Rec Manager for EDIC-mini Tiny

User Manual

Version August, 2010

Contents

Overview

Glossary

1. **Recording** – an audio recording that is made by an audio recorder (or downloaded from a computer) and saved in the recorder's memory.
2. **Demo-mode** – a program operating mode when the recorder is not connected, but emulated by the program. In this mode, the program works as the recorder is connected.
3. **Default Folder** – a previously set folder (chosen by a user) that some commands use to upload recordings and files from the recorder.
4. **Digital Watermark** – additional data that are added at the end of the final recording's file while uploading (these data keep the information about the recorder, which provided the recording, and also help control the record's integrity was there any change in the recording after its uploading)
5. **Firmware** – a program that provides the recorder operation (kept in FLASH memory)
6. **Voice Activating System (VAS)** – a part of the recorder that checks if the audio signal is higher than a previously set level or not (silence) according to set criteria. If there is not audio signal, recording to the recorder's FLASH memory stops. If the signal appears, recording starts. The main goal is to reduce memory consumption. At this, as a rule, the period of autonomic work increases.
7. **Automatic gain control (AGC)** – working mode, at which amplification of the signal from the microphone is automatic or is subject to a fixed program.

What is Rec Manager Program

The Rec Manager for Edic-mini Tiny is an application that works with **Edic-mini Tiny recorders**.
The program is available for Windows XP(SP2 and SP3)/Windows Vista and Windows 7. For normal program functionality, computer hardware should be the same as the one recommended for the normal operation of the user's operational system.

Main Program Features:

- Reviewing the recorder's memory;
- Uploading recordings from the recorder to a PC;
- Erasing recordings from the recorder's memory;
- Downloading recordings from a PC to the recorder *;
- Showing the status of the recordings (uploaded/not uploaded/downloaded);
- Creating a recording's digital watermark (only for the recordings that were created by the currently connected recorder);
- Using a part of the recorder's memory as a flash memory (downloading, uploading, and erasing any available files) – Flash Drive *;
- Synchronizing of the recorder clock with the clock of the computer;
- Showing the rechargeable accumulator's status;
- Setting of the recorder's parameters * ;
- Formatting the recorder's memory;
- Setting of amplification of the microphone signal (AGC or fixed);
- Operating in a demo-mode;
- Multi-language support **.

Notes:
- * Depends on the recorder's model
- ** English is set by default

Starting the Program

This section describes the main menu parts and their commands.

Connect USB cable to the Recorder, then to the USB connector of the PC. The system recognizes a new removable drive. Use it to run «RecManager.exe» file. The Main window of the program opens.
There is the Recorder Content Panel at the left side of the window. If the button "Show Records" is pressed, the panel displays the records made by the Recorder. If the button "Show Flash Drive Content" is pressed, the panel displays the files copied from the PC to be transferred onto the other media (Flash Drive Mode). There is the Explorer panel at the right side of the window which specifies the location of files on your computer.
Read interface description of the program below.

