



## VoiceUSB/G10 User manual v1.2

### History

Company was established on 15th of April 1998.  
Main residence is based in Vilnius.

company started with production of telecommunication devices.

In 2001 company expanded its fields of activity by starting design and manufacturing of electronic systems for wireless data transfer.

In 2002 contract of partnership and collaboration was signed with company Pro-Sign GmbH (Germany), considering design and representation of graphic programming interface iCon-L in Eastern Europe.

In 2003 Teltonika and NOKIA became partners and started integration of NOKIA M2M technology using NOKIA N12 module. It was the beginning of wireless technology development process.

In 2004, NOKIA invited Teltonika to join presentation of M2M technology innovations in CeBIT 2004. It was very high evaluation of a small Lithuanian company and its possibilities, which helped to feel peculiarities of international business.

In 2004 Teltonika produced more than 10 new products and solutions using EDGE technology. It was a condition that made Teltonika a leader of M2M integration solutions using EDGE not only in Lithuania, but also in Europe.

2005 was the year of two successful international exhibitions: CEBIT 2005 and HANNOVER MESSE 2005. These shows opened new possibilities for offering our products and solutions for all world.

In the year 2005 Teltonika became an international company. We became Lithuanian - Finnish Company. A few employees from NOKIA joined Teltonika's staff. Presently they successfully develop activity of new companies: Teltonika International GmbH (Düsseldorf) and Teltonika International Oy (Helsinki).

### Our vision

Our vision is to provide added value for people and companies by creating electronic devices and solutions, which are based on the latest achievements of science and technology.

We aim to help people to integrate the latest technologies in real life, what would bring more cosiness, comfort, freedom of mobility and security to their everyday life.

We seek to make all our solutions an inconceivable part of people lives.

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## ATTENTION



Do not rip the device. Do not touch the device if the device block is broken or its connecting wires are without isolation.



All wireless devices for data transferring may be susceptible to interference, which could affect performance.



Only qualified personnel may install or repair this product.



The device is not water-resistant. Keep it dry.



The device must be steadily fastened on the mounting place.



Do not mount or serve device during the thunderbolt.



The device requires high  $\sim 220V$  voltage.

**IMPORTANT NOTES MUST BE READ BEFORE STARTING THE WORK WITH THE DEVICE!**

## GENERAL SAFETY REQUIREMENTS

You will avoid dangerous situations and harming of yourself if you will follow to these recommendations. You have to be familiar with the safety requirements before starting using the device!

To avoid burning and voltage caused traumas, of the personnel working with device, please follow these safety requirements.



Installation and technical support of the *VoiceUSB* device can be performed only by a qualified personnel or a person who has enough knowledge about this device and safety requirements.



*VoiceUSB* device requires 9V  $\overline{=}$  1.12 A constant power supply source that satisfies all safety requirements listed in EN 60950-1 standard.



The PC and power supply source, to which the device *VoiceUSB* is connected, should satisfy LST EN 60950 standard. The device *VoiceUSB* can be used on first (Personal Computer) or second (Notebook) computer safety class.

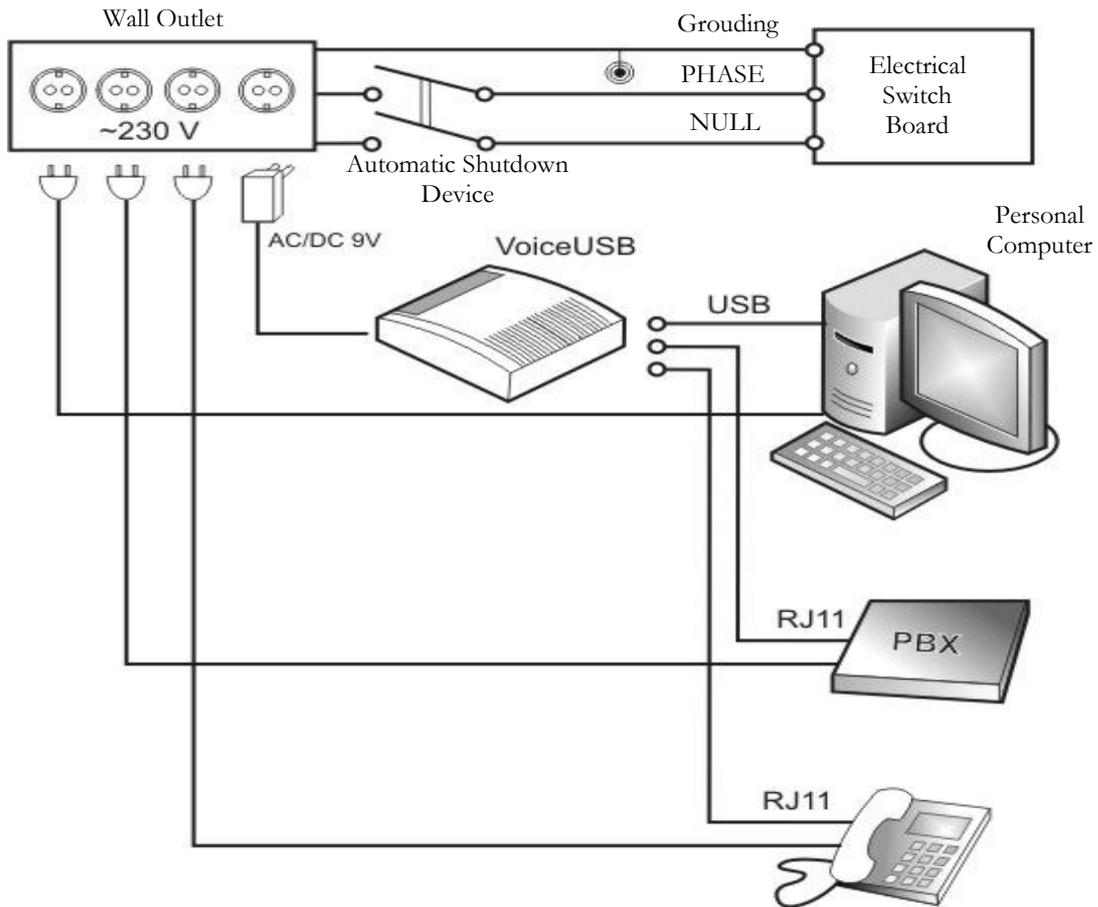


The PBX station and/or the phone connected to the device must satisfy all safety requirements listed in EN 60950-1 standard.

To avoid mechanical damages of the device it is recommended to transport the *VoiceUSB* device packed in damage-proof pack. While using the device, it should be placed so, that its indication LEDs would be visible as they inform in which working mode the device is and if it has any working problems.

For *VoiceUSB* device's network capacity working environment has big influence. If the device starts working insufficiently only qualified personnel may repair this product. We recommend to forward it to repair centre or to manufacturers. No exchangeable parts inside of the device.

In the installation place and supply circuits protective devices (bipolar release device) should be tooled up which will protect from short-circuit and wrong ground installation. The power of connected device should satisfy power of release device. The interstice between contacts should be no less than 3mm. Power supply network should be installed near device on easy accessible place.



Picture 1. Connection scheme of *VoiceUSB* device



*VoiceUSB* device can be directly connected to phone line. Disconnect device from power supply before connecting it to the phone line.

### Mounting of the device



Disconnect device from power supply before mounting to avoid voltage effect!

### Device service

If the device starts working insufficiently only qualified personnel may repair this product. We recommend to forward it to repair centre or to manufacturers. No exchangeable parts inside of the device.

## 1 ABOUT THE DOCUMENT

In this document *VoiceUSB* device technical characteristics are presented, also it is described how to connect *VoiceUSB* device to other devices and how to configure it..

*VoiceUSB* device is being continuously improved: working quality, adding specific requirements from the clients. Therefore, a Firmware update procedure is created.

## 2 INTRODUCTION

*VoiceUSB* device is created correspondingly to up-to-date telecommunications and electronic technologies.

In *Trunk* mode *VoiceUSB* emulates the line. Phone calls in GSM network can be received with the connected to the device analogue phone.

When the device is connected to PBX it emulates external line while being in *Trunk* mode.

When the device is connected to PBX it allows phone calls to/from any number in PBX to GSM network and vice versa while being in *Extension* mode.

*VoiceUSB* device can work as a GSM modem that can create pathway to Internet, exchange data using GPRS, CSD data bearers.

It also gives a user exclusive possibility to change parameters of the device with ordinary telephone using *VoiceUSB Service menu* or with a connected PC with special *VoiceUSB Configuration Tool* software.

### 3 PACKAGE CONTENTS

VoiceUSB device is delivered to the client in cardboard box with all required supplements necessary for work. Package consists of:

- Cardboard box.
- VoiceUSB device.
- USB A ↔ USB mini B connection cable.
- AC/DC power supply adapter.
- CD with User Manual and drivers.
- External GSM antenna.
- Components of mounting.

**Note:** *the manufacturer does not provide SIM card, which is necessary for connecting to the GSM network! SIM card can be obtained from your GSM operator!*

If any of the components is missing from your package, please contact manufacturer's representative or salesperson.

## 4 TECHNICAL CHARACTERISTICS

### 4.1 Data Transfer

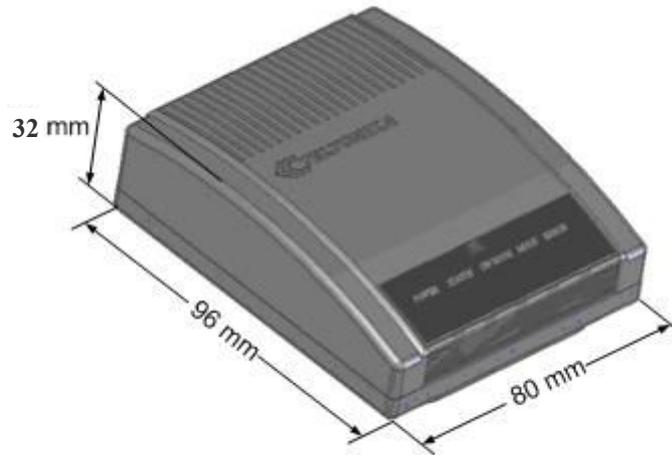
VoiceUSB device supports the following data bearers used in GSM network. Which data channel is used depends on your GSM operator and data transfer capacity in chosen GSM network:

- GPRS class 10:
  - Full PBCH support.
  - MS class B.
  - Coding scheme 1-4.
- Circuit Switched Data: Up to 9.6 kbit/s, Transparent/Non-transparent mode

VoiceUSB device also has an incoming number detection function. A ES300778-1/2 standard and MDMF format is used for it.

