

# REWIRE SECURITY

## 103-RS / 103-RS+ GPS TRACKER



### DETAILED USER GUIDE

#### VER. 3.0

Thank you for purchasing 103-RS. Please read this manual carefully before using this product. Please note that product specifications and information in this user guide are subject to changes without prior notice. Any changes will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

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## **1. Introduction**

1.1 103-RS can locate remote targets or vehicles by using Geographic Positioning System and send instant SMS or Internet reports to the user by using GSM and GPRS network. It is an ideal security and information solution for your vehicle as it is able to send real time alerts and position information or even immobilize your vehicle remotely in seconds.

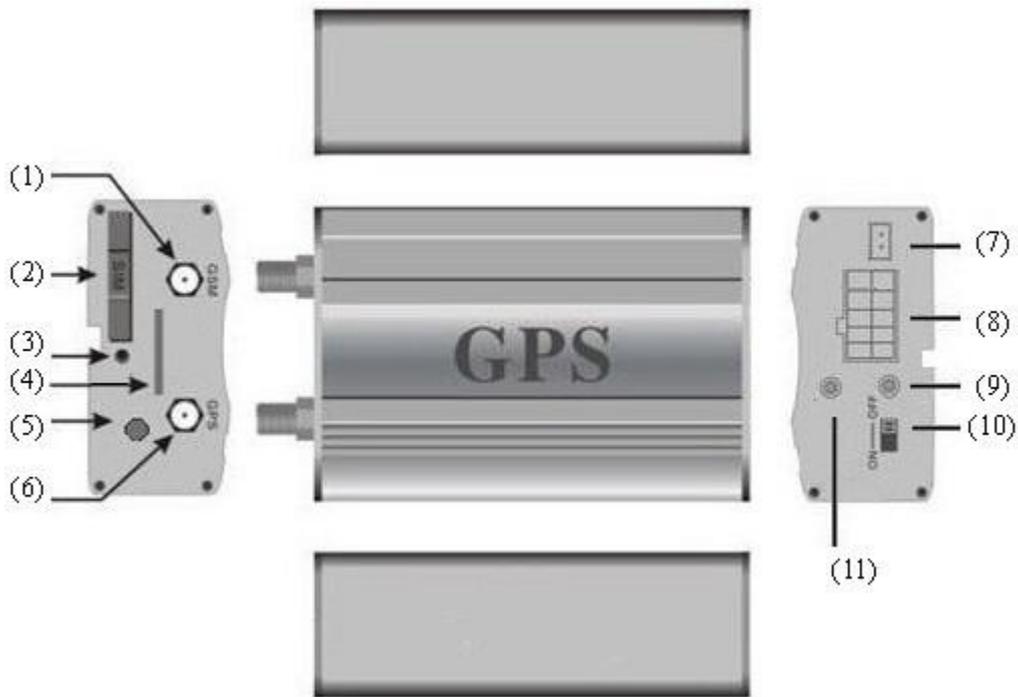
### **1.2 Features**

- 12v - 24v power support.
- Supports SMS/GPRS/Internet Network data transmission .
- External GSM and GPS antennas.
- Remote voice surveillance through external microphone.
- SMS location reports via google maps support.
- 600maH backup battery.
- Remote immobilizing via fuel or power cut-off.

## **2. Applications**

- Vehicle rental, Fleet Management
- Motorbike tracking
- Professional vehicle tracking
- Vehicle security

### 3. Hardware Description



1- GSM Antenna connector

2- SIM card slot

3- SIM card slot Pop-up switch

4- MicroSD slot

5- Microphone jack

6- GPS Antenna connector

7- Shock sensor port

8- Harness Port

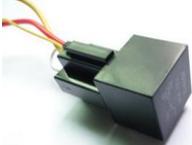
9- GSM/GPS LED

10- Backup battery switch

11- Remote controller antenna

( RS+ model only)

#### 4. Accessories

NO.	PICTURE	NAME	NOTE
1		GPS Antenna	3 meters
2		GSM Antenna	3 meters
3		Microphone	1.5 meters
4		Harness	10 PIN
5		Relay	12V/40A (24V/40A upon request)
6		Shock sensor	Optional for both RS and RS+ models
7		Siren	RS+ MODEL ONLY
8		Remote controller	RS+ MODEL ONLY

## 5. Specifications

<b>Content</b>	<b>specifications</b>
<b>DIM.</b>	<b>83*54*26mm</b>
<b>Weight</b>	<b>120g</b>
<b>Network</b>	<b>GSM/GPRS</b>
<b>Band</b>	<b>850/900/1800/1900Mhz</b>
<b>GPS Module</b>	<b>SIRF3 chip</b>
<b>GPS Sensitivity</b>	<b>-159dBm</b>
<b>GPS Accuracy</b>	<b>5m</b>
<b>GPS Start time</b>	<b>Cold start 45s</b> <b>Warm start 35s</b> <b>Hot start 1s</b>
<b>Voltage of car power system</b>	<b>12 V -24V</b>
<b>Backup battery</b>	<b>Chargeable 3.7V 600mAh Li-ion battery</b>
<b>Storage Temp.</b>	<b>-40°C to +85°C</b>
<b>Operation Temp.</b>	<b>-20°C to +65°C</b>
<b>Humidity</b>	<b>5%--95% non-condensing</b>

## 6. Operating Instructions

### 6.1 Installation

**6.1.1** Please ensure the installation is performed by a qualified and experienced technician. Rewire Security does not accept liability for any damages caused due to incorrect installation.



