User Manual of 18X Radar Detector

Table of Content

1. Summary

1.1 Features
1.2 Notice
1.3 Structure
1.4 Accessories

2. Basic Operation

2.1 Getting-Started
2.2 Power on/off
2.3 Installation

3. Program & Detection

3.1 Volume setting
3.2 Mode Selection
3.3 Sensitivity
3.4 Bands switch
3.5 Language Setting
3.6 Detection & alert

4. Maintenance & Service

4.1 Specification
4.2 Troubleshooting
4.3 Warranty

Summary

FEATURES

1. Full Band Radar Detecting coverage of X, Ku, K, Ka & Laser
2. Urban/highway mode switch to eliminate false alert
3. Free Switch to make the alert from its own speaker or from the PND'S
4. Volume adjustable
5. Distance to the position of fixed speed cameras counting down.(Only in combination of compatible PND with our software)

Notice

1. Please install the detector properly following the User Manual. A rule must be complied with is in whatever way the detector installed, it mustn't impair the motorist's view or increase the risk of an accident.
2. Depending on your car, the power supply of the cigarette lighter socket would be continuous or can be switched on/off by your ignition switch. So before you leaving the car, confirm the status of the detector. Do not leave the detector alone to be longtime running, this may lead to complete consumption of car battery or shorten the life of the detector.
3. Before leaving your car, always remember to conceal your detector in a safe place. To avoid the possibility of break-in theft or distortion of shape due to the heat of longtime exposure in the sun(sometime the temperature in car would be a hundred Celsius or above in Summer)
4. Do not disconnect the detector from PC in the whole process of updating. Or this may result in the instability of system.
5. Use standard 12V DC power supply to the detector. Nothing should cover or overlie the detector while in use.

Structure

Item	Name	Note
1	Voice/Bit rate Switch	Switch to the speaker position, the alert sound from detector's speaker; to the 96 position, the signal transmitted to PND.
2	Audio Vol. Button	Switch to adjust the audio volume , 2 levels
3	Mode Switch	Urban/Highway mode switch
4	12V DC Power socket	12V DC Power input socket
5	Plug slot	Slot to fasten the bracket in
6	5V DC Power Socket	5V DC Power Supply to PND
7	Indicator	Long indicates the transmitting of Signal; blink indicates the condition of power supply. 长亮或长暗表明有信号传输
8	Speaker	Where the alerts come from

Accessories

Items	Photo	Description
12V DC power cable		3m long power cable with fuse and push switch
Bracket with tenon		Easy to remove just unlock and pull the tap. 360 degree rotation Hang your GPS with any position you prefer, turn any angle, bend to different shape. Easily adjust to your desired viewing angle for optional viewing.
Adapter		To connect radar detector and the PND holder

5V mini USB cable		To supply power and transmit signal to PND
4.3”Portable Navigation Device		To display maps and radar alerts
PND holder		PND holder with mortise to lock the PND to radar detector. Mortise a hole or recess cut into a part which is designed to receive a corresponding projection (a tenon) on another part so as to join or lock the parts together 榫孔，榫眼 a mortise and tenon joint

Basic Operation

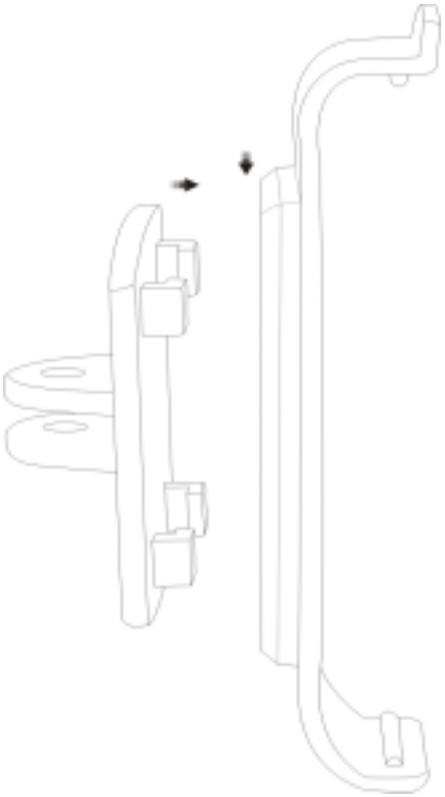
GRD-180 works independently especially for those mobile devices measuring seed by emitting radar/laser signals.