### 4.2 Mechanical characteristics

VoiceUSB device case is made of plastic. External view and measurements of the device are shown in picture 4.2.1.



Picture 4.2.1. External view and measurements of the device

### 4.3 Operating characteristics

The device is powered from a 9 V (DC) power supply. The PC to which the *VoiceUSB* device is connected must have a USB interface corresponding to USB 1.1 or USB 2.0 standards. Electrical parameters of the device are shown in Table 4.3.1.

Table 4.3.1. Electrical characteristics of *VoiceUSB*

Parameter	Min	Nominal	Max	Units
Power Supply Voltage	+9	+12	+15	V
Average Power consumption	-	1.4	7.2	W
Current Consumption	100	120	800	mA

Operating conditions and weight of the device are shown in Table 4.3.2 .

Table 4.3.2. Operating conditions and weight

Parameter	Min	Nominal	Max	Units
Weight		135±10	-	g
Operating Temperature	-0	-	+55	°C
Storage Temperature	-20	-	+70	°C

**Note:** *If the settings outreach the characteristics given above, the device can be damaged!*

## 4.4 Indication

*VoiceUSB* has 5 LEDs for device status indication. They are located at the top part of the device. The indication statuses of the device are described in Table 4.4.1.

Table 4.4.1. Device status description

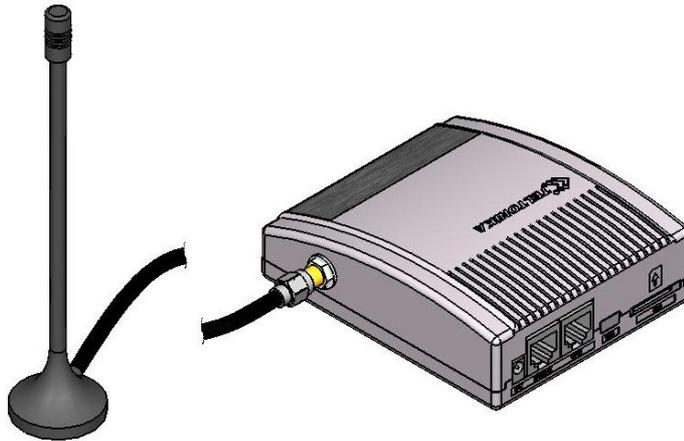
Status	Description
Power LED is on	Power supply on
Status blinking	Device is preparing for work
Status on	Device is ready to work (GSM network is detected, general configurations are made)
Mode blinking	Device is connected to the Internet or calling
Mode on	USB interface connected to the device
On/Hook LED on	Phone is picked up
Error LED blinking	Device is awaiting for PIN code
Error LED on	SIM card not found
Status, Mode, On/Hook, Error blinking	Wrong PIN code

## 5 VoiceUSB PREPARATION TO WORK

Before starting working with *VoiceUSB* device, antenna must be connected (see chapter 5.1). Then, insert SIM card and make sure that it is inserted properly.

### 5.1 Connection of antenna

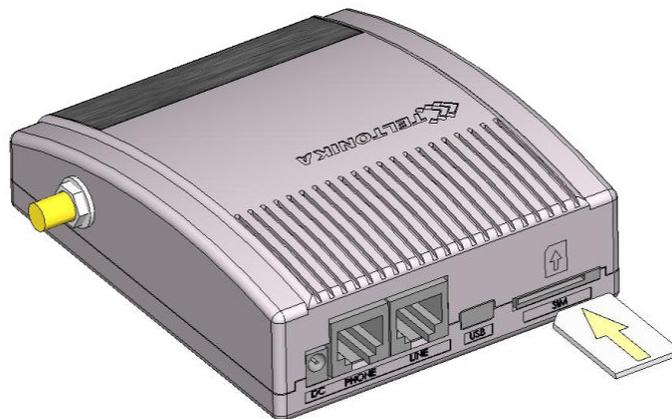
Antenna mounting place is chosen according to mounting place features. It is recommended to mount the antenna inside the building. If because of network conditions antenna is to be mounted outside, it is necessary to set antenna ground and quick-acting security implement against lightning. Antenna is mounted using the standard SMA connector. Antenna connection is shown in picture 5.1.1.



Picture 5.1.1. Connection of antenna

### 5.2 Inserting SIM card

SIM card must be inserted as is shown in picture 5.2.1 and make sure that it is inserted properly.

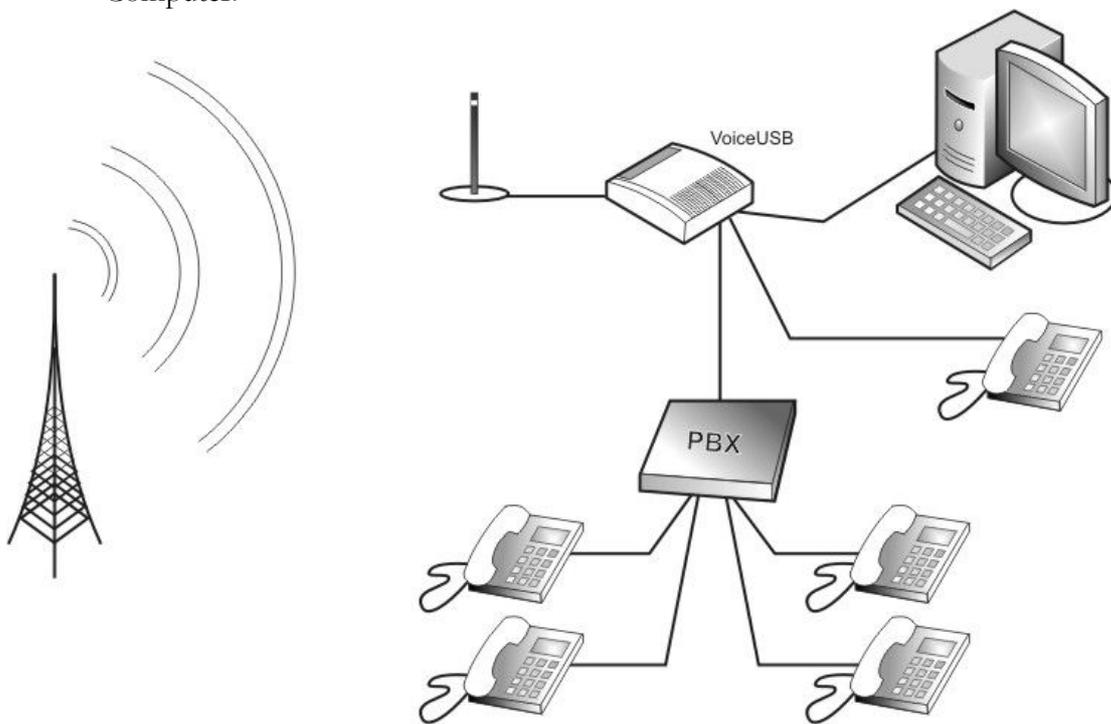


Picture 5.2.1. Inserting SIM card

### 5.3 Devices connection to *VoiceUSB*

Depending on what action the *VoiceUSB* device must perform, the following connections are to be made:

- Phone
- PBX
- Computer.



Picture 5.3.1 Devices connection to *VoiceUSB*

*VoiceUSB* can operate in two modes: *Trunk* and *Extension*.

In *Trunk* mode *VoiceUSB* emulates the line. With connected analogue phone, phone calls can be made and received through the GSM network. *VoiceUSB* device supports the number display function.

In *Trunk* mode *VoiceUSB* can be connected to PBX. In this case *VoiceUSB* emulates external line and is connected to one of the PBX CO sockets. In this mode the phone call forwarding depends on PBX configuration.

In *Extension* mode *VoiceUSB* is connected to PBX *Extensions* socket. In this case *VoiceUSB* instead of emulating the line, loads it. In this mode, the phone call forwarding depends on the user, that is a phone call to GSM network can be made from any internal number and from GSM network to any internal number.