## Wiring diagram

**6.1.5 Note: The orange wire should be connected to the siren (optional), however, it can also be connected to your vehicle's horn .**

**6.1.6** Check if the type of your vehicle's door trigger is positive or negative trigger. Please connect the green wire to the door control circuit if it is positive, and connect the blue wire if it is negative.

**6.1.7** If you wish to use the reset and SOS button, install it where the driver can easily reach.

**6.1.8** Insert the shock sensor plug (RS+ model, optional) into the sensor jack

**6.1.9** Insert the external Microphone into the microphone jack and place the microphone to your desired location.

**6.1.10** Connect the GPS and GSM antenna to the corresponding connector. Find an appropriate place and fix the antennas. Under the front dashboard is the most ideal location to fit the antennas. Thick metal surfaces (e.g. bonnet) will degrade the GPS signal and reduce accuracy. Therefore, antennas should be installed under or as close as possible to windows, windscreen or plastic surfaces.

**6.1.11** If you wish to use the remote immobilizing function, the circuit breaker relay unit must be installed to the cable that provides +12v power to the starter motor. The thick red wire should be connected to 12+ power side (usually coming from the fusebox) and the thick yellow wire should be connected to the starter motor side. This way the power circuit to the

starter motor will be completed through the circuit breaker relay unit.

The thin yellow wire that goes to the relay unit from your tracker is the relay control switch. The thin white cable on the relay unit must be connected to 12+ to power the relay unit.

## **6.2 SIM CARD Installation**

6.2.1 Use tweezers or a screwdriver to push the SIM CARD ejector switch, the SIM CARD slot will pop up. Remove the sim card tray and install your sim card. Now you can install the sim card tray back to its position.

6.2.2 Ensure that your SIM card has been activated and the PIN code request is disabled. If you are using a contract sim card and would like to use GPRS (live) tracking, make sure your SIM card's internet is enabled.

**Ensure that caller id display is enabled on your phone as 103-RS will not be able to respond to messages or calls from private numbers.**

## **6.3 Turn on the 103-RS**

6.3.1 Connect the positive(red) and negative (black) wire to 12v or 24v power source, wait for 1 minute after connecting power to make sure 103-RS is operating normal, then turn on the backup battery switch.

## **6.4 GSM/GPS LED Indicator**

6.4.1 Red LED indicator on: No GSM network signal.

6.4.2 Fast flashing Red LED : GSM Network signal is good and 103-RS is working in GSM mode

6.4.3 Slow flashing Red LED : GSM Network signal is good and the 103-RS is working in GPRS mode.

6.4.4 Green LED indicator on: GPS fix is established.

6.4.5 Green LED indicator off: GPS module is searching for satellite signal.

## 6.5 Initialization

**Note:** When reading this manual, you will notice that we have used "+" and "space" between some words;

"+" between two words means they should be written together as one word and "space" between two words means you should leave one character space between two words. Commands are written in this format to avoid errors as some commands may consist of few words written as one word or separated by a space.

e.g.: `sleep+123456+space+shock` - This command should be sent to 103-RS as following : `sleep123456 shock`

## 6.6 Changing your tracker's password

6.6.1 Send SMS "password+old password+space+new password" to 103-RS to change the password. e.g password123456 888888 . 103-RS will reply: "password OK". If you forget your password, you can restore it to the default password using the command `adminpassword13142324`

Please note that you only need to change your password if you intend to share your 103-RS's phone number with third parties and do not wish to give them access to its settings.

**Example :** `password123456 99999`

**Response:** password OK

## 6.7 Authorization

4.1 You have to add your phone number as the authorized number if you wish to receive any alerts or scheduled reports. If you only wish to use this device for tracking via SMS or GPRS, you can skip the authorization process.

Authorization can be done in two different ways:

4.2 A: Dial 103-RS's phone number 10 times from your mobile phone and it will register your mobile phone number as the authorized number automatically.

Please note that each time you dial it, the 103-RS will hang your call after 2 seconds and reply with a location SMS message.

4.3 B: Send SMS “admin+password+space+phone number” to set up an authorized number. All the other authorized numbers must be set by the first authorized number. You will receive “admin OK” reply once the command has been executed.

**Example:** admin123456 0777666554

**Response:** admin OK

Depending on make / model of your phone, you may after switching the ignition off need to authorize your phone number with the country code. If you notice you do not get any alarms or text reports after calling your tracker, please authorize your phone number including the country code as shown below ;

**Example:** admin123456 +447776665544

**Response:** admin OK

Please note that when entering in international format, the first 0 of your phone number should be dropped. So 07776665544 should be entered as +447776665544 in international format.

Once a number is authorized, 103-RS will only respond to SMS single locating phone calls from the authorized number. However, it will still respond to commands send from any phone number as long as the correct password is entered. If you notice that 103-RS is not responding with an SMS after you call it's phone number, this is very likely to be caused by an error in authorization. When that's the case, you can revert 103-RS to factory defaults by sending `begin123456` command or check the command you have sent for authorization and retry it again with the correct format.

4.4 Delete authorization: Send SMS “noadmin+password+space+authorized  
4.5 number” to delete the authorized number.

**Example:** `noadmin123456 +447776665544`

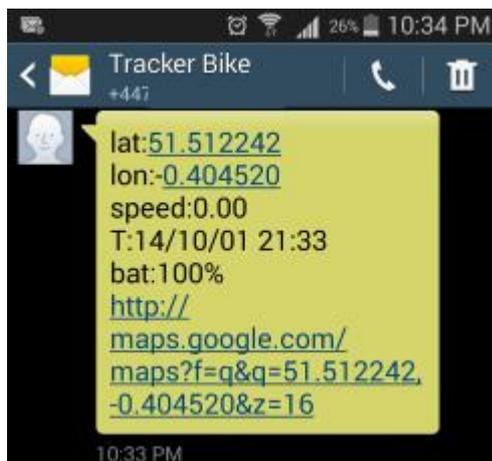
**Response:** `noadmin ok`

## 6.8 Easy SMS Text Message Locating

If there aren't any authorized numbers set-up, 103-RS will reply to all calls with a location report. If there are authorized numbers set-up, only authorized numbers will be able to receive location reports from 103-RS.

