

Navigator 24 Manual

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Part



1

- 4 :
- Navigator - Android 2.3 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15.
 - Navigator - iOS
 - PC Navigator
Windows 2000 / XP / Vista / Windows 7 / Windows 8 / Windows 10 / Windows 11
(notebooky, TabletPC, CarPC, UMPC . .).
 - Pocket Navigator PDA Pocket PC
2003 , Windows Mobile 5 / 6 WindowsCE.NET 4.2 5 6.
 - Navigator - Windows Phone 8.1 Windows 10 Mobile.

Part



2 Navigator

2.1

В случае, если список (например, результаты поиска) или меню из-за большого количества строчек не помещается на одну страницу, в правом углу окна появится индикатор положения изображаемой части в общем списке.



По списку можно перемещаться движением мыши, пальца или карандаша сверху вниз и наоборот.

2.2

GPS

PC

:

BlueTooth GPS PC

Windows.

USB GPS k PC

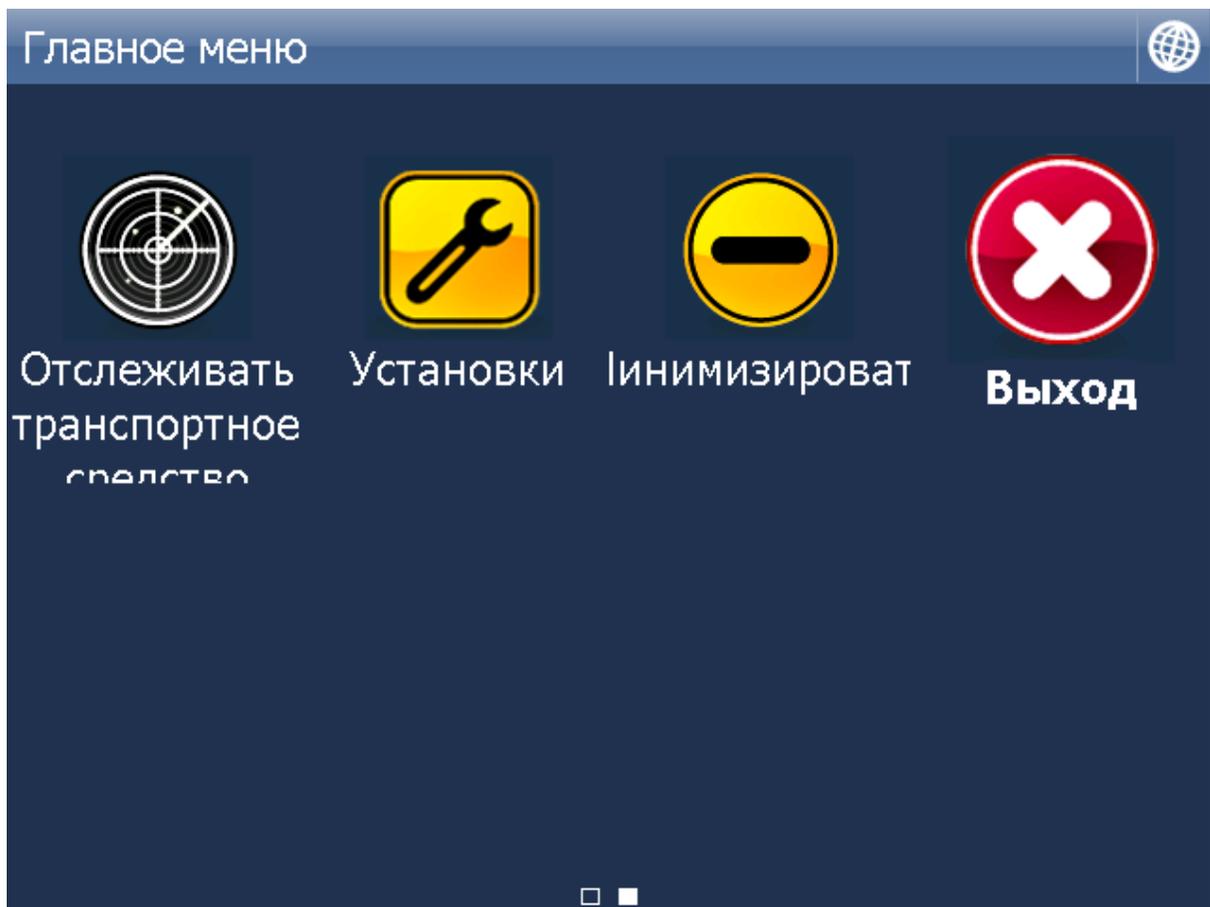
Windows

DVD

GPS_DRIVERS.

GPS

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GPS

← Главное меню\Установки\Настройки GPS 

GPS

GPS оборудование
Установки GPS оборудования

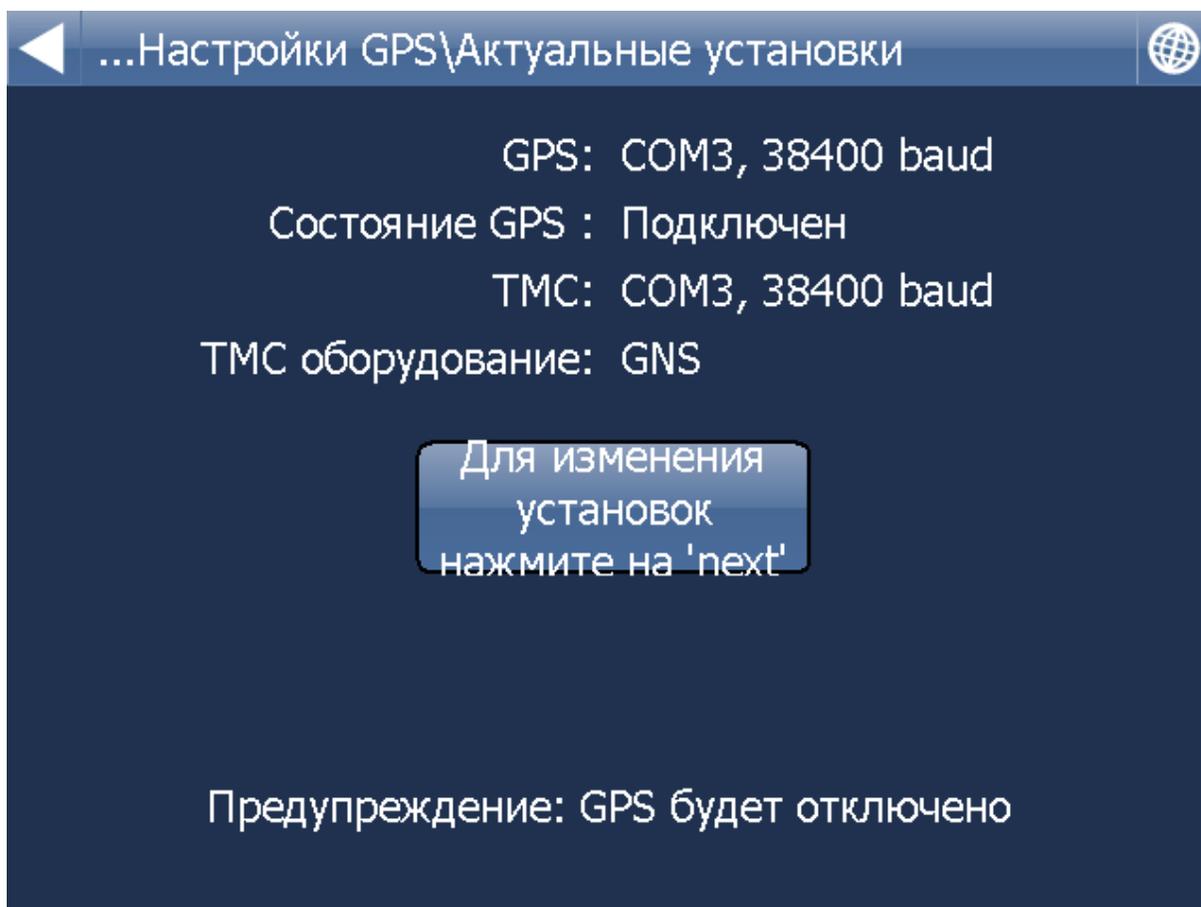
Синхронизовать время с GPS
Обозначьте для синхронизации времени с GPS.

Включать GPS при старте
Обозначьте для автоматического запуска GPS после включения навигатора.

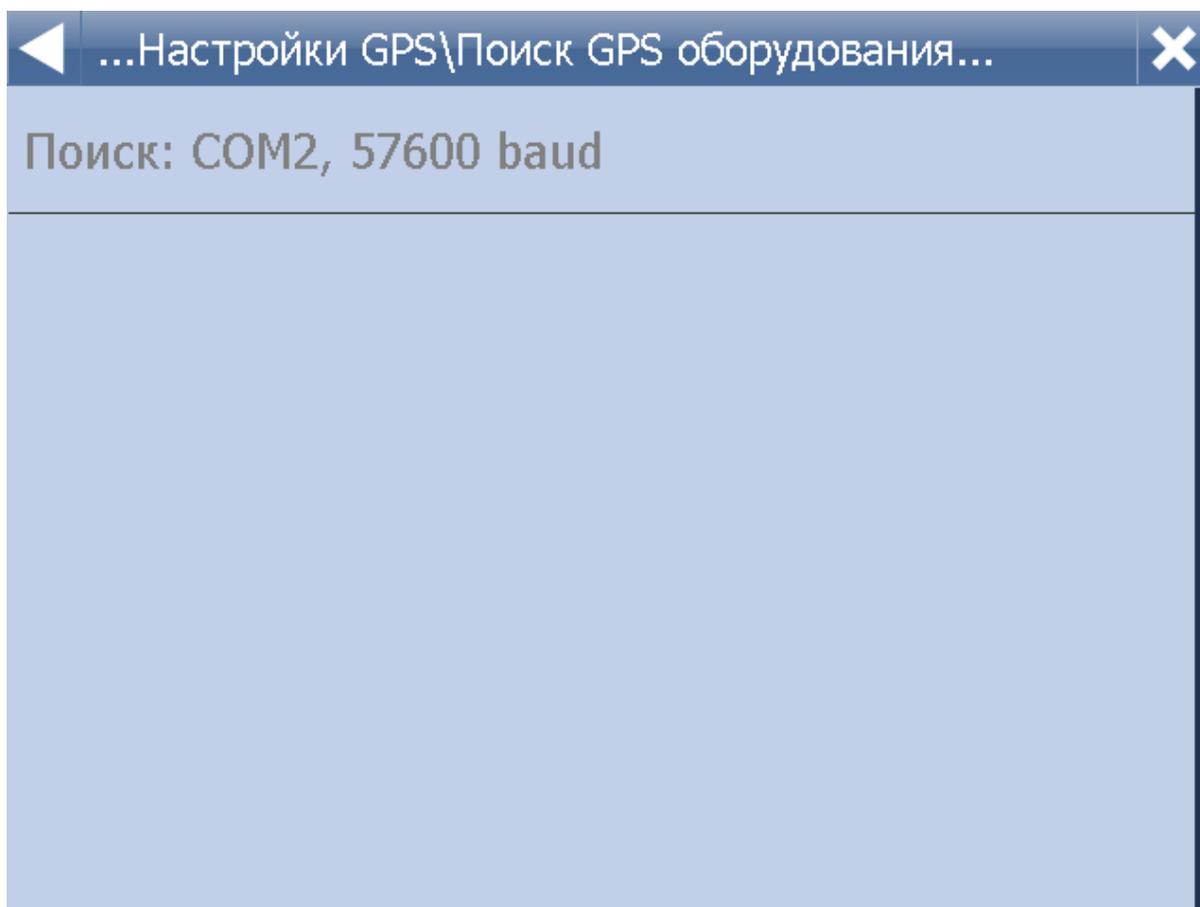
Карта

Включить вращение карты
Обозначьте для поворота карты в направлении езды

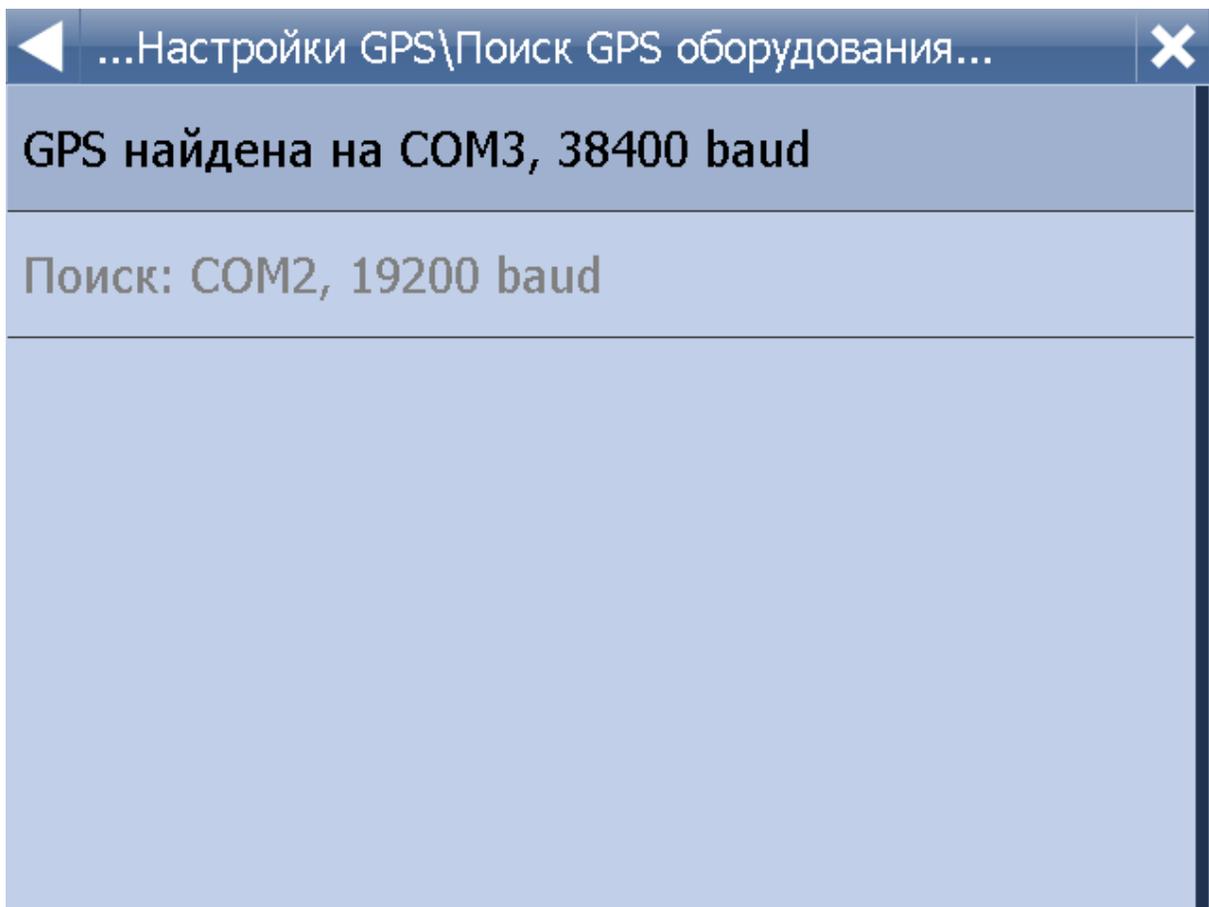
Центрирование карты
Обозначьте для центровки позиции на карте



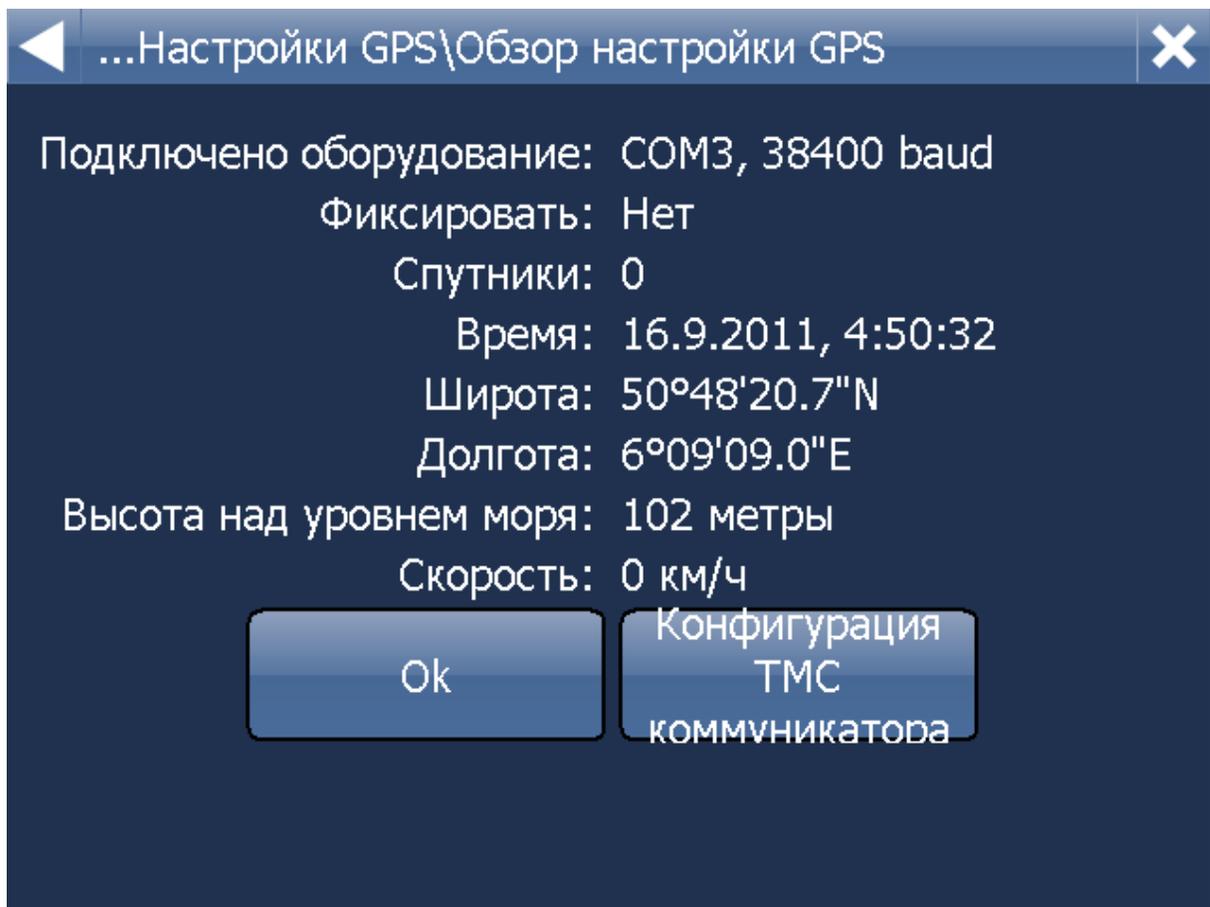
GPS.



В случае нахождения GPS подтвердите правильность нажатием на строчку с найденным GPS.



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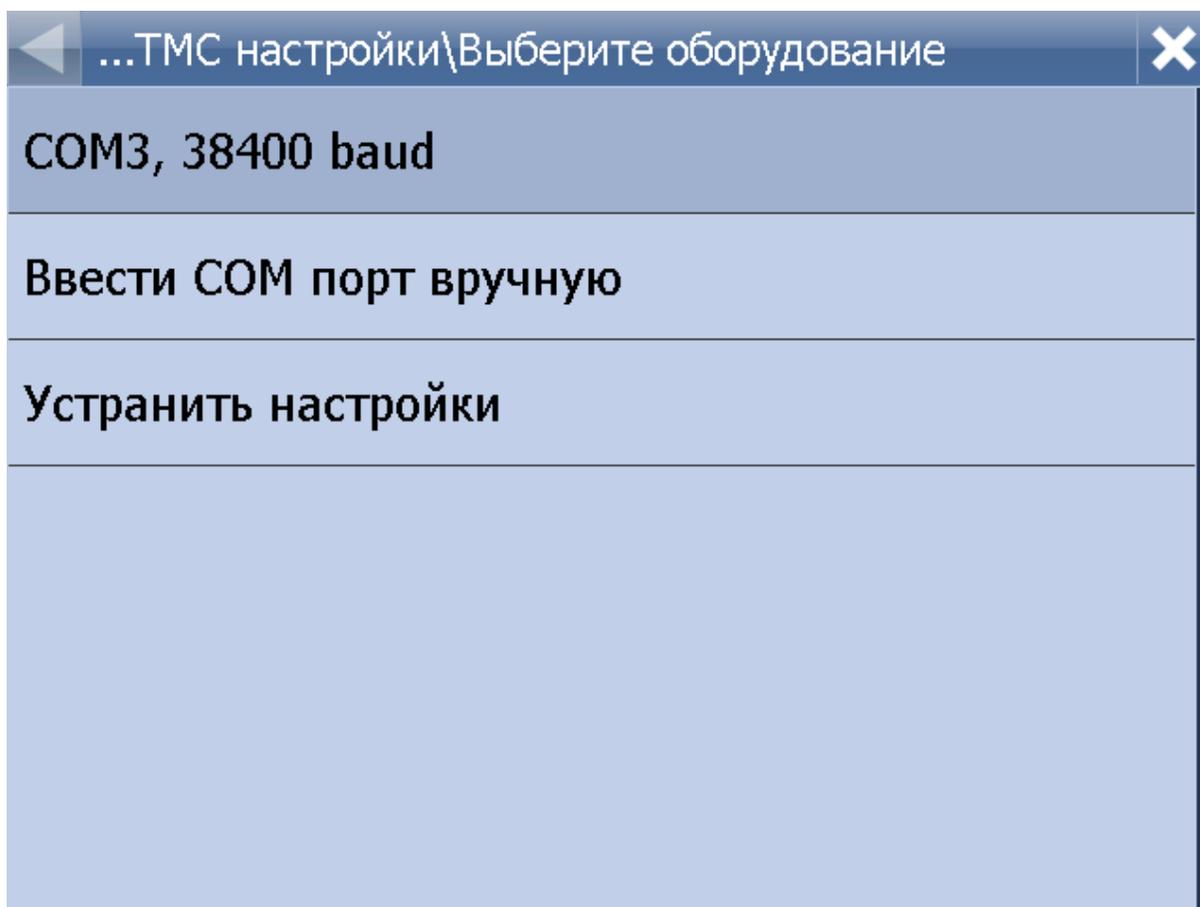
TMC,

TMC,

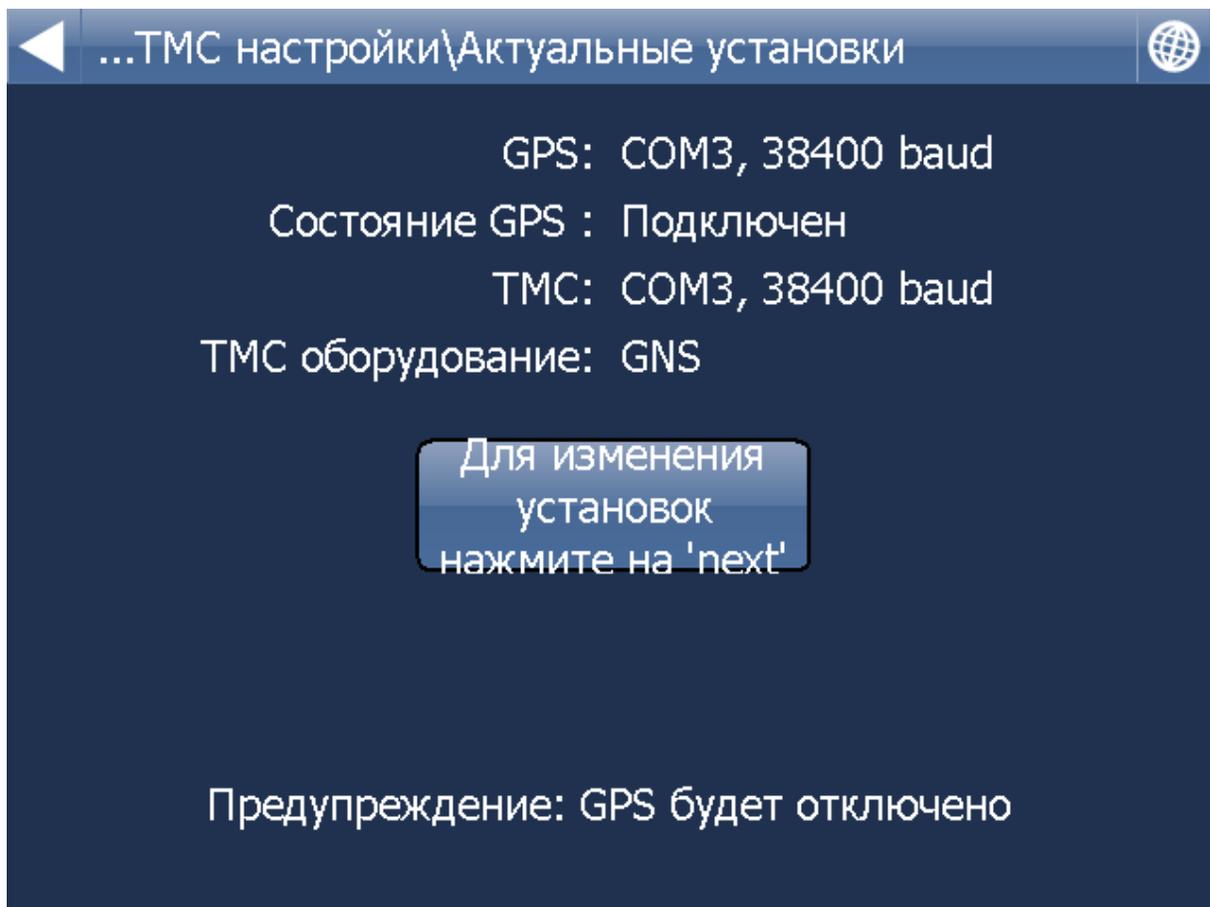
1) TMC

GPS.

GPS.







