

Roadstar Configuration Instruction Manual



This instruction manual describes how to set parameters for software built inside GPS/GPRS vehicle tracking device **Roadstar**.

Software is used to collect and send data to www.tracking.rs server or some other user server. We will describe how to set parameters for GPRS, GPS and server.

Roadstar parameter configuration can be achieved in two ways. Via **SMS** messages or using **Roadstar terminal application**.

Configuration via SMS

Configuration of **Roadstar** via SMS messages is achieved by sending SMS messages to device in a specific format.

NOTE: Take care of blank space after reserved words! Marked as “_” in following text! In SMS type blank space!

Configuration messages:

Each configuration message begins with *Road#:* followed with next configuration words and parameters if they exist for configuration word (no blank space after *Road#:*).

- Setting vehicle ID

Configuration word and parameter: *ID_vehichleID*

where *ID* is configuration word, and *vehichleID* is id for specific vehicle (for instance 23).

Example: *Road#:ID_23*

- Setting GPRS, server and additional parameters

Configuration word and parameters: *NTS_,p1,p2,p3,p4,p5,p6,p7,p8,p9,p10,p11,p12,p13,*

where *NTS* is configuration word and *p(i)* i from 1 to 13, is parameter:

p1 – gprs apn (access point name)

p2 – gprs user (user for GPRS profile defined by mobile operator)

p3 – gprs password (password for GPRS profile defined by mobile operator)

p4 – server IP address (if you use www.tracking.rs leave empty)

p5 – server port (if you use www.tracking.rs leave empty)

p6 - gps scan move interval (in seconds) – Cyclic sending data in movement

p7 – gps scan still interval (in seconds) - Cyclic sending data while still

p8 – running mode (on speed – 0, or on contact - 1) – is move to stop and stop to move, detected by measured speed via GPS or by state of contact 3 on 10-wire cable

p9 – scan angle (in degrees) – Is event of vehicle movement created by change of movement direction in degrees (if 0, event is not created)

- p10 – scan length (in meters) – Same as previous, but in case of made distance
- p11 – measure distance by pulse counter (1-by contact 4, 0-by GPS) – Is distance measured by GPS or by measuring impulses on contact 4 of 10-wire cable
- p12 – work in roaming (1=yes, 0=no)
- p13 – vehicle ID (number, for instance 1)

example: *Road#:NTS ,internet,telenor,gprs,111.222.333.444,21,1,20,10,0,45,25,1,1,*

If you are a user of www.tracking.rs for server IP address enter 178.238.232.204, and for server port enter 4022.

example 2 if you use www.tracking.rs :

Road#:NTS ,internet,telenor,gprs, 178.238.232.204,4022,1,20,10,0,45,25,1,1,

NOTE: When sending new configuration, always send all mentioned parameters!

Device will respond with message, if setup was correct!

- **Reset modem**

Configuration word and parameter: *RSTN*

action performed: resets modem (turn off, turn on modem).

- **Set server IP address**

Configuration word and parameter: *serIP_ipAddress*

where *serIP* is reserved word, and *ipAddress* is new IP address of server.

- **Set scan move interval**

Configuration word and parameter: *RefTm_interval*

where *RefTm* is reserved word, and *interval* is time interval for scan check in seconds.

- **Delete database**

Configuration word and parameter: *DelDB*

deletes all parameters in modem

- **Set server port**

Configuration word and parameter: *serPO_numPort*

where *serPO* is reserved word and *numPort* is new number for server port.

sets new value for server port

- **OTAP**

Configuration word and parameter: *OTPNOW*
performs software update via GPRS

- **IO PINs status**

Configuration word and parameter: *STAT*
Modem returns current status with following informations:

IN:in1in2in3 – current values of input contacts (input1, input2, input3), for example 010; one digit for one contact (0-low, 1-high)

OUT:out1out2out3 – current values of output contacts (output1, output2, output3), for example 100; one digit for one contact (0-low, 1-high)