The SMS text message will include co-ordinates, current speed, time and date. It will also contain a direct Google Map link for smartphone users.

Once you click on the link, it will instantly open up Google Map for you to see the location of your vehicle.



\*If you request your 103-RS's location when it does not have sufficient GPS signal, it will respond with text message but will not contain any co-ordinates. Once it acquires enough GPS signal it will send another text message with its latest co-ordinates.

If the SMS position you have received from your 103-RS starts with "last", this means it does not have a current GPS fix and the position you have received is from the last location where it had a GPS fix.

## 6.9 Interval Tracking

103-RS can send automatic location reports at preset intervals. If SMS mode is active, reports will be sent as SMS text messages. If GPRS tracking mode is active, location report updates will be uploaded to the online tracking server.

### 6.9.2 Continuous interval tracking:

Send SMS "fix030s\*\*\*n+password" to the 103-RS, it will reply the latitude & longitude continuously at 30 seconds fixed intervals.

Note: Minimum interval setting is 10s.

**Example: fix030s\*\*\*n123456**

Please note that you will not get a response for this message.

### 6.9.3 Smart interval tracking:

6.9.3.1 Please set "Continuous interval tracking" before selecting this function.

Send "distance+password+space+distance". 103-RS will reply "Distance

ok" and it will start uploading its location at pre selected time intervals and distance.

**Example: distance123456 0050**

**Response:** distance OK

This means that distance is 50 meters; the number must be 4 digits. This will configure the 103-RS to send its location every 50 meters.

6.9.3.2 To set this function on web server: Set time interval first and then distance interval, 103-RS will locate upon time and distance.

**6.9.4 To cancel interval tracking :** Send SMS “nofix+password” to 103-RS to cancel the interval tracking.

**Example: nofix123456**

## **6.10 Automatic position updating with movement angle**

7.1 103-RS will update the positions automatically to the web server once the vehicle changes driving direction over pre set angle value to form a smooth trajectory consistent with the actual road. This function is only effective in GPRS mode.

7.2 Send "angle+password+space+angle" to 103-RS, it will reply" angle ok".

7.3 The angle must be 3 digits, default angle value is 30 degrees.

**Example: angle123456 45**

**Response:** angle ok

## 6.11 GPS drift suppression

GPS signal can be effected with many factors like weather and location. Surrounding buildings or trees can reduce GPS signal strength. Clouds also degrade the signal and the locating accuracy may drop, causing your 103-RS to show up in different locations in a 50 meter radius time to time. If you are using live (GPRS) tracking you may notice your 103-RS doing 20-50meter jumps on your map when the vehicle is actually stationary. GPS drift suppression is used to avoid this. When activated, 103-RS will stop sending GPRS data to live tracking server when the ignition is OFF. GPRS drift suppression also helps with sim card economy as the GPRS mobile data will only be used while the vehicle is moving.

8.1 This function is switched "OFF" by default. Send "suppress+password" to 103-RS to activate, it will reply " suppress drift ok". The GPS data will stop updating if the vehicle is stationary. GPS data will update automatically once vehicle starts moving. Please note that the ACC (ignition) detection wire (white) on your tracker should be connected for this function to work.

**Example:** suppress123456

**Response:** suppress ok

8.2 To cancel: send "nosuppress+password" to 103-RS.

**Example :** nosuppress123456

## 6.12 Exact street address by SMS

You must set the APN of your GSM network provider for the SIM card used in 103-RS before using this function. If your local GSM network requires

user name and password for GPRS, please set it up according to the GPRS instructions in chapter VII. Send SMS “address+password” to 103-RS after APN has been set up and it will reply in exact address including street name.

**Example:** address123456

**Response:** 20a Park street, clifton, bristol, bs1 5ja

### 6.13 Location based service (LBS)

If 103-RS is unable to establish a solid GPS fix, it will calculate its location using Cell-id info. Location reports will include the GPS co-ordinates of the last known position as well as a LAC code. Entering the LAC code to the "Manual Track" menu of your web tracking platform will enable you to see 103-RS's current location. You can also send command "address+password" to 103-RS to request exact address. 103-RS will automatically switch to tracking by LBS in GPRS mode. Accuracy of LBS (also known as Cell-id tracking) depends on the distance to the nearest GSM Network Cell Tower or Base Station. In urban areas this accuracy varies between 25-100 meters.

### 6.14 Voice surveillance

103-RS is in Tracking mode by default. When voice surveillance mode is activated, it will automatically answer incoming calls rather than replying with its location information.

To activate the monitor mode, send SMS "monitor+password" to 103-RS. It will reply "monitor ok" and switch to "monitor" mode.

**Example:** monitor123456

**Response:** monitor OK

Do not forget to switch back to tracker mode once you have finished using the voice surveillance. When 103-RS is in monitor mode it will stop updating its position and it will shut the GPS module "OFF". To change back to tracker mode use command "tracker+password"

**Example:** tracker123456

**Response:** tracker OK

## 6.15 Data logging

15.1 Auto logging: If 103-RS loses GSM or GPRS signal, it can store the tracking position and alerts automatically on to the flash drive upon the pre-set conditions. When GSM signal is acquired, all the event alerts will be auto-sent to authorized numbers and the live tracking server.

