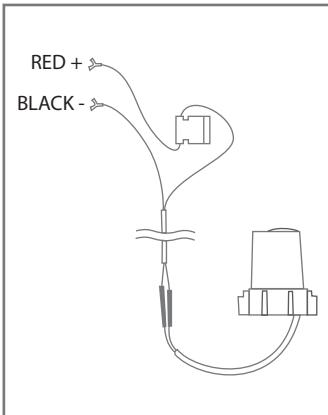
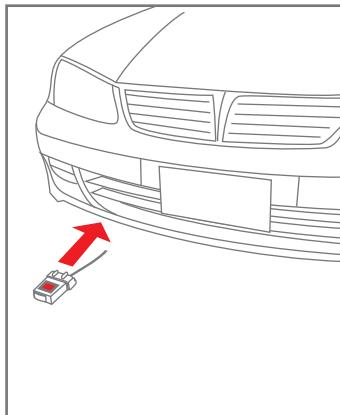
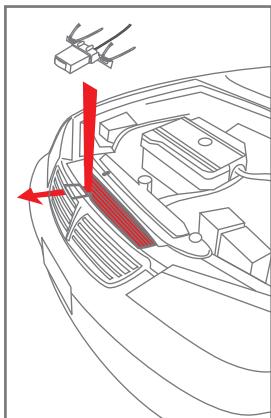
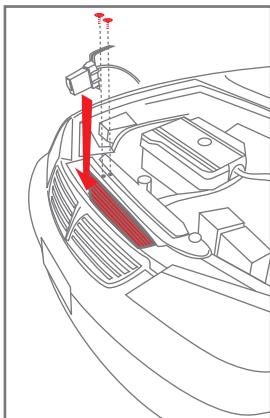
4. Organize wire as shown below.



5. Plug in cigarette lighter plug. It can accomodate a 12~24V power source.



## Installation- Wireless Radar Detector(Optional)



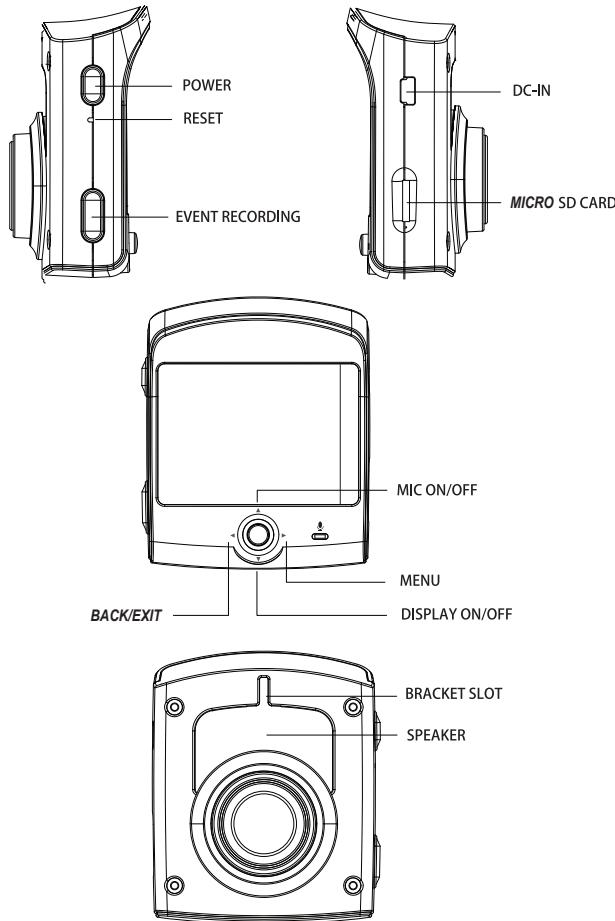
Only DR-1 with built-in RF receiver works for wireless radar detector. Please make sure to acquire correct model.

1. Install it with screws, cable ties or double-sided tape between grille or under the bumper.
2. Make sure there is no metal parts blocking the front of radar detector.
3. Connect black wire to “-” and red wire to “+” on the battery.
4. Organize cable by cable ties.
5. Radar detector works better for some types of radars when it is installed vertically. Please consult the local dealer for best solution in your region.