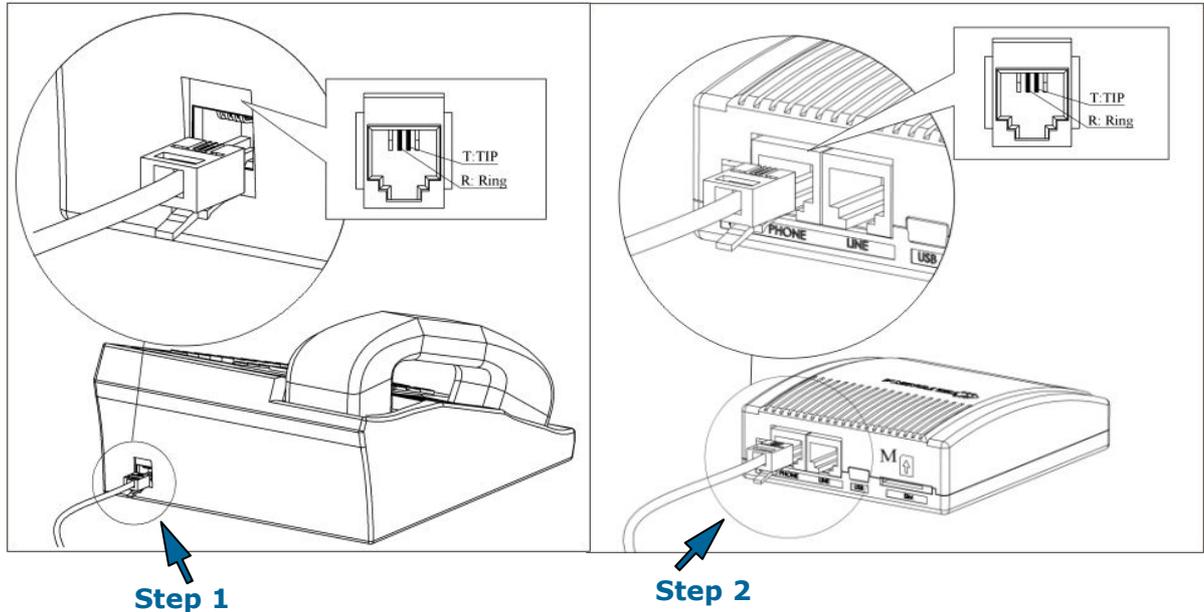
#### 5.3.1 *Trunk* mode

In this mode *VoiceUSB* device emulates the analogue line. Depending upon needs, phone or PBX station can be connected to it through a standard RJ11 connector marked as *PHONE*.

*Trunk* mode is activated through *VoiceUSB Service menu* (##1111# 1# 2# 0#) or with *VoiceUSB Configuration Tool*.

### 5.3.1.1 Connecting phone to *VoiceUSB* (*Trunk* mode)

Module also generates the voltages necessary for the call. The phone connected to the *VoiceUSB* device can make and receive incoming calls from the GSM network. The connection to the device is shown in picture 5.3.2.



Picture 5.3.2. Phone connection to the *VoiceUSB* in *Trunk* mode

#### 5.3.1.1.1 Call examples

To make a phone call, connect the phone to the *VoiceUSB*, insert the SIM card and plug the power supply.

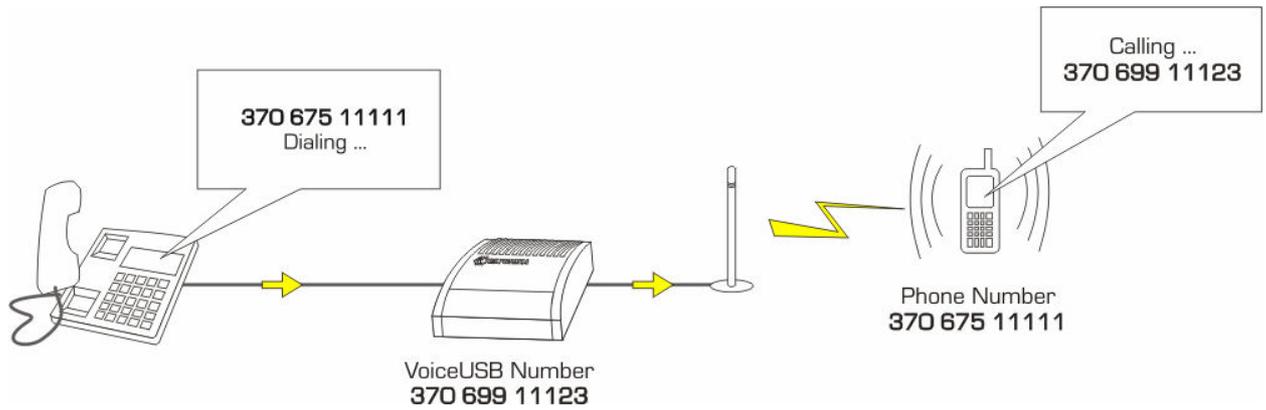
**Note:** Calling mode may not work in the following situations: a) when *VoiceUSB* device is connected to the Internet; b) when Extension mode is activated; c) when working in Service menu; d) when working with *VoiceUSB* Configuration Tool

Wait until the device gets ready for work. Enter PIN code of the SIM card if required.

#### Phone call from phone to a mobile phone using *Trunk* mode

- Pick up the phone, connected to the *VoiceUSB*, handset. Dialing tone should be heard.
- Dial the number and wait for the connection. Time period between two different digits can be no longer than 3 seconds (see chapter 6.1.4.).
- To terminate the call, hung up the phone.

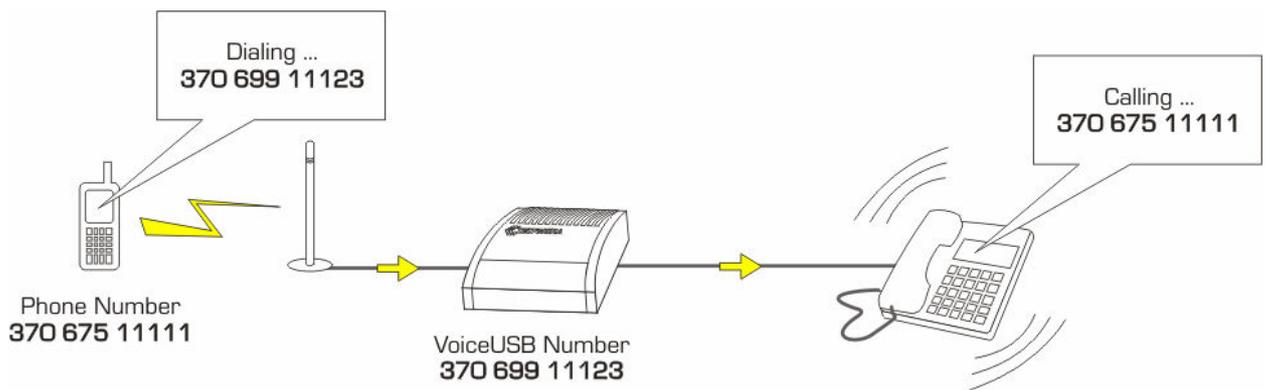
**Note:** Making international phone call dial 00, instead of +



Picture 5.3.3. Phone call from phone to mobile phone using *Trunk* mode

**Phone call from mobile phone to phone using the *Trunk* mode**

Dial the number of the SIM card inserted in the *VoiceUSB* and wait for the signal.



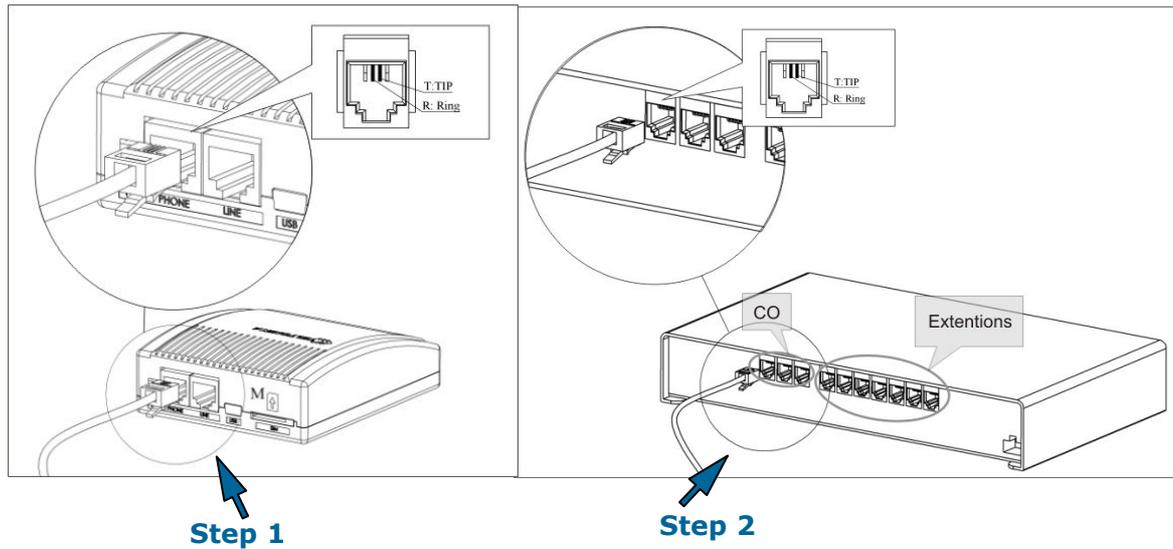
Picture 5.3.4. Phone call from mobile phone to phone using the *Trunk* mode

5.3.1.2 PBX connection to the *VoiceUSB* (*Trunk* mode)

In this mode *VoiceUSB*, connected to the PBX, emulates external line.

**Note:** Before connecting *VoiceUSB* to PBX, the PBX has to be accordingly configured

*VoiceUSB* connection to PBX is shown in picture 5.3.5.

Picture 5.3.5 PBX connection to the *VoiceUSB*

#### 5.3.1.2.1 Phone call examples

In order to make a phone call, connect PBX to *VoiceUSB* (picture 5.3.5), insert the SIM card and plug the power supply.