2) TMC

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COM

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TMC

TMC

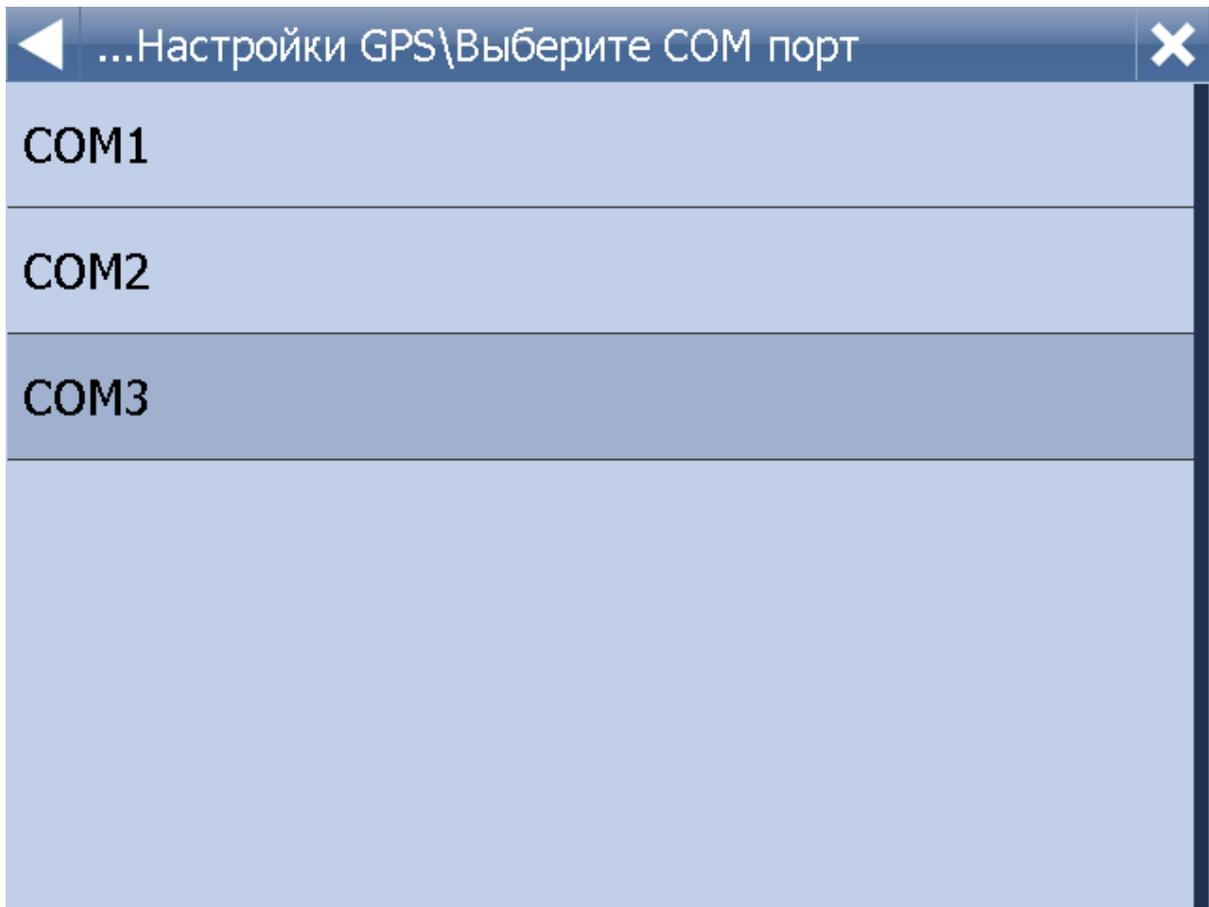
GPS

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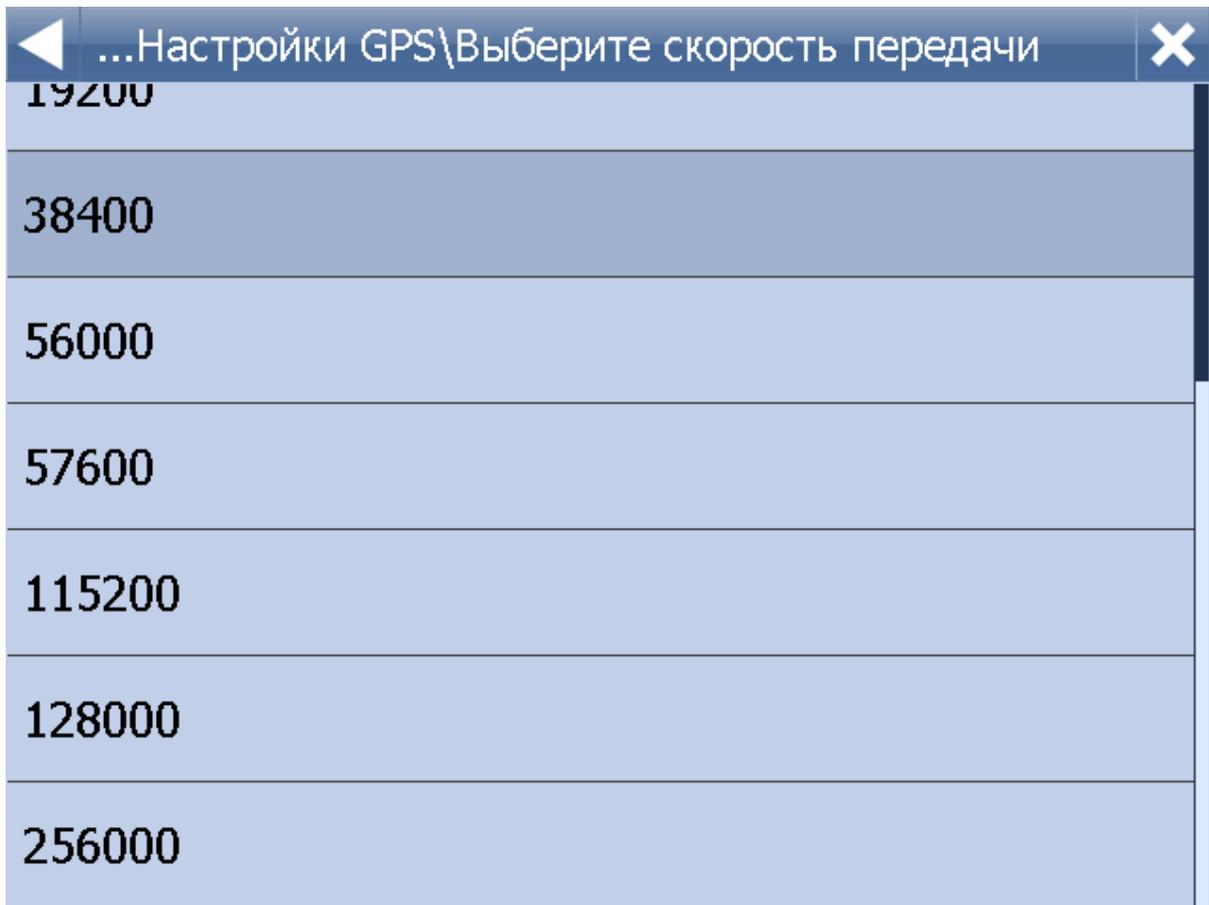
GPS

COM



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GPS .

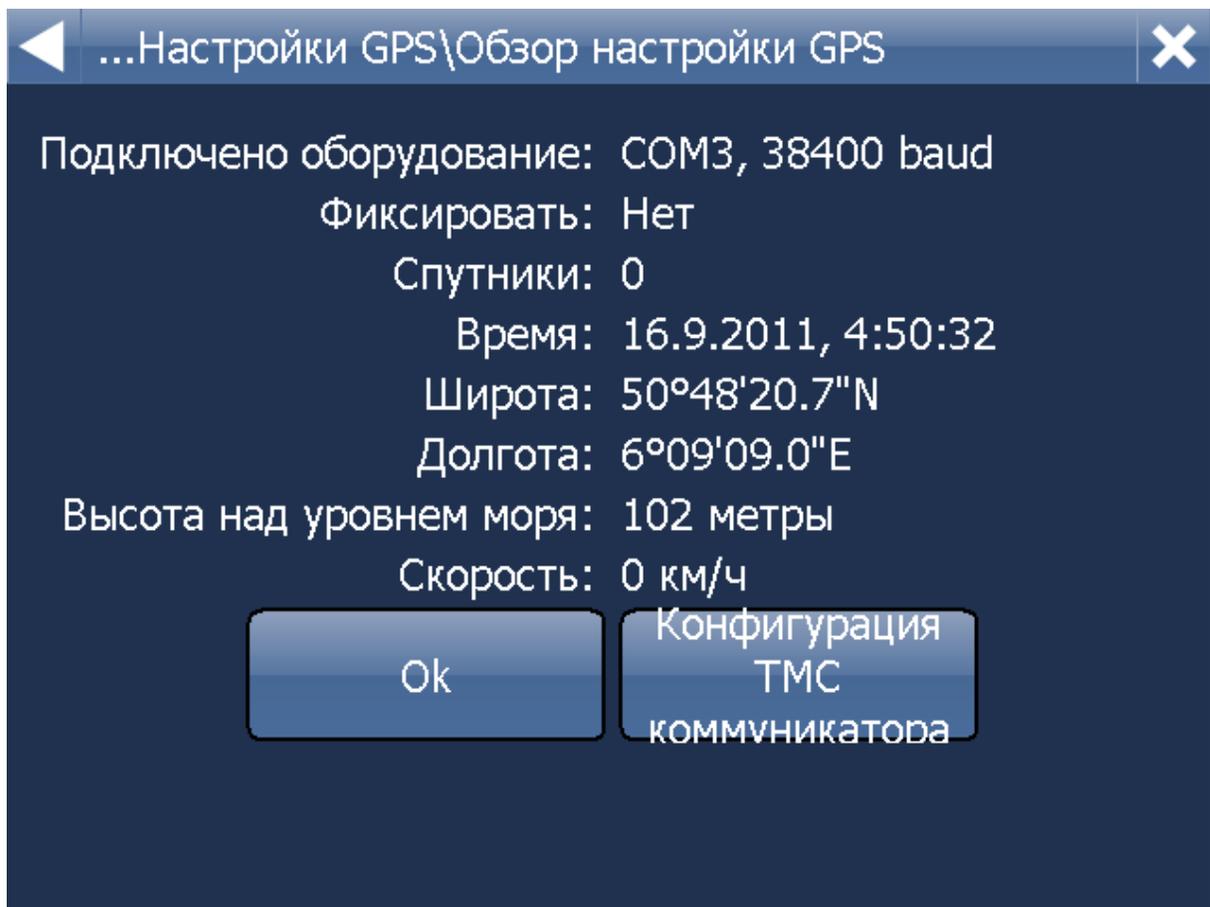


GPS

GPS

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GPS

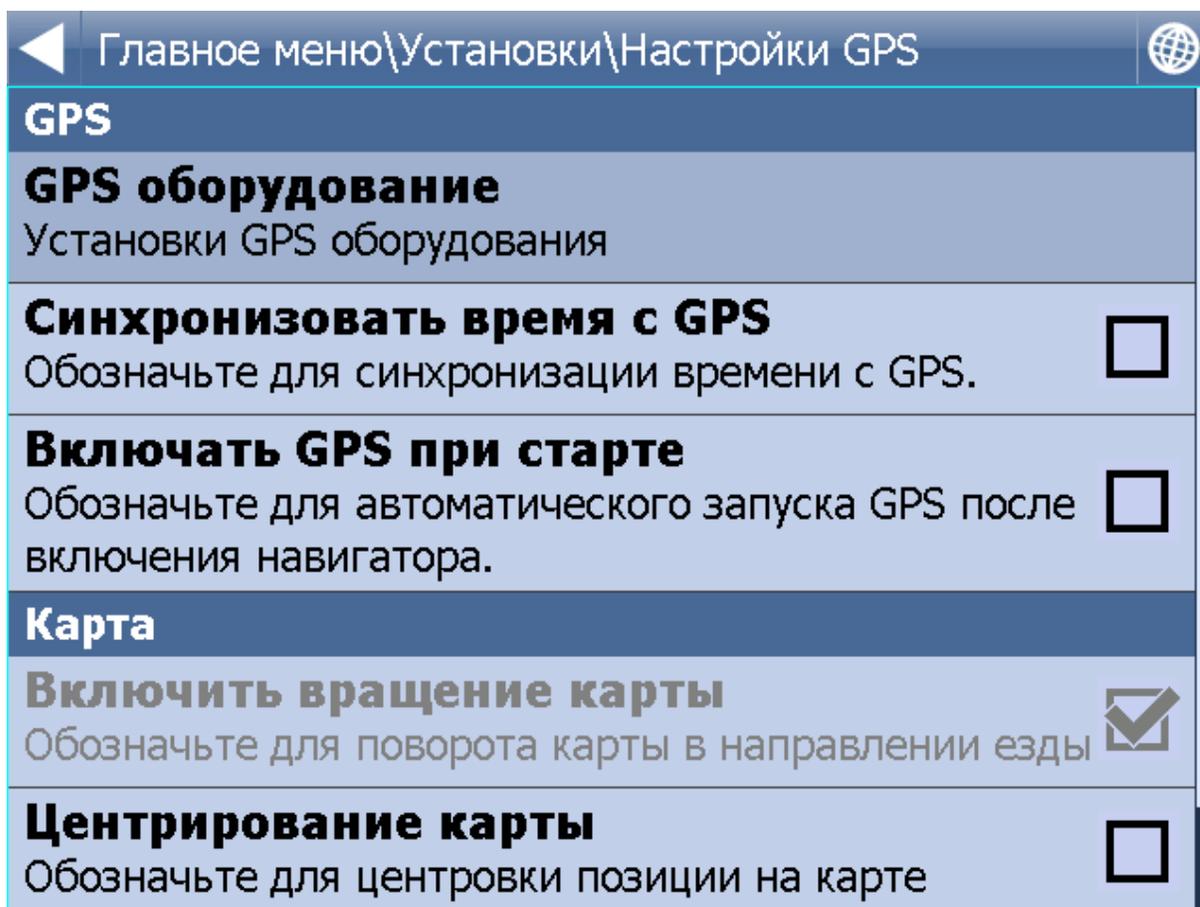


GPS.

GPS

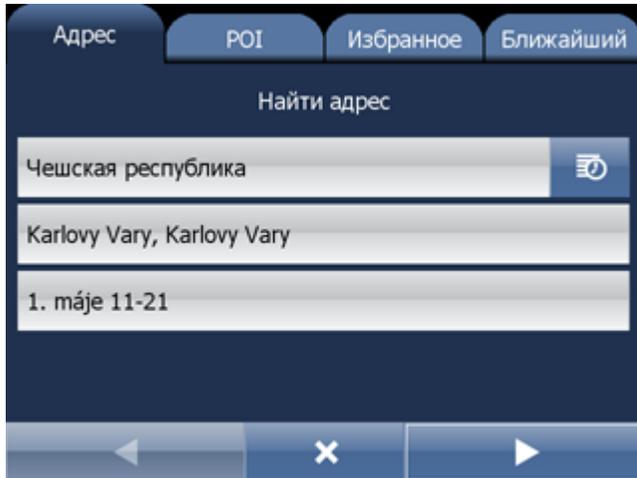
GPS





2.3





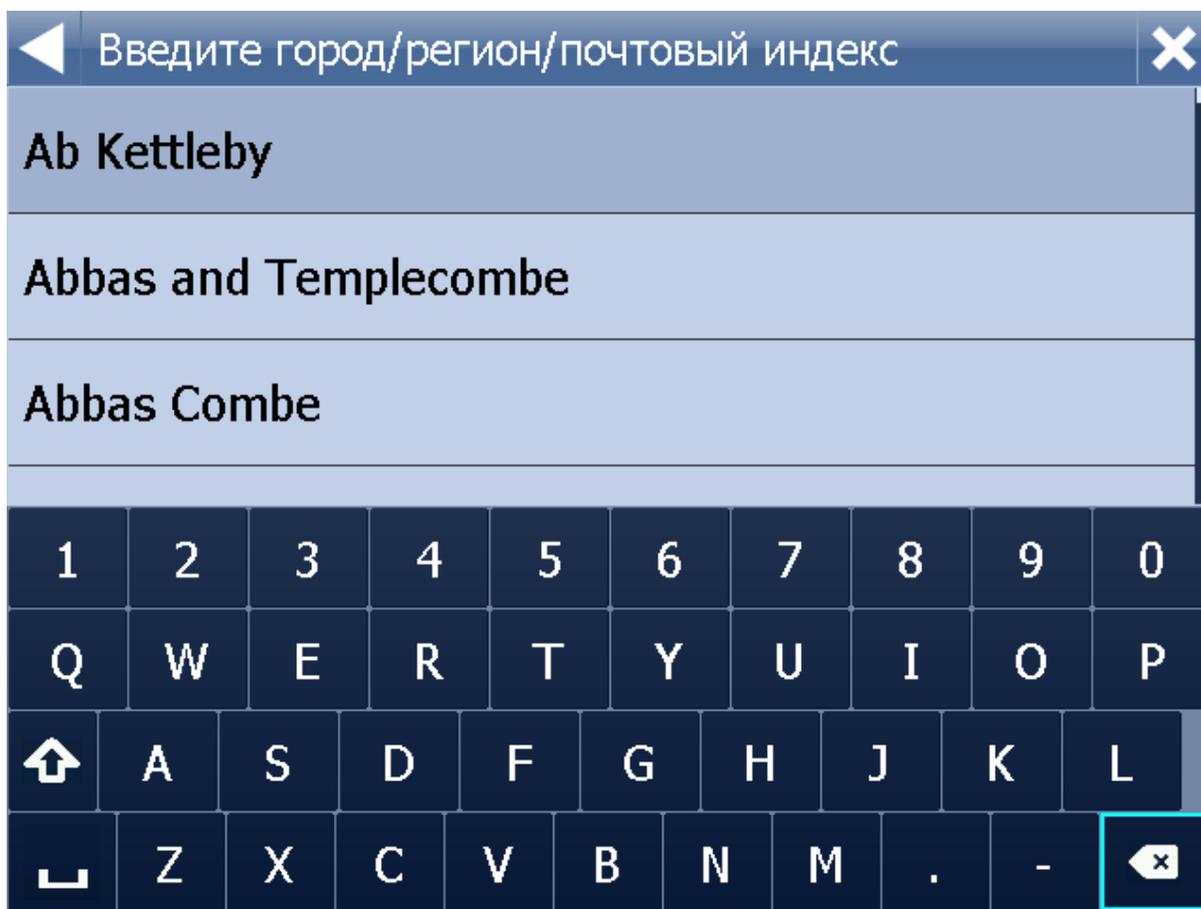
POI (

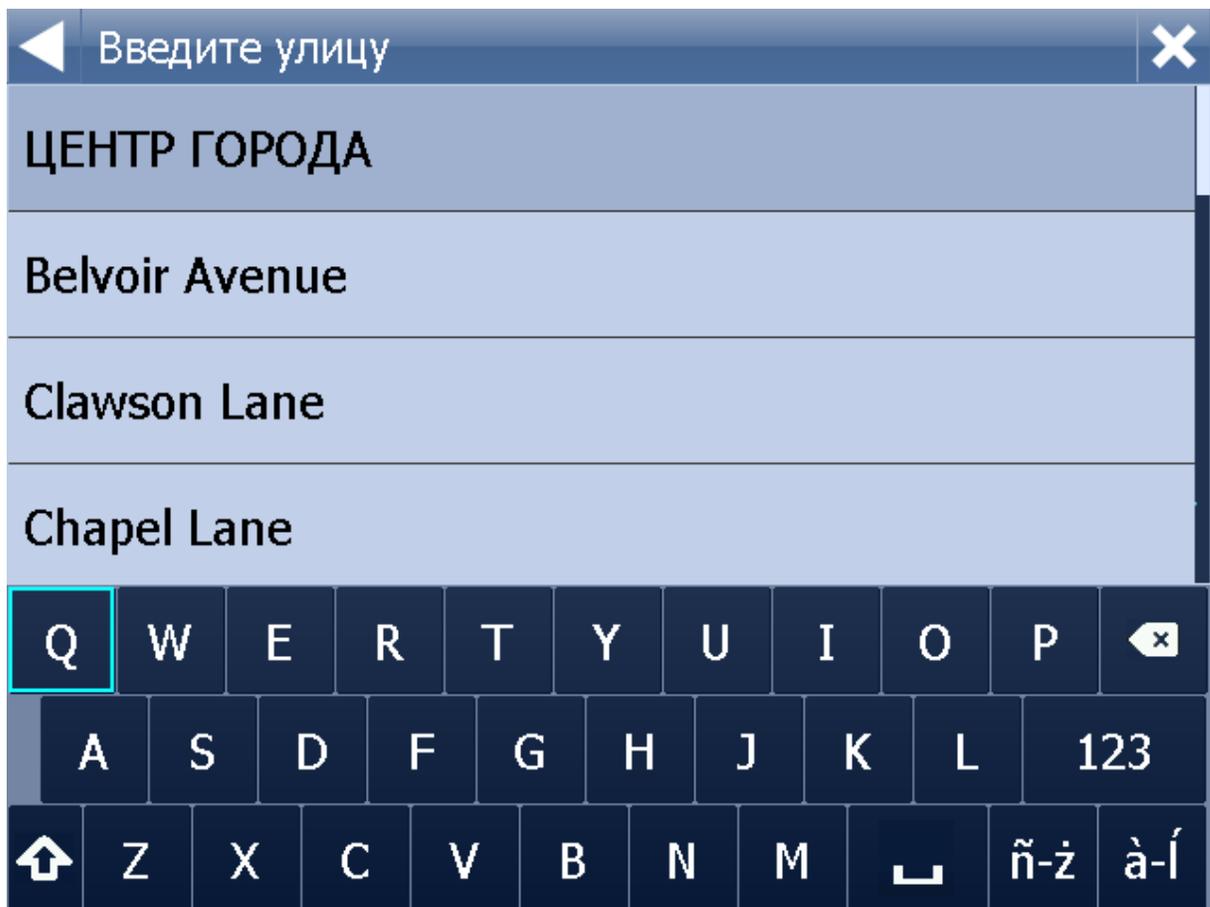
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2.3.1

The screenshot displays the search interface of the Navigator 24 application. At the top, there are four tabs: 'Адрес' (Address), 'POI', 'Избранное' (Favorites), and 'Координаты' (Coordinates), with a globe icon on the right. Below the tabs is a search bar with the text 'Найти адрес' (Find address). The search bar contains the text 'Великобритания' (Great Britain). To the right of the search bar is a magnifying glass icon. Below the search bar, there are two suggestions: 'London, London' and 'Abbey Orchard Street 10'. At the bottom of the search bar, there are two buttons: 'Использовать изображенное' (Use image) and 'Поиск в интернете' (Search in internet).





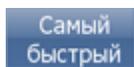
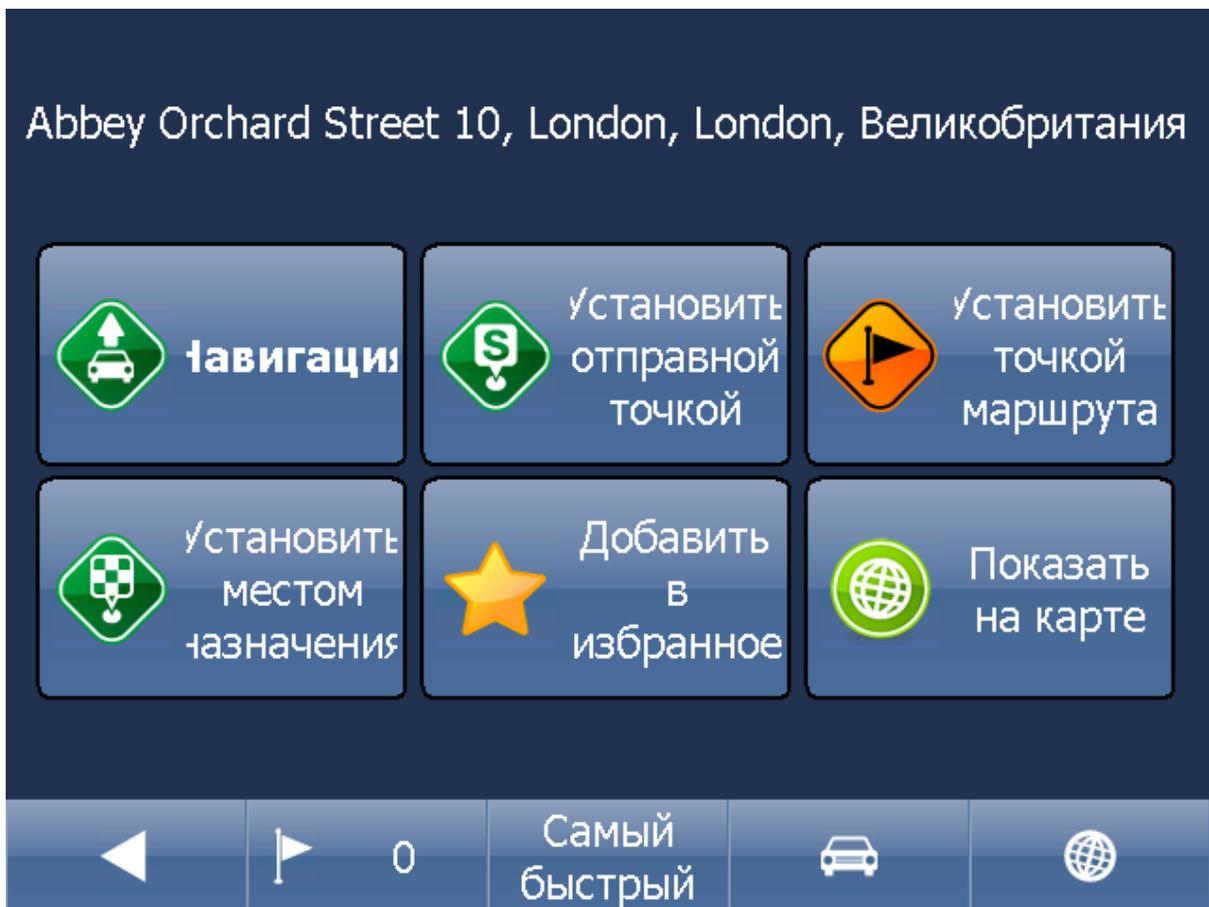
Введите номер дома

ЛЮБОЙ

1-19, 4-22

2

1	2	3	4	5	6	7	8	9	0	
Q	W	E	R	T	Y	U	I	O	P	
↑	A	S	D	F	G	H	J	K	L	
↵	Z	X	C	V	B	N	M	.	-	✕



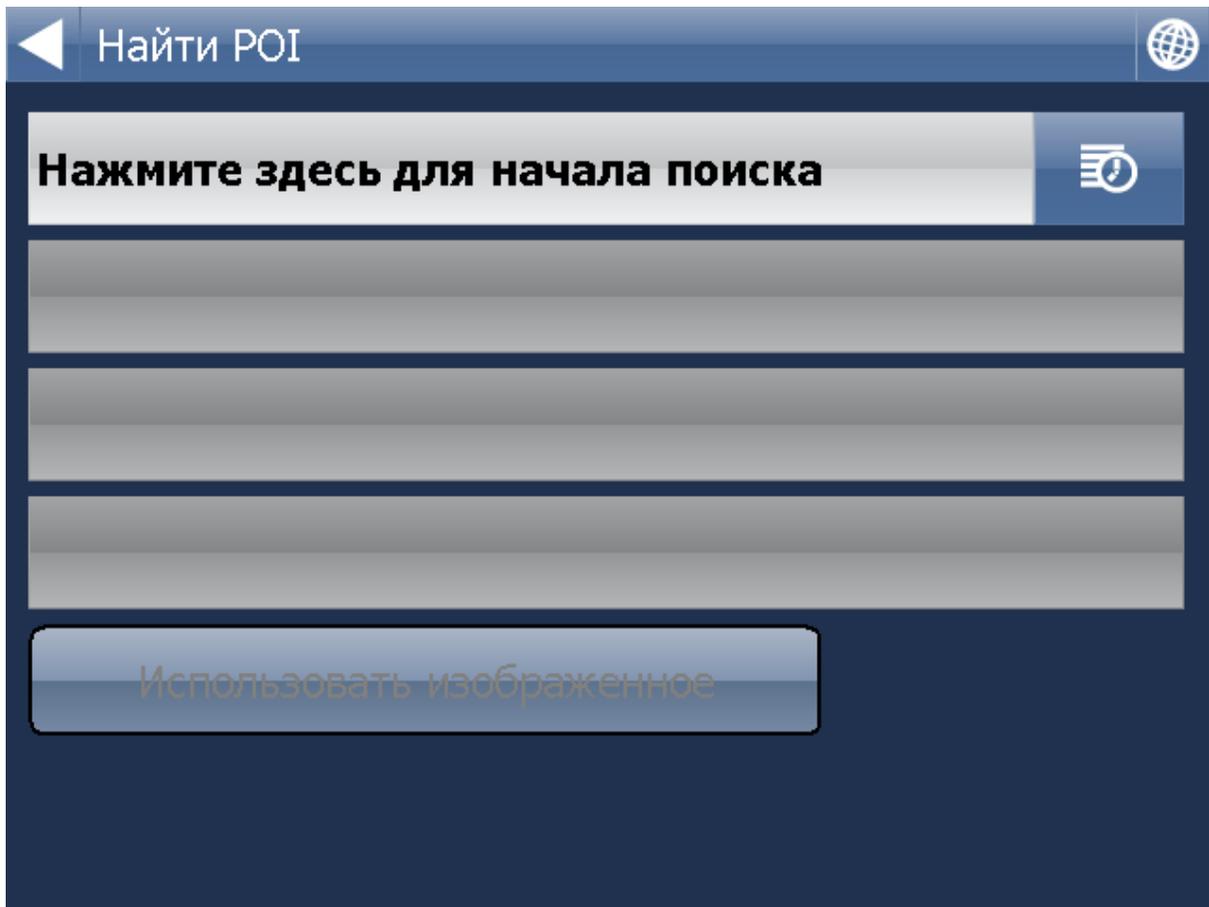
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2.3.2 POI