15.2 Logging at preset intervals: Send SMS: "save030s005n+password" to 103-RS, it will reply "save ok", and will log the lat, long locations every 30 seconds for 5 times. (S: second, m: minute; h: hour).

**Example:** save030s005n123456

**Response:** save ok

15.3 Continuous logging: Send SMS:"save030s\*\*\*n+password" to 103-RS, it will reply "save ok".

**Example:** save030s\*\*\*n123456

**Response:** save ok

15.4 Logging Clearance: send SMS: "clear+password" to 103-RS, it will reply "clear ok".

**Example:** clear123456

**Response:** clear ok

15.5 Logging Volume: Built-in flash 1MB (store about 16,000 positions). This volume can be expanded by using a Micro SD card which can be inserted into slot provided. Please refer to section 3.3 to see where micro SD card needs to be inserted.

A 2GB card would be sufficient for up to 10 months.

15.6 Data logging function also enables you to use your 103-RS as a GPS logger. You can download the location data to your PC by using the free PC software provided, through USB connection.

## 6.16 Data upload

16.1 Auto Upload: If there is no GSM reception, 103-RS will save all GPS data to its built-in memory and upload this information to the live tracking server automatically when the GSM reception is back to normal. This way tracking data won't get lost while driving through areas with no or low GSM reception. If you do not wish to use this feature, you can turn it "OFF" by sending the SMS command "autoload+password+space+off"

**Example:** `autoload123456 off`

**Response:** `autoload off OK`

16.2 Specified date Load: Send SMS: "load+password+space+year month date" to 103-RS. It will reply: "load ok" and will upload the tracking data of the specified time/date.

**Example:** `load123456 20110425`

**Response:** `load ok`

## 6.17 Forwarding received SMS messages

17.1 103-RS can forward incoming messages from pre-set phone numbers . To activate this function, send "forward+password+space+third party phone number" from an authorised phone number. 103-RS will reply "forward ok", and start forwarding SMS messages coming from that number. Only one number can be set-up for SMS forwarding.

**Example:** forward123456 07776665544

**Response:** forward ok

17.2 To cancel SMS forwarding send SMS command "noforward+password".

**Example:** noforward123456

**Response:** no forward ok

## 6.18 SIM card balance check

Send SMS command "balance+password+space+carrier's phone number+space+code" to the tracker, it will forward the content to the specified phone number and return the content from the specified phone number.

**Example:** balance123456 0262 check

Ps: This function assumes that the GSM Network provider has the option where you can check your Sim Card's balance by sending a command to a specific number; which is 0262 in this example.

## **6.19. Alarms**

### **6.19.1 Low battery alarm**

When the voltage of the 103-RS is near 3.6V, it will send SMS “low battery+lat./long” information to authorized numbers twice in 3 minutes intervals.

### **6.19.2 Power off alarm**

When the external power to 103-RS is cut off or at 0V, 103-RS will send SMS “power alarm+lat./long.” to authorized numbers twice in 3 minutes intervals.

### **6.19.3 SOS alarm**

Press and hold the SOS button for 3 seconds and the 103-RS will send 3 SMS reports to all authorized numbers.

### **6.19.4 Geo-fence**

1.1 This function allows you to create safety zones of your choice. When 103-RS enters or leaves this pre-determined zone, it will send geo-fence alarm warning to authorized numbers.

When 103-RS stays immobile in a place for 3-10 minutes, you can send SMS “stockade+password+space+latitude,longitude;latitude,longitude” to 103-RS to set the zone. In case of a breach, it will send SMS “stockade!+location” to authorized numbers every 3 minutes. It will stop sending alarm once it returns back to the zone.

Note: The first latitude & longitude is coordinate of the top left corner of the

Geo-fence, while the second latitude & longitude is the coordinate of the bottom right corner.

**Example:** stockade123456 51.460959, -2.622643; 51.456842, -2.604446

You can obtain co-ordinates of any location from Google Maps by clicking on desired location and selecting "what's here?"

1.2 To Cancel: Send SMS “nostockade+password” to deactivate this function.

If you are using live tracking on our server [www.gpslive.co.uk](http://www.gpslive.co.uk) , geo-fence zones can also be created online.

**Example:** nostockade123456

### 6.19.5 Multi-area management

2.1 To Set an Area for multi-management

Send SMS command

"area+password+space+latitude,longitude+space+areaname,distanceM" to

103-RS(distance unit: M for meter, K for kilometer). 103-RS will reply

"area01ok".

**Example:** area123456 22.353648,113.543678 school,800M

**Response:** area ok

Note: 5 areas at most and the distance between two points can't be less than the total distance in the 2 commands. Different areas can't cover each other.

2.2 Delete areas

Send SMS command:"noarea+password+space+area name", 103-RS will

reply:"noarea ok".

**Example:** noarea123456 school

**Response:** noarea ok

## 2.3 Rename and set distance

Send SMS command "rename+password+space+old name;new name,distanceM" to 103-RS. If name is not repeated and area doesn't cover other areas, it will reply "rename ok!" if configuration was successful.

**Example:** rename123456 area01;school,800M

The new area name will be "school", and will covers area of a radius of 800 meters.

## 2.4 Activate multi-area management

Send SMS command "area+password+space+on" to 103-RS and it will reply "Area on ok!". When 103-RS enters the pre set area, it will send SMS "area location" to all authorized phone numbers, and it will send same SMS when goes out of the area.

**Example:** area123456 on

**Response:** area on ok

## 2.5 Deactivate Multi-area management

Send SMS command "area+password+space+off" to 103-RS, it will reply "area off ok!"