**Note:** *Calling mode may not work in the following situations: a) when VoiceUSB device is connected to the Internet; b) when Extension mode is activated; c) when working in Service menu; d) when working with VoiceUSB Configuration Tool*

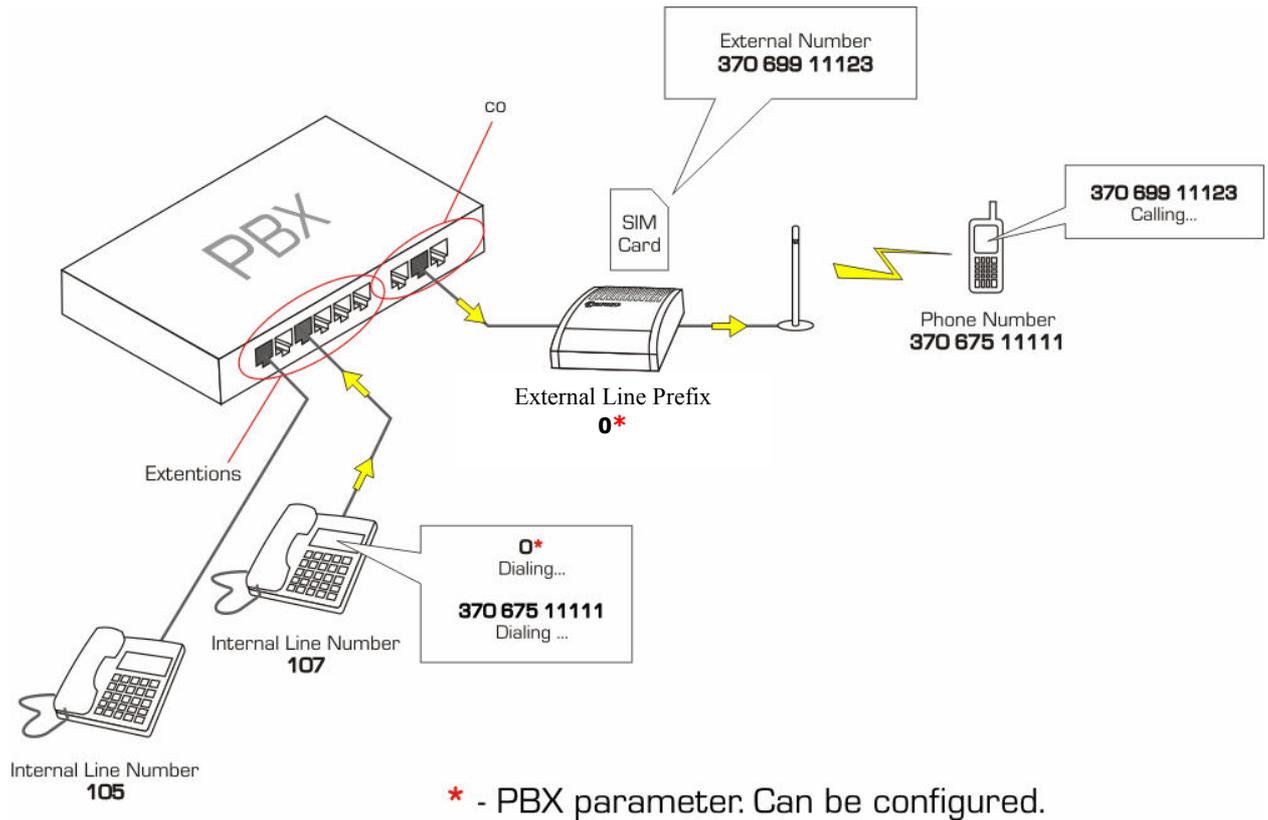
Wait until the device prepares for work.

**Note:** *While using the Trunk mode, the PIN code request for GSM SIM card must be disabled or automatic PIN code entering should be set in the Service menu!*

#### Phone call from internal line number to a mobile phone using the *Trunk* mode

Let's say, you want to make a phone call from the internal line number to a GSM network (picture 5.3.6).

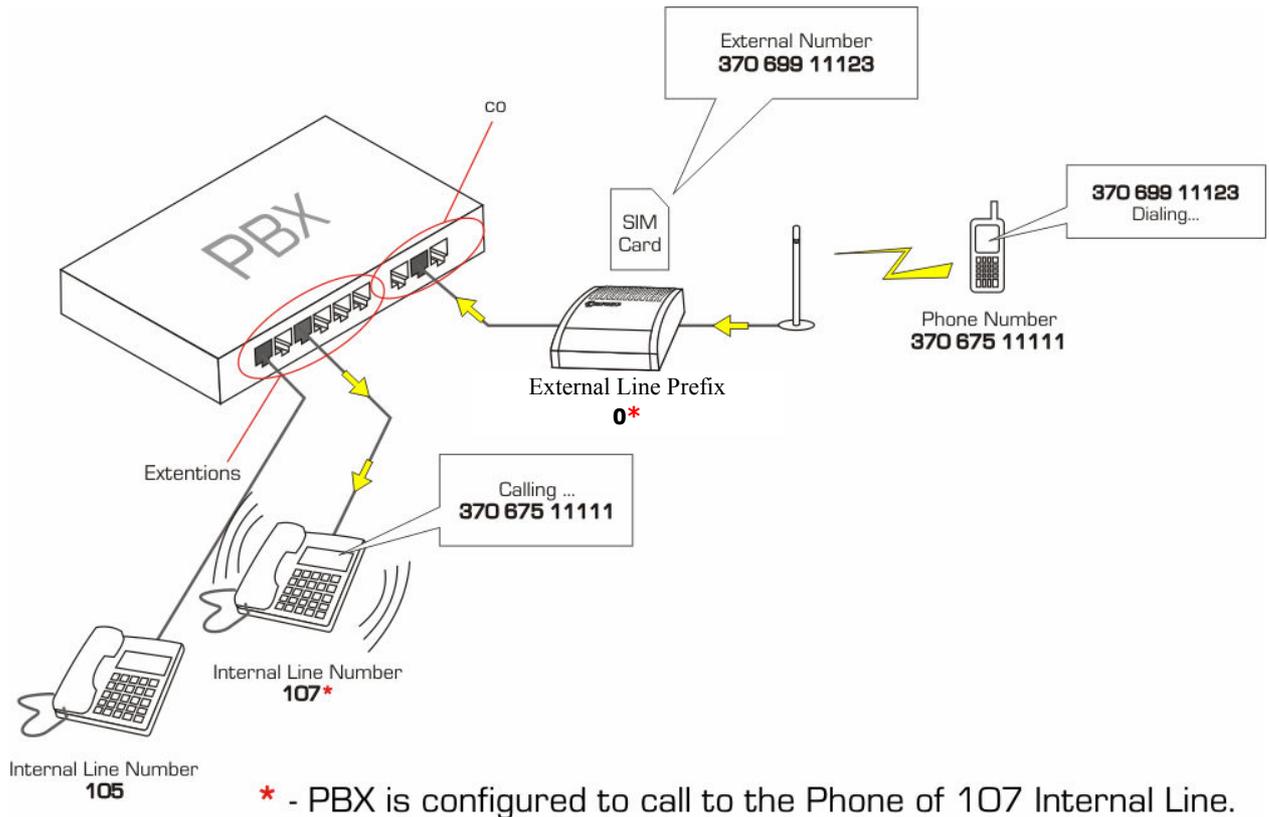
- Pick up the phone connected to the PBX *Extension* socket, handset. Dialing tone should be heard.
- Dial the external line prefix according to the PBX configuration.
- Dial the mobile phone number and wait for the connection.
- To terminate the call, hung up the telephone handset



Picture 5.3.6. Phone call from internal line number to a mobile phone using the *Trunk* mode

**Phone call from mobile phone to an internal line number using the *Trunk* mode**

Let's say you want to make a phone call from the GSM network to an internal line number (picture 5.3.7). Dial the number of the SIM card inserted in *VoiceUSB*. *VoiceUSB* will detect the incoming call and will emulate it. The incoming call will be directed to an appropriate internal line number depending on PBX configuration.



Picture 5.3.7. Phone call from mobile phone to an internal line number using the *Trunk* mode

### 5.3.1.3 *Trunk* mode parameters

All parameters can be changed with *Service menu* or *VoiceUSB Configuration Tool*.

#### Caller ID

The device supports the incoming call ID display function. The incoming number can be shown on the display of the phone connected to the *VoiceUSB* device.

#### Number Prefix

*VoiceUSB* has a Number Prefix function. When this function is enabled, a prefix will be automatically added to every dialed number.

#### Polarity Reverse

When the function is active, polarity reverse will perform when the over party picks up the phone. Otherwise, the polarity reverse will perform when the over party will pick up the handset of the phone connected to the *VoiceUSB* device.

#### Minute notification

*VoiceUSB* device has a Minute notification function. When this function is activated, during the voice call, a short notification beep will be heard each minute.

## Prefix blocking

This mode allows to create a blacklist of number prefixes so the user would not be able to make a call to the number which starts with them. If user dials a forbidden prefix, *VoiceUSB* will restart itself. The prefix list can be formed in *Service Menu* or *VoiceUSB Configuration Tool*.

## Number blocking

This mode allows to create a blacklist of numbers so the user would not be able to call them. If user dials a forbidden number, *VoiceUSB* will restart itself. The forbidden number list can be formed in *Service Menu* or *VoiceUSB Configuration Tool*.

## Allowed Numbers

This mode allows to create a list of numbers that will be allowed to use *Trunk* mode. If caller's number will not match any number from the list, *VoiceUSB*, will reject the call.

