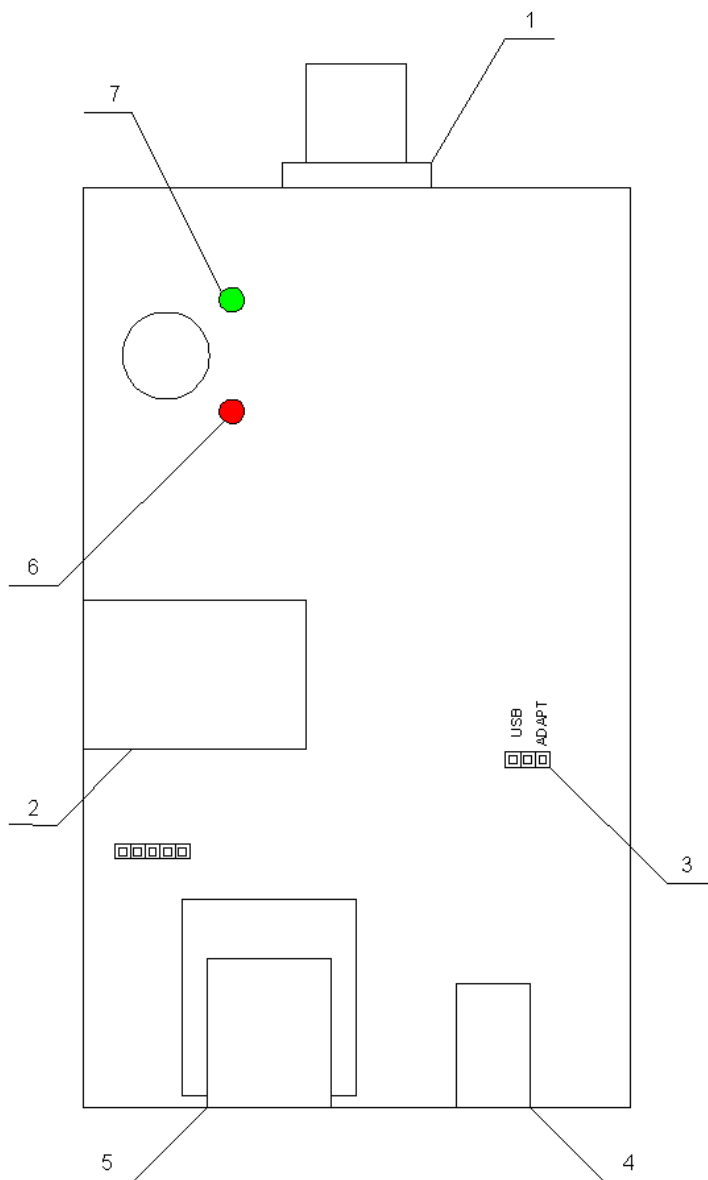# CU-GSM central unit
v.2.0

User manual

Riga, Latvia
2012

General information

CU-GSM central unit is a one-channel receiver, that collects information via GSM channel using voice channel and SMS-messages and transmits it to the **WinSC** software. Central unit receives information via voice channel in **Contact ID** protocol (RT4-5gt device) and via SMS messages in **Contact ID, Silent knight (4x2), Paradox** and **Magellan** protocols (RT4-5gc device)**.**

1. GSM-antenna
2. SIM holder
3. Jumper block for power supply selection
4. Power socket
5. USB-socket
6. Receiver indicator
7. GSM mode indicator

Powering and activating

In order to work properly a SIM-card must be inserted in the central unit. SIM must be activated, PIN request must be turned on and SIM PIN must be set as "0000".
SIM must be inserted before central unit is turned on.

Central unit can be powered in two different ways:
1. Using power supply that provides 10-15V voltage and 250 мА current. Power supply is connected to the power socket (5). To use this option jumper on the power selection block (4) must connect central pin and ADAPT pin (Default option).
2. USB-port is used as a power supply. To use this option jumper on the power selection block (4) must connect central pin and USB pin.

Attention! It is strictly recommended to use the first option to power the device.

After powering up, GSM indicator (8) will start to flash. First 10-15 seconds it will flash constantly (flash and pause approximately 1 second each). During this time Receiver indicator should flash two times. This will mean that SIM is initialized successfully and all the settings are loaded. After that GSM indicator should start flashing once every three seconds. If that didn't happen than the probable troubles are following:
- SIM-card is not activated
- PIN request is turned off
- PIN is different from "0000" карточки отличается от «0000»
- Central unit is out of GSM coverage of the current mobile operator

Connecting to WinSC software

When first connected to the computer, **CU-GSM** requires a **MM232R** driver to be installed.
After installing the driver, **CU-GSM** should be recognized by the operating system as **USB serial port** and can be connected to the **WinSC** software.

To do so, open receiver settings window - **Service/Receiver settings.** In that window you must specify channel number and corresponding COM-port in the Slot field. In the **Receiver Type** field you have to select CU-GSM. After that, press **Port settings** button and set the COM-port preferences. They must be the following:

Baud rate	9600
Data bits	8
Parity	None
Stop bits	1
Flow control	None
Time of heartbeat test	01:30

Central unit indication

GSM-indicator (green LED). After powering on, for 10-15 seconds it will flash once per second. After Initializing and while working properly it will flash once every 3 seconds.

Receiver indicator (red LED). When initializing it will double-flash once. After initialization it will flash every time information is received.

Sound signal – short single beep is formed if CU-GSM didn't receive an answer to it's test message from the software. Long sound signal is formed if CU-GSM failed to transmit received message to the software.

Central unit events

Central unit events are described in the system events editor window - **Service/System events Editor**
All messages look the following way:

Account	Event code	Event description
0000	T50	SIM error
0000	R50	SIM initialization successful
0000	T40	Blank call. No data received
0000	T10	Faulty data received
0000	A20	No GSM coverage
0000	R30	GSM coverage restored
0000	T60	Check sum error
0000	T70	SMS sending failure
0000	R70	SMS sent successfully
0000	T80	Incorrect SMS text