Program's Interface

Main menu of the program.
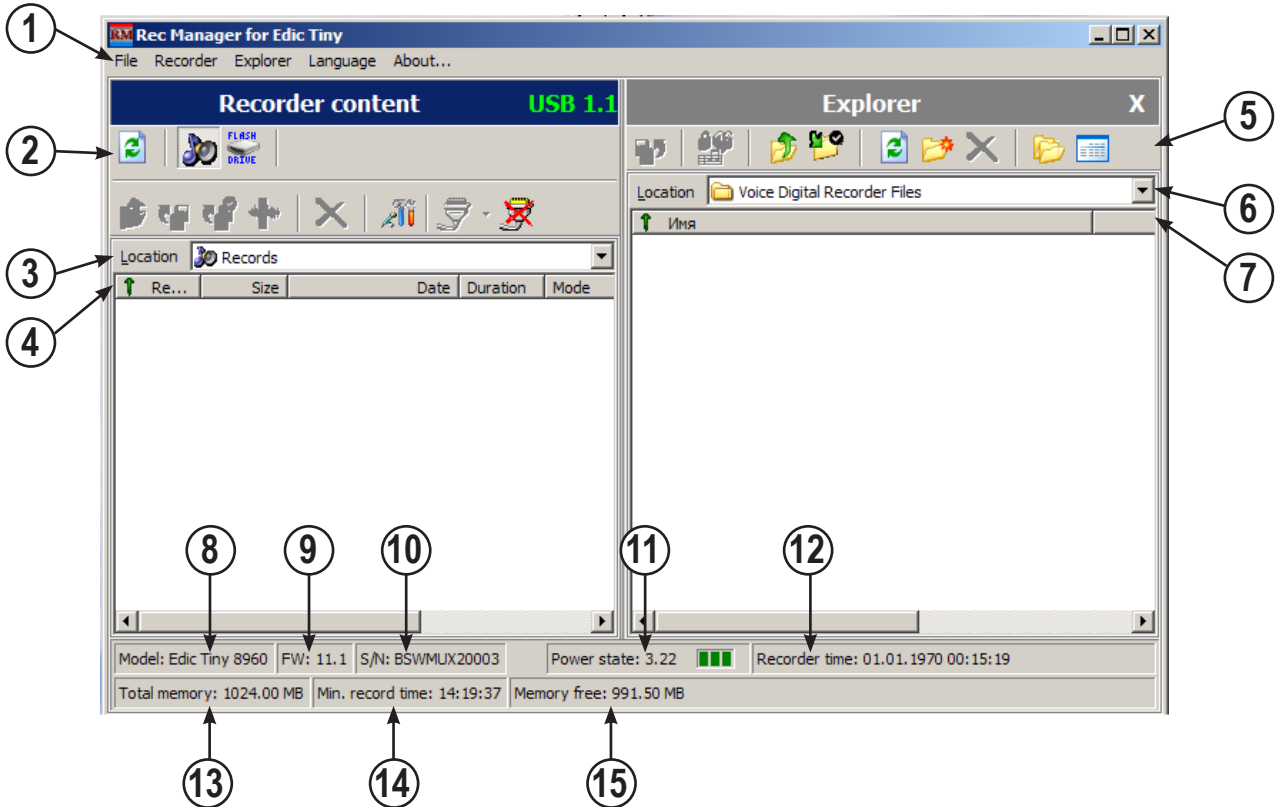
Legend keys

1. Main Menu line;
2. Control buttons of the **Recorder Content** Panel;
3. Display of the **Recorder Content** status:
   – «Records» - the panel displays records made by the Recorder;
   – «Flash Drive» - the panel is in File Transfer Mode
4. Write attributes;
5. Control buttons of the **Explorer** Panel;
6. The location of the uploaded records on the Recorder;
7. File attributes (record uploaded from the Recorder onto the PC);
8. Recorder's Model;
9. Firmware version of the Recorder;
10. Recorder's serial number;
11. Recorder's charge indicator and voltage;
12. Recorder's Date and Time;
13. Recorder's total writable memory;
14. Recorder's free writable memory in hours (depending on the Recorder's settings);
15. Free memory capacity in Mb.

Main Menu
(see point 1 of the picture at page 5)

File

Exit – to exit the program.
Recorder

File   Recorder   Explorer   Language   About...

⭕ Exit   Alt+F4

Recorder

Refresh content – refreshes the recorder's memory content (reloads a list of the recordings and files that are in the recorder's memory). Usually it is automatic.

Records – switches the Recorder content panel in to a mode of showing recordings that are in the recorder's memory.

Flash Drive – switches the Recorder content panel in to a mode of showing files that are in the recorder's memory. This mode can be forbidden by the recorder's settings or not supported by the recorder.
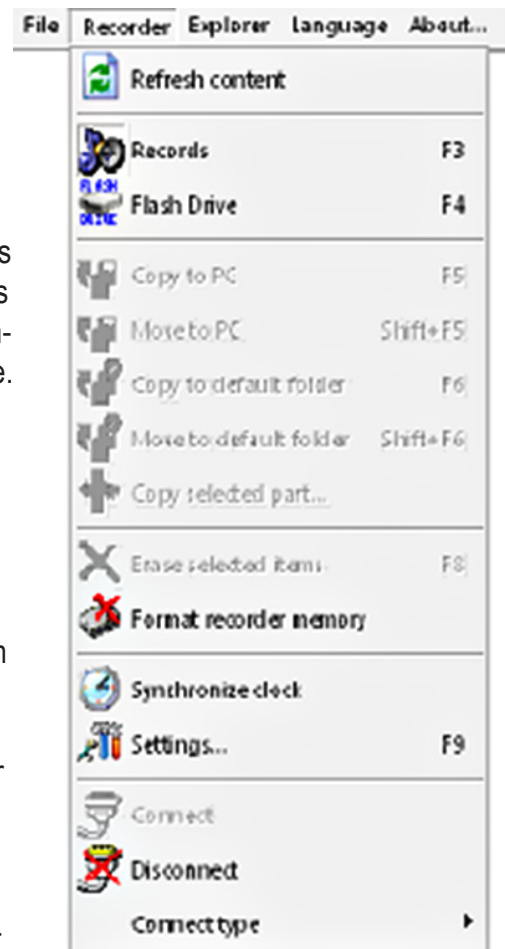
Copy To PC – copies the items (recordings or files) selected in the Recorder content panel to the current folder of the Explorer panel. While copying recordings, the result file names are created on the base of a mask that is set in the program settings. While copying files their names stay the same. If there already is a file with the same name in the computer, the program suggests overwriting the file, changing the file name, or canceling the command. This command is active when the Explorer panel is visible.

File   Recorder   Explorer   Language   About...

🔄 Refresh content

📠 Records   F3

📠 Flash Drive   F4

📄 Copy to PC   F5

📄 Move to PC   Shift+F5

📄 Copy to default folder   F6

📄 Move to default folder   Shift+F6

➕ Copy selected part...

❌ Erase selected items   F8

🔧 Format recorder memory

🕐 Synchronize clock

🔧 Settings...   F9

📠 Connect

📠 Disconnect

Connect type   ▶

Move To PC– is analogous to Copy To PC command, but after the command is finished, copied items are deleted.

Copy to default folder – copies selected in the Recorder content panel items
(recordings or files) into a default folder that is set in the program settings. The Explorer panel can be invisible.

Move to default folder – is analogous to Copy to Default Folder command, but after the command is finished, copied items are deleted.

Copy selected part – allows to copy the selected items (recordings or files) from the Recorder content panel to the current folder of the Explorer panel.

Erase selected items – erases from the recorder's memory items (recordings or files) selected in the Recorder content panel.

Format recorder memory – erases all the items (recordings or files) from the recorder's memory

Synchronize clock – sets the current PC time in the recorder.

Settings – shows a dialog window where you can see and change the recorder's settings.

Connect – attempts to connect to recorder by means of the current type of connection.

Disconnect – disconnects from the recorder. It is recommended, that this command is activated before the recorder (the adapter) is disconnected from the PC.

Connect type – the current type of connection can be chosen in the menu of this command. After the type of connect6ion is chosen, the command Connect is automatically implemented.

Explorer

Copy to recorder – downloads selected in the Explorer panel items into the recorder. This command depends on the mode of the Recorder content panel.