### **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.

## Profile



## Main Features

### 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 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 once the number exceeds 10.

## Specifications of Video Camera

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: -20~+75°C
19. Input: DC12~24V
20. Dimension: 70\*65\*22mm
21. Weight: 97g
22. Material: PC/ABS
23. Product origin: Taiwan

## Specifications of Radar Detector(Optional)

Input: DC 12V  
X band: 10.525 GHz ± 50 MHz  
K band: 24.150 GHz ± 100 MHz  
New K band: 24.125 GHz ± 100 MHz  
Ka band: 33.4 ~ 36.0 GHz  
(Coverage can be adjusted in some regions.)  
LASER: 904nm  
Operation Temperature : - 25 oC ~ + 85 oC

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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.

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## Features

### 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, DR-1 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

DR-1 “knows” the speed limit of the road you are currently driving on by a built-in speed limit map. DR-1 activates its optional radar detector only when you exceed speed limit under Adaptive Threshold Mode.

### Radar/ Laser Detection(Optional)

DR-1’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.

### Emergency Vehicle Warnings(Optional)

DR-1’s optional radar detector reacts to SWS (Safety Alert® Traffic Warning System).

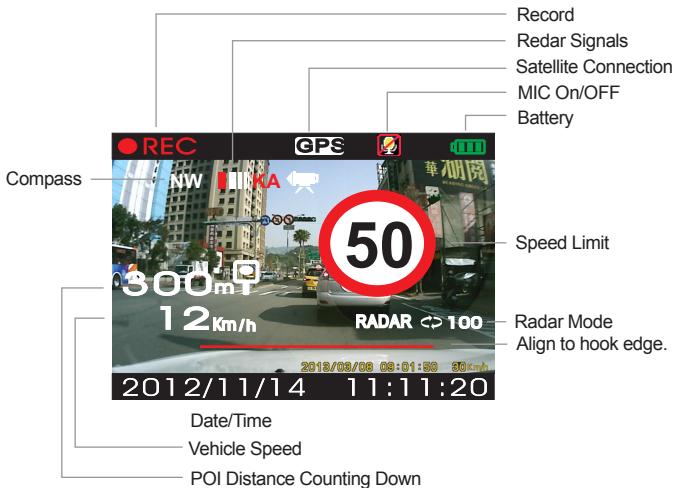
### STS (Signal Tracking System, Optional)

Radar signals with increasing intensity will be tracked by DR-1’s optional radar detector, and the alert will not be interrupted by temporary interference to hold user’s awareness of a true threat.

## Getting Start / Display / Replay

### Getting Start

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.

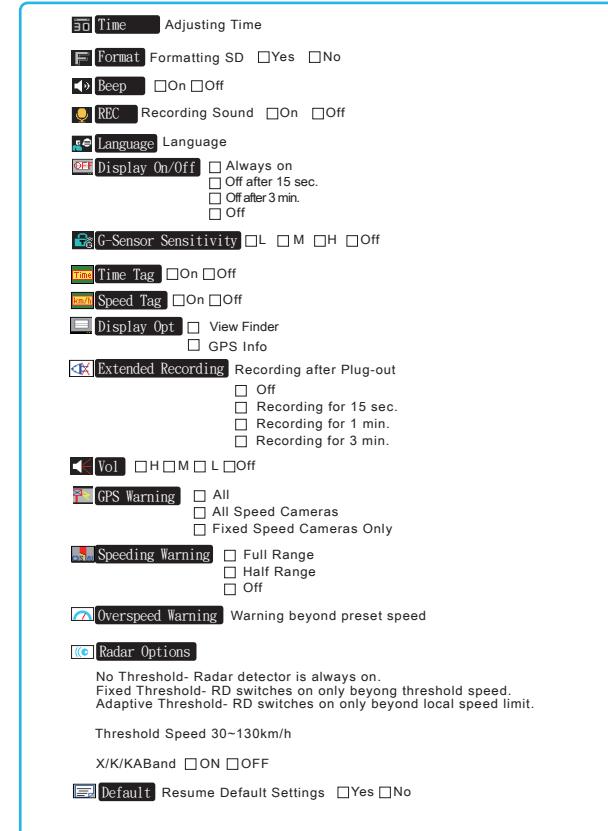


### Replay

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.