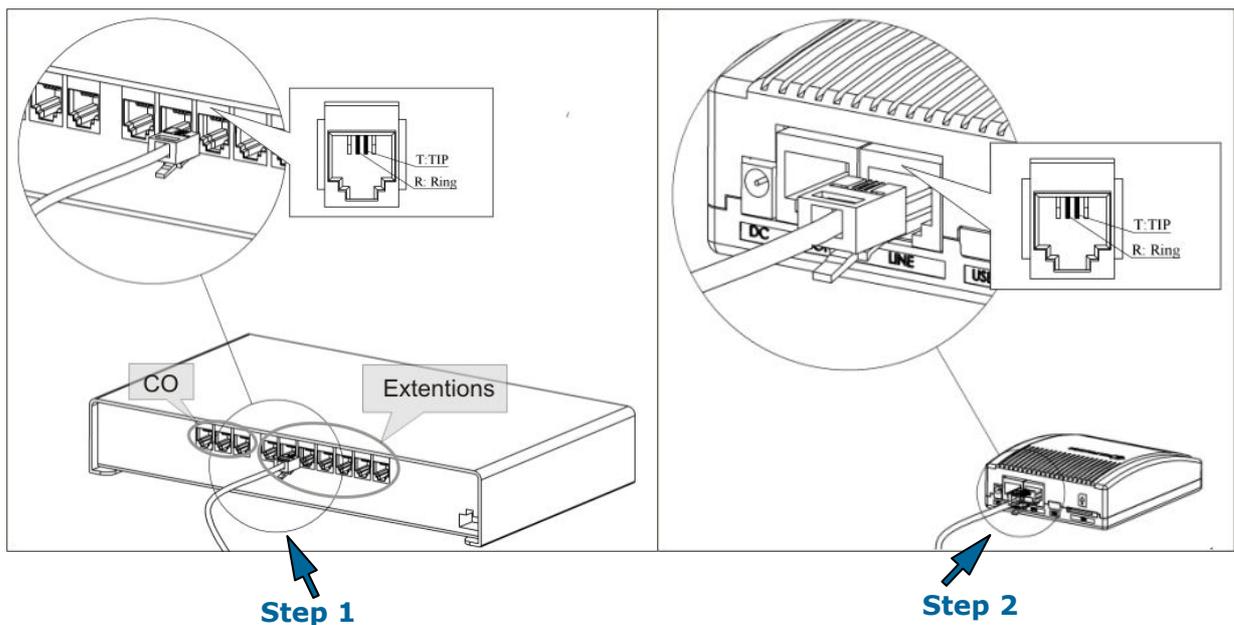
**Note:** All functions are listed in *Service menu* or in *VoiceUSB Configuration Tool* description.

### 5.3.2 Extension mode

In this mode a call from GSM network to *VoiceUSB* module is possible. The module will commutate with any number in internal or PSTN network. Also it is possible to make a call from any internal or PSTN number (through PBX) to GSM network.

*Extension* mode is activated through the *Service menu* (##1111# 1# 1# 0#) or with *VoiceUSB Configuration Tool*.

#### 5.3.2.1 PBX connection to *VoiceUSB* (*Extension* mode)



Picture 5.3.8. PBX connection to *VoiceUSB*

### 5.3.2.1.1 Calling examples

In order to make a phone call, connect *VoiceUSB* to one of the PBX *Extensions* sockets (picture 5.3.8), insert the SIM card and plug the power supply.

**Note:** *Calling mode may not work in the following situations: a) when VoiceUSB device is connected to the Internet; b) when Trunk mode is activated; c) when working in Service menu; d) when working with VoiceUSB Configuration Tool*

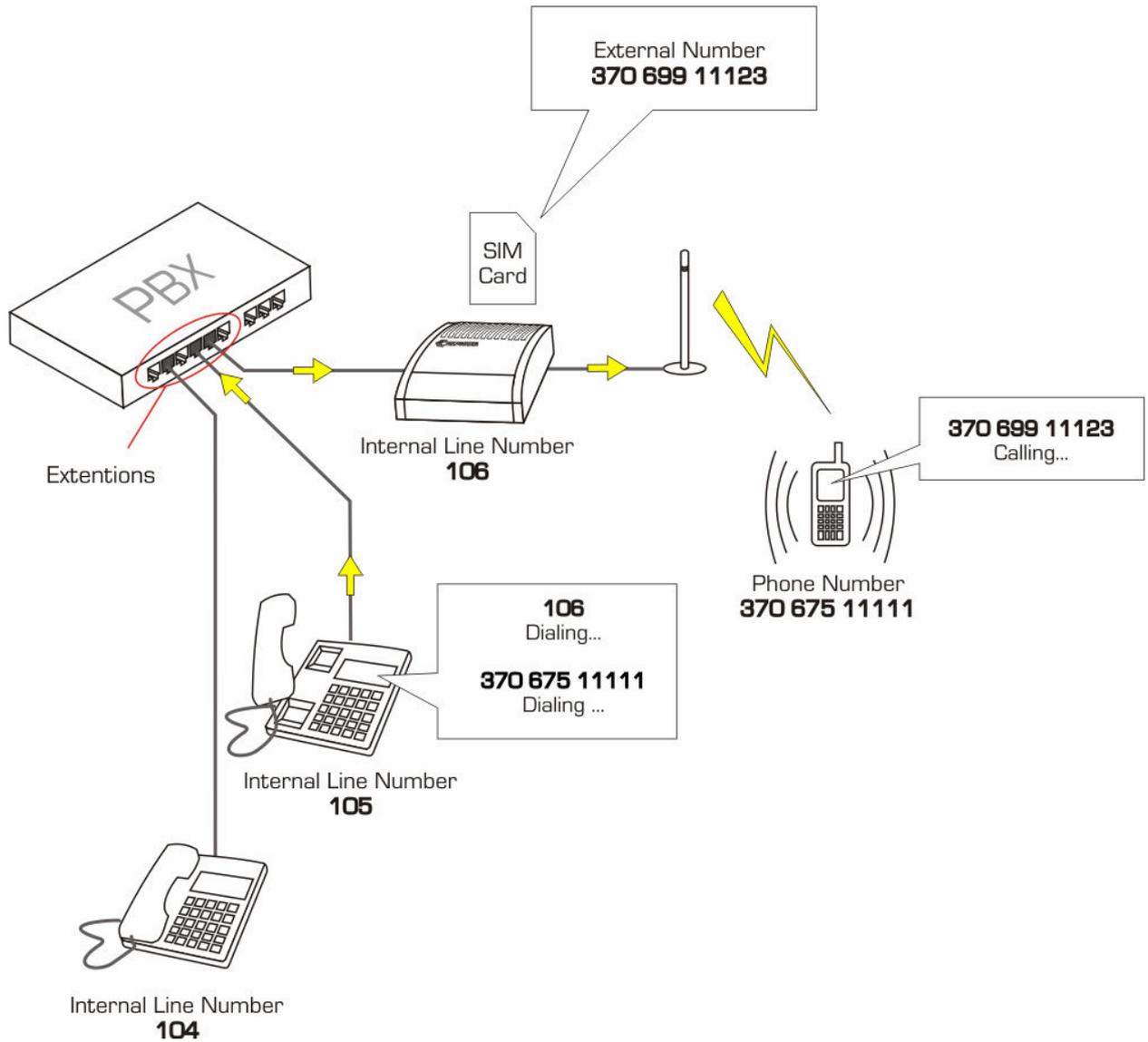
Wait until the device prepares for work.

**Note:** *While using the Extension mode, the PIN code request for GSM SIM card must be disabled or automatic PIN code entering should be set in the Service menu!*

### Phone call from internal line number to a mobile phone using the *Extension* mode

Let's say you want to make a phone call from an internal line number to a GSM network (picture 5.3.9).

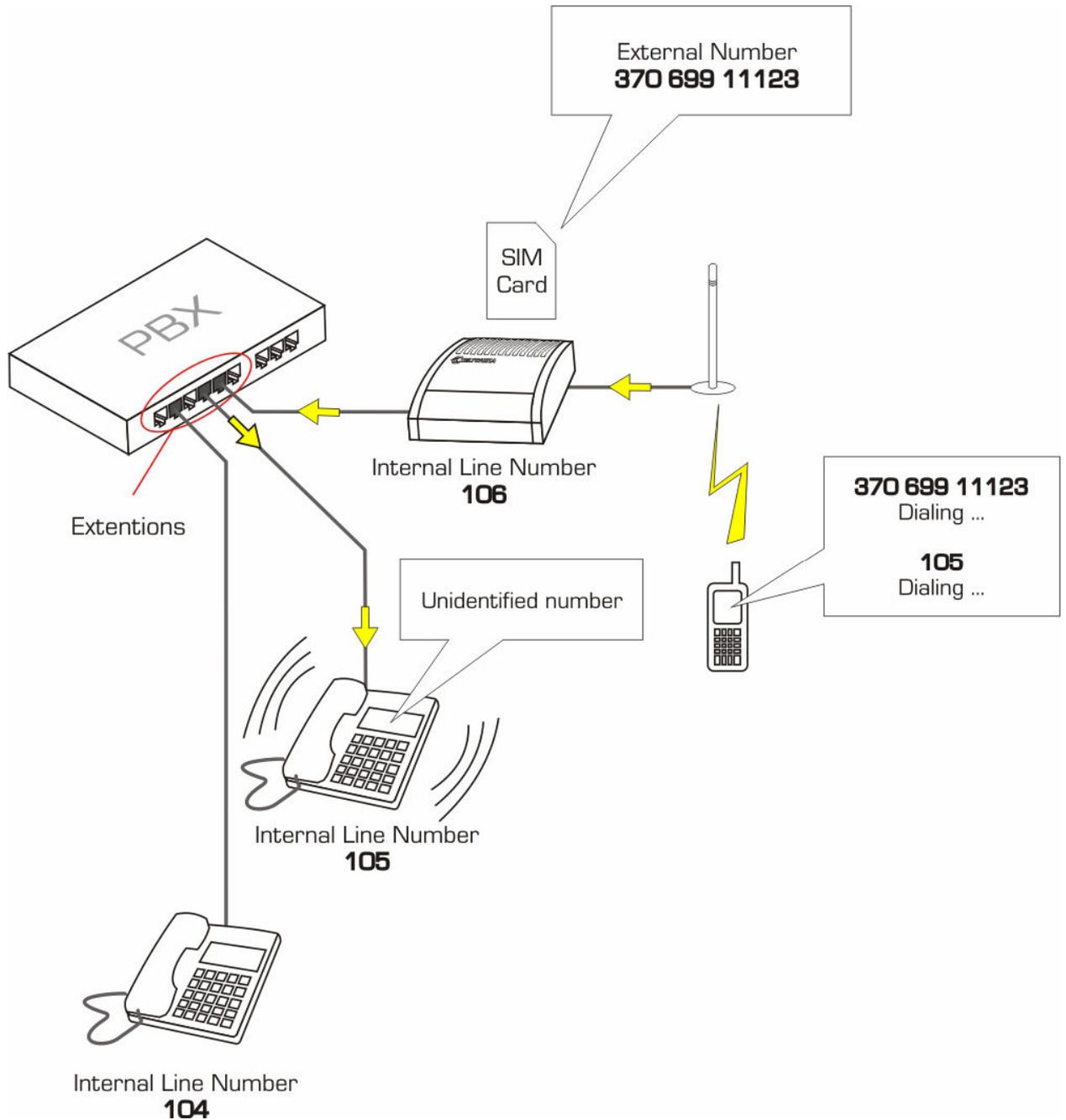
- Pick up the phone connected to the PBX *Extension* socket, handset. Dialing tone should be heard
- Dial the internal *VoiceUSB* number
- Wait until you hear the dialing tone
- Dial the mobile phone number and wait for the connection.
- To terminate the call, hung up the telephone handset



Picture 5.3.9. Phone call from internal line number to a mobile phone using the *Extension* mode

**Phone call from a mobile phone to internal line number using the *Extension* mode**

Let's say you want to make a phone call from the GSM network to the internal line number (picture 5.3.10). In your mobile phone dial the number of the SIM card inserted in *VoiceUSB*. The device will automatically detect the incoming call and will answer it. Dial the internal line phone number after the long phone tone signal.