In the **Flash Drive** mode, files are copied without any change: after following uploading, they will be identical to the original ones. If there is no free space for copying files, the command is canceled. In the showing content mode, it is possible to copy only audio files which formats are supported by the program; otherwise, a notice appears that the format is not supported.
Before copying audio files, the dialog window appears where you can choose a format in which the record will be downloaded to the recorder. In comparison with copying files, if there is not free space for a whole audio file (the needed amount of memory is detected according
to the chosen format), you can download the audio file partly according to the free memory space.
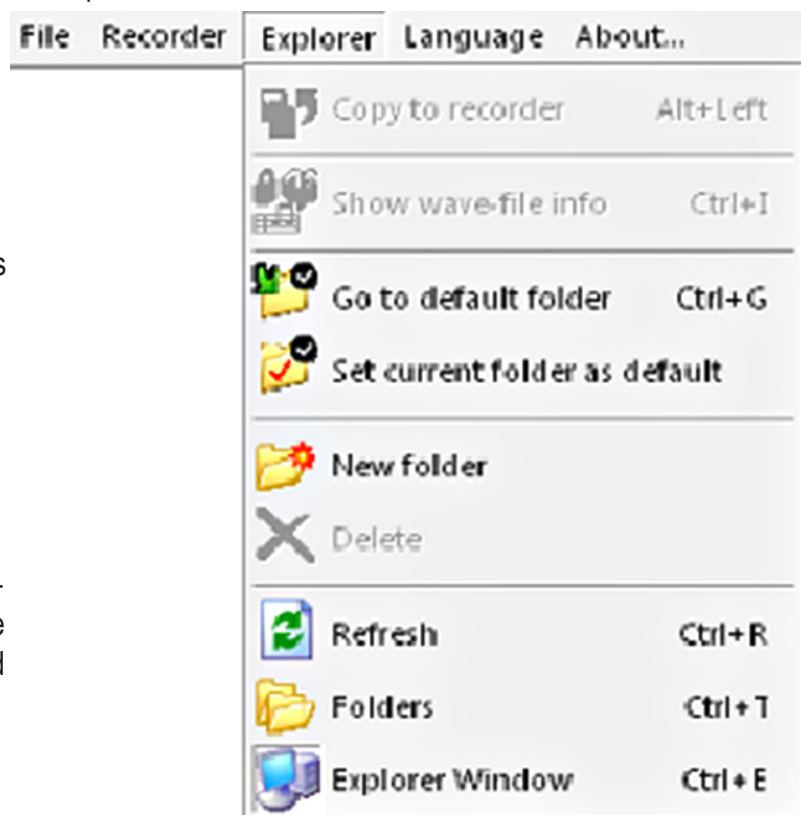
Show wave-file info – shows a window with characteristics of the chosen in the Explorer panel audio file along with the information about the file's digital watermark.

Go to default folder – sets a default folder of the program settings as a current folder of the Explorer panel.

Set current folder as default – sets the current folder as a default folder.

New folder – creates a new folder in the current folder.

Delete – erases selected in the Explorer panel items.

Refresh – refreshes the Explorer panel content.

Folders – shows/hides the folders' directories

Explorer window – shows/hides the Explorer panel

Notes: Along with abovementioned functions of the Explorer panel, the list of folders and files supports a content menu for all the items. Use the right mouse button or a correspondent button of the keyboard to call this menu. This menu is identical to the menu of the Explorer for Windows.

Language – allows to choose a language
for the program interface (in the list there are all the languages available for the program). English is set by default.

About – shows a dialog window with the information about the program version.

Control buttons of the Recorder Content Panel
(See point 2 of the picture at page 5)

(from left to right)

- ☻ *Upgrade Recorder Content backs up the option Upgrade Content of the Recorder Menu;*
- ☻ *Show Records backs up Records of the Recorder Menu;*
- ☻ *Show Flash Drive Contents backs up Flash Drive of the Recorder Menu;*
- ☻ *Go to higher level refers to the shift in the records' structure onto the higher level;*
- ☻ *Copy selected elements to the PC backs up the option Copy to the PC of the Recorder Menu*
- ☻ *Copy selected elements to default folder backs up Copy to default folder of the Recorder Menu*
- ☻ *Copy selected part of the record backs up the option Copy selected part of the Recorder Menu*
- ☻ *Delete selected elements backs up the option Delete selected elements of the Recorder Menu*
- ☻ *Recorder Settings backs up the option Settings of the Recorder Menu*
- ☻ *Connect backs up the option Connect of the Recorder Menu*
- ☻ *Disconnect backs up the option Disconnect of the Recorder Menu*

Control buttons of the Explorer Panel

(See point 5 of the picture at page 5)

(from left to right)