## Main Menu

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



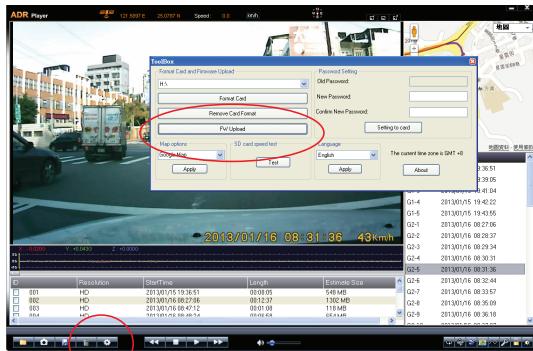
## Replay and Firmware Update

Insert SD card to a computer and double click . The following interface will appear. You can replay video in the SD card, delete locked files or save video onto your computer.



## Database and Firmware Update

1. Download the latest firmware from our web site (www.TMG-Facets.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 DR-1.
7. Power on DR-1 and hold central stick until the display shows FW Updating...
8. It will take a few minutes to upload firmware to DR-1.
9. After uploading is done, click the central stick.



## Report to Us

Please report new cameras or wrong database spots to us. We will update our database usually with-in 48 hours.

Thanks for new technologies, reporting is never so easy.

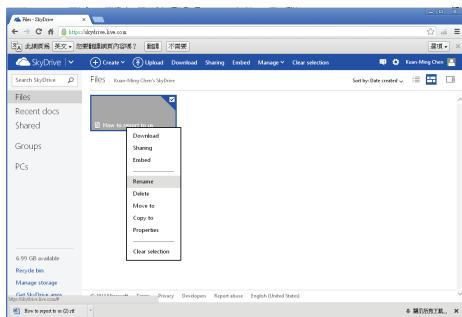
Please save the video with what you want to report to us by event recording button. Click event recording button about 10~30 meters after the spot. Retrieve the video file on a computer, then change the file name to include what you want to report to us, direction type and what the speed limit is. For example, you can make the file name as “New fixed camera 50 km h uni directional”, “New red light camera bi directional” or “Missing school zone 30km h 8AM to 16PM all direction”. Please notice you can not use any mark such as “/” or “\_” in a file name. Drag and drop it onto our Skydrive space.

<https://skydrive.live.com>

Account name: facetstmg@gmail.com

Password: tw034945150

You can also change file name on Skydrive through right button on the mouse.



## Trouble Shooting

Problem	Possible Cause	Solution
No sound	Volume off	Switch on sound by pushing central stick to the right, then selecting volume to set up.
No connection to satellites	Satellites signals are blocked by tint film.	Change tint film as non-metallic type or make a hole on tint film above the device.
System doesn't proceed.	System error	Re-start the device, or push the reset switch by a pin.
Missing fixed cameras	Cameras not in the database	1. Update firmware. 2. Report to us.

## Warranty & License Agreement

### One Year Limited Warranty

For period of one year from the date of first consumer purchase, Facets Product Design and Development Limited will, without charge, repair or replace, at its option, defective TMG products upon delivery to Facets Service Department or an authorized Facets 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. For efficiency reason, be sure to talk to one of our service representatives first, either through phone, e-mail or forum, before shipping the product for service. From our experience, most problems can be solved by our representative's instructions. Our authorized dealers and service agents can be found on our website at [www.TMG-FACETS.com](http://www.TMG-FACETS.com)

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. Facets shall not be liable for any

incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

It is the user's responsibility to use the product prudently and responsibly. This product is intended to be used only as a travel aid and must not be used for a precise measurement of direction or distance.

### License Agreement

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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.

Facets 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.

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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.

#### **FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT**

**This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:**

- Reorient or relocate the receiving antenna.**
- Increase the separation between the equipment and receiver.**
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- Consult the dealer or an experienced radio/TV technician for help.**

#### **CAUTION:**

**Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**