Picture 5.3.10. Phone call from a mobile phone to internal line number using the *Extension* mode

### 5.3.2.1.2 Call Through

*Extension* mode allows you to use Call Through function, which makes calling from mobile to internal number much easier.

To make a Call Through you just have to dial phone number of a SIM card inserted into *VoiceUSB* device, pause sign and internal number.

Each mobile phone has its own way to make a pause. Please see below:

For a Nokia phone:

- Step 1. Dial phone number of a SIM card inserted into *VoiceUSB* device
  - Step 2. Press \* 3 times to show 'p'. (This causes dialing to pause)
  - Step 3. Dial internal number
- Example. 0037068884p103

For a Siemens or Panasonic phone:

- Step 1. Dial phone number of a SIM card inserted into *VoiceUSB* device
  - Step 2. Press and hold '0' to show '+'. (This causes dialing to pause)
  - Step 3. Dial internal number
- Example. 0037068884+103.

For a Motorola or Ericsson phone :

- Step 1. Dial phone number of a SIM card inserted into *VoiceUSB* device
  - Step 2. Press and hold \* to show 'p'. (This causes dialing to pause)
  - Step 3. Dial internal number
- Example. 0037068884p103.

### 5.3.2.2 *Extension* mode parameters

All parameters can be changed with *VoiceUSB Configuration Tool* or through the *Service menu* of the connected to the device phone.

#### **DTMF sensitivity**

This menu item allows to change number dialing tone signal level in *Extension* mode. It is recommended to change it if during the call in *Extension* mode the device does not react to a dialed number or reacts to several digits (then the level should be decreased) or if the number is dialed because of the interference when in reality no number is being dialed (then the level should be increased).

#### **Prefix blocking**

This mode allows to create a blacklist of number prefixes so the user would not be able to make a call to the number which starts with them. If user dials a forbidden prefix, *VoiceUSB* will restart itself. The prefix list can be formed in *Service Menu* or *VoiceUSB Configuration Tool*.

#### **Number blocking**

This mode allows to create a blacklist of numbers so the user would not be able to call them. If user dials a forbidden number, *VoiceUSB* will restart itself. The forbidden number list can be formed in *Service Menu* or *VoiceUSB Configuration Tool*.

## Allowed Numbers

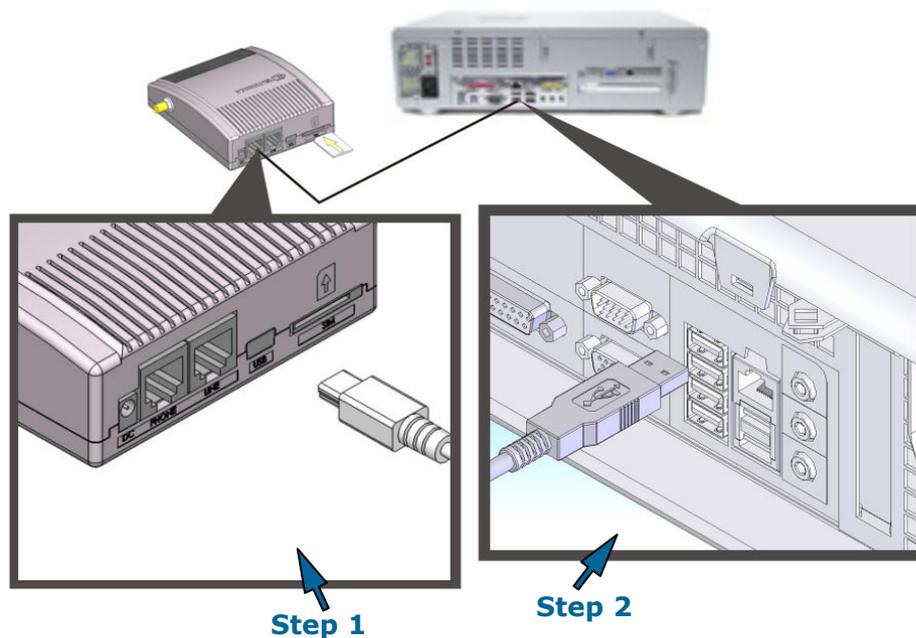
This mode allows to create a list of numbers that will be allowed to use *Extension* mode. If caller's number will not match any number from the list, *VoiceUSB*, will reject the call.

*VoiceUSB* device in *Extension* mode was tested on PANASONIC KX – TEM284 and AGFEO AC 12 USB PBX stations.

## Connecting *VoiceUSB* to the PC

The connection of *VoiceUSB* device is performed in the following order:

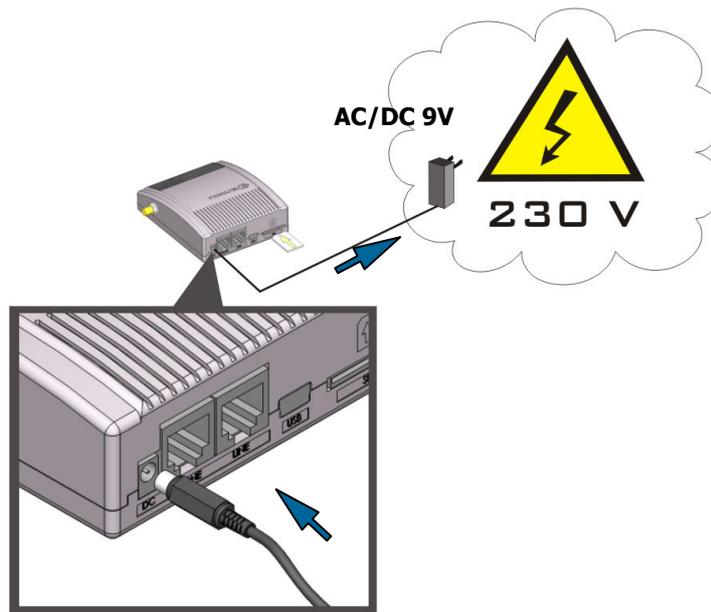
- Turn off the PC
- Insert SIM card to *VoiceUSB*. Make sure it is inserted properly.
- Connect one mini USB cable end to the device and the other to the USB port in the PC (picture 5.4.1). If the device is being connected for the first time, mini USB cable must be connected during the drivers installation.
- Connect AC/DC power supply source to the supply socket of the device (picture 5.5.1).
- Turn on the PC.



Picture 5.4.1. Connection to the PC

## 5.5 Connection of the power supply

VoiceUSB module uses 9V  $\overline{\text{---}}$  1.12 A direct current power supply source which goes with the package. The connection of the power supply is shown in picture 5.5.1 .



Picture 5.5.1. Connection of the power supply

## 5.6 THE START

When the *VoiceUSB* device is set to work, that is, SIM card inserted, antenna, phone, analog phone line or PC (depending on needs) and power supply are connected, the Power LED is on and the Status LED is blinking indicating, that the module is preparing for work. The initialization can take up to 20 seconds (it is recommended to wait). During that time, the module checks the SIM card, detects the appropriate GSM network and checks the operating parameters. When initialization is done, the Status LED becomes constant.

**Note:** If PIN code request is active on the SIM card, then Error LED starts blinking and phone signal is busy. That means that the module is waiting for the PIN code.

## 5.7 Entering the PIN code

There are two possible PIN code entering ways in *VoiceUSB*: manual and automatic.

### 5.7.1 Manual PIN code entering

If SIM card PIN code request is activated, Error LED starts blinking after *VoiceUSB* is turned on and phone gives busy signal. This means, that the module is waiting for the PIN code which must be entered with the help of the phone buttons. If the PIN code entered correctly, a long phone signal is on the line indicating, that the *VoiceUSB* is ready for work. If the PIN code was entered incorrectly, the Status, On/Hook, Mode, Error LEDs start blinking and the phone line is busy. PIN code can be entered through the *Service menu* or with *VoiceUSB Configuration Tools*.

### 5.7.2 Automatic PIN code entering

If SIM card PIN code request is activated, the *VoiceUSB* device takes the PIN code from its memory. The PIN code can be entered into *VoiceUSB* memory using *Service menu* (`##1111#6#3#<PIN code>#`) or *VoiceUSB Configuration Tool*.

## 6 VoiceUSB Service menu

VoiceUSB device parameters can be changed using ordinary telephone connected to VoiceUSB device through a standard RJ11 connector named *PHONE* (see chapter 5.3.1.1. ). When the device is turned on, wait until it sets for work. If required enter PIN code of the SIM card. After a long beep, enter *Service menu* password. Standard password is ##1111#. When password is entered VoiceUSB controlling through the phone is activated and user directly accesses VoiceUSB main *Service menu*. Exit from any part of the *Service menu* by hanging up the phone or dialing \*\*. While navigating in *Service menu*, long beeps are heard on the line. When any function is being activated, short beeps are heard on the line.