- ☺ *Copy to Recorder backs up the option Copy to Recorder of the Explorer Menu*
- ☺ *Show Wave-File Info backs up Wave-File Info of the Explorer Menu*
- ☺ *Go to higher level refers to the shift in the folders' structure onto the higher level*
- ☺ *Go to default folder backs up the option Go to default folder of the Explorer Menu*
- ☺ *Upgrade backs up the option Upgrade of the Explorer Menu*
- ☺ *reate New Folder backs up the option "New Folder" of the Explorer Menu*
- ☺ *Delete selected elements backs up the option Delete of the Explorer Menu*
- ☺ *Show/Hide Folder Tree backs up the option Folders of the Explorer Menu*
- ☺ *hange Display Style – one of the four available display styles can be selected out of the drop-down list*
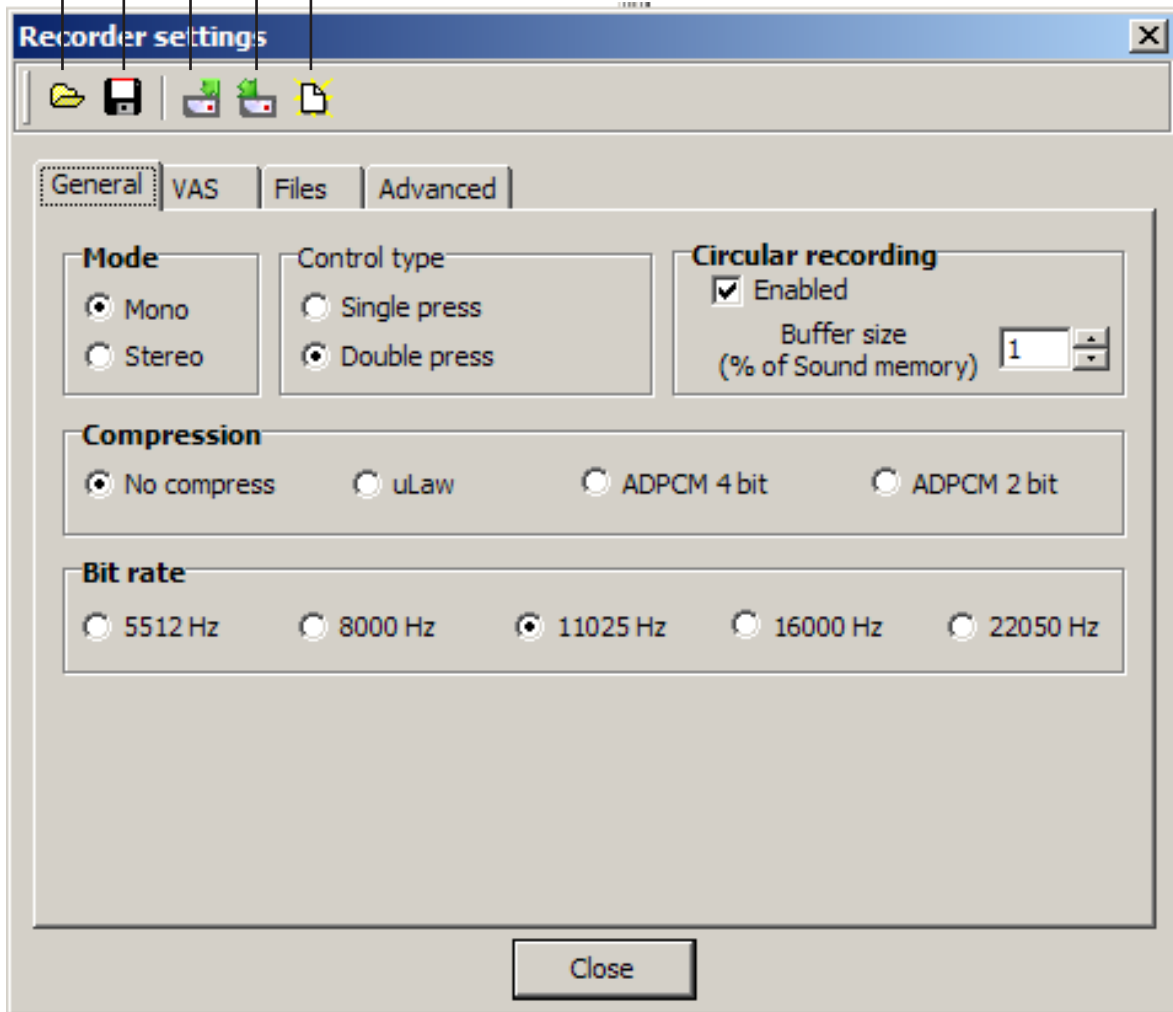
Explorer:

- \- *Large icons*
- \- *Tiny icons*
- \- *List*
- \- *Report*

Recorder's settings

General Settings

Control buttons:
1. Upload Recorder Settings from file;
2. Save Recorder Settings to file;
3. Restore settings from Recorder;
4. Store Settings to file;
5. Restore Factory Settings.

Recorder settings ☒

General | VAS | Files | Advanced

Mode
- ⦿ Mono
- ○ Stereo

Control type
- ○ Single press
- ⦿ Double press

Circular recording
- ☑ Enabled
  Buffer size
  (% of Sound memory) `1`

Compression
- ⦿ No compress
- ○ uLaw
- ○ ADPCM 4 bit
- ○ ADPCM 2 bit

Bit rate
- ○ 5512 Hz
- ○ 8000 Hz
- ⦿ 11025 Hz
- ○ 16000 Hz
- ○ 22050 Hz

[Close]

General settings are situated in the insertion **General**.

Mode – reflects the type of mode for the given modification – Stereo or Mono. If the recorder supports Stereo mode, it can be chosen for recording.

Control type. For the button- type operation there is an opportunity to choose between "Single Press", at which the recording is on after pushing the button during more them 2 seconds, or "Double Press", at which the recording is on after rapid double pushing. For switcher-type "Switch" is indicated without the opportunity to change it.

Circular recording – turns on circular recording mode. The recorder's memory space can be distributed according to the user's desire to use memory for circular recording – "Buffer size". "Enabled" – turns on circular recording mode.

*The recording quality is adjusted by means of the following parameters:*

Compression – sets one of the types of compression, which is for the recording.
Bit rate – sets the sampling frequency for the recording.
(More detailed description is available in the Operational Manual for Tiny series.)

Note, that the more sampling frequency is, the better the quality, however, higher quality requires more memory. Compression mode, on the contrary, requires less memory and at the same time leads to worse quality.