**Example:** area123456 off

**Response:** area off ok

## 6.19.6 Movement alarm

### 3.1 Set up: when 103-RS stays immobile in a place for 3-10 minutes with GPS

signal reception you can send SMS "move+password+space+0200" to

103-RS. This will activate the movement alert with an area radius of 200

meters. Maximum radius limit is 999 meters. 103-RS will reply “move OK”.

In case of such a movement it will reply SMS "move+location" to authorized numbers at 3 minutes intervals.

**Example: move123456 0250**

**Response:** move ok

Note: Setting the radius less than 100 meters may result in false movement alert. The fault alert occurs if GPS position is miscalculated due to bad GPS reception. Inaccurate GPS reading will cause the 103-RS to think that it is in a different location, possibly further from its current location, thus the processor will accept this as a movement and trigger the movement alarm. However, this may only occur if the 103-RS is installed improperly in a place where it can't receive good signal.

**3.2 To Cancel:** Send SMS “nomove+password” to deactivate the movement alarm.

**Example: nomove123456**

**Response:** nomove ok

### 6.19.7 Over speed alarm

4.1 Over speed alarm will be triggered when 103-RS exceeds speed limit predetermined by you. Setup: Send SMS “speed+password+space+speed” to 103-RS and it will reply “speed ok!”. This means that you have set up over speed alarm successfully.

**Example: speed123456 080 .**

080 refers to 80km/h. When your vehicle's speed exceeds 80km/h, 103-RS will send SMS “speed+080!+ location” to authorized numbers.

4.2 Cancel: Send SMS “nospeed+password” to deactivate the over speed alarm.

Note: Recommended minimum setting for over speed alarm is 30km/s.

**Example:** nospeed123456

**Response:** nospeed ok

### 6.19.9 ACC/ignition alarm

6.19.9.1 This function is switched "OFF" by default. To activate, send "ACC+password" to 103-RS, it will reply "ACC ok" and send "ACC on+latitude & longitude" to authorized numbers when the ignition of the vehicle has been switched "ON"; and it will send “ACC off+latitude & longitude" to authorized numbers, which means the ignition of the vehicle is "OFF".

**Example:** acc123456

**Response:** acc ok

6.19.9.2 Send SMS command "noACC+password" to disable this function.

**Example:** noacc123456

### 6.20 Remote immobilizing

Send command “stop+password” to 103-RS. Once the immobilize function has been executed, it will reply “Stop engine Succeed”. It will remain immobile until you send command to resume the fuel supply. Before using the stop command, please select execute immediately mode or normal mode;

**Example:** stop123456

**Response:** Stop engine succeed

### 6.20.3 Resume the Fuel and Power System

Send “resume+password” to 103-RS, it will reply "Resume engine succeed", this means

the 103-RS will now resume the fuel & power supply.

**Example:** resume123456

**Response:** Resume engine succeed

## 6.21 Arm

### 6.21.1 Set up arm by SMS

Send SMS command “arm+password” to your 103-RS. It will reply “Tracker is activated” and it will enter armed state if it is currently disarmed.

You will only be able to "arm" your 103-RS's alarm if the ignition is "OFF" and the doors are closed. If not, you will receive the following response from 103-RS : “set up fail! please turn off ACC”

**Example:** arm123456

**Response:** tracker is activated

### 6.21.2 Set up arm by remote controller (RS+ model only)

Press  button on the remote controller, the 103-RS will enter armed state and the siren will beep once.

## 6.22 Disarm

### 6.22.1 Disarm by SMS

Send SMS command "disarm + password" to your 103-RS, It will reply “Tracker is deactivated” 103-RS will enter disarmed state.

**Example:** disarm123456

**Response:** tracker is deactivated

### 6.22.2 Disarm by remote controller (RS+ model only)

Press  button on the remote controller and the 103-RS+ will enter disarmed state. The siren will be twice.

### 6.23 Function of Remote Controller (RS+ model only)

Button	Function	Descriptions
	ARM	Press for 0.5 second, the siren will beep one time.
	DISARM	Press for 0.5 second, the siren will beep two times.
	ARM & Silent mode	Press for 0.5 second when it is in disarm state, the siren will beep three times. In silent mode the siren will not work even if an alarm is triggered.
	SOS	Press for 3 seconds, 103-RS will send SOS alert to authorized phone numbers.
	Deterrence/car locate	Press for 0.5 second when it is in arm state, siren will beep 10 seconds, press disarm button  to stop.

### 6.24. Alarms under Arm State

#### 6.24.1 Door alarm

103-RS will send SMS “Door alarm+lat/long” to authorized numbers in 3 minutes intervals when a door has been opened; Siren will sound for 30 seconds, and circle again with 20 seconds intervals. Send SMS command “disarm+password” to stop.

**Example:**    **disarm123456**

#### 6.24.2 Shock Sensor alarm (default with RS+, optional with RS model)

103-RS will send SMS “Sensor alarm+lat/long” to authorized numbers in 3 minutes intervals when the sensor is triggered in arm status; Siren will sound for 5 seconds. Send SMS command “disarm+password” to stop .

**Example:**    **disarm123456**

#### 6.24.3 ACC alarm

103-RS will send SMS “ACC alarm+lat/long” to authorized numbers in 3 minutes intervals when the ignition is switched on, Siren will sound for 30 seconds, and circle again with 20 seconds intervals. Send SMS command “disarm+password” to stop.

**Example:** disarm123456

## 6.25. Silent Mode

### 6.25.1 Set up silent mode by SMS

Send SMS “silent+password” to 103-RS, it will reply “silent ok!”.103-RS will enter **silent mode**, the siren will be deactivated but it will still send sms alerts to authorized numbers.