POI (

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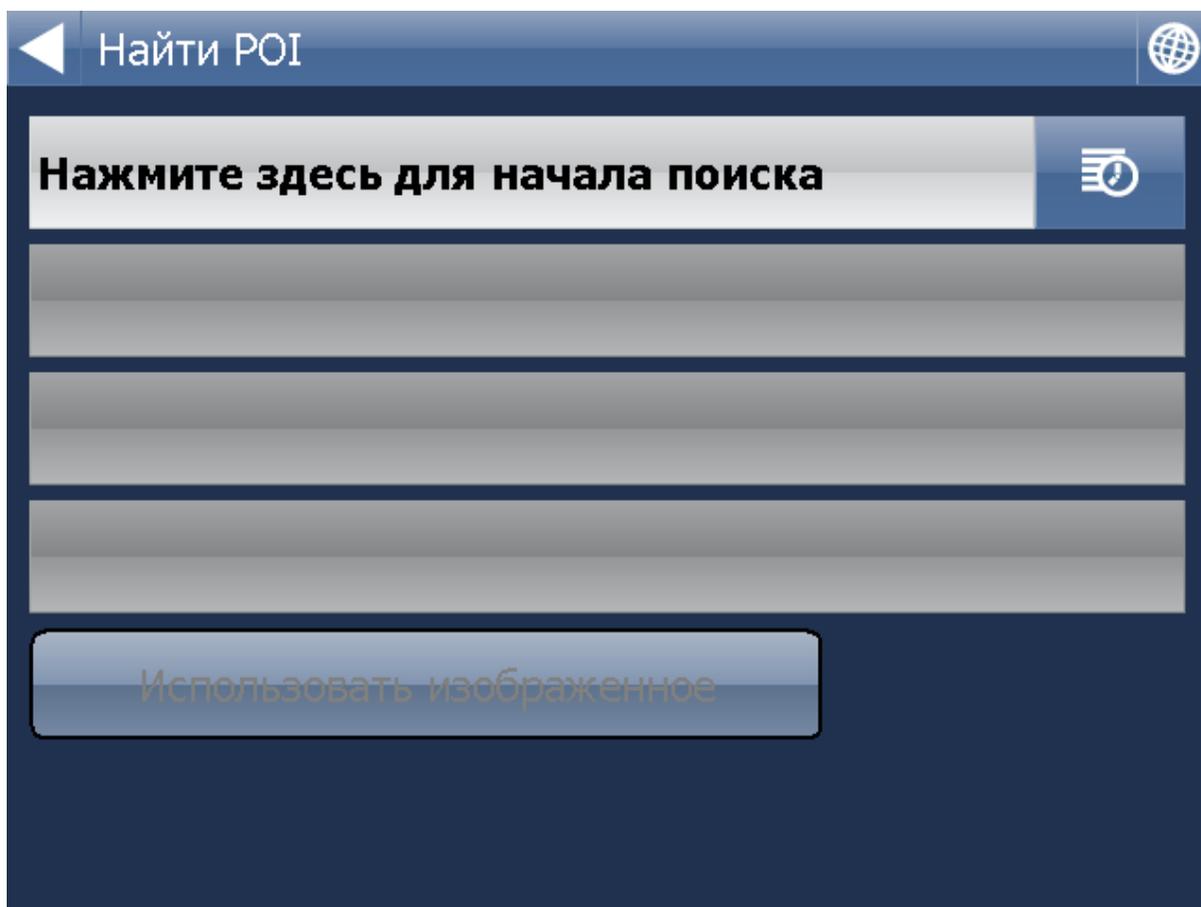
POI

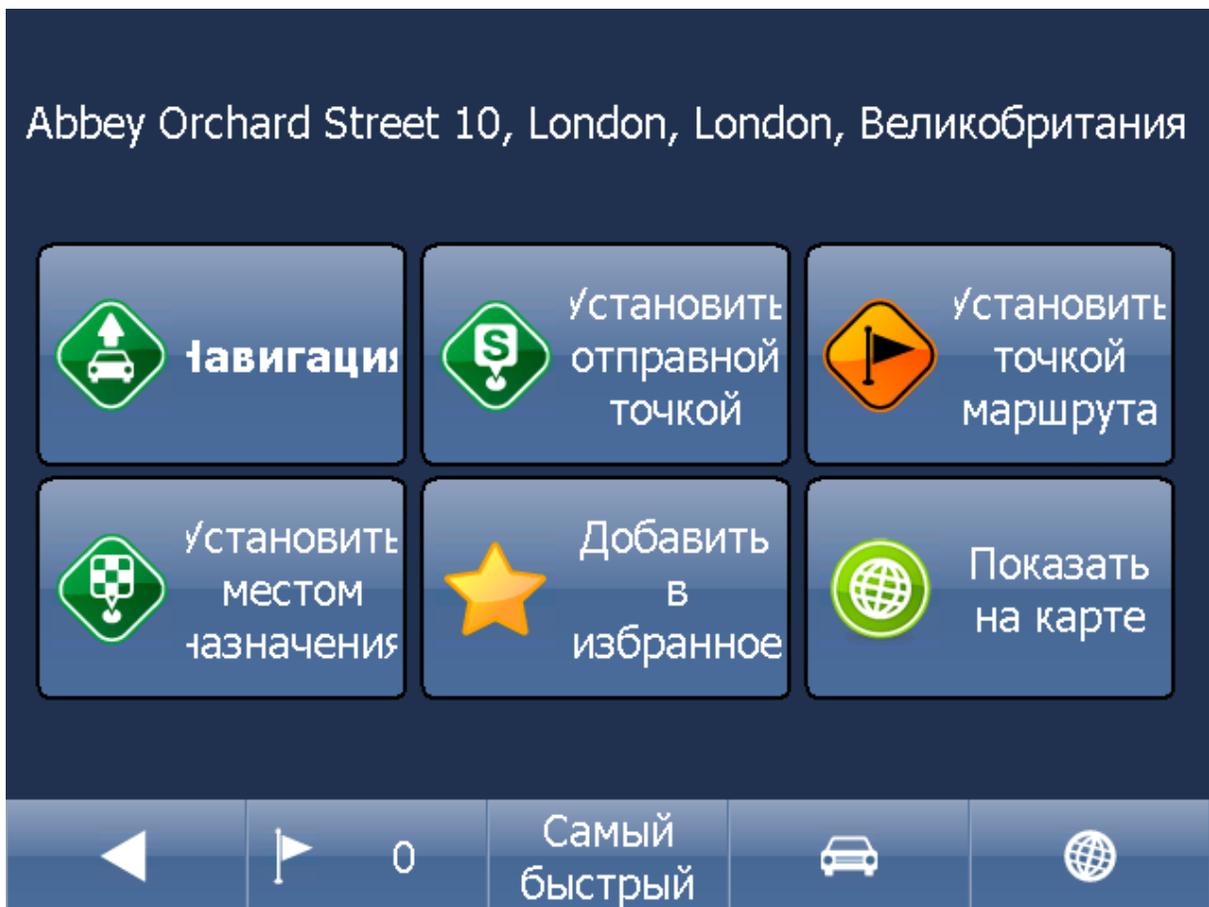
POI.

POI

← Выберите тип POI ×

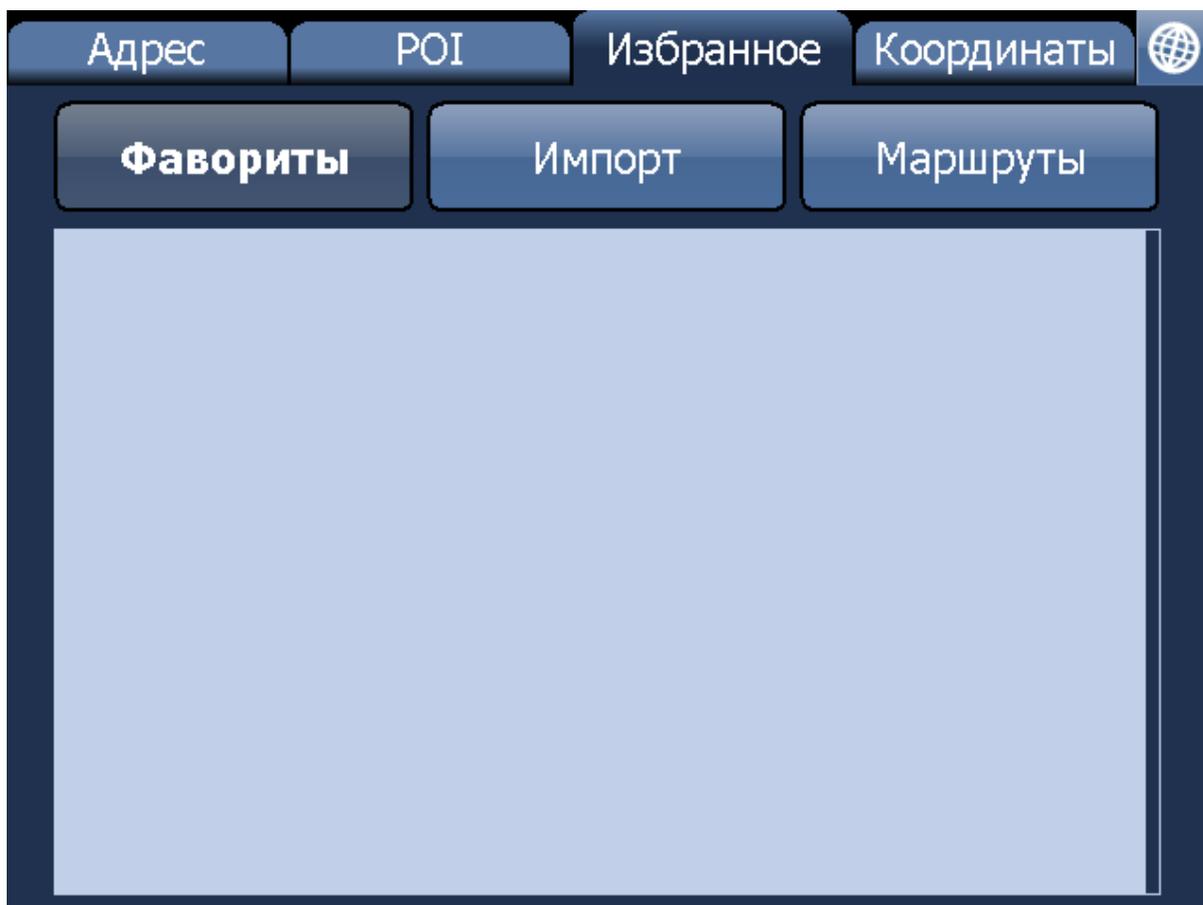
- ЛЮБОЙ
-  Культура и развлечения
-  Покупки и питание
-  Путешествие и проживание
-  Спорт и здоровье
-  Туризм и религия
-  Учреждения

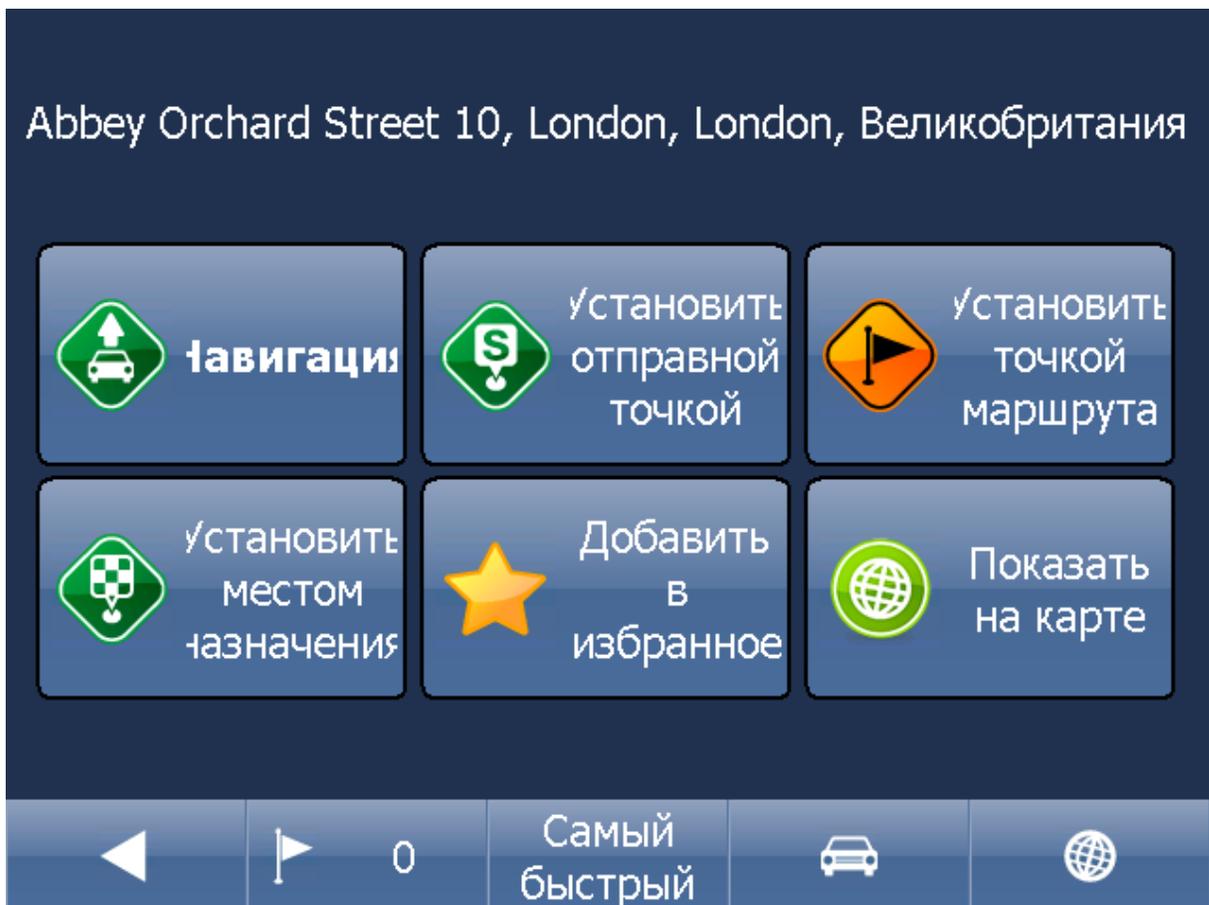






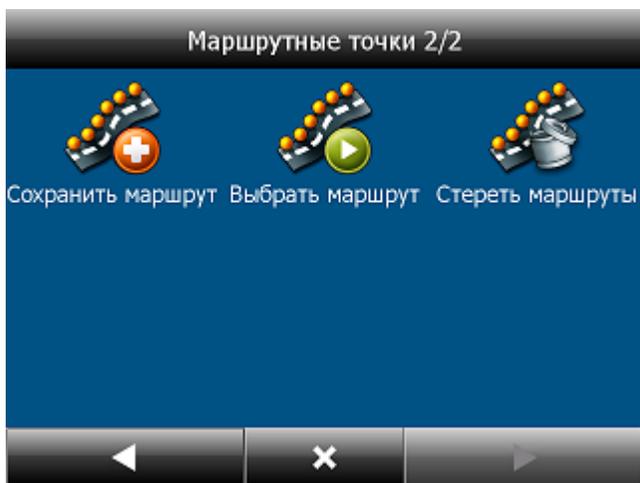
2.3.3



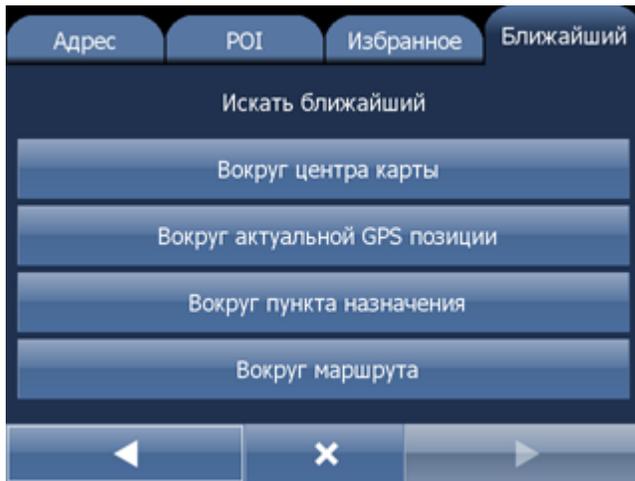


Самый
быстрый





2.3.4



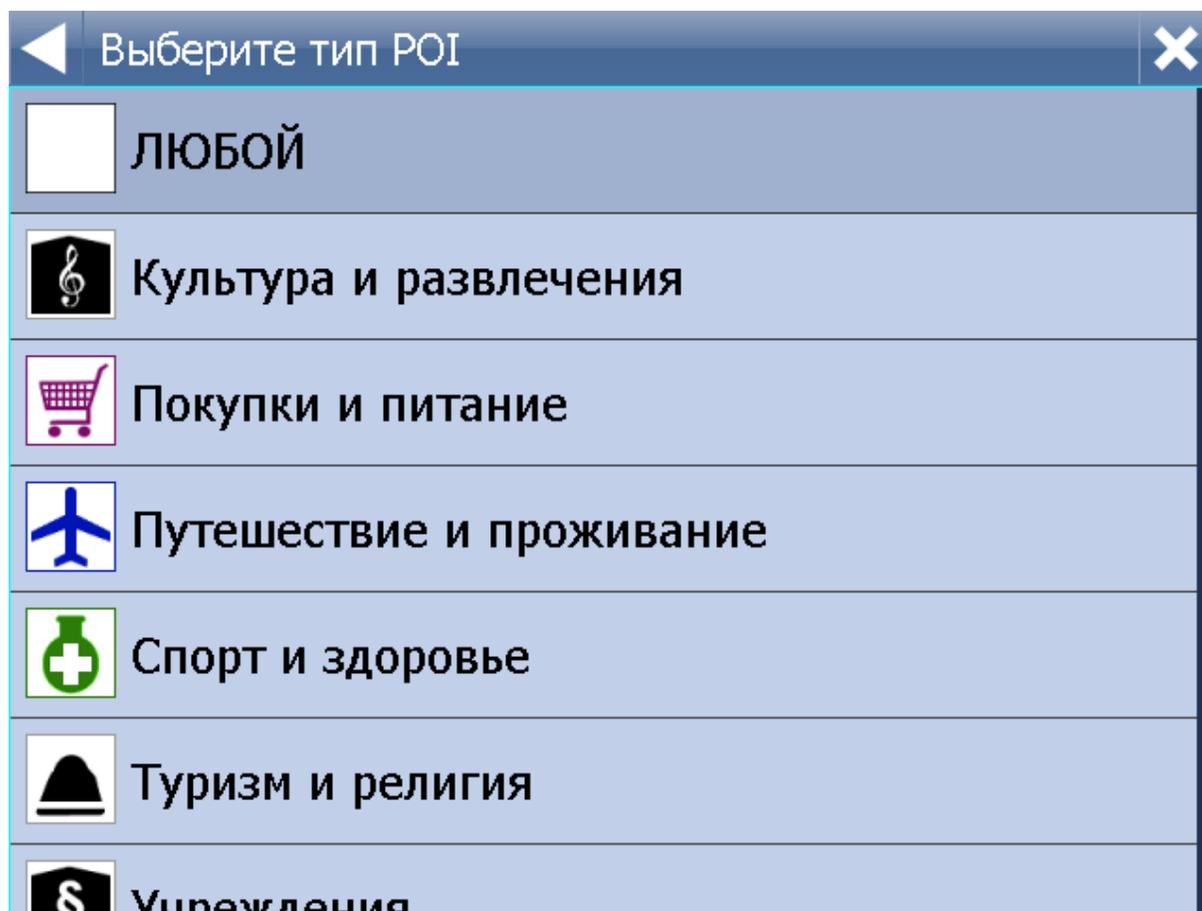
- POI

Zde m :
ete hledat nejbli zaje m m sta - POI podle n kolika krit ri :

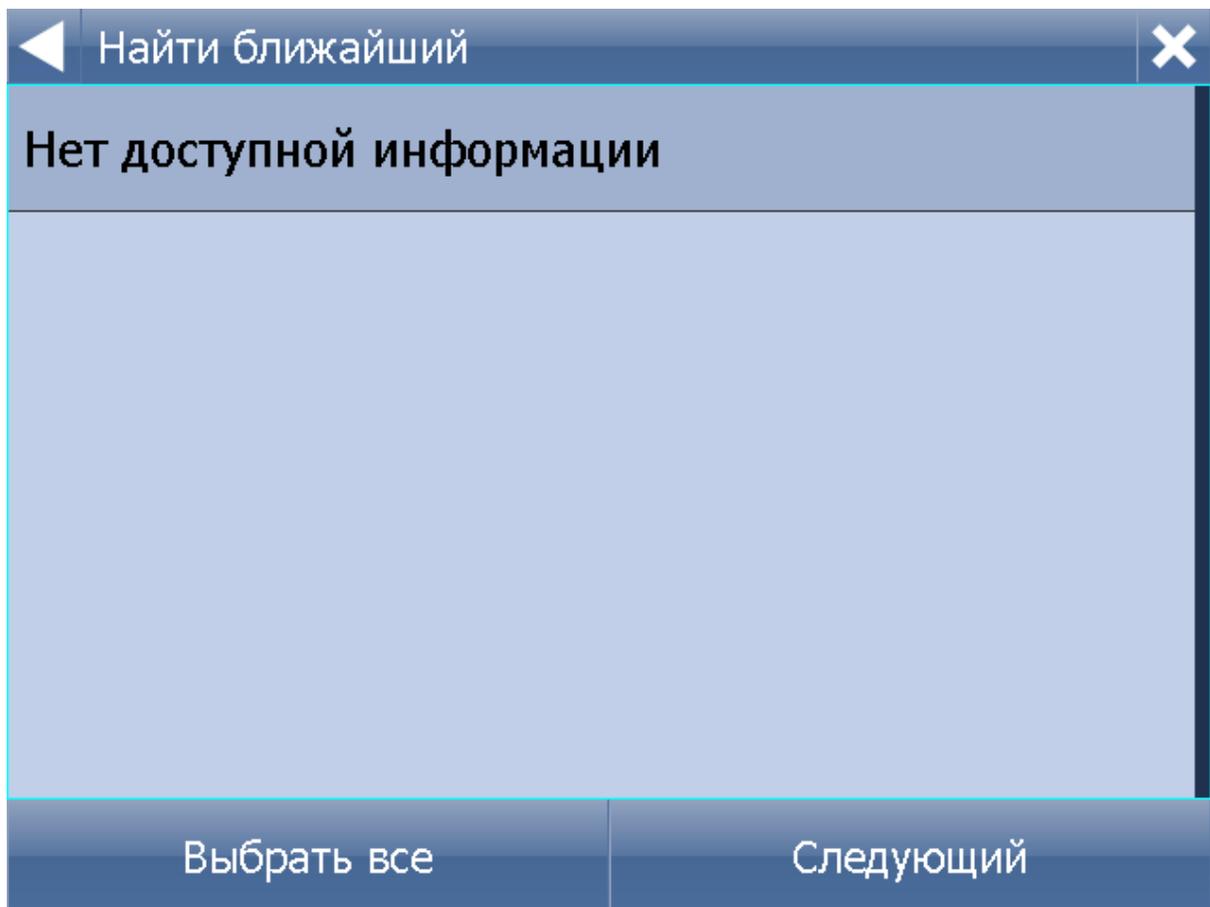
GPS - POI POI
- POI
- POI

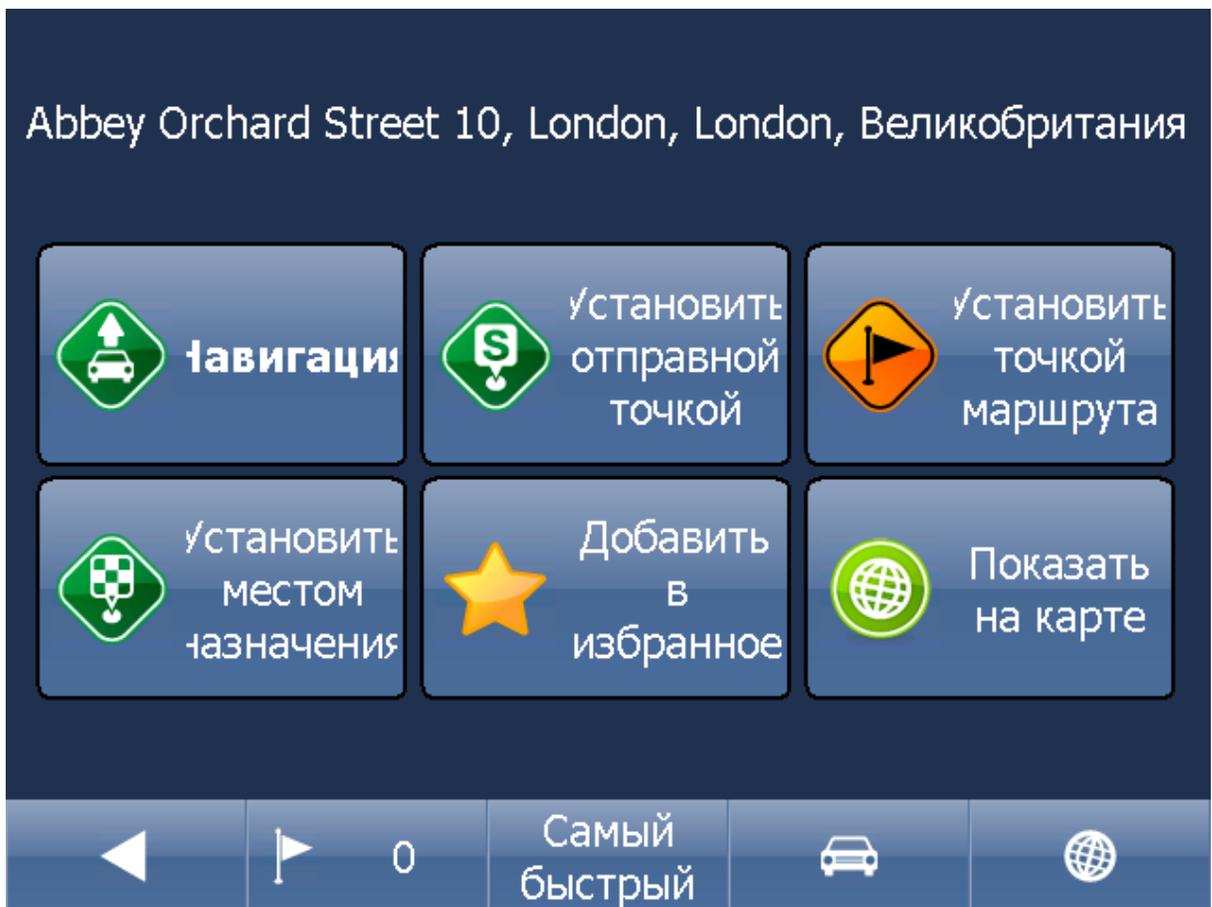
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POI



