

GPS Positioning Terminal

Model: R56L



User Manual

Statement

Hello! Thank you very much for using the R56L car terminal (mobile user terminal) product. Please read this manual carefully before using it. Please pay attention to all the precautions and warnings mentioned in the manual. Please keep this manual properly for reference.

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1.Product Introduction

The R56L positioning terminal is an OBD positioning terminal with rich functions and a wide range of applications. The device adopts AT6558R chip and supports GPS and Beidou satellite system. In addition to satellite positioning, the device also supports single base station and multi-base station positioning. Rich extension functions, please refer to the following description about extension functions. The self-developed hardware monitoring circuit is integrated to make the equipment work reliably and stably for a long time, and it can automatically recover when an abnormality occurs.

2.Product Features

- Built-in GSM/GPS antenna;
- Built-in 4G CAT1 chip, compatible with 2G/4G network communication;
- · Built-in high-power surge protection circuit;
- Built-in hardware monitoring circuit, automatic recovery of abnormal status:
- Built-in battery switching circuit, support power failure alarm;
- Built-in vibration sensor, support vibration alarm;

- Supports all deployed and upcoming global navigation satellite systems (GNSS)
- Support global multi-base station and satellite positioning mode;
- Support voltage input 9-36V
- Support OTA remote upgrade;
- Adopt IP65 waterproof design;

3. Specification

Project	Specifications	Remark
Operating Voltage	DC 9V - 36V	
Working current	30mA 12V	
Static current	Quiescent current 5 mA	When not charging
Targeting	GPS+BDS+LBS	
Positioning error	< 10M	
Communication network	2G/4G	
Communication frequency band	C:B1/B3/B5/B8/B34/B38/B39/B40/B41 EU:B1/B3/B7/B8/B20 SA:B1/B2/B3/B4/B5/B7/B8/B28/B66	Select the applicable version according to the region
Way of communication	TCP	
Range of working temperature	- 30 °C ~ + 80 °C	

Working humidity	35% ~ 80%	
Standard sizes	L54mm*W34mm*H32mm	
Backup battery working time	About 0.5h	
warranty period	1 year	

4.Appearance diagram



By looking at the status indicator, you can understand the working condition of the device. The status of the indicator is as follows:

Push cover direction

LED Color	LED light status	Description
	Slow flash	GSM initialization
Yellow	Always on	GSM/GPRS online
	Not bright	No GSM signal/no card inserted / shut down
	Slow flash	BD/ GPS signal search
Blue	Always on	BD/ GPS positioning success
	Not bright	GPS sleep/not working /shut down

5.Installation Notes

5.1.Installation Tutorial

Installation: first open the back cover, into the SIM card (middle card), then close the back cover. (as shown in the figure below)



The thumb of the left hand isin the direction of the arrowThe right thumb is opened inthe direction of the arrow



Open the cover and see the SIMcard holder in the direction of the arrow



SIM card holder opens in the direction of the arrow



SIM Install SIM card Buckle back theSIM card cover



Bucklebackthe SIM card cover

5.2.Installation Precautions

The installation method of the terminal is hidden installation, It is recommend to be installed under the guidance of professional and technical personnel designated by the dealer, and pay attention to the following items:

- * In order to avoid damage by thieves, the location of the equipment should be as concealed as possible;
- Avoid putting it together with the emission source, such as reversing radar, anti-theft device and other vehicle communication equipment;

* The device has a built-in GSM antenna and GPS antenna. When installing, make sure that the front is facing up, and there is no metal object blocking the shielding above.

6.Installation Diagram



OBD common installation location:

Area A: some models of Audi, GM, Honda and other brands Area B: Volkswagen, BMW, Ford, Hyundai,

Mercedes-Benz, etc.

Area C: a small number of models such as Touran and Lexus Area D: Peugeot, Citroen, Changan, Renault and other models

The vast majority of car OBD installations are located under the steering wheel

7.Instruction of Comnon Commands

7.1. Common Commands setting

Command function	Command format	Remark
Set online	SERVER, [mode] , [DomainName/IP] , [port] ,0# SERVER,1,gps.whats gps.com,6801,0# SERVER,0,47.56.208. 182,6801,0#	mode = 1 use domain name setting mode = 0 use IP settings
Set APN	APN, [apnname]# APN, cmiot#	APN varies according to different local telecom operators
Set upload interval	TIMER,[T1]# TIMER,10#	T1: 5-18000 seconds, motion upload interval, the device defaults to 10s;
Heartbeat interval setting	HBT,[T]# HBT,3#	T1: 60-360S, default 180s
Set time zone	GMT,[A],[b],[C]# GMT,E,0,0#	A=E/W, representing the Eastern Time Zone and Western Time Zone respectively: B:0-12, representing the time zone; C: 0, 15, 30, 45, means half time zone, the default is 0.

7.2.Common query commands

Command function	Command format	Remark
Query parameters	PARAM#	Query the parameters currently set by the device
Query status	FACTORY#	Query the current working status of the device
Device restart	RESET#	

7.3. Commonly used control commands

Command function	Command format	Remark
Vibration alarm	SENALM,[A][,M]# SENALM, ON, 1# SENALM,OFF# SENALM#	A=ON/OFF, default is OFF; M=0/1/2/3, Alarm mode: 0 only GPRS I:SMS+GPRS, 2:GPRS+SMS+PHONE 3:GPRS+PHONE The default alarm mode is 1 SENALM# query vibration alarm settings

2 Power alarm	POWERALM, [A][,M]# POWERALM, ON,1# POWERALM, OFF# POWERALM#	Alarm mode : 0 : only GPRS, 1: SMS+GPRS, 2: GPRS+SMS+PHONE, 3:GPRS+PHONE The default alarm mode is 0.
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8. Troubleshooting

When operating the terminal, if you feel that the device is abnormal, please refer to the following problems and solutions. If the problem still cannot be solved, please contact the seller or service provider.

Common Problem	Reason	Solution
Poor signal reception	Use the terminal in areas with poor signal reception, such as near tall buildings or in basements, where radio waves cannot effectively communicate	Use the terminal in a location with good signal
	SIM card not installed Dirt on the metal surface of the SIM card	Check the SIM card Wipe with a clean cloth
	SIM card invalid	Internet service provider
Unable to connect to the network	Out of GSM service area	Please move to the ISP service area
	weak signal	Please move to a place with strong signal and try again
Switch off	Make sure the device is turned on	Turn on the device battery switch
	Please check if the SIM is installed	Please install the SIM card
	poor contact	Check if the plug is connected

Warranty card

Maintenance record		
Maintenance shop		
Sending date		
Fault description		
Maintenance situation		
IMEI number		
Maintenance person		

FCC Warnning:

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 againstharmful interference in a residential installation. This equipment generates, uses and can radiateradio frequency energy and, if not installed and used in accordance with the instructions, maycause harmful interference to radio communications. However, there is no guarantee thatinterference will not occur in a particular installation. If this equipment does cause harmfulinterference to radio or television reception, which can be determined by turning the equipmentoff and on, the user is encouraged to try to correct the interference by one or more of thefollowing 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 to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.