**Example:** silent123456

**Response:** silent ok!

**Quit silent mode** send SMS “loud+password” to the 103-RS, it will reply “loud ok!”.

**Example:** loud123456

### 6.25.2 Activate silent mode using remote controller (RS+ model only)

**Silent mode** Press for 0.5 second when it is in disarm state, the siren will beep three times. In silent mode the siren will not work even if an alarm is triggered.

**Quit silent mode** Press  in disarm state for 0.5 second again, siren will beep two times, and quit from silent mode.

## 6.26. GSM network blind spot alarm

If 103-RS has no GSM reception, siren will still work if an alarm is

triggered (door, sensor, ACC), however SMS alarm reports will only be sent when the GSM reception is back to normal.

## 6.27 Status enquiry

Send SMS command “check+password” to the 103-RS in the vehicle, It will reply with the status of the power, battery, GPS, ACC, door, GSM signal, fuel level, apn, server ip address and port to authorized numbers.

Power: ON/OFF

Battery: 100%

GPRS: ON/OFF

GPS: OK/NO GPS

ACC: OFF/ON

Door: OFF/ON

GSM Signal: 1-32

Oil: 0.00% (fuel level, requires optional ultrasonic fuel sensor)

APN: uk.lebara.mobi

IP: 178.159.0.78 PORT: 10200

## 6.28 Hardware reset

### 6.28.1 SMS Reset

Send SMS “reset+password” to 103-RS to reset the GSM module and GPS module, it will reply “reset ok”.

**Example:** reset123456

**Response:** reset ok

### 6.28.2 Using reset button

Press the reset button for 1 second, hardware of 103-RS will reset.

## 6.29 Imei number request

Send SMS command "imei+password" to 103-RS. E.g. Send SMS command "imei123456" to 103-RS and it will reply with it's 15 digit imei number.

**Example:** imei123456

**Response:** 359710055647863

## 6.30 Time setting

**6.30.1** Send SMS command "time+space+zone+password+space+time" to 103-RS, It will reply "time OK"

**Example:** time zone123456 0 (0 is gmt 0 UK time zone)

**Response:** time ok

**6.30.2** If your country time zone is minus, send the time zone with a "-" symbol.

**Example:** time zone123456 -8

**Response:** time ok

## 6.31 TCP/UDP switch

Command:"gprs+password,1,1" switch to UDP mode.

Command: "gprs+password,0,0" switch back to TCP mode, this is the default mode. If you would like to use our own server [www.gpslive.co.uk](http://www.gpslive.co.uk), you do not have to change this setting.

## 6.32 GPRS Setting

GPRS tracking mode allows 103-RS to upload its location data to a web server at preset intervals.

APN , Update intervals and server's ip address must be configured to be able

to use GPRS (live internet) tracking.

### 6.32.1 APN SETTING

**6.33.1.1** APN stands for Access Point Name and differs with each GSM network. For more information, contact your local SIM card network operator. Send SMS “APN+password+space+APN”, 103-RS will reply “APN OK” if succeeded.

**Example:** `apn123456 orangeinternet`

**Response:** `apn ok`

Note: orangeinternet is the APN code for pay as you go services of Orange GSM network. the APN varies with different GSM network operators in different countries, please check with your local GPRS network operator to get the correct APN. See examples below for some UK networks.

`apn123456 data.lycamobile.co.uk` ->lyca mobile UK

`apn123456 uk.lebara.mobi` -> Lebara UK

`apn123456 everywhere` -> ee pay as you go

### 6.32.2 APN User Name and password Setup

Most networks do not require password authentication while setting up the APN. However, if your network requires this setting please configure as following:

Send SMS “up+password+space+user+space+password”, If succeeded, 103-RS will reply “user, password ok!”.

**Example:** `up123456 data user`

Note: 123456 is password of 103-RS, data is the user name for GPRS login,

user is the password for GPRS login.

### 6.32.3 Server IP and Port Setup

**6.33.3.1.** This setting will configure the 103-RS to upload its location to the selected live tracking server.

Send SMS “adminip+password+space+IP+space+port” to 103-RS. It will reply “adminip ok” if succeeded

**Example:** adminip123456 178.159.0.78 10200

**Response:** adminip ok

Note: 178.159.0.78 is the IP address of default server [www.gpslive.co.uk](http://www.gpslive.co.uk) and 10200 is the port.

### 6.33 GPRS economy mode

5.1 With this feature after switching the vehicle ignition off 103-RS will enter GPRS economy mode and close the GPRS (mobile internet) connection.

It will automatically reconnect once the ignition is turned back ON.