VAS Settings
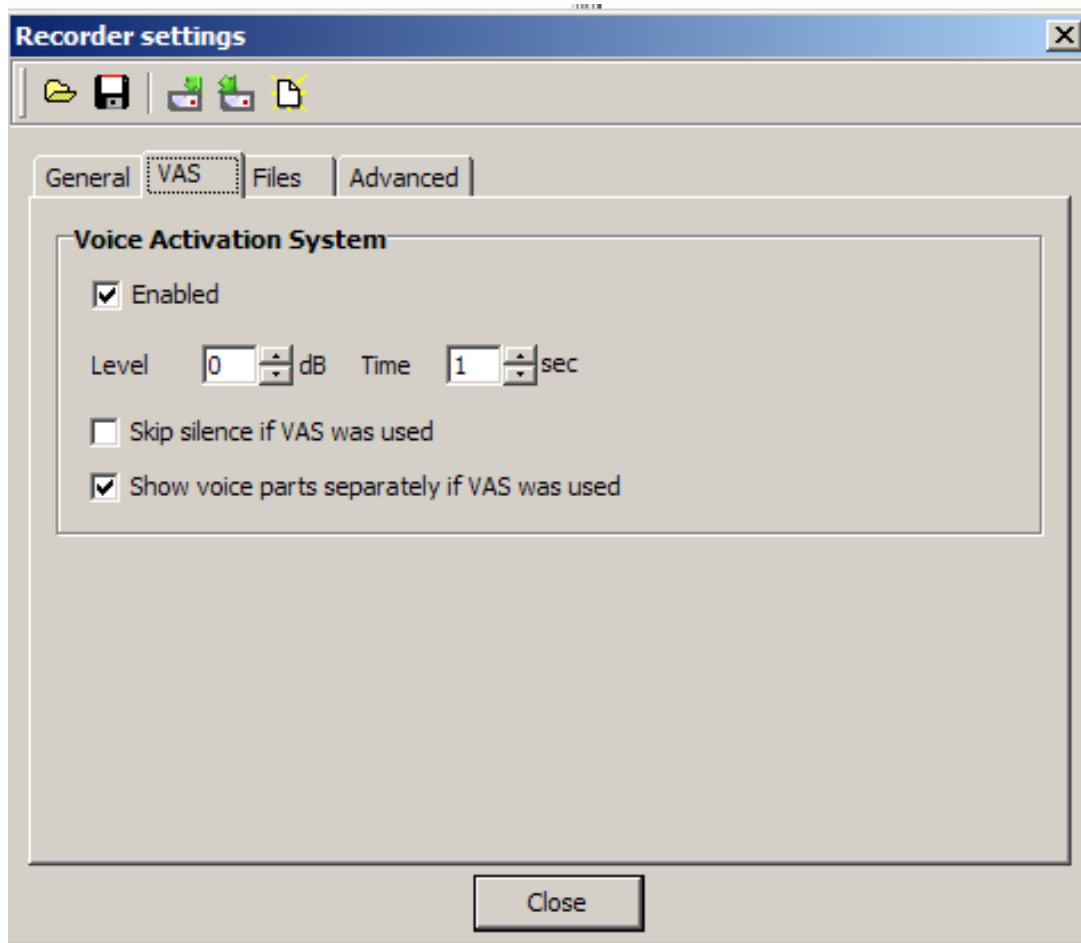
Voice Activation System – turns on Voice Activation System. You can change VAS
settings (threshold). Also you can set a method of viewing of recordings with VAS on the Recorder panel.
You can choose a method of uploading these recordings to a computer (with or without pauses in record-
ings).

Enabled – activates the system while recording.

Level – sets the threshold of the input signal, at exceeding which the input signal is considered to be ac-
tive. Silence is considered to be signal with volume less, than preset.

Time – sets the time, destined to be silence for the recording to finish before the active signal.

Skip silence if VAS was used – the program won't count silent passages, formed with VAS.

Show voice parts separately if VAS was used – shows each part (sub-recording) of one and the same
recording with VAS in a common list of recordings as separate recordings, having numbers 1,2, etc.
The date of sub-recordings compared to the start of the recording is shown in the field "Data". When sub-
recordings are downloaded to PC, the recording itself isn't marked as downloaded.

Check Box **"Display voice fragments with VAS separately"**

If the check box is on, voice fragments (input signal exceeds VAS operation threshold) are displayed separately. Silent fragments are neither displayed nor counted when estimating record duration time. If the check box is off, the record consists of both uninterrupted and silent voice fragments. Both are added when estimating record duration time.

Attention!
Changes in settings are applicable to the recorder only after pressing the button "4" (see page 10).

Files settings
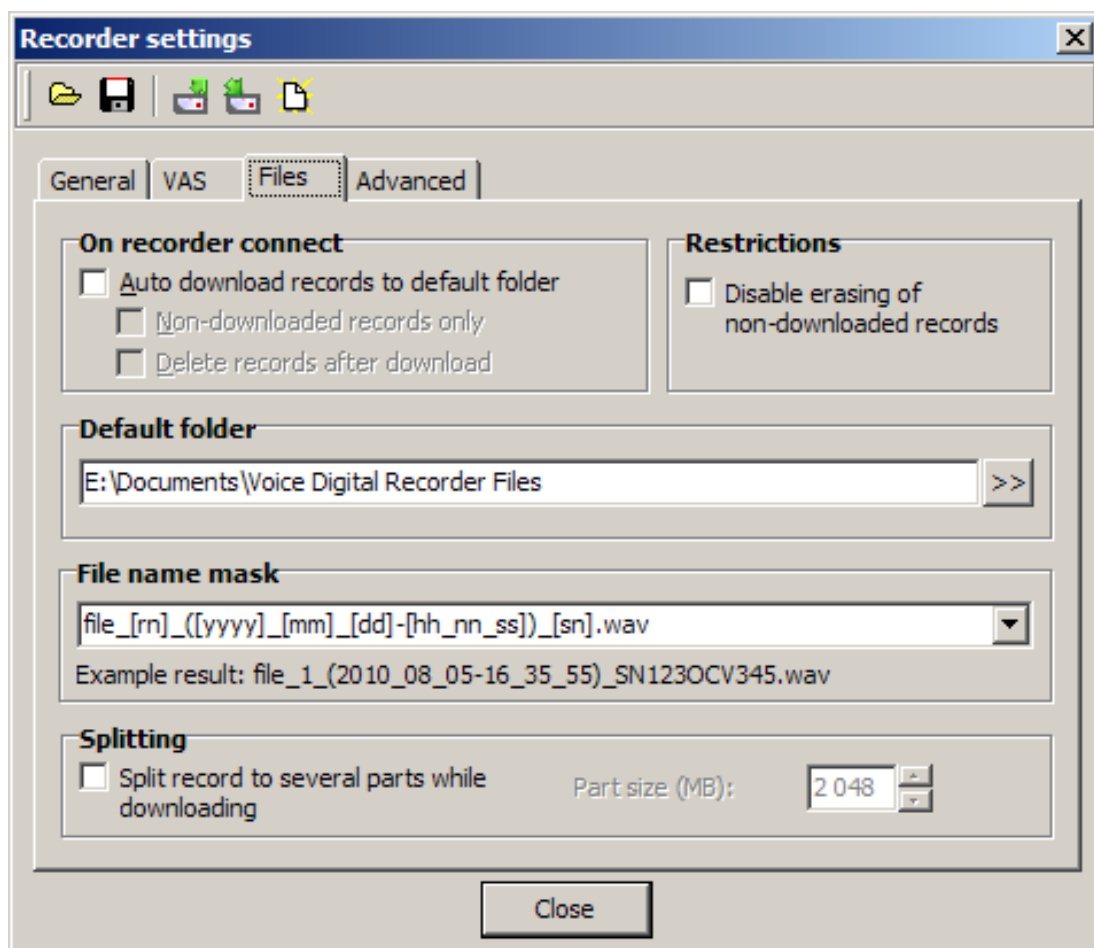
Folder "Files" has the following settings:

Check box **"Auto download records to default folder"** – the recordings will be uploaded to default folder, the tracking path of which is specified in the field Default folder.
Non-downloaded records only, Delete records after download – additional uploading functions.