POI

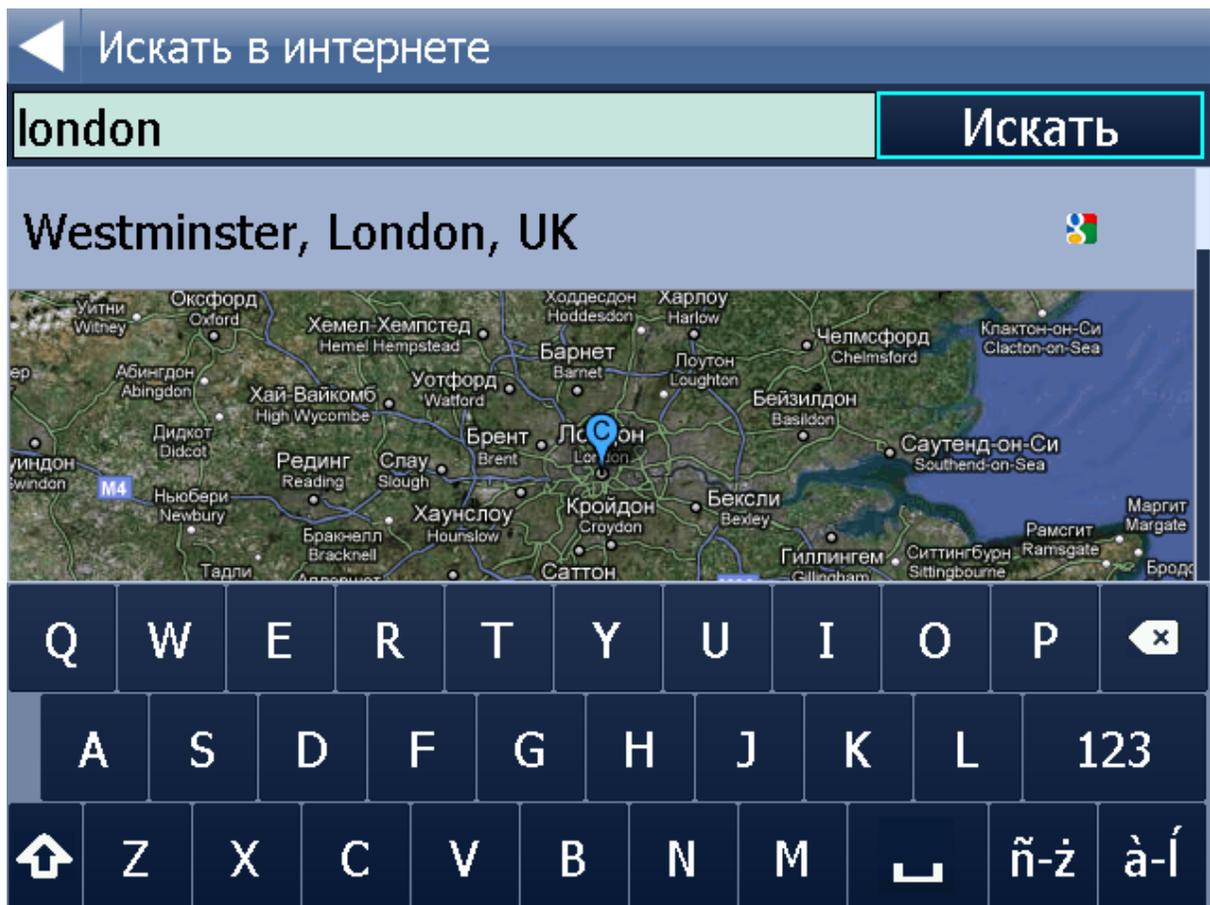






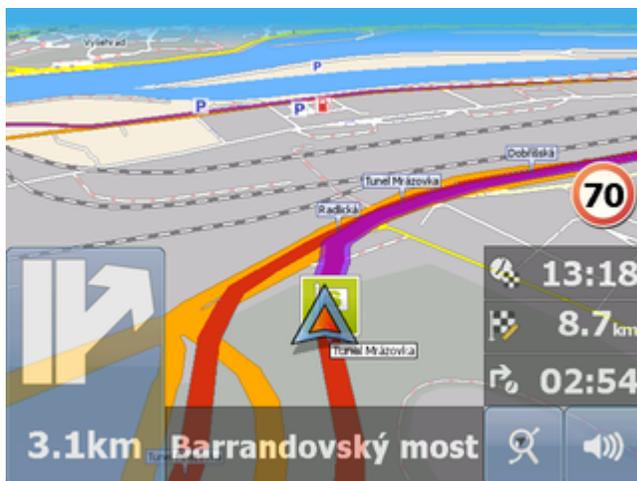
2.3.5

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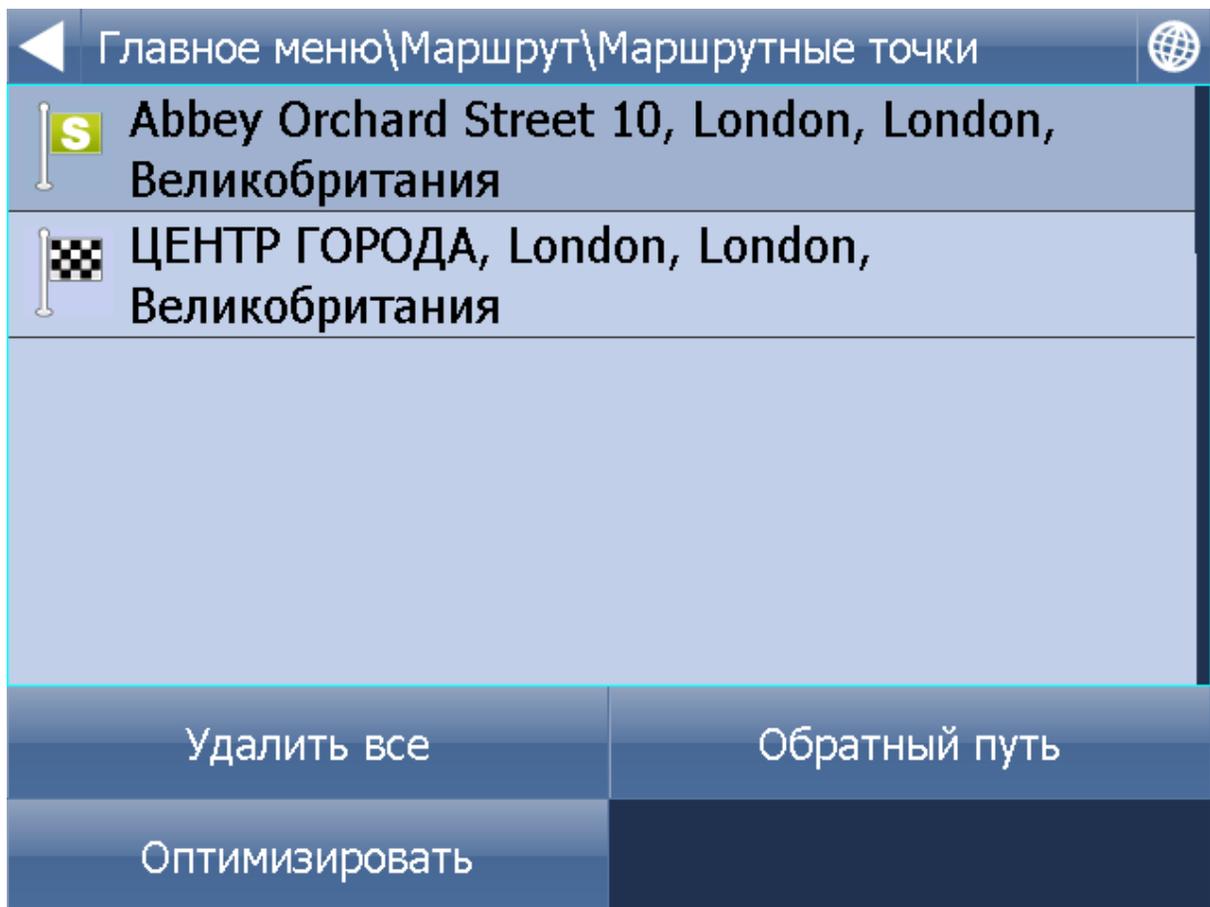
Yahoo Google.

2.4



2D

3D.



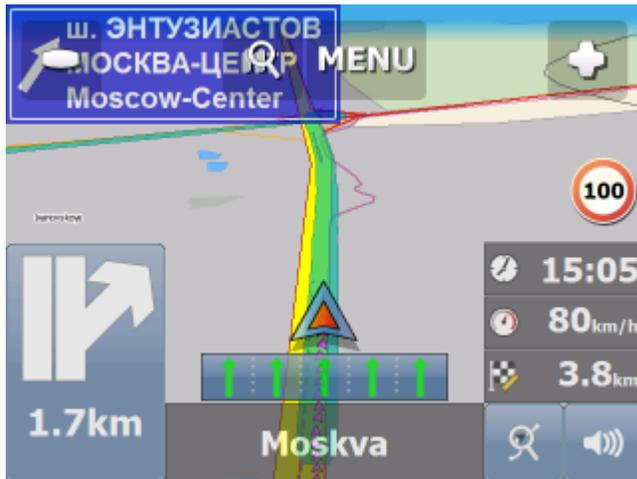
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the lane assistant

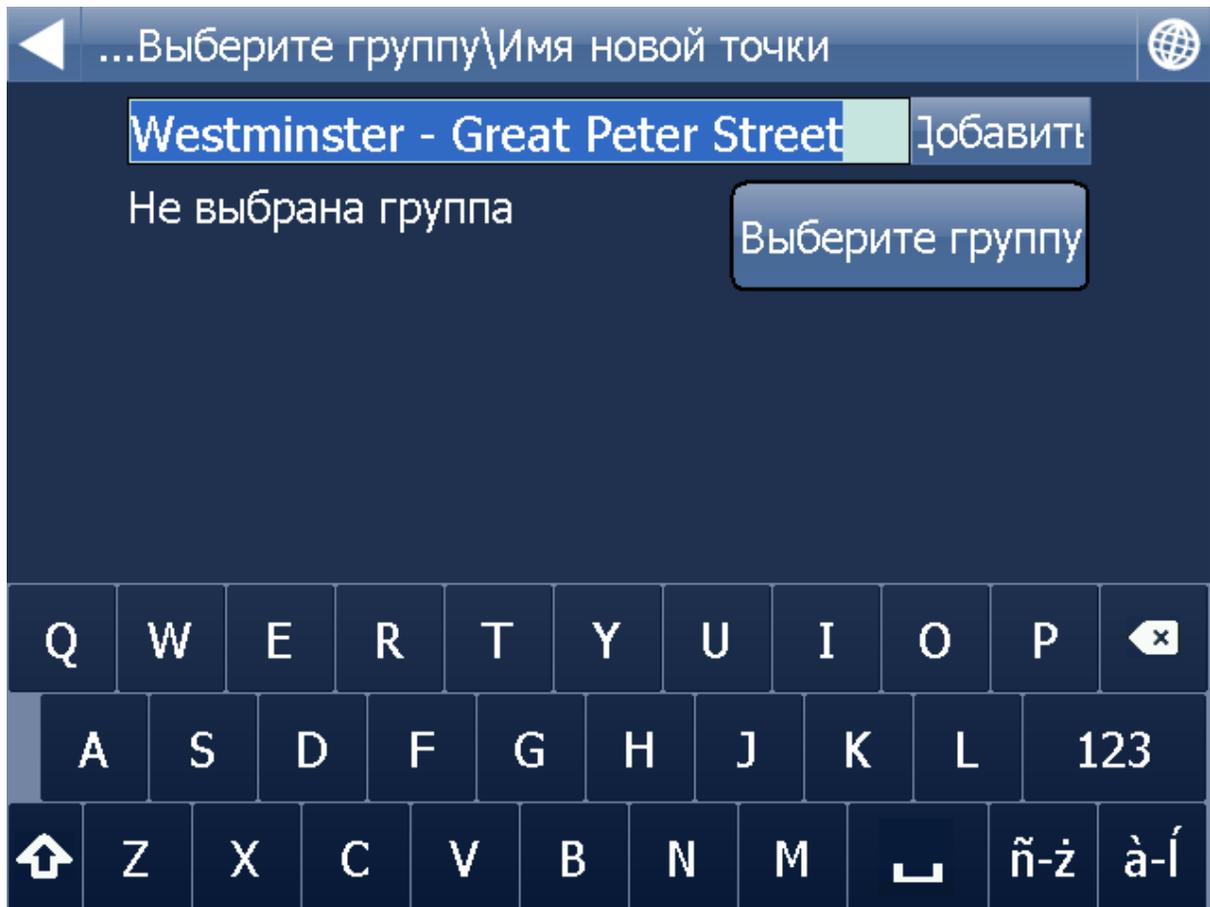


- zoom in, menu, zoom out,



GPS

← Главное меню\Маршрут\План поездки		
Оставшееся расстояние 0.6mls Время до цели 00:01:16		
	Westminster - Great Peter Street	121yds
	Westminster - Great Peter Street	330yds
	Westminster - Abingdon Street	612yds
	КОНЕЦ МАРШРУТА	0.6mls



DST -

TTA -

ETA -

TTM -

ALT -

SPD -

AZI -

SAT -

GPS -

TIM -

PDA

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DAT - -
TTW -

PDA

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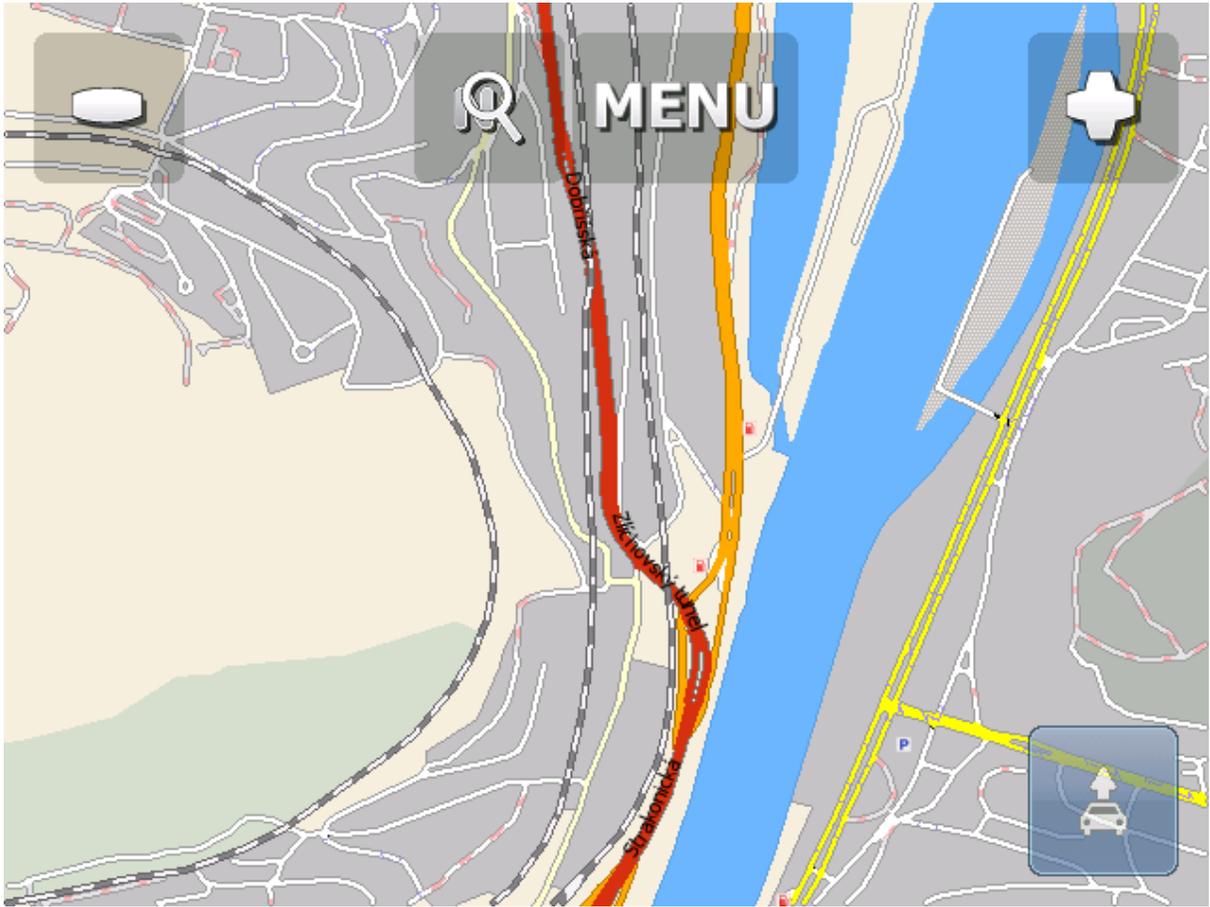
DTW -

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Part



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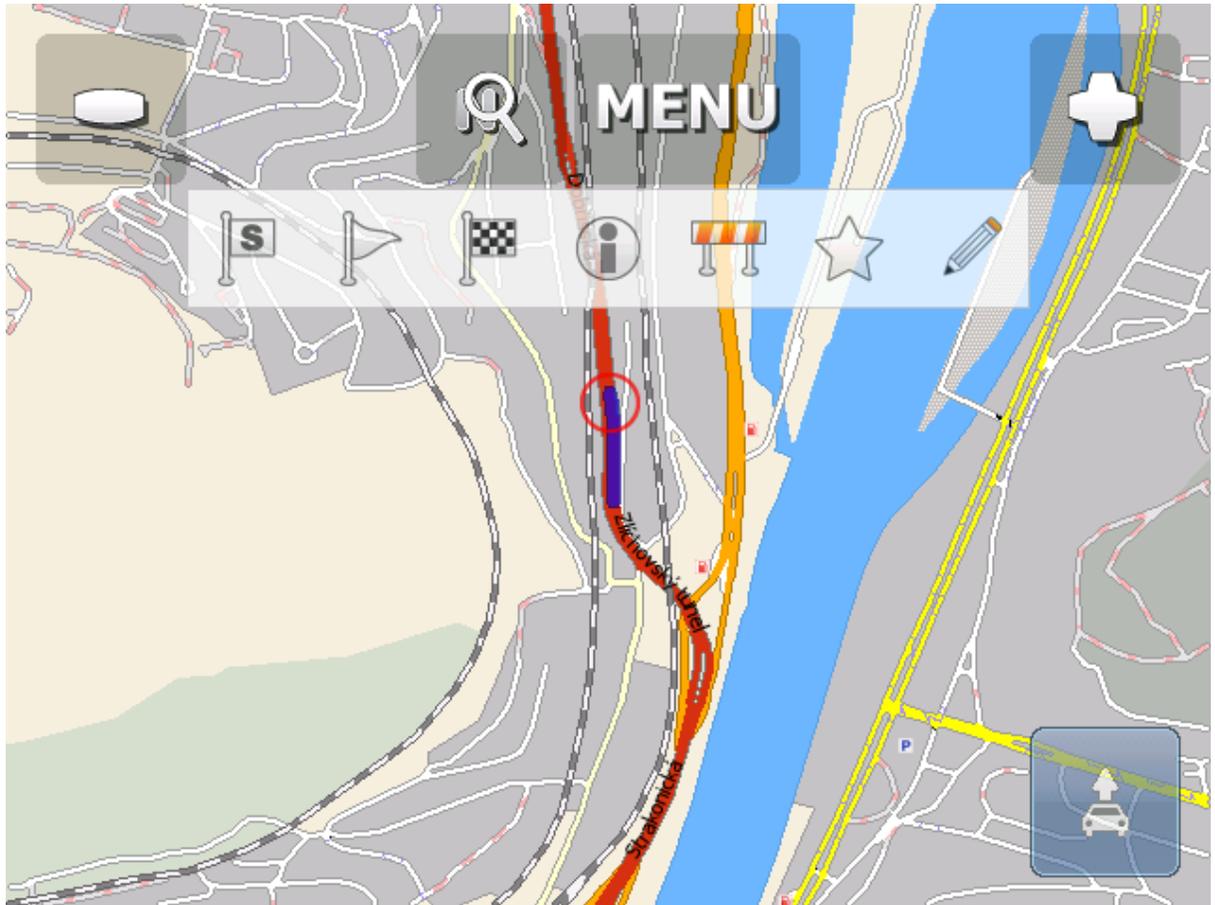


 - zoom

 -

 - zoom

zoom,





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... , TRUCK
link_params.xml
C:\Documents and Settings\[user name]\Application data\Navigator\10.0\.

(routing)

TRUCK

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Кружок: 51°29'52.2"N 0°07'56.5"W 