Or it operates combined with a PND and transmits alerts to PNDs.

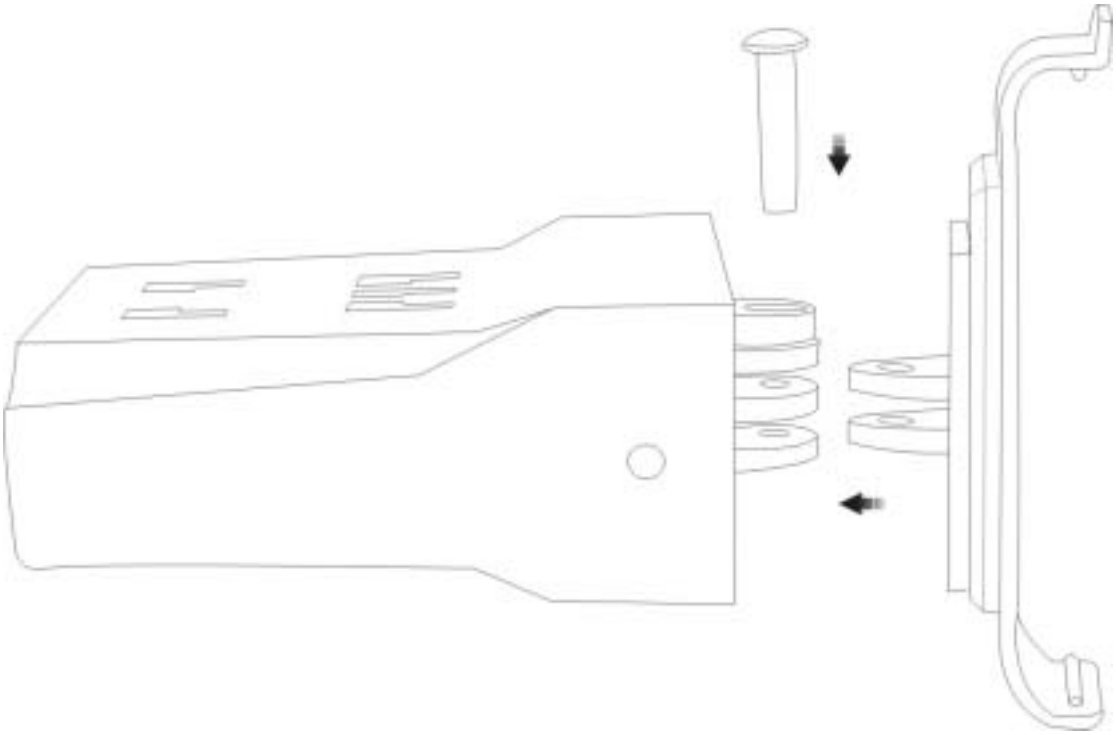
Getting-Started

Please simply follow these steps to get started:

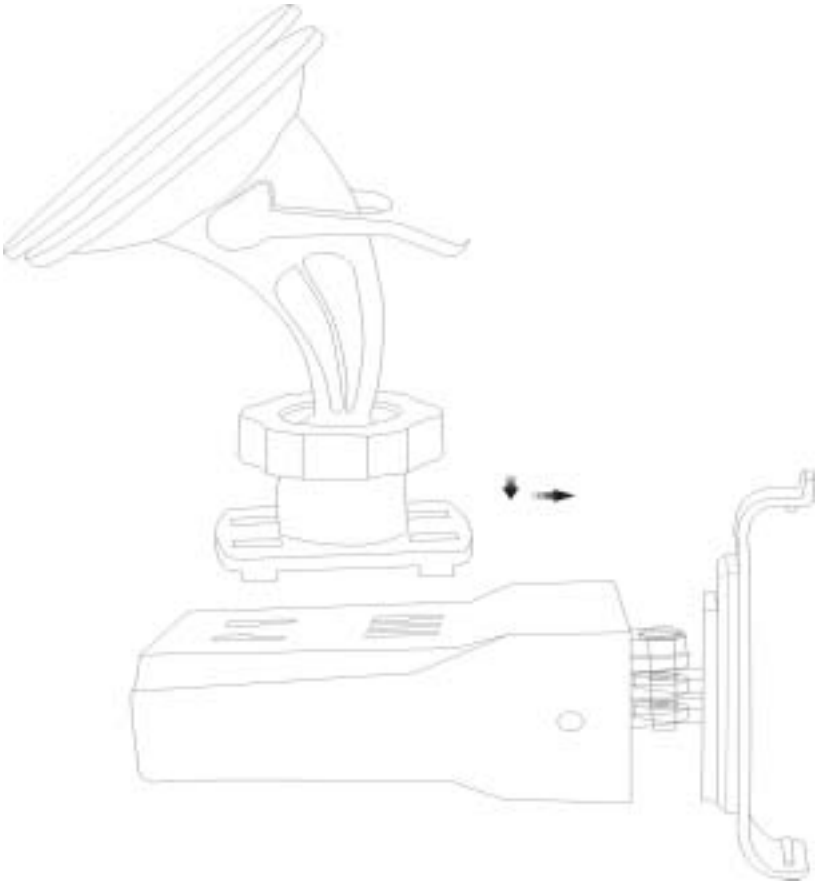
1. Lock the holder to the adapter by joining and pulling



2. Screw the adapter to the bottom of the radar detector.



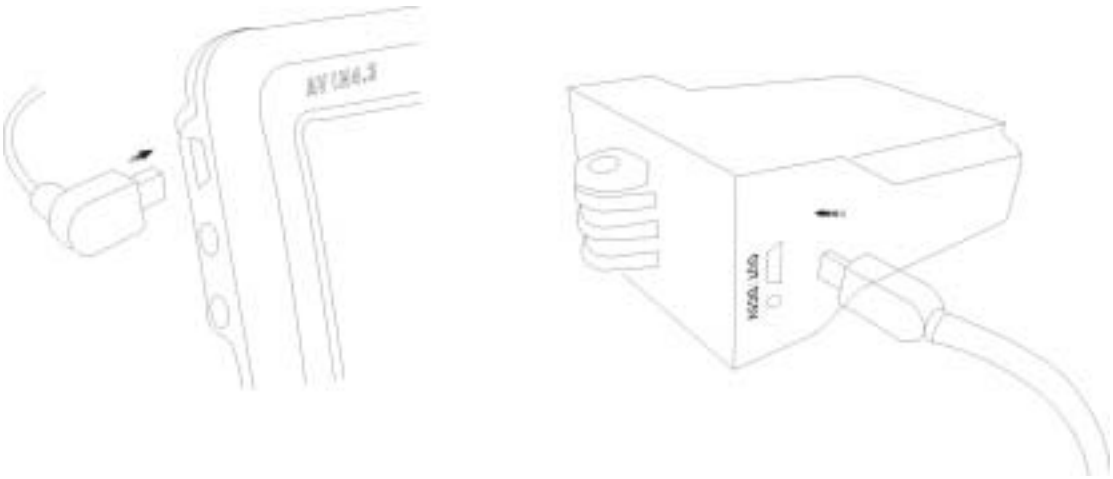
3. Lock the bracket to the radar detector by inserting to the mortise and pulling.