Field "Restrictions" – allows to forbid deletion of non-uploaded recordings with **Disable erasing of non-downloaded records**.

Default folder – the default folder with uploaded recordings.

File name mask – setting the mask, basing on which file name will be given, when the recording is uploaded to the PC. File name will be formed according to the preset mask, where "m" – recording's number, "yyyy" – year, "mm" – month, dd – day, "hh" - hours, "ss" – seconds, "sn" – serial number of the recorder.

Split – when **Split record to several parts while downloading** is on, the program will devide re recording into several files with size, specified in the field.

Advanced
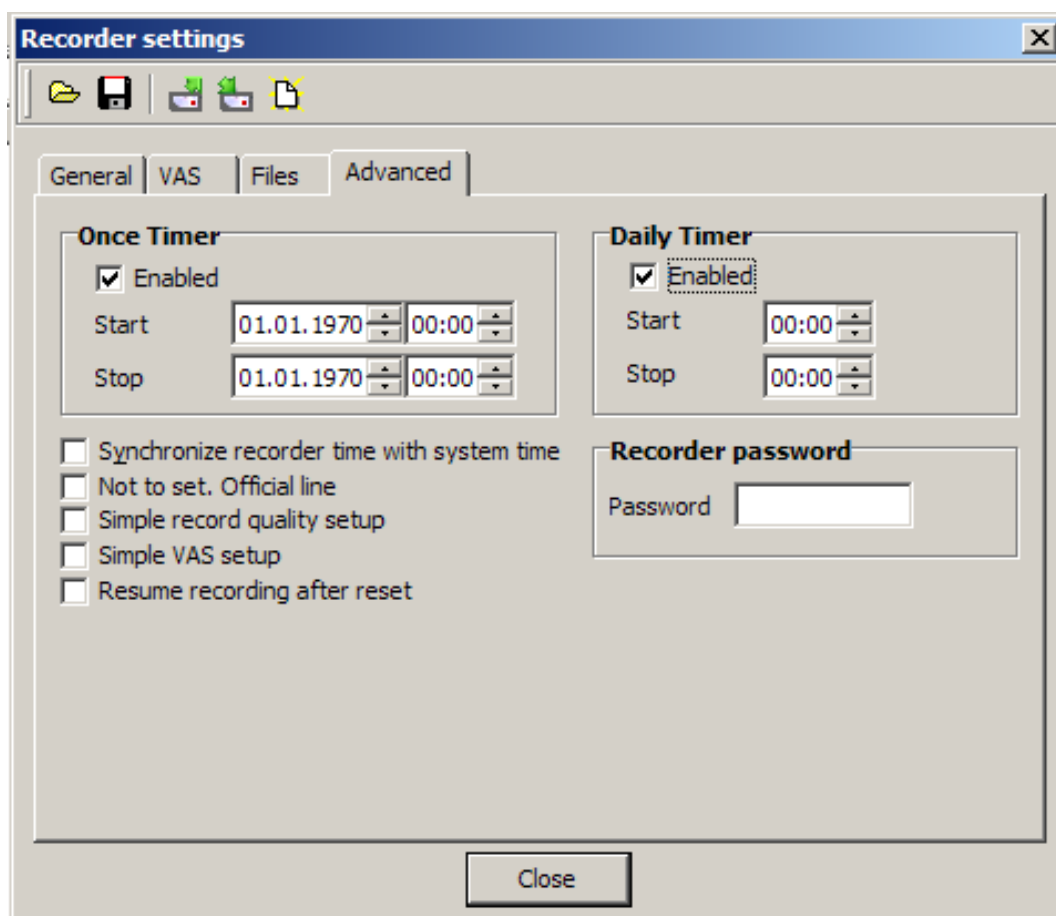
Additional settings:

The additional settings are situated in the insertion "Advanced".

Once Timer – allows to turn on/off the built-in once timer – date and time of turning on/off of the recording.

Daily Time – allows to turn on/off the built-in daily timer – date and time of turning on/off of the recording.

Attention! *If both timers are active at the same time, their operational time must not coincide or intersect.*

Recorder password – allows to protect access to the recorder's content by a password. If the password is set, it will be asked for while connecting to a computer.

If you need to remove the parole protection, you need to leave the password field blank and save the recorder's settings. If you forget the password, to get the access to the recorder, you have to erase the recorder's content.

- **"Synchronize recorder time with system time"** – allows automatic synchronization of the recorder clock with the computer's clock.
- **"Simplified record quality settings" Tab "General" of "Recorder Settings"** window changes its style (see Figure on p.16)
- **"Simplified VAS settings"** Tab "VAS" of "Recorder Settings" window changes its style (see Figure on p.17)
- **"Not to set. Official line"**. This window should always stay unfilled.
- **"Resume recording after reset"** (this point is applicable only for recorders with switch control). If power supply is lost during recording and after a while is found again, the recording will continue with a mark in the check box and fill fail to continue – without a mark in the check box.

Changes in settings are applicable to the recorder only after pressing the button "4" (see page10).

