

User Manual

of



GRD-2010

Table of Contents

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. Chinese/English bilingual announcement free switch.
2. Super radar detection by high sensitive VCO waveguide.
3. Precise Radar frequency display
4. Clear digit display of 9 band Radar signal strength
5. Band switch- each band alert can be switched off/on separately
6. 3 levels of radar sensitivity adjustable- medium/high/ultrahigh
7. Urban/highway mode switch to eliminate false alerts
8. Full band detection(X, K, new K, Ku, Ka, new Ka, 6/8F, VG-2, 360°Laser)
9. Push button style power switch design
10. Volume adjustable by pressing keys.

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. Use standard 12V DC power supply to the detector. Nothing should cover or overlies the detector while in use.

Structure



Item	Name	Note
1	Radar antenna	For receiving radar signals
2	Mounting bracket slot	To insert the kits of sucking cups or visor for mounting detector in car
3	Laser lens	Receiving laser signal
4	----	----
5	Bracket release button	To lock or release the bracket to detector safely and quickly
6	12V DC power socket	To connect the small end of the power cord for power supply
7	Speaker	Where the announcements and alerts come from
8	Cooling holes	For heat dissipation of detector
9	Function buttons	4 buttons of different functions, press single or 2 together to perform
10	Display screen	Radar bands, signal strength etc. display

Accessories

Enclosed in package:

Detector

12V DC car power cord

Windshield mounting bracket

U shaped visor mounting kit
Strong magnet
User manual
QC certificate

BASIC OPERATION

Getting-Started

To begin using your GRD-2010, simply follow these steps below:

1. Plug the small end of the power cord into the power socket at the right side of the detector, and plug the adapter of the other end into the car's cigarette lighter socket.
2. Mount the detector on the windshield using the supplied windshield mounting brackets.
3. Press down the red button at the adapter to connect power. After the red indicator lights up, the icons in display screen all flash with 2 beeps. Then the announcement of current mode and sensitivity settings comes out and the detector comes into working condition.
3. Adjust the audio volume by pressing M2 and M3 button on the top case of the detector

Now GRD-2010 is ready to use. Please read the manual carefully to fully understand the operation and features.

Power on/off

The detector operates on 12 volts DC power only. The adapter of the power cord end has a fuse and a switch.

NOTE: Please connect power to detector after the engine starts, to prevent the over-current shock while igniting.

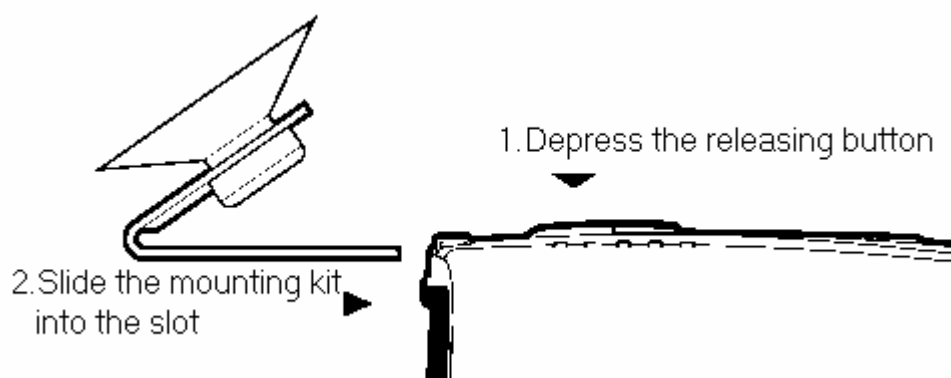
1. To power the detector, just plug the small end of power cord into the socket at the right side of the detector, plug the adapter of the other end into Car cigarette lighter socket. Then press down the red button of the adapter.
2. To power off, long press M4 button. In case of an abnormal condition, just cut the power supply. (Not recommended)

Installation

The manufacturer cannot anticipate the way the detector is installed. The ways showed bellow is most common; end users can make changes due to the real situation, but under the principles of never endangering driving safety.

1. Mounting on windshield.

Depress the bracket releasing button on the top of the detector, then slide the mounting kit with sucking cups into the slot at the central top of radar antenna end (see STRUCTURE) Until the kit is locked by the slot.



Mount the cups to windshield by pressing down to windshield glass. Be sure to make the glass and cups both are clean. The mounting position should have a clear view of the front. Bend the bracket if necessary, but slide the bracket off the detector before bending.



2. Mounting on the sun visor

Depress the bracket releasing button and slide the short end of the U shaped bracket into the mounting slot until locked. Then mount the detector to the front edge of the visor board, make sure the radar antenna facing the front and bend the bracket if it grips the visor loosely.

3. Mounting on dashboard

There is a strong magnet enclosed to mount your detector to the dashboard. Tear the plastic paper of the red side and stick the magnet at a right place of the dashboard. Simply put the detector on magnet.

Don't glue the magnet to dashboard if it is already strongly attracted.

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.

PROGRAM & DETECTION

Working Condition shows as below:



Volume setting

In working condition, press button M2 for audio volume increase and M3 for decrease. Each press gets the announcement of current mode (urban or highway mode) and the number in display screen indicates the current level-totally 9 levels.

Mode Selection

In working condition, press button M1 to switch between City/highway mode. Voice announces the current selected mode. If highway selected the icon H illuminates otherwise no indications.

NOTE: In city mode, many false alerts will be eliminated. Usually the interference signals come from automatic door opener, bank security system, and other devices which share frequencies with police radar. But remember to get back to highway mode if you are driving in open road.

Sensitivity

In working condition, press button M4 to adjust Radar sensitivity. There are totally 3 levels-medium, high, ultrahigh. Voice announces when a level is selected and also the name displayed in screen.

Bands switch

In working condition, press and hold button M1 and M4 together for over 5 seconds. Here entering the bands switch menu, We can switch on/off alert of a certain band, press M3 for options and M2 to set values. Each operation has voice announcement as well as visual indication.

Options are X-Band/Ku-Band/K-Band/Ka-Band/Ka1-Band/Ka2-Band/Laser/Mode and language in sequence.

Press button M4 to quit or no operation for 10 seconds returns to working condition.

Language Setting

The same as the above operation, change the value of the last option until you hear the announcement in your language. There are 2 selections-Chinese and English.

The same method as above to quit.

Detection & alert

When radar signal detected, the name of the band in screen flashes and voice alert comes out. At the same time the screen show the precise numerical frequency in 4 digits and the signal strength, e.g. Ka 35.80 3. This stands for radar signal of Ka band detected, frequency is 35.80GHz, and signal strength ranged for level 3.

MAINTENANCE & SERVICE

Specification

Radar Detecting Frequency:

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

Main unit:

Measurement(mm)	115L x 73 W x 35 H
Volts input	DC12V-15V
Currency input	150~300mA
Operation temp.	-25 $^{\circ}$ C~85 $^{\circ}$ C
Storage temp.	-30 $^{\circ}$ C~105 $^{\circ}$ C

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.