*Service menu* command list of the device is shown in the table.

	Command	Description
General parameters	1#	Device operating mode control
	2#	Country selection
	3#	USB connection mode
	4#	Number dial interval
Security parameters	5#	<i>Service menu</i> password changing
	6#	PIN code entry control
<i>Trunk</i> mode parameters	7#	Caller ID display control
	8#	Number prefix
	9#	Polarity reversal
	10#	Minute notification on/off
<i>Extension</i> mode parameters	11#	DTMF sensitivity in <i>Extension</i> mode
Numbers and prefixes blocking	12#	Prefix blocking
	13#	Numbers blocking
	14#	Allowed numbers
	99#	Restoring default settings

*Service menu* parameters are divided into:

- General parameters,
- Security parameters,
- *Trunk* mode parameters,
- *Extension* mode parameters,
- Numbers and prefixes blocking.

## 6.1 General Parameters

### 6.1.1 Device operating mode control

*VoiceUSB* device operating mode can be changed with the help of telephone. This *Service menu* function is activated by pressing 1# on telephone.

##1111# 1# ... 0#

1# activates *Extension* mode.

##1111# 1# 1# 0#

*Trunk* mode is activated by dialling 2#.

##1111# 1# 2# 0#

### 6.1.2 Country selection

As different countries have different ringing and busy tone frequencies and ringing, busy tone and calling sequences *VoiceUSB* device has a possibility to choose country according to ITU-T recommendation\*.

List of Various tones used in national networks

(According to ITU-T Recommendation E.180) (03/1998) (Position on 1 February 2003)

To select the country in main *Service menu* dial 2#.

##1111# 2# ... 0#

Enter country prefix and press #. After country selection the device returns to main menu.

##1111# 2# <Country Code> #

**Note:** Country Code can be found at the end of this document in the "List of Countries"

### 6.1.3 USB Connection Mode

*VoiceUSB* device supports two USB connection modes. In Data mode device switches to data transfer mode (transfer speed – 115200bps). In FAX mode device switches to PC fax mode (data transfer speed – 19200bps).

*VoiceUSB* device USB connection mode can be change with telephone. This *Service menu* function is activated by dialing 3#.

##1111# 3# ... 0#

1# activates Data mode.

##1111# 3# 1# 0#

2# activates FAX mode.

##1111# 3# 2# 0#

#### 6.1.4 Number dial interval

Sets time interval after which *VoiceUSB* device starts calling the dialled number. Parameter unit is in seconds.

Example: Num dial interval field value is 3 seconds. You want to dial 123456. If after pressing 1 passes more than 3 seconds, the device understands dialled digit as whole number. To avoid such misunderstandings, pauses between dialled digits cannot exceed 3 seconds.

Time interval can be changed with telephone by dialing 4# in the main *Service menu*.

##1111# 4# ... 0#

Enter seconds from 2 to 6 and press #.

##1111# 4# (2...6) # 0#

## 6.2 Security parameters

### 6.2.1 Changing *Service menu* password

To change menu password dial 5# in the main *Service menu*.

##1111# 5# < ... #

Enter new 4 digit user password and press #.

##1111# 5# < New 4 digit menu password > #

New *Service menu* password will be stored in the memory of the device. After saving the password, the device returns to the main menu.

### 6.2.2 PIN code entering control

PIN code automatic entering of the GSM SIM card inserted in the *VoiceUSB* device, can be enabled/disabled with the help of the phone.

Dial 6# in the main *Service menu* to get to PIN code entering control.

##1111# 6# ... 0#

1# dialled in PIN code entering control menu activates manual PIN code entering and each time the device is turned on, the PIN code will have to be entered manually.

##1111# 6# 1# 0#

2# dialled in PIN code entering control menu activates automatic PIN code entering and each time the device is turned on, the PIN code will be automatically read from the device.

##1111# 6# 2# 0#

**Note:** in order to use automatic PIN code entering, the PIN code has to be saved in device memory.

To save PIN code in device memory, dial 3# in PIN code entering control menu, enter the PIN code and press #

##1111# 6# 3# <PIN code> #

## 6.3 Trunk mode parameters

### 6.3.1 Caller ID type display

VoiceUSB device has *Caller ID* recognition function. This function displays incoming caller ID. To use this function, telephone must have a display for ID showing.

In *Service menu* dial 7# to get to Caller ID type display menu.

##1111# 7# ... 0#

To disable the function dial 1#.

##1111# 7# 1# 0#

Dial 2# to activate FSK format.

##1111# 7# 2# 0#

Dial 3# to activate DTMF format

##1111# 7# 3# 0#

### 6.3.2 Number prefix

VoiceUSB device allows to activate function which automatically add prefix to the number. Dial 8# in main *Service menu* to activate it.

##1111# 8# ... 0#

Dial 1# to activate prefix adding to number.

##1111# 8# 1# 0#

To disable dial 2# in Number prefix menu.

##1111# 8# 2# 0#

Dial 3#, enter prefix and press #.

##1111# 8# 3# <Prefix># 0#

Example. Activate prefix function by entering ##1111#8#1#0# combination. Then enter a prefix, in this case 370 and dial ##1111#8#3#370#0# combination.

Now each time you dial number 123456 in *VoiceUSB* device, in telephone number will be dialled with prefix 370 123456.

### 6.3.3 Polarity reverse

After activating this function, the polarity reverse will perform when the over party will answer the call. Otherwise, the polarity reverse will perform when the user picks up the phone connected to the *VoiceUSB* device. To enter the mode control menu, dial 9# in the main *Service menu*.

##1111# 9# ... 0#

Dial 1# in Polarity reverse mode menu for activation.

##1111# 9# 1# 0#

Dial 2# in Polarity reverse mode menu for deactivation.

##1111# 9# 2# 0#

### 6.3.4 Call duration indicating signal

Dial 10# in main menu in order to get to Call duration indicating signal menu.

##1111# 10# ... 0#

The signal indicating call duration can be turned on/off with the help of the phone. The call duration is indicating with a beep per minute.

In Call duration indicating signal menu press 1#, to enable the function.

##1111# 10# 1# 0#

Press 2#, to disable Call duration indicating signal function.

##1111# 10# 2# 0#

## 6.4 *Extension mode parameters*

### 6.4.1 DTMF sensitivity in *Extension mode*

Dial 11# in main menu to get to DTMF sensitivity in *Extension mode* menu.

Dialled digits in *Extension mode* signal level can be changed in DTMF sensitivity in *Extension mode* menu.

##1111# 11# <Level value> #

It is recommended to change it if during the call in *Extension mode* the device does not react to a dialed number or reacts to several digits (then the limit should be decreased) or if the number is dialed because of the interference when in reality no number is being dialed (then the limit should be increased). Allowed level range is from 800 to 1800.

## 6.5 *Numbers and prefixes blocking*

### 6.5.1 *Prefix blocking*

Prefix blocking can be performed with the help of the phone.

In order to get to the Prefix blocking menu, dial 12# in the main *Service menu*. Total 10 entries can be done.

##1111# 12# ... 0#

Dial 1# in Prefix blocking menu to activate the function.

##1111# 12# 1# 0#

Dial 2# in Prefix blocking menu to disable prefix blocking.

##1111# 12# 2# 0#

Phone call will not be performed if the first digits of the number will be the same with the prefix on the list. Maximum length of the blocking prefix is 6 digits.

#### 6.5.1.1 *Add entry*

Dial 3# in Prefix blocking menu to add new entry.

##1111# 12# 3# ... 0#

This command activates entry supplement function. When the function is activated, place in the list has to be chosen. This is done by dialing the list place number from 0 to 9 and pressing #. In such matter the particular list place is chosen for the blocked prefix.

```
##1111# 12# 3# (0 ... 9) # ... 0#
```

Now you can enter a prefix and dial #.

```
##1111# 12# 3# (0 ... 9) # < Prefix > # 0#
```

### 6.5.1.2 Remove entry

Dial 4# in Prefix blocking menu to delete prefix.

```
##1111# 12# 4# ... 0#
```

This command activates entry deleting function. When the function is activated choose the entry place in the list. This is done by dialing an entry place number from 0 to 9 and pressing #.

```
##1111# 12# 4# (0 ... 9) # 0#
```

The particular blocked prefix will be deleted from the specified place in the list.

### 6.5.2 Number blocking

*Number blocking* can be performed with the help of the phone. The function is activated by dialing 13#.

```
##1111# 13# ... 0#
```

In total 10 entries are allowed.

Dial 1# in Number Blocking menu to enable number blocking.

```
##1111# 13# 1# 0#
```

Dial 2# in Number blocking menu to disable number blocking.

```
##1111# 13# 2# 0#
```

### 6.5.2.1 Add entry

Dial 3# in Number blocking menu to add new entry.

```
##1111# 13# 3# ... 0#
```

This command activates number adding function. When the function is activated, choose an entry number in the list. This is done by dialing the list place number from 0 to 9 and pressing #. The specified place in the list for the blocked number will be selected.

```
##1111# 13# 3# (0...9) # ... 0#
```

Now add a new phone number and press #. Do not enter + for the number that starts with prefix.

```
##1111# 13# 3# (0...9) # 370 651 12345 # 0#
```

### 6.5.2.2 Delete entry

Entry is deleted by dialing 4# in Number blocking menu.

```
##1111# 13# 4# ... 0#
```

This command activates the entry deleting function. When the function is activated, choose entry from the list. This is performed by dialing the list number from 0 to 9 and pressing #.

```
##1111# 13# 4# (0...9) # 0#
```

The particular blocked number will be deleted from the specified place in the list.