5.2 To activate this function: Send "less gprs+password on", 103-RS will reply "less gprs on ok".

**Example:** less gprs123456 on

**Response:** less gprs on ok

5.3 To deactivate: Send "less gprs+password off".

**Example:** less gprs123456 off

**Response:** less gprs off ok

**Please note that the ignition (ACC) detection wire must be connected to**

**your vehicle's ignition for this feature to work.**

### **6.34. Modes Switch between “SMS” and “GPRS”**

**6.34.1** 103-RS is in SMS mode by default.

**6.34.2** To activate GPRS mode, send SMS “GPRS+password” to 103-RS, and it will reply “GPRS ok!”

**Example:** `gprs123456`

**Response:** GPRS ok!

**6.34.3** Send SMS “SMS+password” to 103-RS, it will reply “SMS ok!” and restore to “SMS” mode.

## **7. TROUBLESHOOTING**

Faults	Solution
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No LED light	Please make sure 103-RS is wired correctly & receiving power from the 12 or 24v source
No dial tone	<p>First check the LED lights on 103-RS. If 103-RS is Receiving power , no dial tone means there is no GSM.</p> <p>1- Check if the sim card you are using is active.</p> <p>2- Ensure the GSM &amp; GPS antennas are installed the right way around.</p> <p>3- Test the sim card in a mobile phone and see if the network you are using does not have any reception issues in your area.</p>
No response to Text commands	<p>First ensure there is dial tone when you call 103-RS's Sim number. If there is a dial tone, there are two possible causes for 103-RS not to respond to your commands;</p> <p>1- There is no balance/credit in the sim card you are using.</p> <p>2- You are using a wrong password (default:123456)</p>
No location report SMS after calling 103-RS	<p>1- If there is an authorized phone number registered, 103-RS will only respond to authorized phone numbers with SMS location reports.</p> <p>2- Ensure that you are not calling from a withheld or private phone number.</p>

<p>Wrong position In GPRS mode (internet/ live Tracking Server)</p>	<p>1- If your 103-RS is showing up in the middle of the ocean just outside the gulf of guinea, it hasn't sent any data or position co-ordinates to the server and it is currently on default , zero coordinate position. Please check your APN, GPRS server ip / port and interval settings. Most common reason for this issue is the APN settings. Some networks may have a few different APN settings for different sim cards or bundles. We recommending contacting your sim network provider to obtain the correct APN information.</p> <p>2- If your 103-RS is still showing up at a previous location, this means it hasn't sent any position data to the Online tracking server since you have left that location. If this is a persistent problem, your 103-RS may not be receiving sufficient GPS signal, and that may cause delayed position update.</p>
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Wrong position	1- Check if the position report starts with the word "Last". If so, this means that 103-RS hasn't established a GPS fix since and it is showing the last position it did have a solid GPS fix.
In SMS mode	2- If the co-ordinates on position report are showing 0 , this means that 103-RS hasn't established a GPS fix yet. Move your 103-RS to a position with clear line of sight with the sky to allow it to establish its first GPS fix.

## Terms and Conditions for the sale of Goods by REM Trading LTD

### Contents:

1. Our contract with you
2. Changes to order or terms
3. Delivery of goods
4. If the goods are faulty
5. Seller's guarantee of goods
6. Price and payment
7. Our liability to you
8. Your cancellation rights
9. Our cancellation rights
10. Information about us and how to contact us
11. How we may use your personal information
12. Other important terms

### 1. OUR CONTRACT WITH YOU

1.1 These are the terms and conditions on which We supply Goods to you.

1.2 Please ensure that you read these Terms carefully, and check that the details on the Order and in these Terms are complete and accurate, before you submit the Order. If you think that there is a mistake, please contact Us to discuss, and please make sure that you ask Us to confirm any change in writing to avoid any confusion between you and Us.

1.3 We consider that these Terms and the Order constitute the whole agreement between you and Us.

1.4 When you sign and submit the Order to Us, this does not mean We have accepted your order for Goods. Our acceptance of the Order will take place as described in clause

1.5 If We are unable to supply you with the Goods, We will inform you of this in writing and We will not process the order. These Terms will become binding on you and Us when We issue you with a written acceptance of an Order OR We contact you that We are able to provide you with the Goods, which We will also confirm in writing to you, at which point a

contract will come into existence between you and Us.

1.6 If any of these Terms conflict with any term of the Order, the Order will take priority.

1.7 We shall assign an order number to the Order and inform you of it when We confirm the Order. Please quote the order number in all subsequent correspondence with Us relating to the Order.

1.9 The images of the Goods on Our website OR in Our catalogue or brochure are for illustrative purposes only. Although We have made every effort to display the colors accurately, We cannot guarantee that your computer's display of the colors OR the printed pictures accurately reflect the color of the Goods. Your Goods may vary slightly from those images. Although We have made every effort to be as accurate as possible, however all sizes, weights, capacities, dimensions and measurements indicated on Our website OR in Our catalogue or brochure have a 2% tolerance.

## 2. CHANGES TO ORDER OR TERMS

2.1 We may revise these Terms from time to time in the following circumstances:

- (a) Changes in how We accept payment from you;
- (b) Changes in relevant laws and regulatory requirements

2.2 If We have to revise these Terms under clause 2.1, We will give you at least one month's written notice of any changes to these Terms before they take effect. You can choose to cancel the contract in accordance with clause 11.

## 3. DELIVERY OF GOODS

3.1 Please note that timescales for delivery and delivery charges will vary depending on the availability of the Goods and your address. Please allow for extra time for deliveries to the Scottish Highlands and Islands OR Ireland.

3.2 We will contact you with an estimated delivery date. Occasionally Our delivery to you may be affected by an Event Outside Our Control.

3.3 Delivery of an Order shall be completed when We deliver the Goods to the address you gave Us.

3.4 If We are not able to deliver the whole of the Order at one time due to operational reasons or shortage of stock, We will deliver the Order in installments. We will not charge you extra delivery costs for this. However, if you ask Us to deliver the Order in installments, We may charge you extra delivery costs. Each installment shall constitute a separate contract governed by these terms. If We are late delivering an installment or one installment is faulty, that will not entitle you to cancel any other installment.

3.5 The Goods will be your responsibility from the completion of delivery.

3.6 You own the Goods once We have received payment in full.

## 4. IF THE GOODS ARE FAULTY

As a consumer, you have legal rights in relation to Goods that are faulty or not as described.