Folder General
*(with a check mark on "Simple record quality set up" on folder "Advanced")*
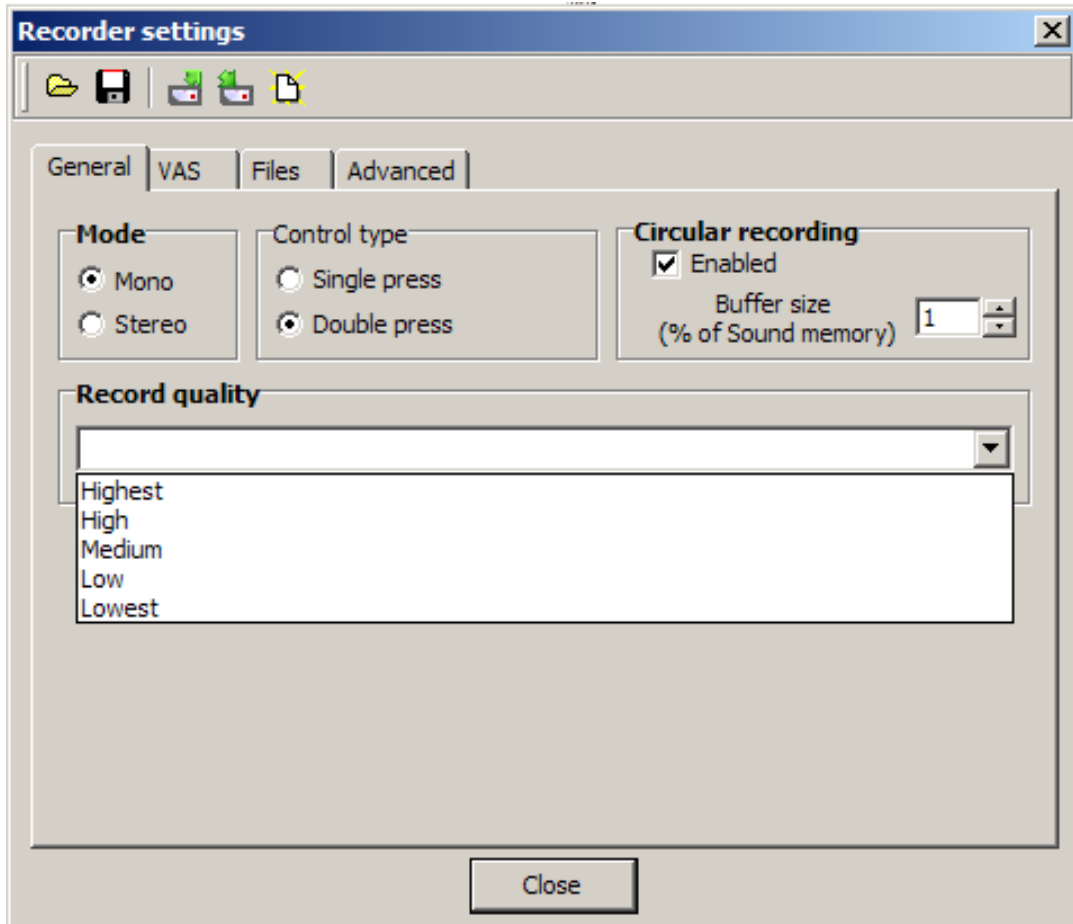
Characteristics	Bit rate	Compression
Very high	22 kHz	Without compression
High	16 kHz	Without compression
Medium	16 kHz	ADPCM 4 bits
Low	8 kHz	ADPCM 2 bits
Very low	5 kHz	ADPCM 2 bits

There is only "Record quality" field instead of "Compression" and "Sampling rate". There are five available record quality choices that correspond to the following record parameters (see Table below).

Folder VAS
(with a check mark on "Simply VAS setup" on folder "Advanced")
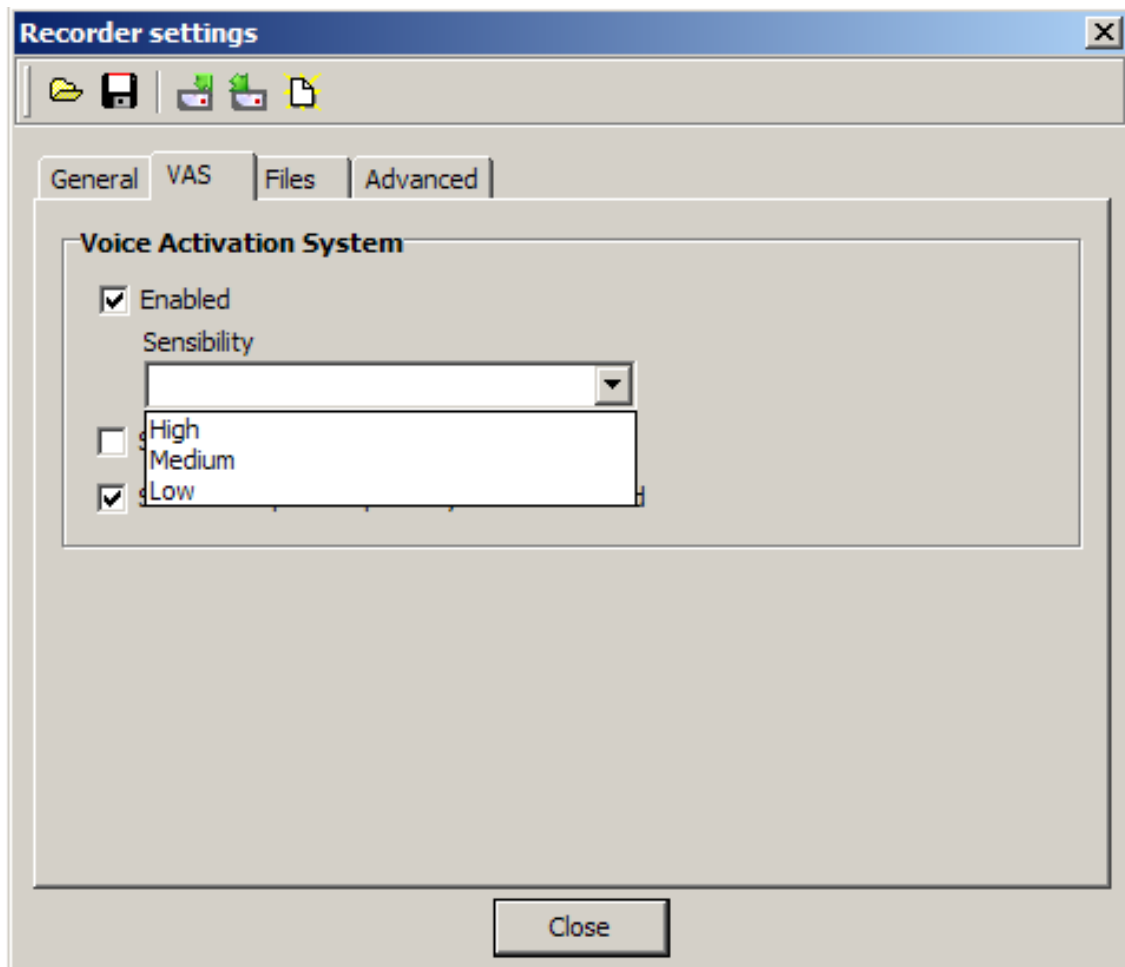
In the list "Sensitivity" three variants of VAS sensitivity are offered. These variants correspond to the following parameters of the VAS system:

Characteristics	Level	Time
High	-30 dB	2 sec
Medium	-17 dB	3 sec
Low	-12 dB	5 sec

Other fields remain unchanged.

Working with the program.

Connecting the Recorder

Connect USB cable to the Recorder, then to the USB connector of the PC. The operating system recognizes a removable drive.

Among other files there are the following ones:
1. Operation Manual for EM Tiny.pdf;
2. User Manual for the program Rec Manager for Edic Tiny.pdf.
3. The program Rec Manager.exe

There are also other files that are necessary for smooth operating of the Recorder.

The Recorder can be adjusted in the following way: when it is connected to the PC the records are uploaded onto the drive automatically. The setting can be performed in the Tab "Files" by ticking the corresponding check boxes in the field "Connecting the Recorder"

Recorder Memory Formatting

Attention! *Recorder Memory is a united area in spite of the fact that records as well as files (in Flash Drive Mode) are displayed in the Recorder Content Panel separately.*

Therefore when formatting the memory all the records and files will be deleted (in Flash Drive Mode). To format Recorder memory choose in the Main window Recorder => Format. The window appears to warn that when formatting all data in the Recorder memory will be deleted. Press "Yes". The window appears to display the formatting process status. When completed the window closes. All the data in the memory are deleted.

Synchronize Clock with the PC

To synchronize clock select Recorder => Synchronize Clock

Battery Status Display

There is a power supply indicator at the bottom of the Main window of the program (see position 11 of the Figure, p.5). The figure refers to power voltage, and the indicator from three sections refers to the state of charge.

The absence of colored sections means full charge.

Demo Mode

Demo Mode emulates the Recorder programmatically, not full-scale, but sufficient enough to study the interface of RecManager program, its opportunities, to perform simple operations with the Recorder content.

Recorder Content Processing

Uploading of Records from Recorder to the PC

The Recorder saves records in its internal format. While transferring records to the PC they are re-encoded to a standard WAV format. This procedure means uploading of record to the PC.

The Attribute Status field displays whether the record has been uploaded to the PC or not. While uploading data to the PC a so called digital signature is created (data concerning the recorder, file integrity, which makes it possible to define whether the file has been changed after being uploaded to the PC).

To upload records to the PC do the following:
1. Select folder for the records uploaded from the Recorder using one of the following:
1.1 Select folder in the field "Default folder" of the Tab "Files" in the main window of the program;
1.2 Select folder in the Explorer Panel (see point 6 at p. 5)
2. Select one or several records in the Recorder Content Panel
3. To upload record to the folder specified in paragraph 1.2 select **Recorder => Copy to the PC.** After that the record will be uploaded to the folder specified. The record itself will be saved in the recorder's memory, but the field specifies the status of the record as "Uploaded".
    - **Recorder => Move to PC** – the record will also be uploaded to the folder specified, but not saved in the recorder memory\
4. To upload record to the default folder (paragraph 1.1) select:
    - **Recorder => Copy to default folder** – the record will be uploaded to the default folder. The record itself will be saved in the recorder's memory, but the field specifies the status of the record as "Uploaded".
    - **Recorder => Move to default folder** - the record will be uploaded to the default folder, but not saved in the recorder memory.

There is an option to upload only a part of record to the PC. To do this:
1. Select the record a part of which is to be uploaded in the Recorder Content Panel.
2. Select **Recorder – Copy selected part**. Specify the boundaries of the record to be uploaded to the PC. Press "OK". After that the field Status reads "Uploaded".

Uploading of Records from the PC to the Recorder Memory

There is an opportunity to upload a .wav file to the recorder memory. To do this:

1.   Press "Show records" in the Recorder Content Panel
2.   In the Explorer panel:

-    select the desired file;
-    select "Upload to the Recorder".

The file uploaded to the Recorder memory will be marked by the status "Uploaded". The record made by the Recorder is marked by the status "Not uploaded".

Erasing Records in the Recorder Memory

To erase file in the Recorder memory and displayed in the Recorder Content Panel choose "Erase selected elements".

Using Recorder as a Flash Drive

Uploading of file to the Recorder memory presupposes its conversion to an internal format of the Recorder. The conversion is not carried out in Flash Drive Mode, which gives an opportunity to record file of any format.
To do this:
1.   Choose "Show Flash Drive Content"
2.   Select in the Explorer Panel a desired file and push the button "Upload to the PC".
The Recorder as a flash drive can be used only when transferring files to the other drive.

Multilanguage Support

The RecManager program is available in both Russian and English. However, you can translate the button names, messages, and etc. into other languages. For this, edit RecManager_rus.lng (or RecManager_ eng.lng) file in the following way:
1.   In the first file line, change the number of the page code into the code of your language.
2.   Translate all the messages and names from this file into your language and change them.
3.   Rename RecManager_xxx.lng file (xxx- an abbreviation for the language).
After you run the program the next time, your language will be available.
If you want your language to be in the program installation, send the edited file to support@ts-market.com.
The installation with your language support will be available on the TS-Market website.

Technical Supportt

Our engineers constantly work improving the software and documentation. You can always download the last version of the program from our website for free - www.ts-market.com.
Technical support e-mail: support@ts-market.com