GPS:numberOfSatellites – current number of available satellites

LAT:value lat – current latitude

LON:value lon – current longitude

SPE:value km/h – current speed

- **Set OUTPUT PINs value**

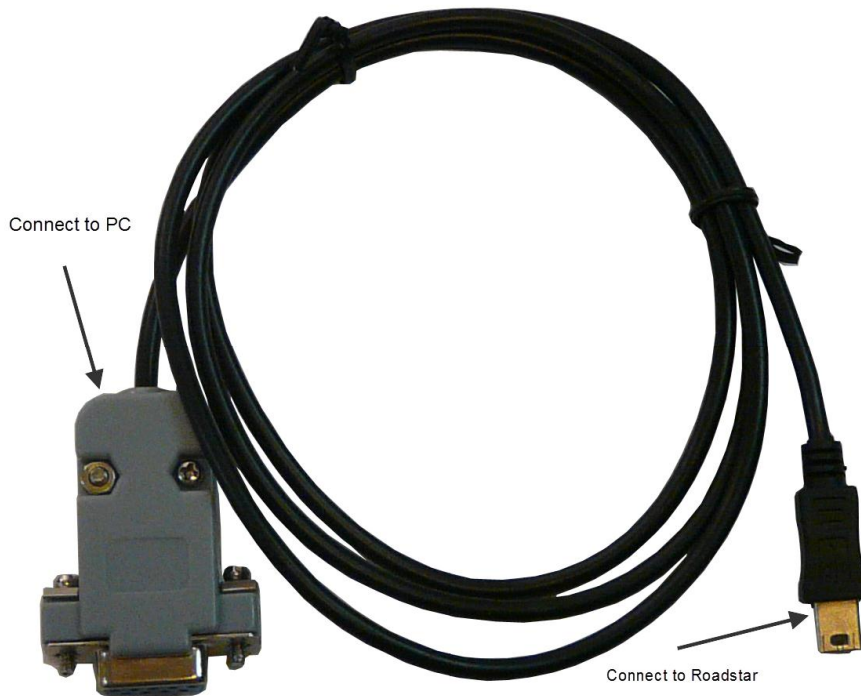
With this message, you can set values for output contacts (1-high, 0-low) for output pins out1, out2 and LED output pin.

Configuration word and parameters: *OUT: out1out2outLED*

Simply enter 1 or 0 for each output contact – for example 101 will switch out1 to 1, out2 to 0 and LED contact to 1.

Configuration via Roadstar Terminal application

Configuration of **Roadstar** can be also achieved using *Roadstar Terminal* application. Connect **Roadstar** via serial cable to your PC. Modem is connected to PC via serial cable as shown in the following picture. After connecting to PC, connect device to power supply.

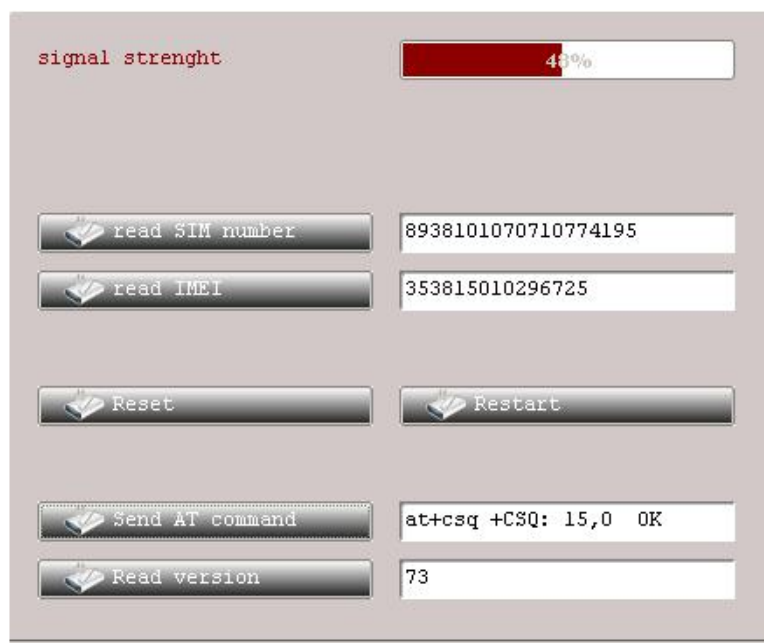


NOTE: Do not connect device to PC using USB cable! PC port shown on previous picture is RS232! Connect device to PC only using cable shown on previous picture!