## 5. SELLER'S GUARANTEE OF GOODS

5.1 We guarantee that on delivery and for a period of 12 months from delivery, the Goods shall be free from material defects. However, this guarantee does not apply in the circumstances described in clause 5.2.

5.2 This guarantee does not apply to any defect in the Goods arising from:

- (a) Fair wear and tear;
- (b) Willful damage, abnormal storage or working conditions, accident, negligence by you or by any third party;
- (c) If you fail to operate or use the Goods in accordance with the user instructions;
- (d) Any alteration or repair by you or by a third party who is not one of Our authorized repairers;

(e) Incorrect installation by you or by a third party who is not one of Our authorized installers; and

(f) Any specification provided by you.

5.3 This guarantee is in addition to your legal rights in relation to the Goods that are faulty or not as described.

## 6. PRICE AND PAYMENT

6.1 The price of the Goods will be set out in Our price list in force at the time We confirm your Order. Our prices may change at any time, but price changes will not affect Orders that We have already confirmed with you.

6.2 It is always possible that, despite Our best efforts, some of the Goods We sell may be incorrectly priced. We will normally check prices as part of Our dispatch procedures so that, where the Goods' correct price is less than Our stated price, We will charge the lower amount when dispatching the Goods to you. If the Goods' correct price is higher than the price stated on Our site. We will contact you to tell you and for your instructions. If the pricing error is obvious and unmistakable and could have reasonably been recognized by you as a mispricing, We do not have to provide the Goods to you at the incorrect (lower) price.

6.3 Where We are providing Goods to you, you must make payment for Goods in advance by credit card, debit card, paypal or bank transfer.

## 7. OUR LIABILITY TO YOU

7.1 If We fail to comply with these Terms, We are responsible for loss or damage you suffer that is a foreseeable result of Our breach of the Terms or Our negligence, but We are not responsible for any loss or damage that is not foreseeable. Loss or damage is foreseeable if they were an obvious consequence of Our breach or if they were contemplated by you and Us at the time we entered into this contract.

7.3 We only supply the Goods for domestic, private and business use. However, we have no liability to you for any loss of profit, loss of business, business interruption, or loss of business opportunity.

## 8. YOUR CANCELLATION RIGHTS

8.1 Before the Goods are delivered, you have the following rights to cancel and Order for Goods including where you choose to cancel because We are affected by an Event Outside Our Control or We change these Terms under clause 3.1 to your material disadvantage:

- (a) You may cancel any Order for Goods at any time before We dispatch the Goods.
- (b) If you cancel an Order under clause 8.1 (a) and you have made any payment in advance for Goods that have not been delivered to you, We will refund these amounts to you.
- (c) Unfortunately, if you cancel an Order for Goods under clause 8.1 (a) and We have already dispatched your Goods to you, We will not be able to cancel your Order until it is delivered. In this case, if you return the Goods to Us, we will have to charge you the cost of collection or you will have to pay the cost of returning the Goods back to Us. This will not affect your refund for the Goods, but any charge for collection will be deducted from the refund that is due to you.

## 9. OUR CANCELLATION RIGHTS

If We have to cancel an Order for Goods before the Goods are delivered:

- (a) We may have to cancel an Order before the Goods are delivered, due to an Event Outside Our Control or the unavailability of stock. We will promptly contact you if this happens.
- (b) If We have to cancel an Order under clause 9(a) and you have made any payment in advance for Goods that have not been delivered to you, We will refund these amounts to you.

## 10. INFORMATION ABOUT US AND HOW TO CONTACT US

10.1 We are a company registered. Our company registration number is 9451681 and Our registered office is Chandos mews, 34b chandos road, Redland, Bristol, BS6 6PF.

10.2 If you have any questions or if you have any complaints, please contact Us.

You can contact Our customer service team by emailing Us at [info@rewiresecurity.co.uk](mailto:info@rewiresecurity.co.uk)

10.3 If you wish to contact Us in writing, or if any clause in these Terms requires you to give Us notice in writing (for example, to cancel the contract), you can send this to Us by e-mail, by hand or by pre-paid post to Chandos mews, 34b chandos road, Redland, Bristol, BS6 6PF OR [info@rewiresecurity.co.uk](mailto:info@rewiresecurity.co.uk). We will confirm receipt of this by contacting you in writing. If We have to contact you or give you notice in writing, We will do so by e-mail, by hand, or by pre-paid post to the address you provide to Us in the Order.

## 11. HOW WE MAY USE YOUR PERSONAL INFORMATION

11.1 We will use the personal information you provide to Us to:

- (a) provide the Goods;
- (b) process your payment for such Goods; and
- (c) inform you about similar products or services that We provide, but you may stop receiving these at any time by contacting Us.

11.2 We will not give your personal data to any other third party.

## 12 OTHER IMPORTANT TERMS

12.1 We may transfer Our rights and obligations under these Terms to another organization, and We will always notify you in writing if this happens, but this will not affect your rights or Our obligations under these Terms.

12.2 This contract is between you and Us. No other person shall have any rights to enforce any of its terms. However, the purchaser of your property will have the benefit of the guarantee at clause 6.1 if you transfer it to them, but We and you will not need their consent to cancel or make any changes to these Terms.

12.3 Each of the paragraphs of these Terms operates separately, If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

12.4 If We fail to insist that you perform any of your obligations under these Terms, or if We do not enforce Our rights against you, or if We delay in doing so, that will not mean that We have waived Our rights against you and will not mean that you do not have to comply with those obligations. If We do waive a default by you, We will only do so in writing, and that will not mean that We will automatically waive any later default by you.

12.5 These Terms are governed by English law. You and We both agree to submit to the non-exclusive jurisdiction of the English courts.