Abbey Orchard Street : Westminster, London;
Дороги и улицы

London : England; Область стройки

London; Округ

England; Регион

Великобритания; Страна

Найти ближайший	Добавить в избранное
Карта Google	Копировать систему координат



Part

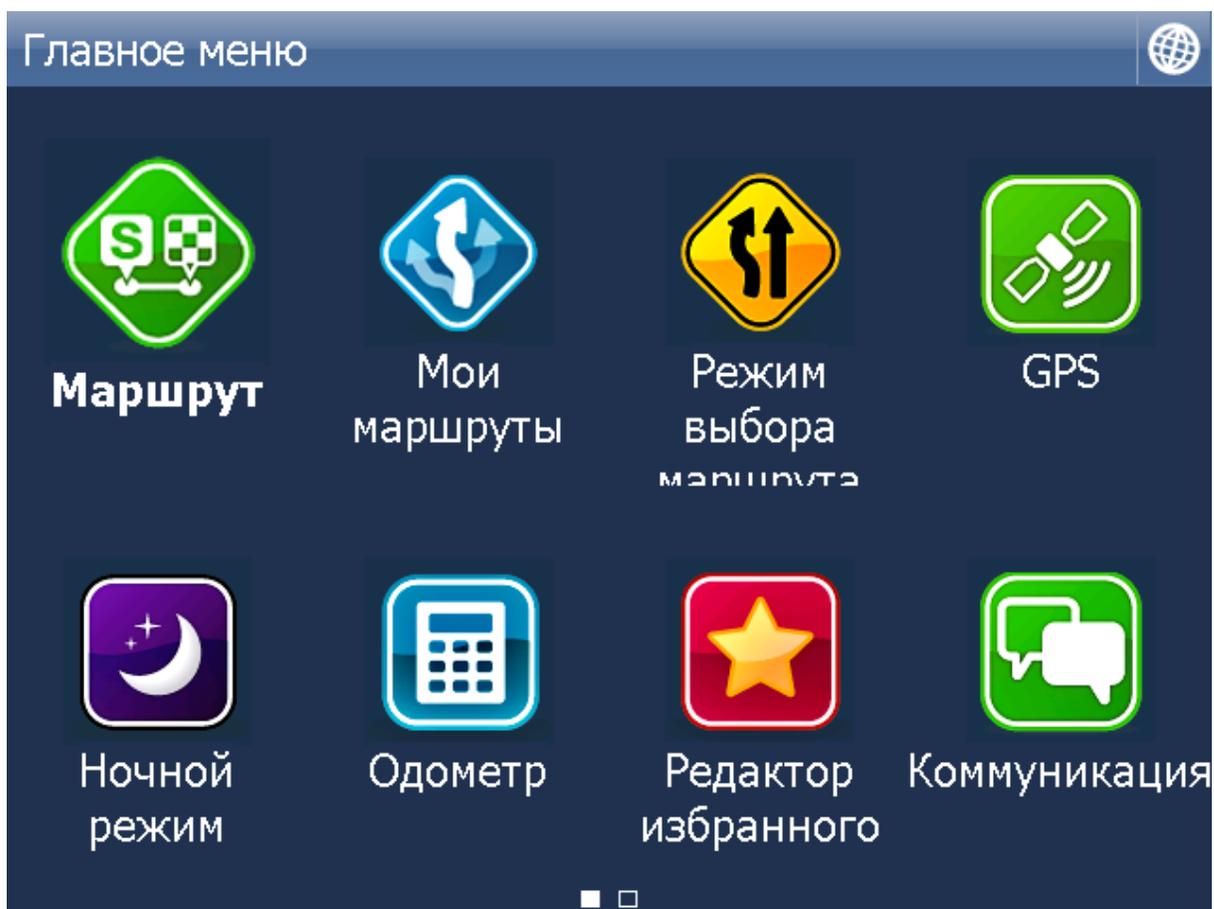


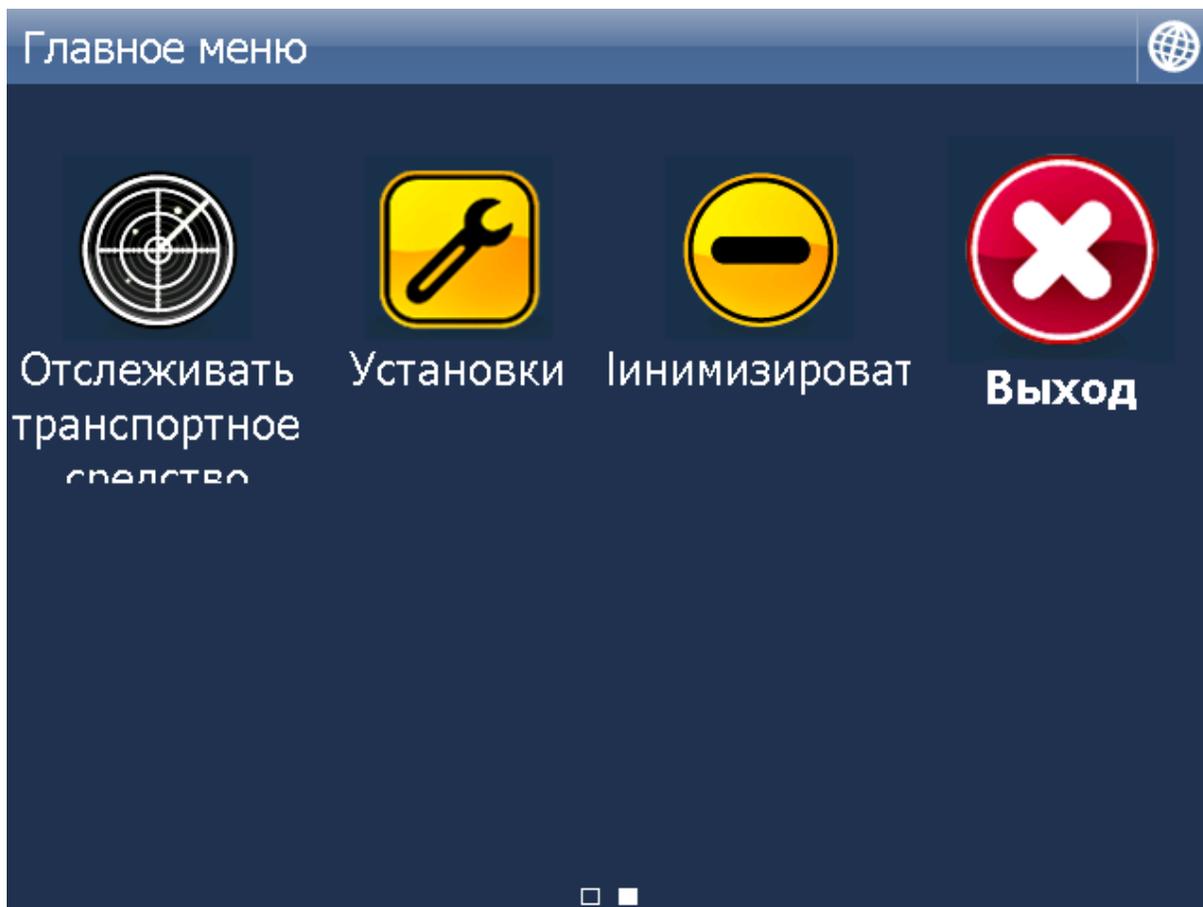
4 Navigator

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2

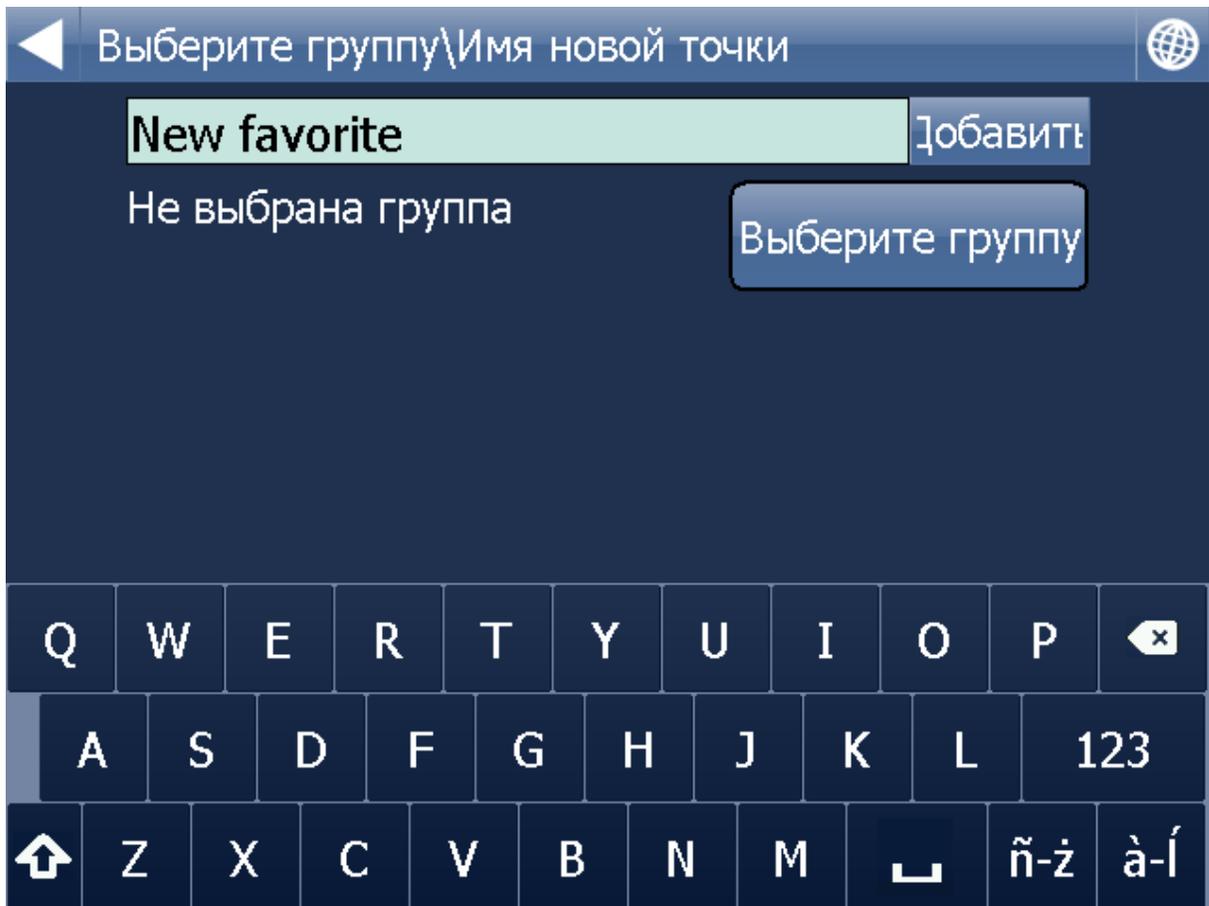
Part



5

5.1

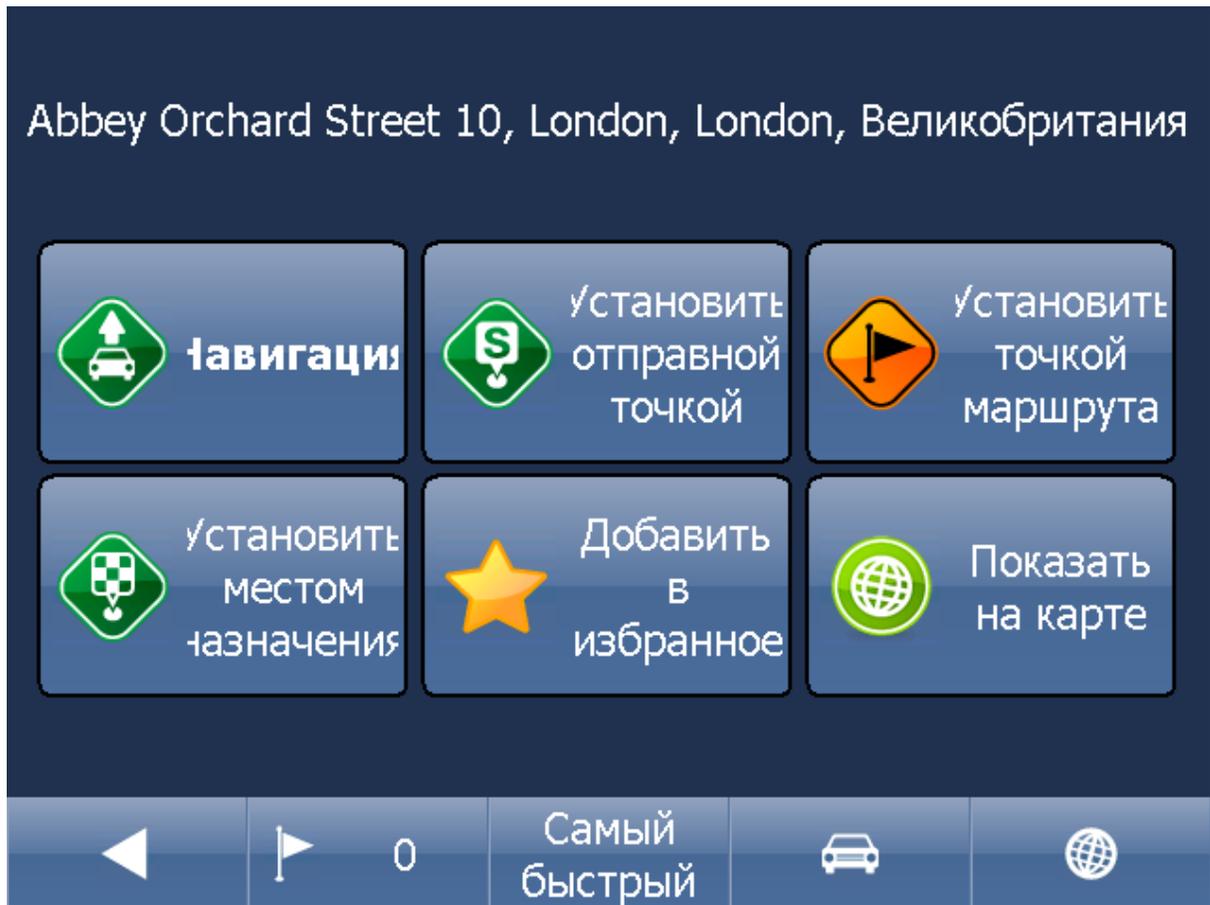
1)



2)



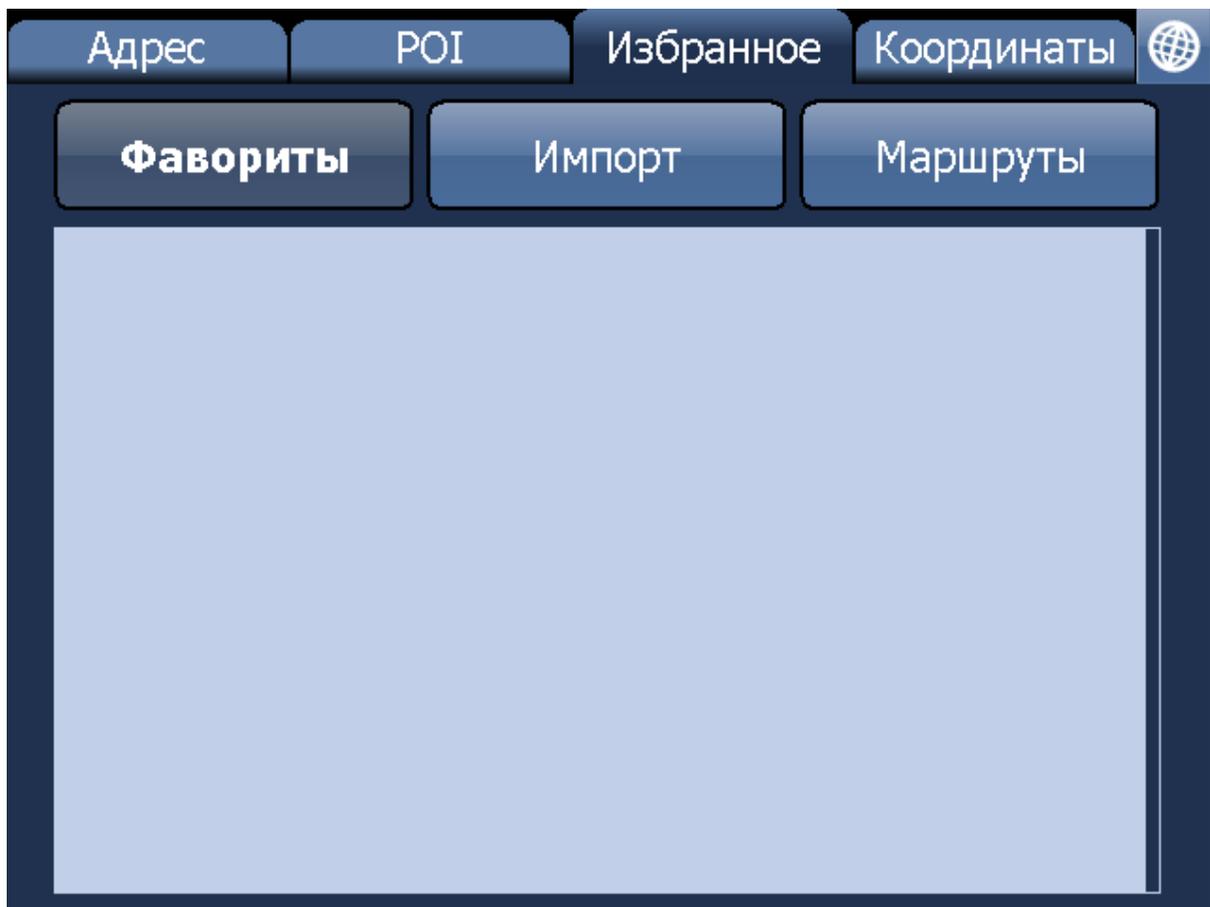
POI () _____.

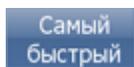
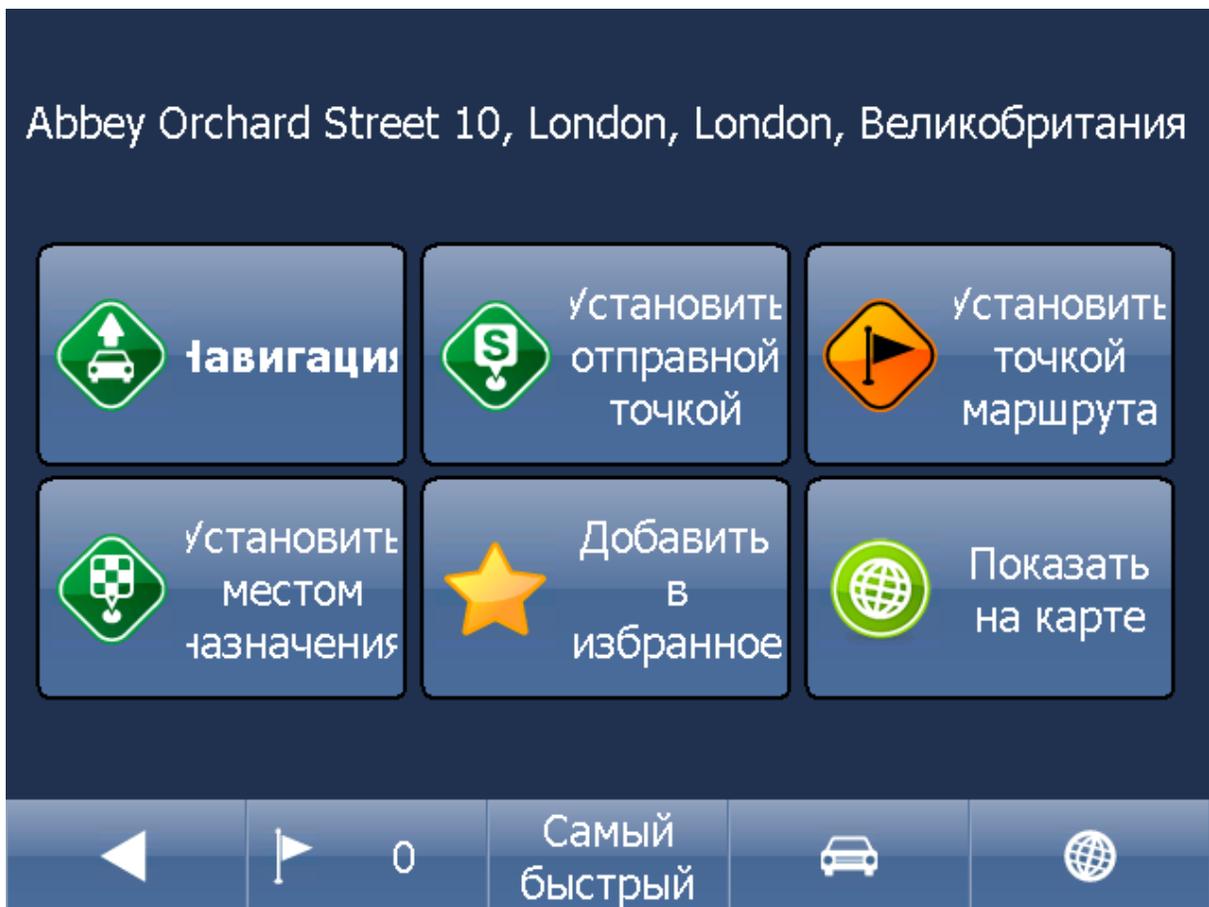


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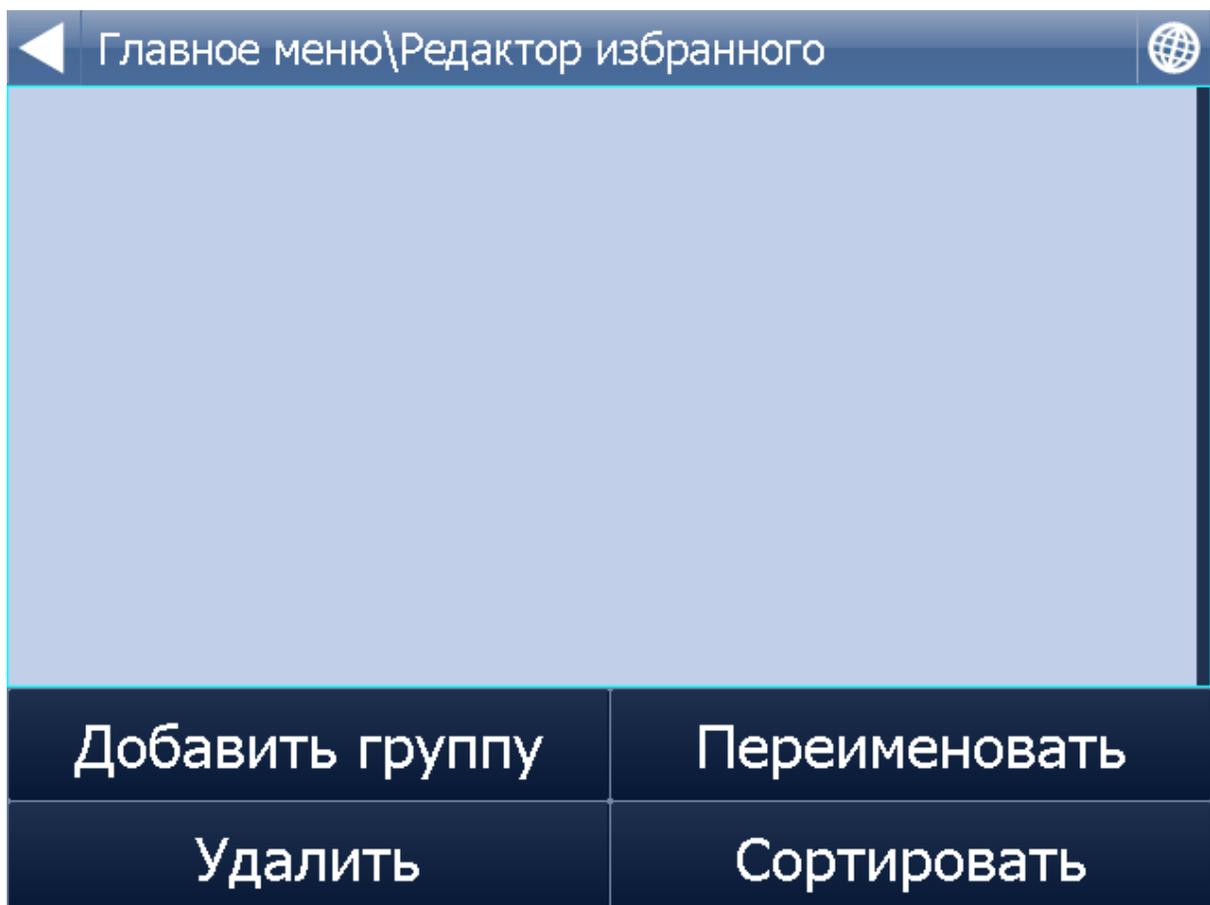
5.2







5.3

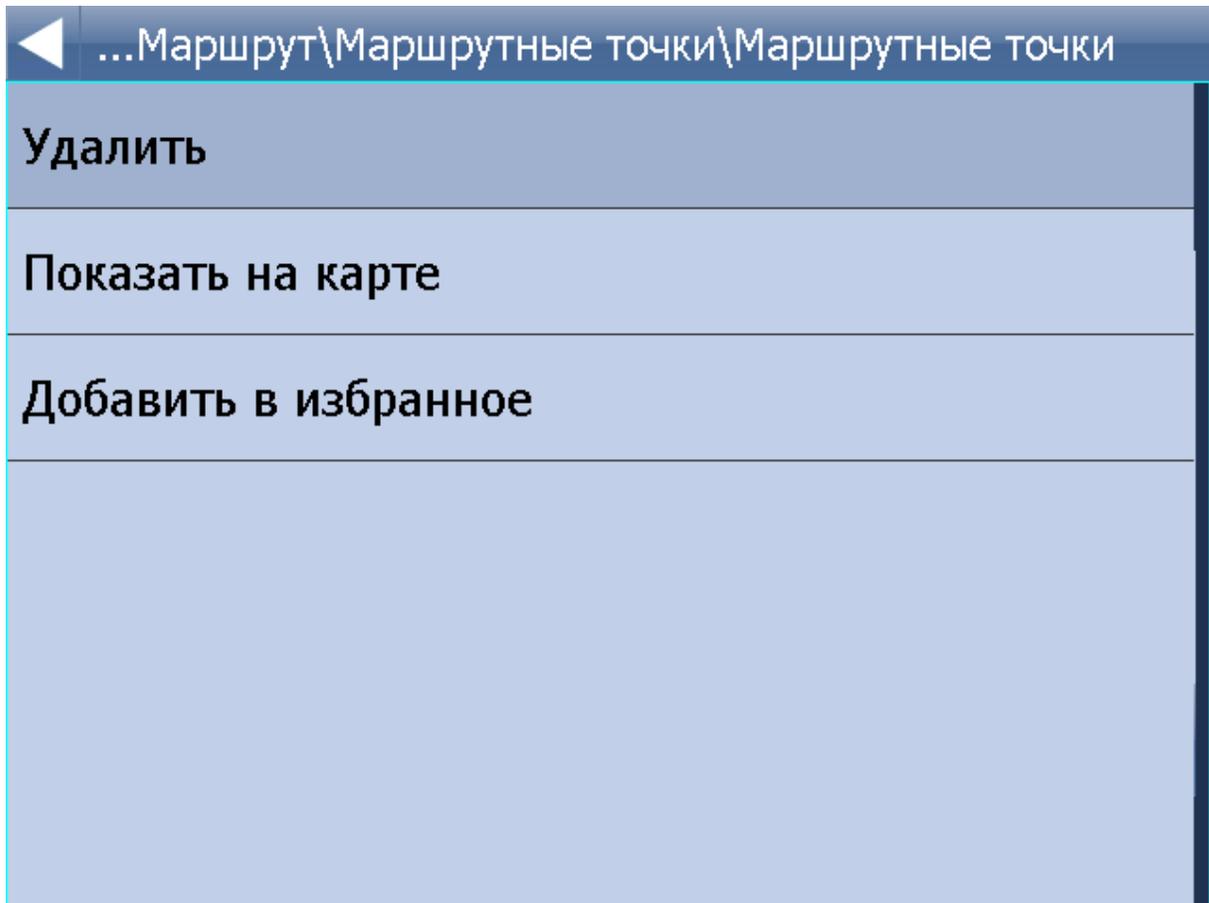


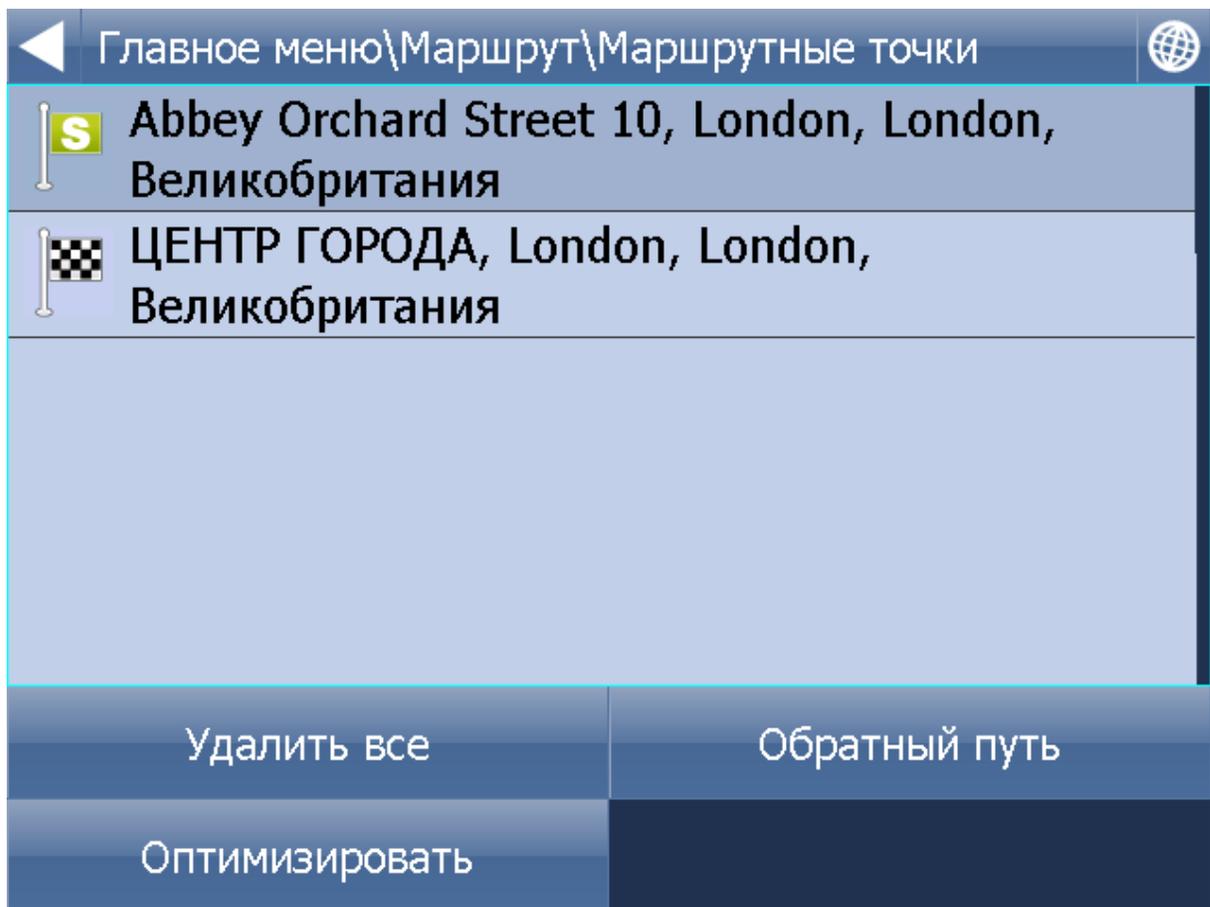
Part



6

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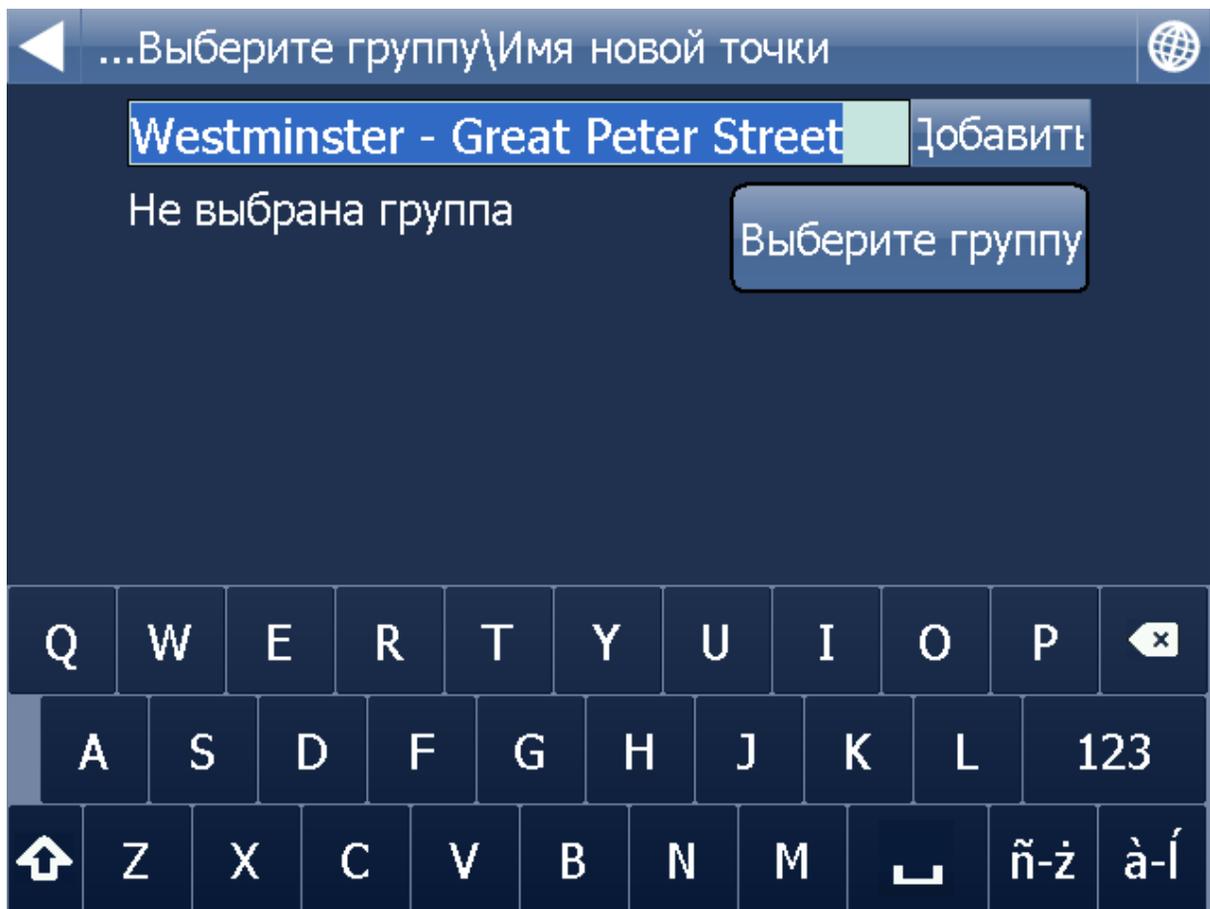




(^ v).



← Главное меню\Маршрут\План поездки		
Оставшееся расстояние 0.6mls Время до цели 00:01:16		
	Westminster - Great Peter Street	121yds
	Westminster - Great Peter Street	330yds
	Westminster - Abingdon Street	612yds
	КОНЕЦ МАРШРУТА	0.6mls



1/3.