Select COM (serial) port on which your device is connected, choose speed 115200bps and press TEST to check connection.



After connection has been established, you can check signal strength, read SIM card number, modem IMEI number, reset or restart modem, execute AT commands.



User and APN (Access Point Name) settings

APN settings (Access Point Name) are implied settings for each device which is using SIM cards for transferring data via GPRS protocol.

Each Mobile Operator gives for that kind of settings its Access Point Name, Username and Password. **Roadstar** is programmed to recognize these settings for at least 90 different Operators and Telecommunication Companies, over the world.

If **Roadstar** does not recognize Operator parameters for inserted SIM card (Operator isn't on the known list), settings must be entered manually.

Settings can be read from the terminal by pressing READ button, and sent to the terminal with SEND button.

Description must be entered for each user. After naming and giving id for users, ADD button adds user to the list. Users on the list can be saved and loaded each time you want to make a change. Users can be removed from the list as well.

Note: When loading user, APN (access point) data is also loaded. These data is shown on the following page.

The screenshot shows a configuration window with two main sections. The top section is titled 'apn settings' and contains three input fields: 'apn' with the value 'internet', 'user' with 'mobtel', and 'pass' with 'gprs'. Below these fields are 'read' and 'send' buttons. The bottom section is titled 'User id' and contains 'user description' with 'hcp' and 'user id' with '123'. Below these are 'add' and 'remove' buttons. At the bottom of the window are 'save' and 'load' buttons. A table at the bottom of the 'User id' section displays the current user list.

description	id
hcp	123

GPS General Settings

In these text boxes, scan and send values are shown. After entering of values which are representing:

- *NOT MOVE TIME* - period (in seconds), between sending position data of the vehicle if it doesn't move;
- *RUNNING TIME* - period (in seconds), between sending position data of the vehicle if it is on the move;
- *ANGLE* (in degrees), when data of turning of the vehicle is send;
- *LENGTH* (in meters), represents period after how many meters data is being send,
- *SERVER ADDRESS* – server IP address
- *SERVER PORT* – server port

Check boxes allow other additional settings.

Press READ button to get current parameters, or SEND for setting new ones.

Note: *Check course* box will be checked after reading data, depending on value entered into field for *angle*. If angle is less then 25 degrees, box will be unchecked, i.e. no course checking.

scan and send values	
not move time(s)	300
running time(s)	15
angle (deg)	30
length (m)	400
work in roaming	<input checked="" type="checkbox"/>
check distance	<input type="checkbox"/>
check course	<input type="checkbox"/>
run mode on pin	<input checked="" type="checkbox"/>
run mode on speed	<input type="checkbox"/>
measure by PLSC	<input checked="" type="checkbox"/>
expand still interval	<input checked="" type="checkbox"/>

server	
server address	111.222.333.444
server port	1234

read send

User's vehicle

Type selection of the vehicle is in the drop down list, after that it is required to enter vehicle's id number.

Adding to the list can be performed by pressing the ADD button, and removing the unwanted type from the list with the REMOVE button.

(Select vehicle first)

Press READ button to read current parameters from device, or SEND to set new ones.

vehicle

vehicle type: truck

vehicle id: 149

add remove

type	id
bike	147
bus	148
truck	149

read send

After setting all parameters, device is ready to be installed in vehicle, and you can start tracking it. For **Roadstar** installation check document **Roadstar Installation Instruction Manual**.