4. Dock the PND to the holder securely with the tenon into the mortise, as below

5. Insert the right angle shaped end of the mini USB cable to the PND power socket and another end

to the output socket of radar detector.



6. Plug the small end of the power cord into the power socket at the left side of the detector, and plug the adapter of the other end into the car's cigarette lighter socket.

Mount the whole combination to windshield by the suction cup, select a right position and adjust the suitable viewing angle. Never install the device to impair the motorist's clear view or increase the risk of an accident.

7. Press down the red button at the adapter to connect power. After the red indicator lights up, the detector beeps and power on.
8. After power on, the red LED indicator on right side of radar detector blinks, when it is long time on or off means the signal transmission in process.
9. Change the voice/bit rate switch to the speaker , the alert will come out from the detector's speaker; If in a combination of a PND, just change to 96.

Program & Detection

Volume setting

In working condition, press VOL button for audio volume adjust. There are 3 levels selectable: loud, medium and quiet. Each press will sound the current selected level.

Mode Selection

In working conditions, press MENU button to select working mode. Totally 2 options, one is urban mode and another is highway mode. When urban mode is selected, the voice of alert will automatically decrease because there are much more false alerts when driving in streets.

Alert Mode Selection

The radar detector works independently or combined with a PND. When it operates solely the alert is not voice from its own speaker. In the integration of a PND, the alert will be transmitted to PND to make visible and audible alerts.

1. To change the voice/bit rate switch on the top of the radar detector, at the speaker end the voice alert comes from the radar detector.
2. To connect a PND by the enclosed mini USB cable, the right angle shaped end to PND's power socket and the other end to the 5V DC output on the right side of the detector.
   Change the voice/bit rate switch to the 96 end to make the signal transmitting to PND.

   NOTE: The performance of this function subject to the operation of our Radar Detector software in PND.

Detection & alert

When radar or laser signal detected, the radar detector will make voice alerts like "radar X band", then beeps. Stronger the signal the shorter the beeps are.

In the combination of a PND and radar detector software works properly, when radar/laser signal detects, there will prompt an icon on screen. The icon indicates the radar band and also with voice alert.

NOTE: No matter in whichever way the detector mounted, for the best detecting performance, never mount behind wipers, signs, strong metal films, etc. These will affect the receiving of radar and laser signal and result in the delay of critical warning time. The direction of the radar antenna should be horizontal forward or slightly down to the road, but never face to the sky or to the side of the car.

The detecting range varies due to many factors, e.g. the traffic flow, the weather (fog, moisture and drizzle absorb the radar signal) and the geography, etc. If you are experiencing the short warning range, adjust the detector's position and angle.

Maintenance & Service

Specification

Radar Detecting Frequency:

Bands	Frequency	Sensitivity
X-BAND	10.42~10.62GHZ±20MHZ	105±2dB
Ku-BAND	13.32~13.54GHZ±20MHZ	105±2dB
K-BAND	23.9~24.3GHZ±20MHZ	124±2dB
Ka-BAND	34.1~35.82 GHZ±20MHZ	124±2dB
Laser beam	800~1100nm	/
VG-2	11.150±175MHZ	/

Main unit：

Measurement(mm)	Bracket 116L x 145 W x 66 H(Max.) PND 120L x 83W x 14H
Volts input	DC12V-15V
Currency input	150～300mA
Operation temp.	-25℃～85℃
Storage temp.	-30℃～105℃

Troubleshooting

Problem	Solution1	Solution2	Solution3
No display	Check the power supply	Indicator of the adapter/or replace the fuse	The lighter socket clean or not
Continuous abnormal alerts	Check if interference nearby	Restart	Change to another vehicle to test
No audio or quiet	Check the volume setting	Restart	Change to another vehicle to test

Warranty

Federal Communication 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 radiates 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 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.

This device complies with Part 15 of the 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.

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