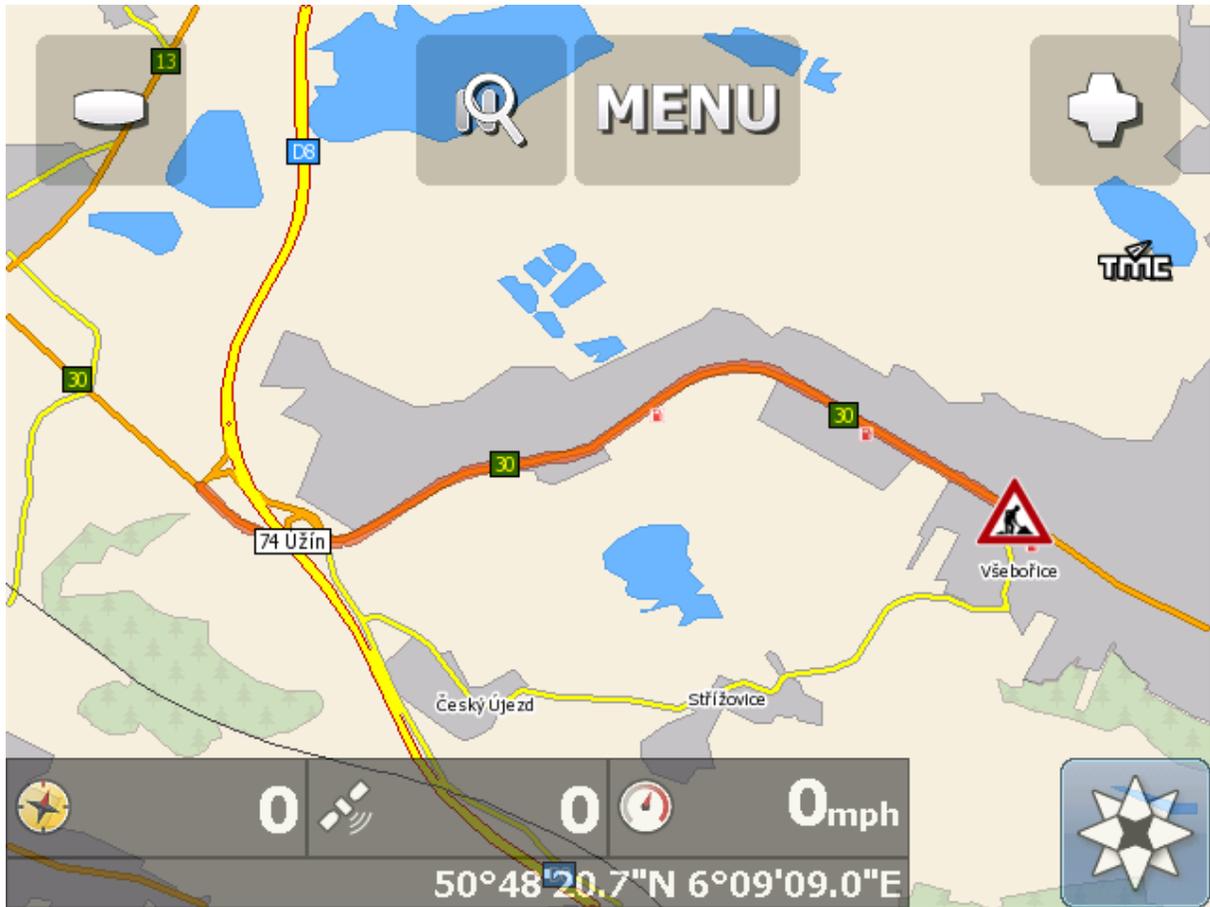
1/3,

TMC

1/3

TMC.

TMC сообщения			
	Průmyslová, Praha 15, Praha, Hlavní město Praha Roadworks. Carriageway reduced to one lane	8.98km	
	Jinočanská, Zbuzany, Praha-západ Cycle race; delays expected	9.8km	
	Podřipská, 101, Kralupy nad Vltavou, Mělník Closed for heavy lorries	21.1km	
	D5, Zdice, Beroun Contraflow. Carriageway reduced to one lane; bridge maintenance work	34.7km	
	Plzeňská, 231, Zruč-Senec, Plzeň-sever	76.0km	

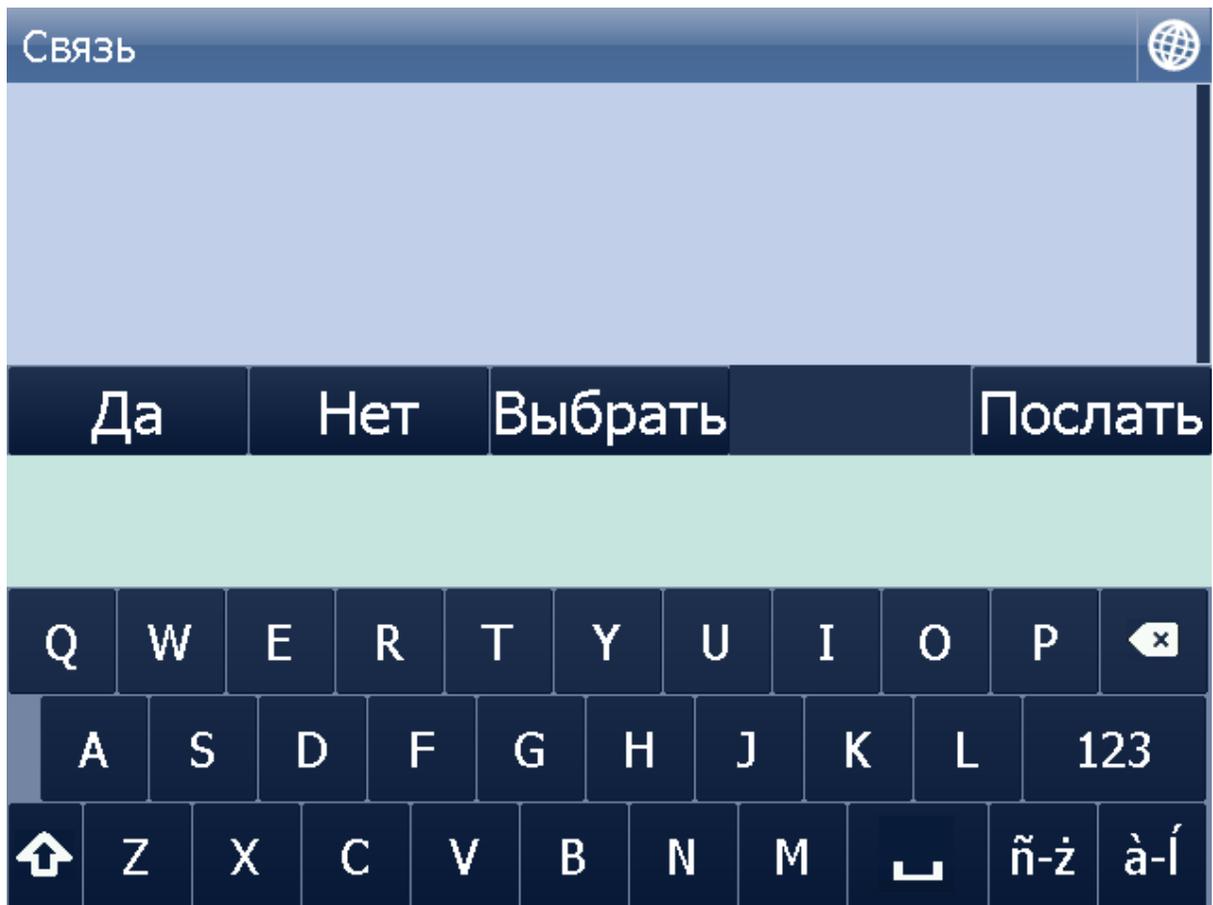


Part



7

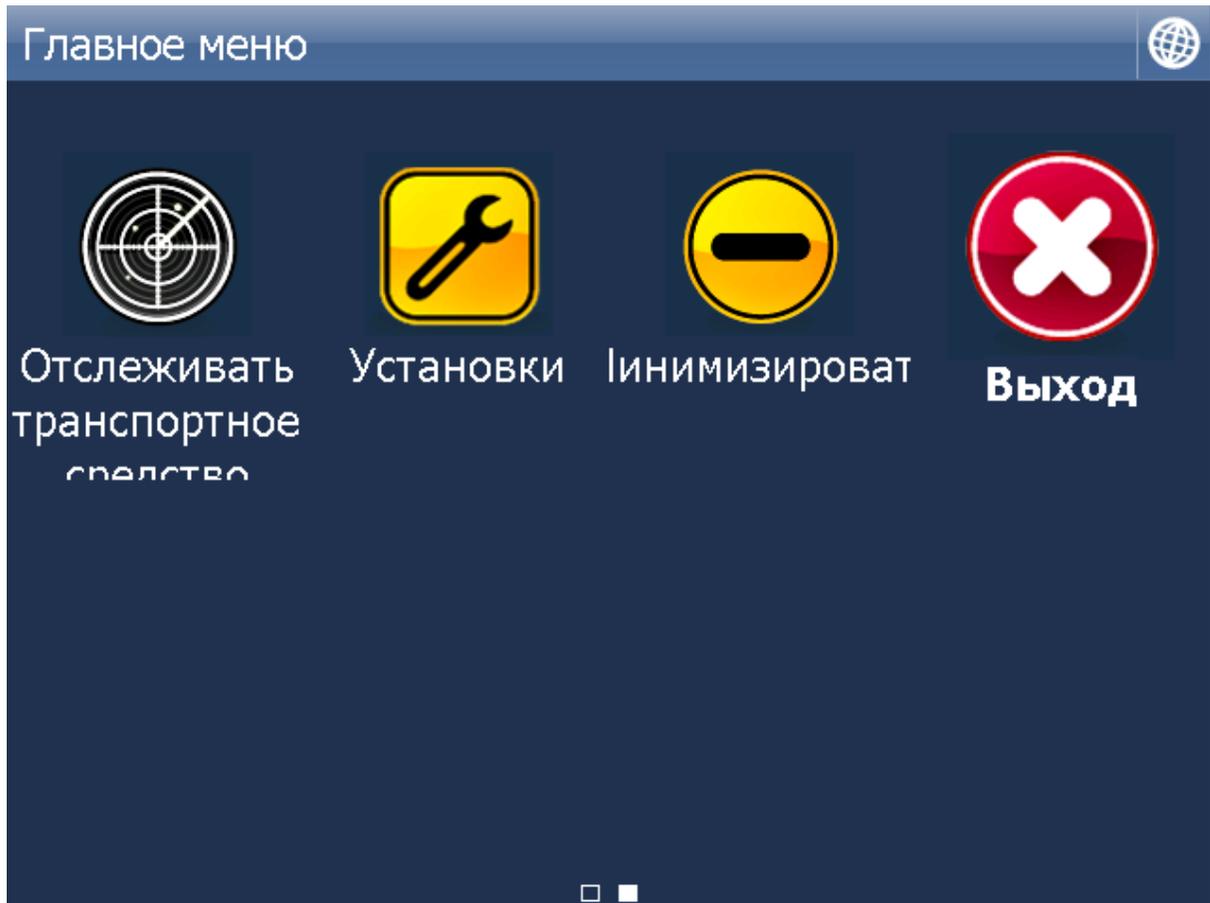
VTU.

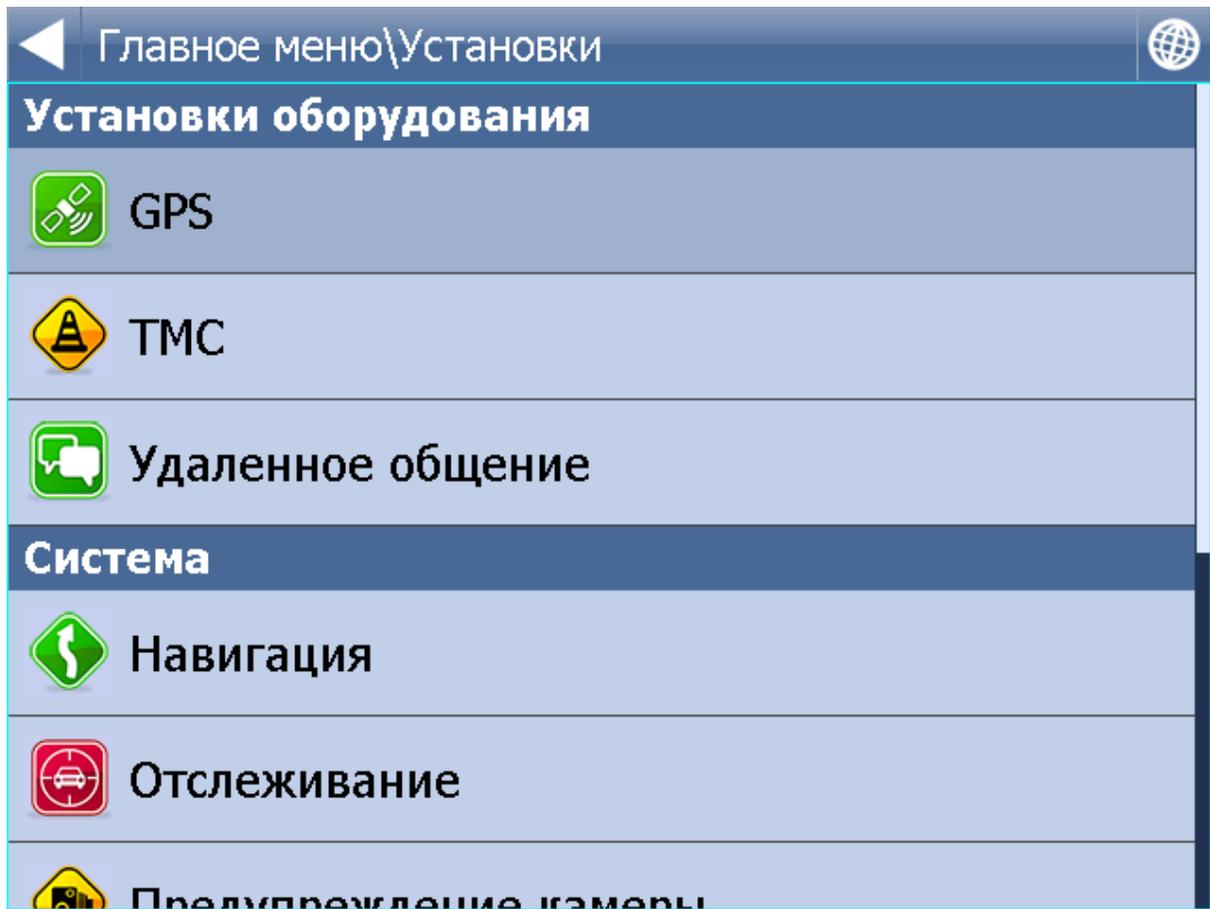


Part



8

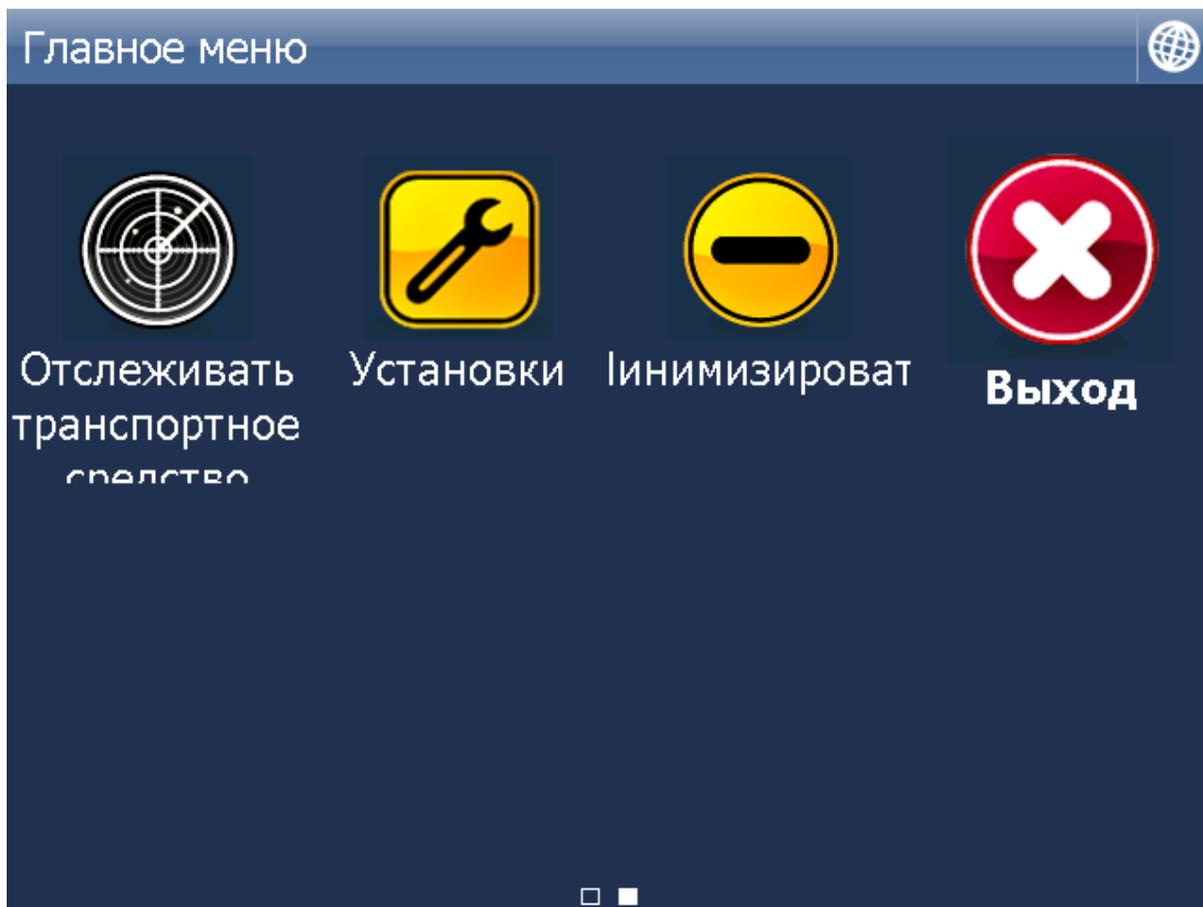


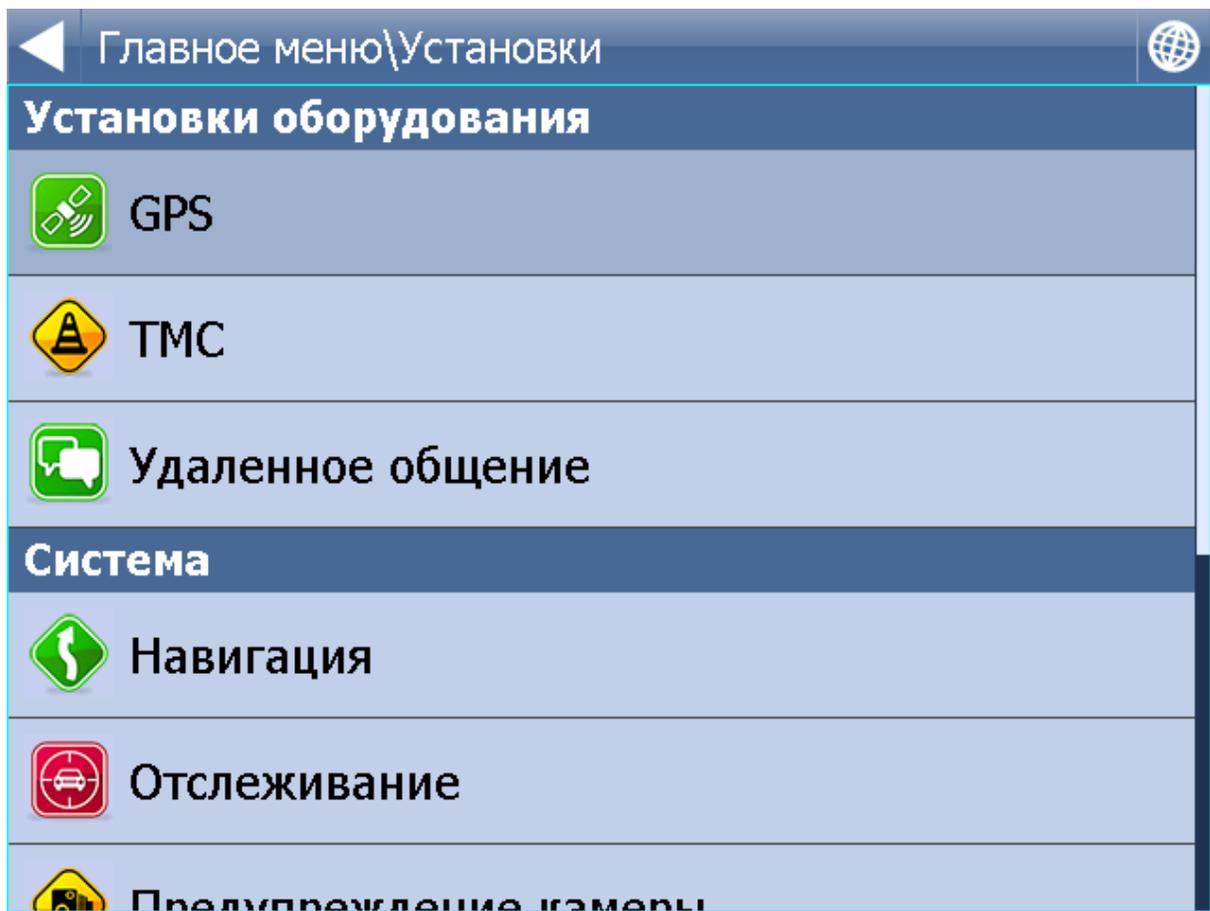


GPS,
TMC.

8.1 GPS

PC :
BlueTooth GPS PC
Windows.
USB GPS k PC
Windows DVD : GPS
GPS_DRIVERS.





GPS

← Главное меню\Установки\Настройки GPS 

GPS

GPS оборудование
Установки GPS оборудования

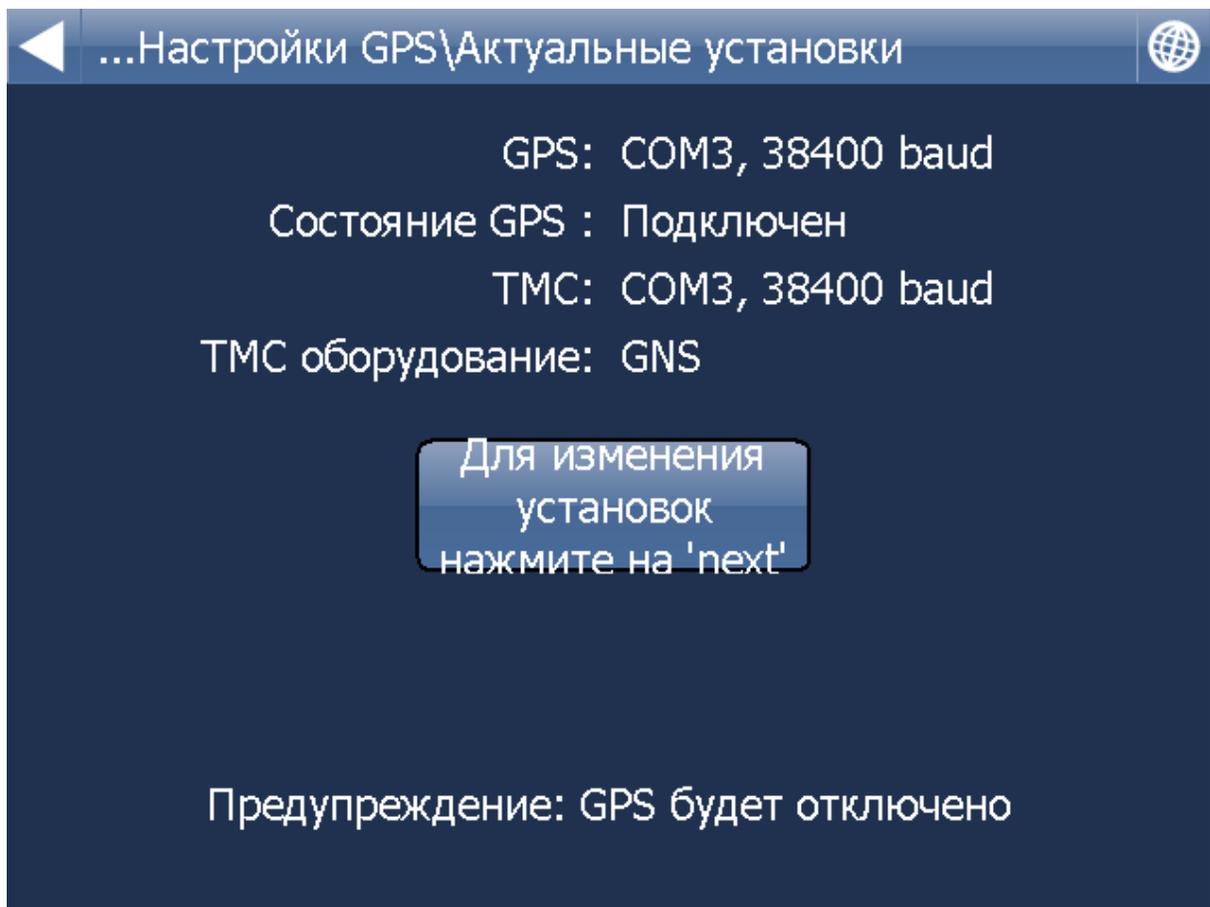
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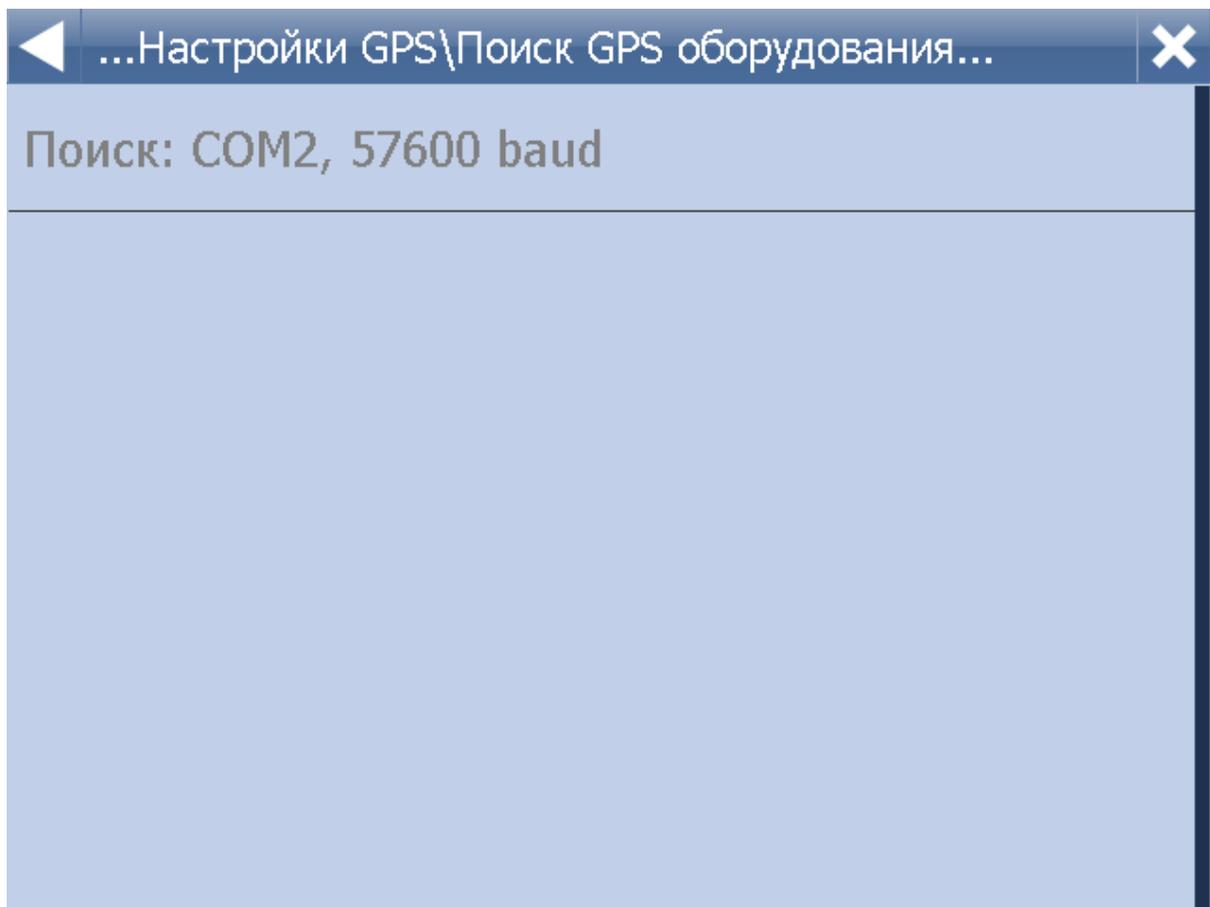
Карта