### 6.5.3 Allowed numbers

*Trunk and Extension* modes allowed numbers' list can be formed with the help of the phone. In total 10 numbers can be entered. The function is activated by dialing 14#.

```
##1111# 14# ... 0#
```

Dial 1# to enable allowed numbers list function.

```
##1111# 14# 1# 0#
```

Dial 2# to disable allowed numbers' list function.

```
##1111# 14# 2# 0#
```

When the mode is activated, the phone calls can be made only from the numbers in the formed list. Other numbers will be ignored.

#### 6.5.3.1 Add entry

Dial 3# to add new entry to allowed numbers' list menu.

```
##1111# 14# 3# ... 0#
```

This command activates entry adding function. When the function is activated, choose an entry number in the list. This is performed by dialing list number from 0 to 9 and pressing #. The particular place in the list will be chosen for new entry.

```
##1111# 14# 3# (0...9) # ... 0#
```

Now enter the phone number and press #.

```
##1111# 14# 3# (0...9) # 370 651 12345 # 0#
```

#### 6.5.3.2 Delete entry

Dial 4# to delete the entry from the allowed numbers' list.

```
##1111# 14# 4# ... 0#
```

When the function is activated, choose the entry from the list. This is performed by dialing list number from 0 to 9 and pressing #.

```
##1111# 14# 4# (0...9) # 0#
```

## 6.6 Restoring default settings

To restore default settings, dial 99# in main *Service menu*.

##1111# 99#

### 6.6.1 Default settings

	Default parameters
Device operating mode	<i>Trunk</i>
Country	Lithuania*
USB connection mode	Data
Number dial interval	3
<i>Service menu</i> password	1111
PIN code entering	Manual
PIN code	
Caller ID display	FSK
Number prefix	Off
Polarity reverse	On
Minute Notification	Off
DTMF sensitivity in <i>Extension</i> mode	900
Prefix blocking	Off
Numbers blocking	Off
Allow numbers blocking	Off

\*In Lithuania:

	Frequency in Hz	Cadence in seconds
Busy tone	425	0.35 on , 0.35 off
Dial tone	425	Continuous
Ringing tone	25	1 on , 4 off

## 6.7 Table of Parameters

##1111# 1# 1# 0#	Activate <i>Extension</i> mode
##1111# 1# 2# 0#	Activate <i>Trunk</i> mode
##1111# 2# <Country code>#	Country selection
##1111# 3# 1# 0#	USB connection in Data mode
##1111# 3# 2# 0#	USB connection in FAX mode
##1111# 4# (2...6) # 0#	Number dial interval
##1111# 5# <New 4 digit menu password> #	<i>Service menu</i> password changing
##1111# 6# 1# 0#	Manual PIN code entering
##1111# 6# 2# 0#	Automatic PIN code entering
##1111# 6# 3# <New 4 digits PIN code># 0#	PIN code entering to memory
##1111# 7# 1# 0#	Caller ID type disable
##1111# 7# 2# 0#	FSK format
##1111# 7# 3# 0#	DTMF format
##1111# 8# 1# 0#	Number prefix blocking enable
##1111# 8# 2# 0#	Number prefix blocking disable
##1111# 8# 3# <Prefix># 0#	Prefix blocking entering
##1111# 9# 1#	Polarity reverse enable
##1111# 9# 2#	Polarity reverse disable
##1111# 10# 1# 0#	Minute notification on (1min.)
##1111# 10# 2# 0#	Minute notification off
##1111# 11# <Level value>#	DTMF sensitivity in <i>Extension</i> mode
##1111# 12# 1# 0#	Prefix blocking enable
##1111# 12# 2# 0#	Prefix blocking disable
##1111# 12# 3# (0 ... 9) # <Prefix> # 0#	Prefix adding
##1111# 12# 4# (0 ... 9) # 0#	Prefix deleting
##1111# 13# 1# 0#	Number blocking enabled
##1111# 13# 2# 0#	Number blocking disabled
##1111# 13# 3# (0 ... 9) # <Number> # 0#	Number adding to the list
##1111# 13# 4# (0 ... 9) # 0#	Number deleting from the list
##1111# 14# 1# 0#	Allow numbers list enable
##1111# 14# 2# 0#	Allow numbers list disable
##1111# 14# 3# (0...9) # Number # 0#	Add allowed numbers to the list
##1111# 14# 4# (0...9) # 0#	Delete allowed numbers from the list
##1111# 99#	Restore default settings

## 7 ACRONYMS

PC	- Personal Computer.
USB	- Universal Serial Bus.
GPRS	- General Packet Radio Service.
CSD	- Circuit Switched Data.
MDMF	- Multiple Data Message Format.
GSM	- Global System for Mobile communications.
BPX	- Private Branch Exchange.
SIM	- Subscriber Identity Module.
PIN	- Personal Identification Number.
AC/DC	- Alternating Current/Direct Current.
APN	- Access Point Name.
PSTN	- Public switched telephone network.
FSK	- Frequency Shift Keying.
DTMF	- Dual Tone Multiple Frequency.

## TECHNICAL SUPPORT



This sign on the package means that it is necessary to read the User's Manual, which is on the CD before you start using the device.



This sign on the package means, that used electronic and electric equipment should be stored separately.

If you encounter any problems while using the device and you are not able to solve them please follow these direction:

- double check if everything was accomplished according to *VoiceUSB* user manual,
- set device back to default factory settings,
- download and install the newest *VoiceUSB* device drivers and software from [www.teltonika.com](http://www.teltonika.com),
- download the newest *VoiceUSB* device firmware and update it from [www.teltonika.com](http://www.teltonika.com).

If all direction above were performed but the problem still remains please contact our technical support team via e-mail [support@teltonika.lt](mailto:support@teltonika.lt). We will be glad to help You.

## List of Countries

0. Default	53. Denmark2	106. Madagascar2	157. Senegal
1. Albania	54. Dominica	107. Malawi	158. Seychelles
2. Andorra	55. Dominican Republic	108. Malaysia1	159. Sierra Leone1
3. Angola	56. Ecuador	109. Malaysia2	160. Sierra Leone2
4. Anguilla	57. El Salvador	110. Mali	161. Singapore
5. Antigua and Barbuda	58. Estonia	111. Malta	162. Slovak Republic1
6. Argentine Republic	59. Ethiopia	112. Martinique	163. Slovak Republic2
7. Aruba	60. Falkland Islands	113. Mauritania	164. Slovenia
8. Ascension	61. Faroe Islands	114. Mauritius	165. Solomon Islands
9. Austria1	62. Fiji	115. Mayotte	166. Spain1
10. Austria2	63. Finland	116. Mexico	167. Spain2
11. Bangladesh	64. France	117. Moldova1	168. Sri Lanka
12. Barbados	65. French Guiana	118. Moldova2	169. Sudan
13. Belarus	66. French Polynesia	119. Montserrat	170. Suriname
14. Belgium	67. Gabonese Republic	120. Morocco1	171. Swaziland1
15. Benin1	68. Gambia	121. Morocco2	172. Swaziland2
16. Benin2	69. Georgia	122. Myanmar	173. Sweden1
17. Bermuda	70. Germany	123. Namibia	174. Sweden2
18. Bhutan	71. Germany2	124. Nauru	175. Switzerland
19. Bosnia and Herzegovina	72. Ghana	125. Nepal	176. Syrian Arab Republic
20. Botswana	73. Gibraltar	126. Netherlands	177. Tajikistan
21. Brazil1	74. Greece	127. New Caledonia1	178. Tanzania1
22. Brazil2	75. Greenland1	128. New Caledonia2	179. Tanzania2
23. British Virgin Islands	76. Greenland2	129. New Zealand	180. Macedonia
24. Bulgaria1	77. Guadeloupe	130. Niger	181. Tokelau
25. Bulgaria2	78. Honduras	131. Nigeria1	182. Trinidad and Tobago
26. Bulgaria3	79. Honkong	132. Nigeria2	183. Tunisia
27. Burkina Faso1	80. Hungary	133. Norway	184. Turkey
28. Burkina Faso2	81. Iceland	134. Oman	185. Turkmenistan
29. Burundi	82. Indonesia	135. Panama	186. Turks and Caicos Islands
30. Cambodia	83. Iran	136. Papua New Guinea	187. Tuvalu
31. Cameroon1	84. Ireland	137. Paraguay	188. Uganda
32. Cameroon2	85. Israel	138. Peru	189. United Arab Emirates1
33. Canada	86. Italy	139. Philippines	190. United Arab Emirates2
34. Cayman Islands	87. Jamaica	140. Poland	191. United Kingdom2
35. Central African Rep.	88. Japan	141. Portugal	192. Uruguay1
36. Chad1	89. Jordan	142. Qatar1	193. Uruguay2
37. Chad2	90. Kenya	143. Qatar2	194. Vanuatu
38. Channel Islands: Guernsey	91. Kiribati	144. Reunion	195. Venezuela
39. Channel Islands: Jersey	92. Korea	145. Romania1	196. Wallis and Futuna1
40. Chile	93. Kuwait	146. Romania2	197. Wallis and Futuna2
41. China	94. Kyrgyz	147. Rwandese Republic	198. Yemen
42. Colombia	95. Lao People's Democratic Rep.	148. Saint Helena	199. Yugoslavia1
43. Comoros1	96. Latvia	149. Saint Kitts and Nevis	200. Yugoslavia2
44. Comoros2	97. Lebanon	150. Saint Lucia	201. Zambia
45. Cook Islands	98. Lesotho	151. Saint Pierre and Miquelon	202. Zimbabwe
46. Costa Rica	99. Liberia	152. Saint Vincent and Grenadines1	
47. Cote d'Ivoire1	100. Liechtenstein	153. Saint Vincent and Grenadines2	
48. Cote d'Ivoire2	101. Lithuania	154. San Marino	
49. Croatia	102. Luxembourg1	155. Sao Tome and Principe	
50. Cyprus	103. Luxembourg2	156. Saudi Arabia	
51. Czech Republic	104. Macao		
52. Denmark1	105. Madagascar1		