Включить вращение карты
Обозначьте для поворота карты в направлении езды

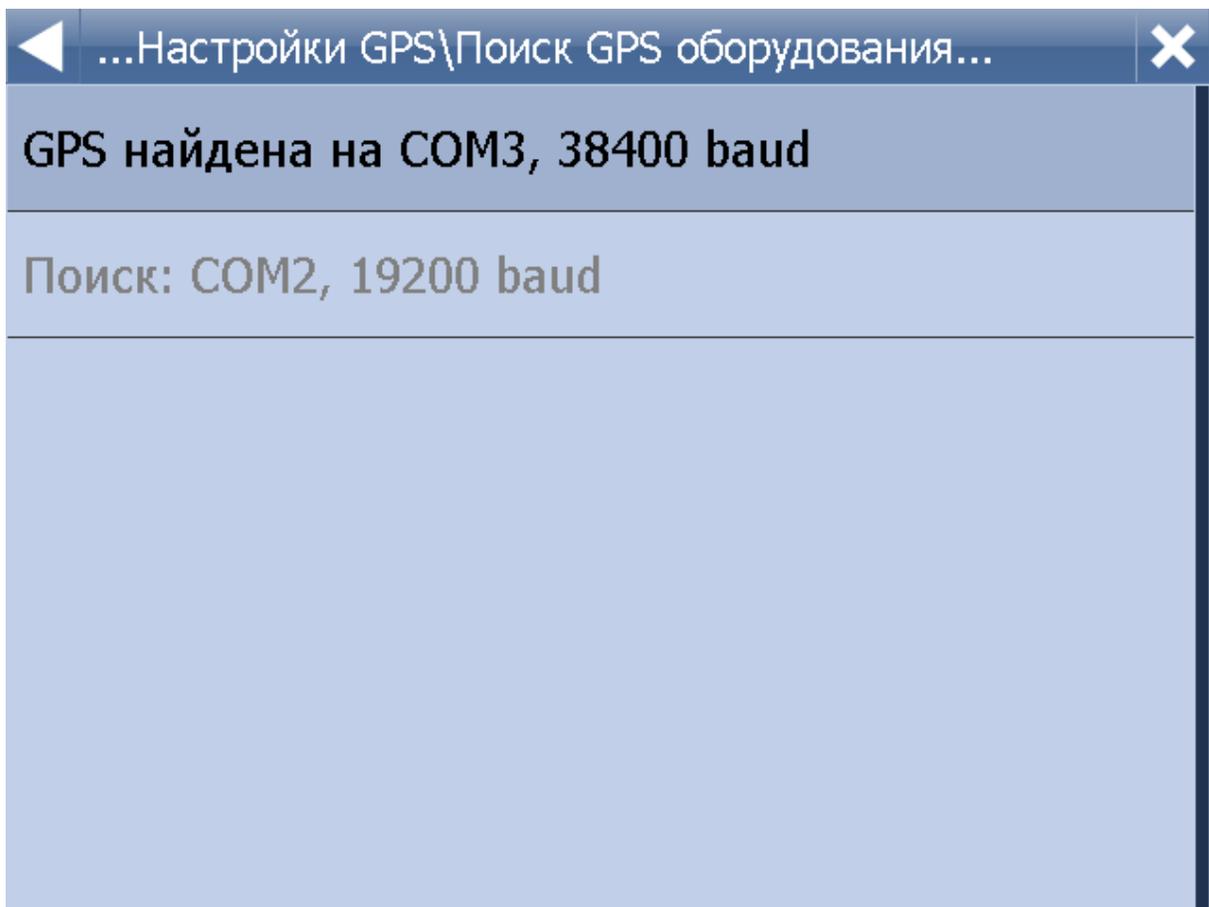
Центрирование карты
Обозначьте для центровки позиции на карте



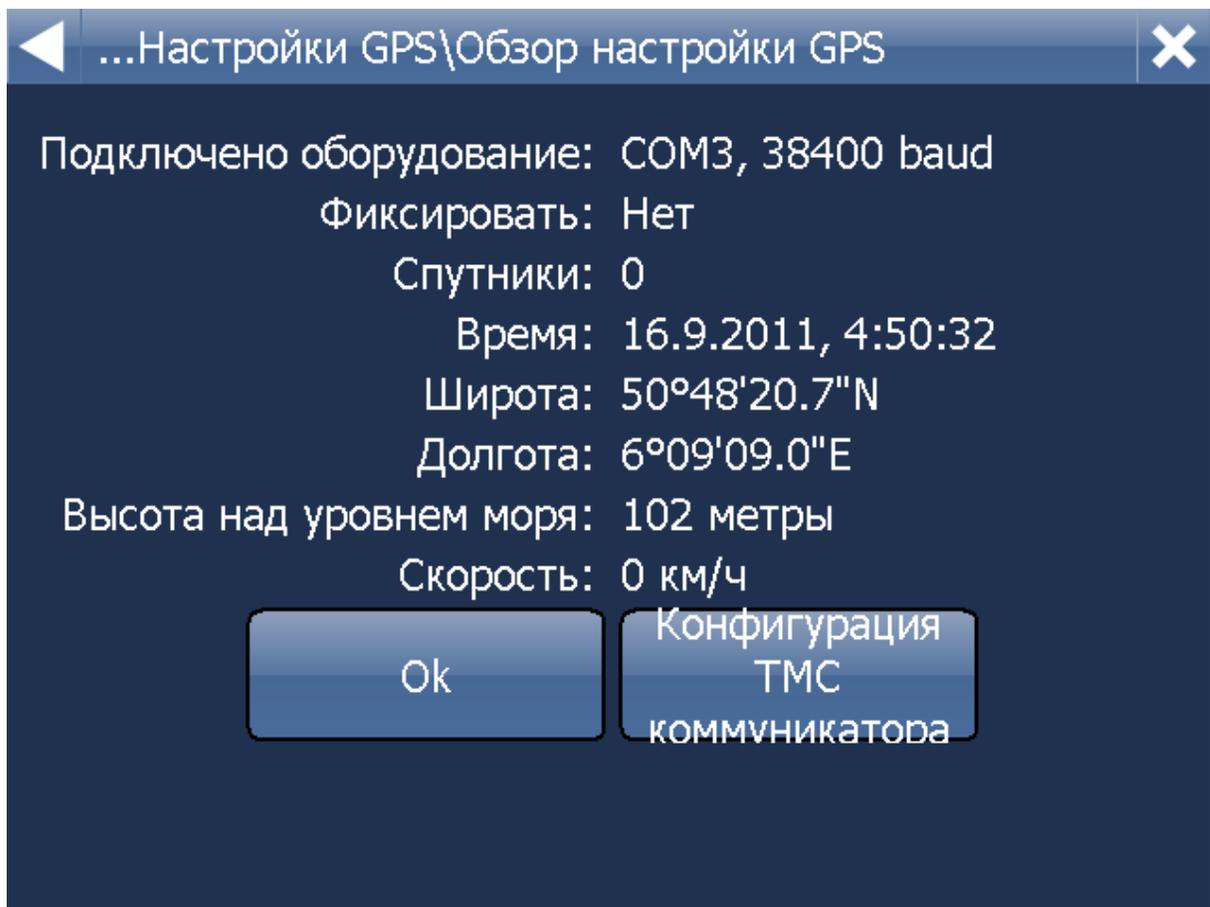
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GPS



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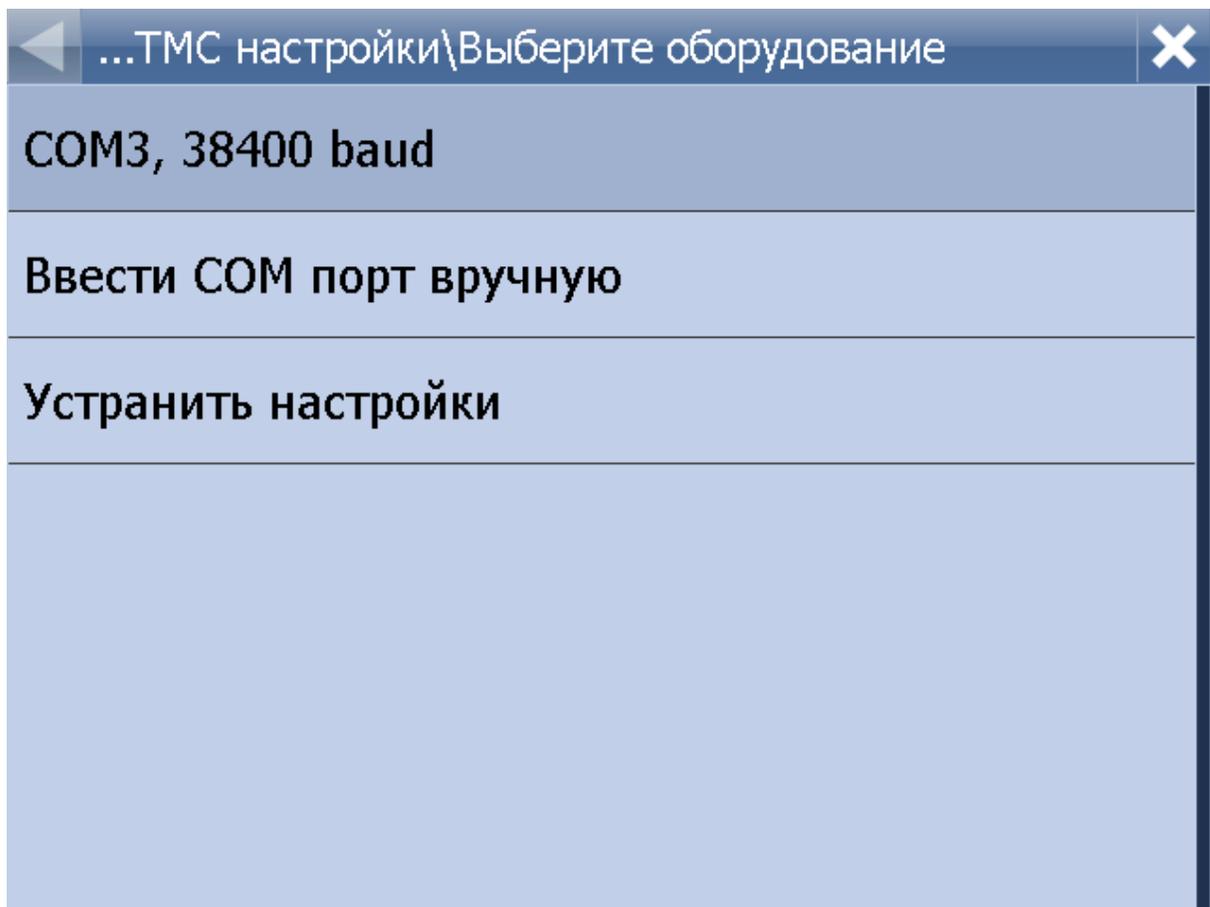
TMC,

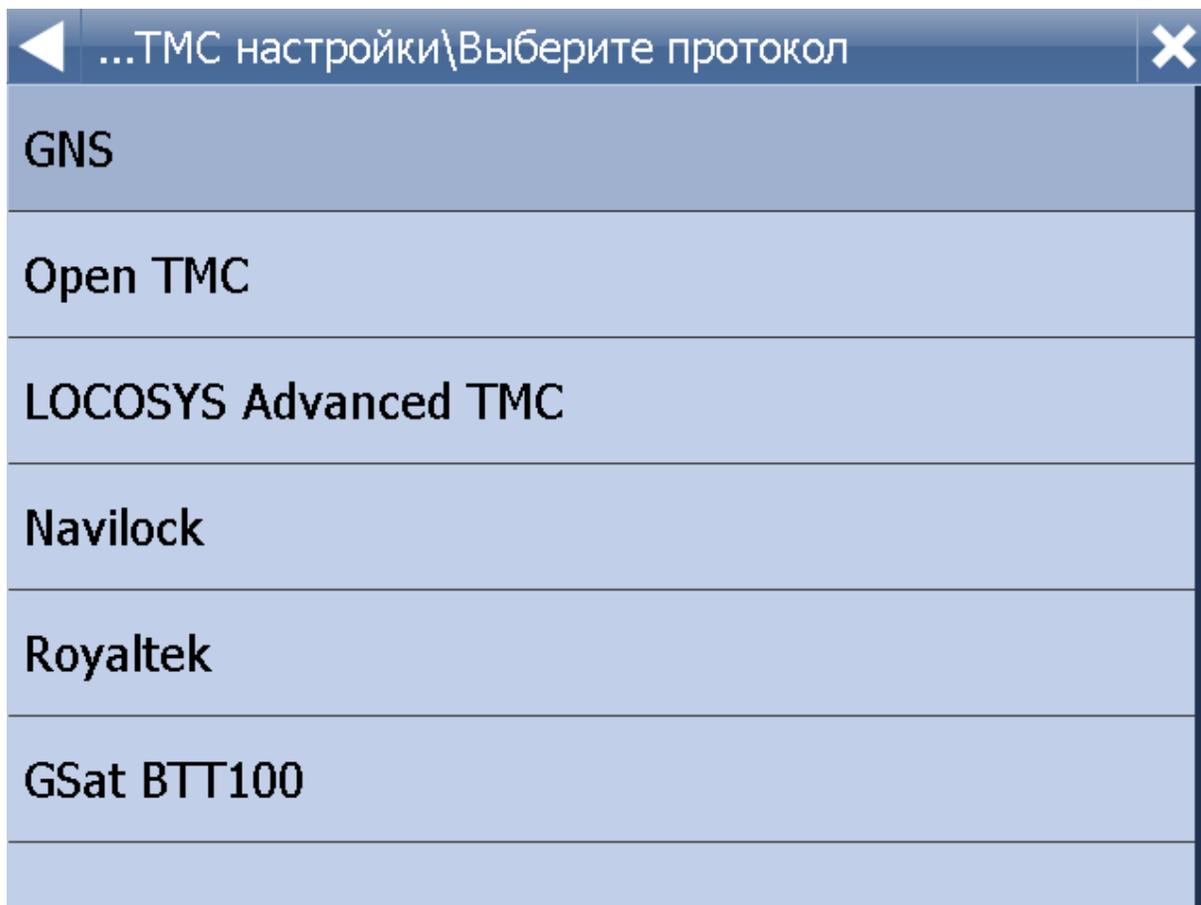
TMC,

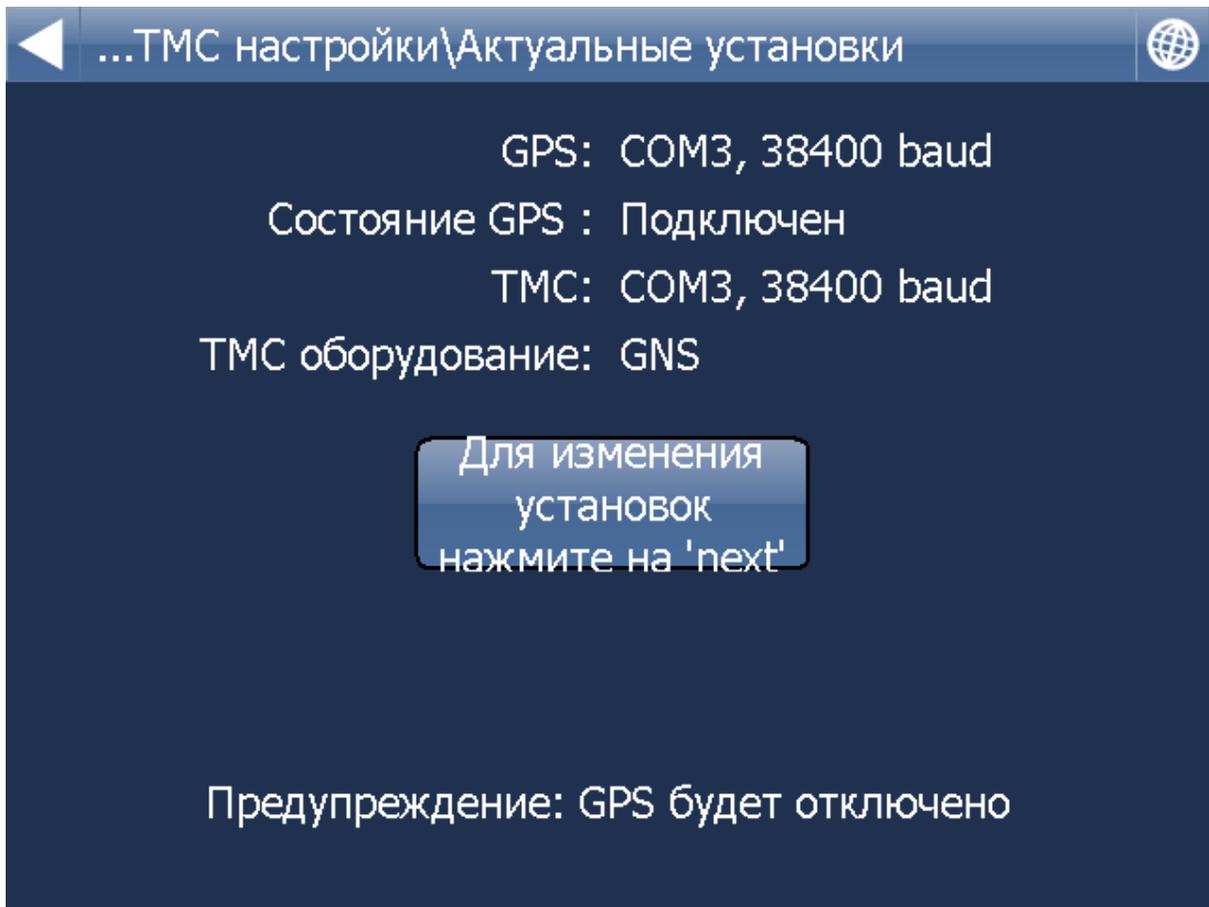
1) TMC

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2) TMC

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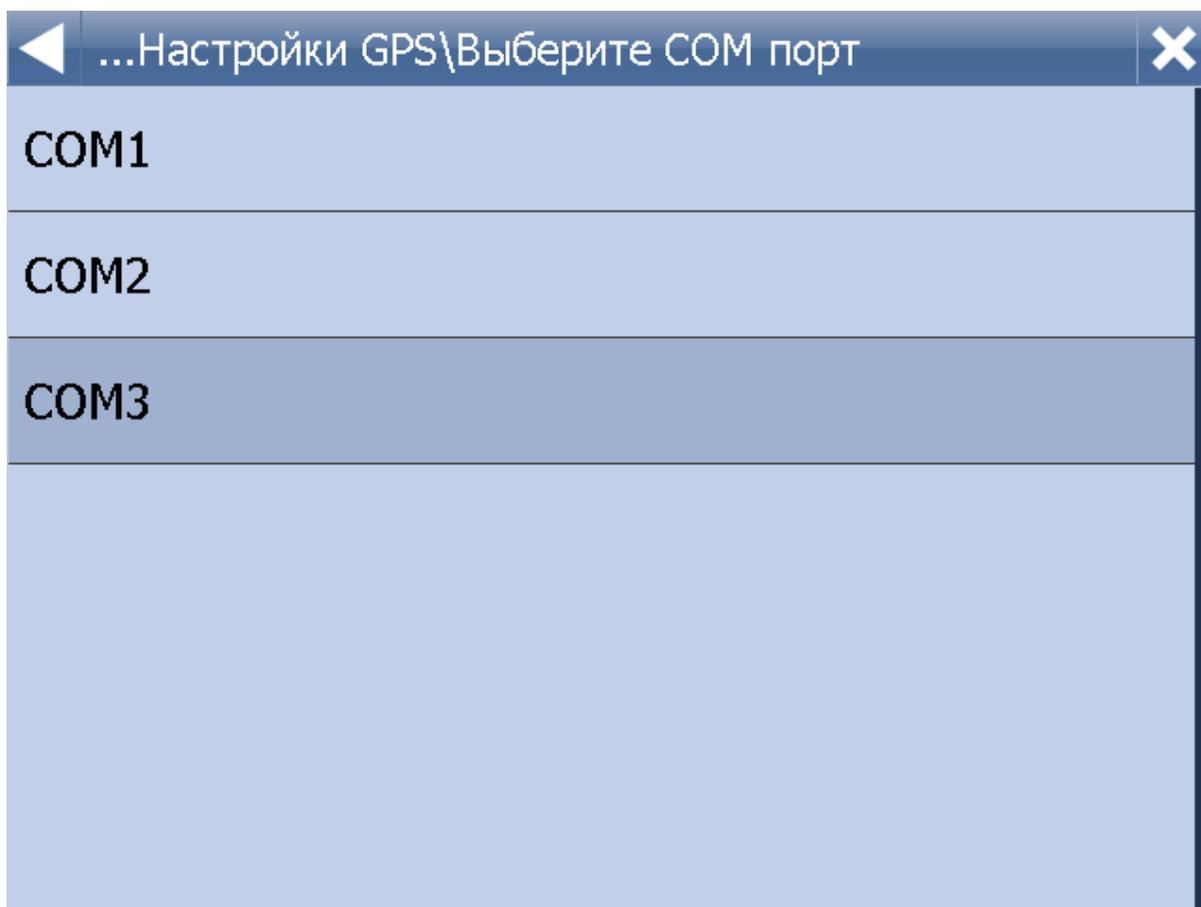
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← ...Настройки GPS\Выберите скорость передачи

19200

38400

56000

57600

115200

128000

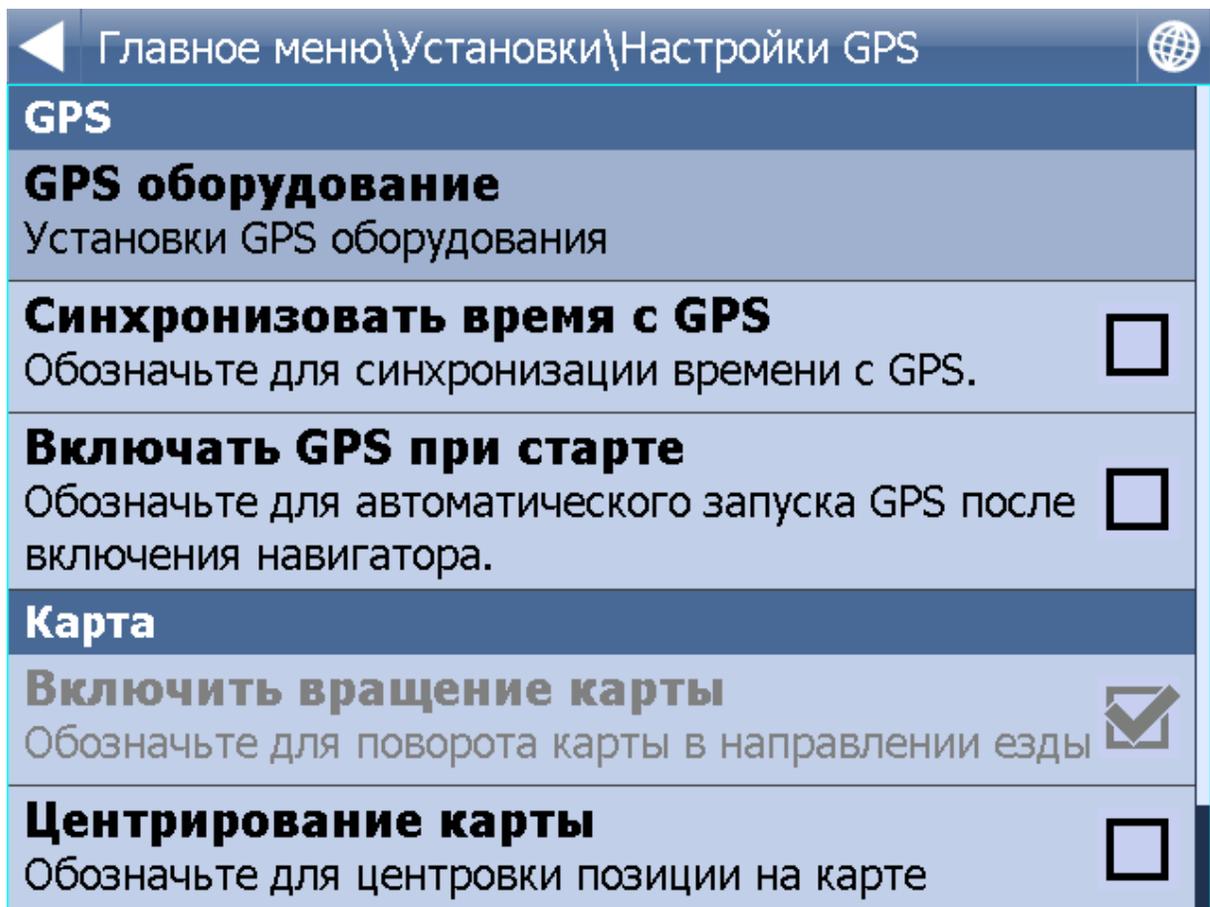
256000

GPS

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4800.

GPS



GPS

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GPS

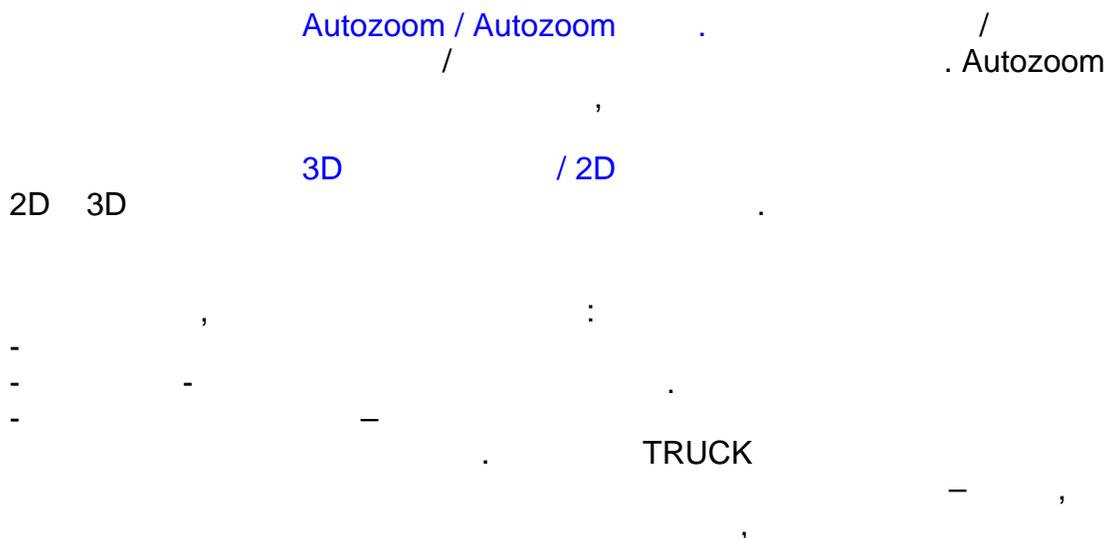
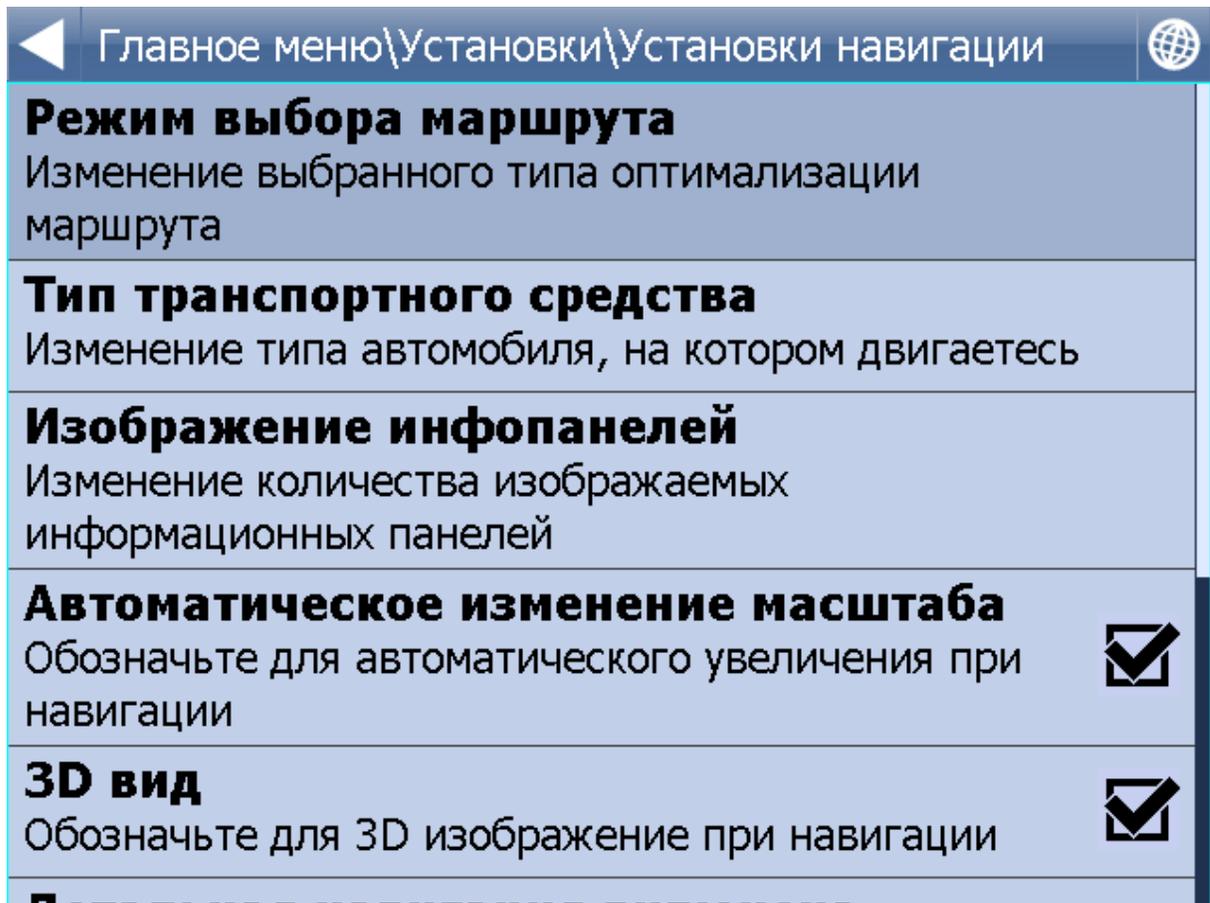
GPS

GPS

PDA

GPS.

8.2



TRUCK

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yc -

← ...Тип транспортного средства

	Режим автомобиля	<input checked="" type="radio"/>
	Грузовой режим	<input type="radio"/>
	Пешком	<input type="radio"/>
	Bicycle	<input type="radio"/>
	Bus	<input type="radio"/>

...Параметры транспортного средства (Новое транспор Ok									
Максимальная скорость								50mph	
Общий вес								3.5t	
Нагрузка на ось (вес)								3.5t	
Общая длина								12.0m	
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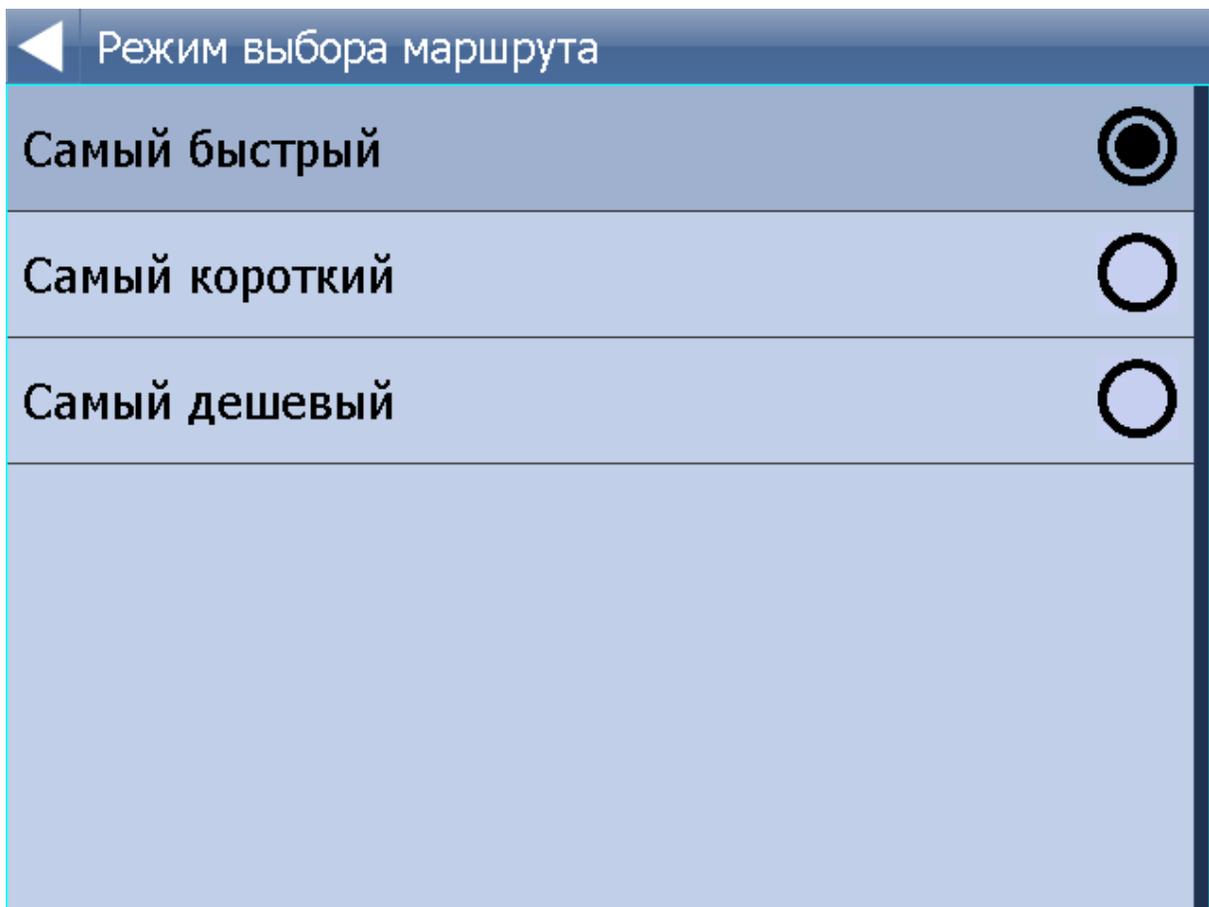
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— .
— .

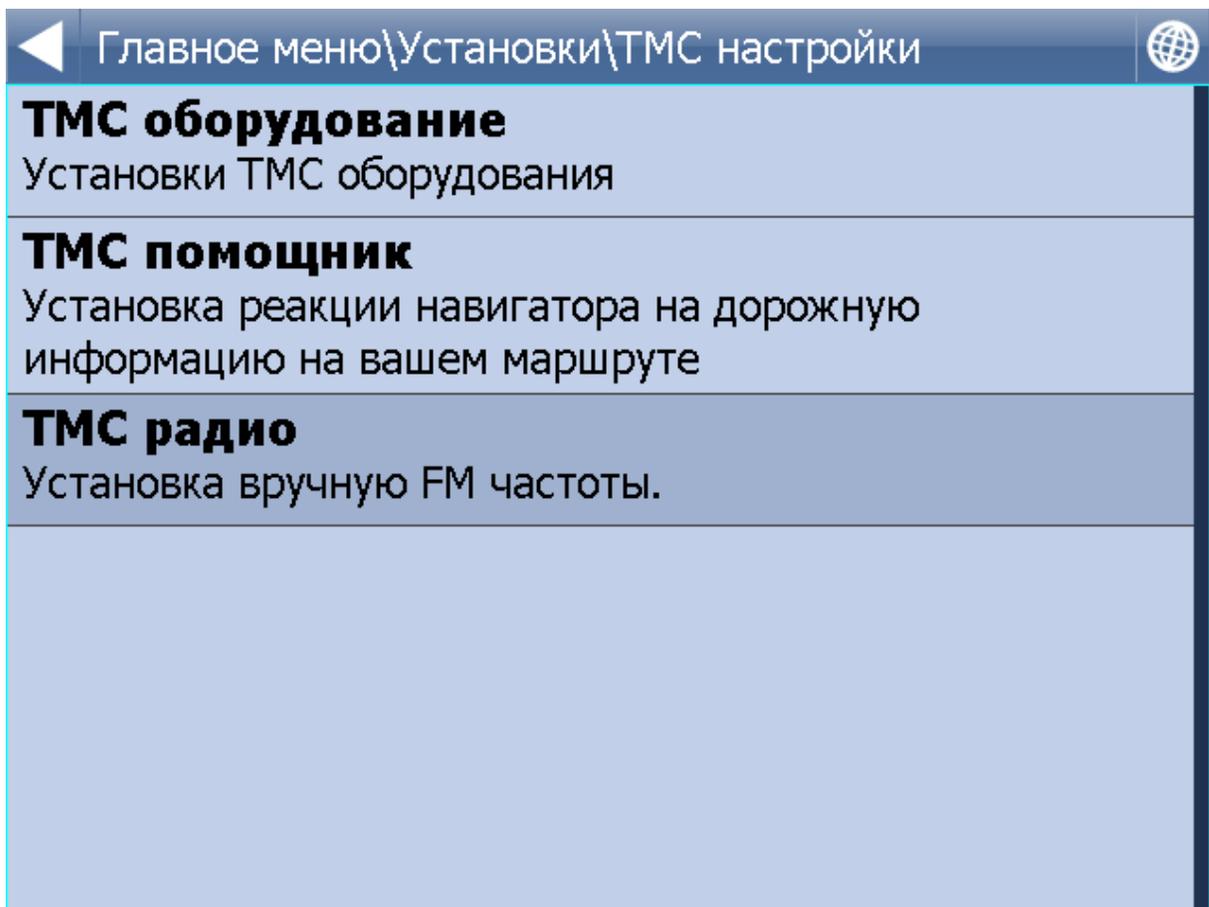
/ /

, .

(GPS /) GPS , /

/ - /

— ,
.



TMC

-

,

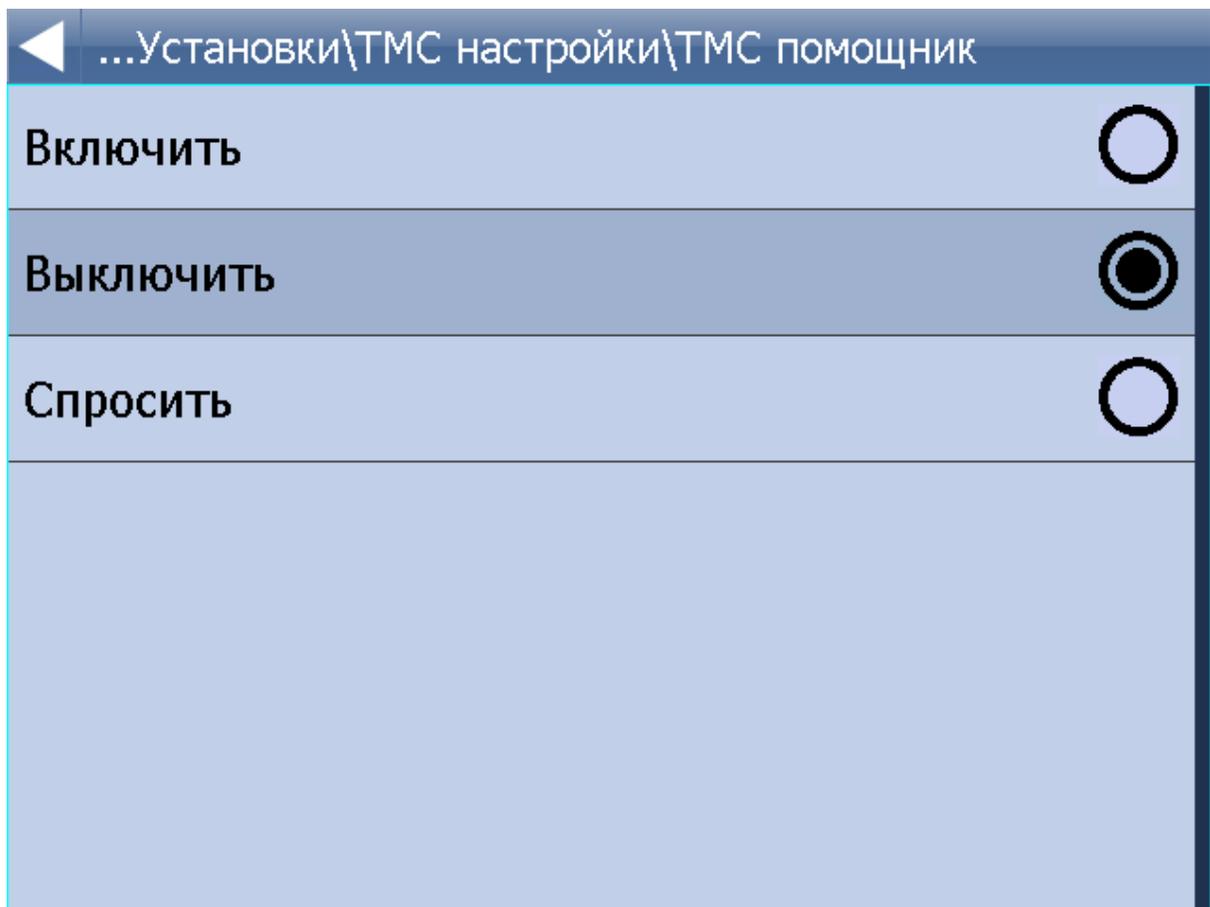
TMC

.



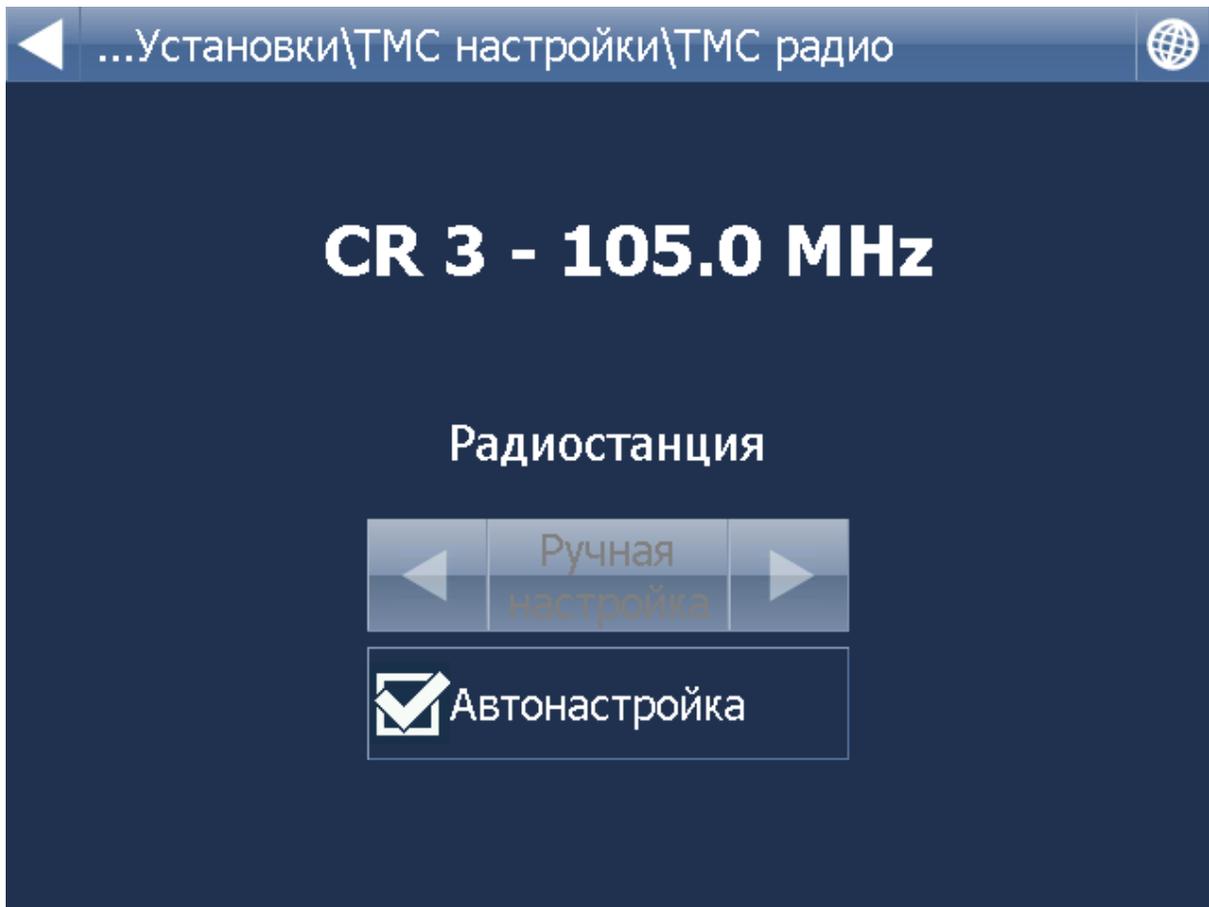
TMC

TMC



TMC GNS

:



8.4

Actis 7	VTU009	8	4800.
Actis 7	VTU 10	8	9600.

Part



9 Entering special characters with the on screen keyboard

It is possible to input special characters using the on screen keyboard. Use the  and  keys (bottom right of the keyboard) to switch to other international characters.

Some international characters can be entered using the standard keyboard.

char	transcript
å	aa
æ	ae
ä	ae
ø	oe
œ	oe
ö	oe
ü	ue
ß	ss

Characters not in the above table can be substituted for a character without accent. For example,

char	transcript
á	a
č	c
ř	r
ů	u
.....	

Part



10 TCP/IP communication

TCP/IP

To activate communication in Navigator go to [Menu / Settings / Remote Communication](#). Starting from the command line, as in previous versions, is no longer possible.

TCP/IP commands:

Every command starts with '\$' and ends with '\n' or '\r\n'.

DISPLAY A TEXT MESSAGE

Format:

```
$message="message";instant
```

Description:

- shows a message on remote device

Protocol version:

- 1.0.0 or later
- 2.0.3 or later for "instant parameter"

Availability:

- tcp/ip or com

Parameters:

- parameter is a text enclosed in quotation marks to display on remote device
- when parameter "instant" is used the message is shown immediately; placeholder icon is displayed otherwise

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

DISPLAY A QUESTION

Format:

```
$message="message";ask;instant
```

Description:

- shows a question on remote device (can be answered with "yes" or "no")

Protocol version:

- 1.0.0 or later
- 2.0.3 or later for "instant parameter"

Availability:

- tcp/ip or com

Parameters:

- parameter is a text enclosed in quotation marks to display on remote device
- when parameter "instant" is used the message is shown immediately; placeholder icon is displayed otherwise

Return values:

- "yes" or "no" as the answer to question on success or "error" when failed
- "busy" when the remote device is busy responding to another command

DISPLAY A CHAT MESSAGE

Format:

```
$chat="message"
```

Description:

- sends a new message to chat window

Protocol version:

- 2.0.0 or later

Availability:

- tcp/ip or com

Parameters:

- parameter is a text enclosed in quotation marks to display on remote device

Return values:

- none

SEND DESTINATION AND/OR WAYPOINT(S) AND/OR DEPARTURE

Format:

```
$destination=50.074525,14.409428;...;50.074421,14.409226;"Text";ask;navigate;departure;instant
```

```
$destination=50.074525,14.409428,"waypoint
```

```
name";...;50.074421,14.409226;"Text";ask;navigate;departure;instant
```

```
$destination=clear
```

Description:

- sends routing points with possible text message/question and possibility to start navigation on remote device

- each routing point can have a name

- clear to clear all waypoints

Protocol version:

- 1.0.0 or later

- 1.4.1 or later for \$destination=clear

- 2.0.1 or later departure parameter added (first coordinate is departure point)

- 2.0.3 or later for "instant parameter"

- 2.0.4 or later for waypoints names

Availability:

- tcp/ip or com

Parameters:

- route points order is waypoint1;...;waypointN;destination

- use parameter "Text" to display text

- use parameters "Text";ask to display question

- parameter "navigate" to start navigation on remote device

- when parameter "instant" is used the message is shown immediately; placeholder icon is displayed otherwise

Return values:

- for a message "ok" on success or "error" when failed

- for a question "yes" or "no" as the answer to question on success or "error" when failed

- "failed" when a routing point could not be added (no road nearby)

- "busy" when the remote device is busy responding to another command

NAVIGATION ROUTE STATISTICS

Format:

```
$navigation_statistics
```

Description:

- returns distance (in meters) or time (in seconds) to destination and nearest waypoint

Protocol version:

- 2.0.2 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- distance to waypoint, time to waypoint, distance to destination, time to destination

- example: 1000,60,2000,122

- "not navigating" when not currently navigating

NAVIGATION INFORMATION

Format:

\$navigation_info=recalculation_warning:on
 \$navigation_info=recalculation_warning:off
 \$navigation_info=sound_warning:on
 \$navigation_info=sound_warning:off
 \$navigation_info=waypoint_info:on
 \$navigation_info=waypoint_info:off

Description:

- turns specific navigation informations on or off
- "recalculation_warning:on" - returns "recalculating" whenever the route is recalculated
- "sound_warning:on" - enables sound warning before every navigation voice command (same as \$sound_warning=start)
- "waypoint_info:on" - returns "waypoint 1 reached", "waypoint 2 reached", "waypoint N reached" and "destination reached" whenever the route point is reached or returns "waypoint 1 missed", "waypoint 2 missed", "waypoint N missed" whenever the waypoint is missed

Protocol version:

- 2.0.2 or later (recalculation_warning, sound_warning)
- 2.0.4 or later (waypoint reached info)

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command
- "sound" when a navigation voice command occurs
- "recalculating" when a recalculation occurs

STOP NAVIGATION

Format:

\$stop_navigation

Description:

- stops navigation on remote device

Protocol version:

- 1.2.0 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

GET LAST KNOWN GPS POSITION

Format:

\$last_position

Description:

- get last known gps data from remote device

Protocol version:

- 1.2.0 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- when last position is known:
 latitude(degrees),longitude(degrees),altitude(meters),speed(km/h),course(degrees)

- when last position is unknown: "unknown"
- "error" when an error occurred
- "busy" when the remote device is busy responding to another command

NAVIGATION SOUND

Format:

\$sound_volume=volume

Description:

- set sound volume on remote device

Protocol version:

- 1.2.0 or later

Availability:

- tcp/ip or com

Parameters:

- "on" - system volume does not change and navigation messages are played
- "off" - system volume does not change and navigation messages are not played
- volume values from 0 to 100 set operation system sound volume to 0-100 percent

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

SOUND WARNINGS (OBSOLETE - SEE NAVIGATION INFORMATION)

Format:

\$sound_warning=start

\$sound_warning=stop

Description:

- request to send warning before a sound is played

Protocol version:

- 1.2.0 or later

Availability:

- tcp/ip or com

Parameters:

- start - starts sending sound warning
- stop - stops sending sound warning

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

CHANGE APPLICATION WINDOW SIZE

Format:

\$window=left,top,width,height,[border|noborder]

Description:

- set remote device application window size

Protocol version:

- 1.0.0 or later

Availability:

- tcp/ip or com

Parameters:

- values are in pixels

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

MINIMIZE APPLICATION WINDOW

Format:

\$minimize

Description:

- minimize remote device application window

Protocol version:

- 1.0.0 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

MAXIMIZE APPLICATION WINDOW

Format:

\$maximize

Description:

- maximize remote device application window

Protocol version:

- 1.0.0 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

RESTORE MINIMIZED/MAXIMIZED APPLICATION WINDOW SIZE

Format:

\$restore

Description:

- restore remote device minimized or maximized application window

Protocol version:

- 1.1.0 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

si

EXIT THE APPLICATION

Format:

\$exit

Description:

- exits the application

Protocol version:

- 2.0.2 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- "ok" on success or "error" when failed

START/STOP SENDING GPS POSITIONS

Format:

\$gps_sending=start;nmea

\$gps_sending=stop

Description:

- start/stop sending current nmea data

Protocol version:

- 1.2.0 or later

Availability:

- tcp/ip or com

Parameters:

- start;nmea: start sending gps positions in nmea format

- stop: stop sending gps positions

Return values:

- for start;nmea: gps positions in nmea format or "error" when failed

- for stop: "ok" on success or "error" when failed

- "busy" when the remote device is busy responding to another command

START/STOP RECEIVING GPS POSITIONS

Format:

\$gps_receiving=start

\$gps_receiving=stop

Description:

- start/stop receiving nmea data

Protocol version:

- 1.3.0 or later

Availability:

- tcp/ip or com

Parameters:

- start: start receiving gps positions in nmea format

- stop: stop receiving gps positions

Return values:

- "ok" on success or "error" when failed

- "busy" when the remote device is busy responding to another command

SET APPLICATION MODE

Format:

\$set_mode=day

\$set_mode=night

Description:

- set application mode

Protocol version:

- 1.2.0 or later

Availability:

- tcp/ip or com

Parameters:

- day: show application in day mode colors

- night: show application in night mode colors

Return values:

- "ok" on success or "error" when failed

- "busy" when the remote device is busy responding to another command

MAP ICONS

Format:

\$icon_new=42;50.074525,14.409428;"C:\My Pictures\Icons\icon1.ico"

\$icon_new=42;50.074525,14.409428;"C:\My Pictures\Icons\icon1.ico";"Text"

\$icon_move=42;50.074800,14.409627

\$icon_move=42;50.074800,14.409627;"Text"

\$icon_delete=42

\$icon_delete=all

Description:

- create, move and delete an icon on map

Protocol version:

- 1.4.0 or later

Availability:

- tcp/ip or com

Parameters:

- icon_new command : icon number, coordinate, path, [text]
- icon_move command : icon number, coordinate
- icon_delete command : icon number
- icon_delete command : "all" to remove all icons

Return values:

- "ok" on success or "error" when failed
- "busy" when the remote device is busy responding to another command

GET REMOTE SOFTWARE VERSION**Format:**

\$software_version

Description:

- returns remote device application software version

Protocol version:

- 1.0.0 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- software version (e.g. 8.0.42) or "error" when failed
- "busy" when the remote device is busy responding to another command

GET COMMUNICATION PROTOCOL VERSION**Format:**

\$protocol_version

Description:

- returns communication protocol version

Protocol version:

- 1.0.0 or later

Availability:

- tcp/ip or com

Parameters:

- none

Return values:

- protocol version (e.g. 1.0.0) or "error" when failed
- "busy" when the remote device is busy responding to another command

Testing communication can be done by using a telnet client.

Start Navigator in command mode

Activate communication in Navigator - go to [Menu / Settings / Remote Communication](#).

Wait a few seconds while an automatic scan takes place. Now select [Setup TCP/IP connection manually](#).

Enter the following IP address 127.0.0.1 and port 4242.

Now commands can be sent to 127.0.0.1 port 4242.

To confirm it is working start Command Prompt by clicking on Start/Run and typing cmd. Now in

command prompt type:

telnet 127.0.0.1 4242

and then

\$message="Hello"

Part



11 Command line arguments

Window size and border

=====

--window_border=yes/no --window_position=left,top,width,height

Example:

--window_border=yes --window_position=100,100,800,600

On some small or wide resolutions button can be too large. In that case try the following parameter
--nohires

Example:

--window_border=no --window_position=100,100,480,272 --nohires

Start with default settings

=====

--default

Start from an alternate settings file

=====

--configset=...