DIGITAL VOICE RECORDER PAPYRUS-III PAPYRUS-III Titan

USER MANUAL

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INTRODUCTION

It is essential to familiarize yourself with this user manual (UM) before turning on the digital voice recorders Papyrus III and Papyrus III Titan (referred as the device below).

Observe all precaution measures when using the device.

Check the content according to the part 1.3 of UM before use.

1 DESCRIPTION AND USE

1.1 Purpose

- 1.1.1 The digital voice recorder Papyrus-III (Papyrus-III Titan) (referred as the device below) is the professional audio recording device intended for high quality recording of audio information in a noisy environment.
- 1.1.2 The meetings, talks, interview and other indoor and outdoor activities can be audio recorded using the device with built-in or external microphones. The voice can be recorded from the distances of up to 5 meters indoor and 1-2 meters outdoor in the city environment using built-in microphone.
- 1.1.3 The digital voice recorder Papyrus-III has a remote control. The wireless remote control can be used to start and stop the recording and to check the condition of built-in battery. The area of remote control operation is not less than 3 meters in the direct eyesight.

To work at a distance with a digital voice recorder Papyrus-III Titan remote control function is available only when recording using the remote microphone.

1.1.4 The device automatically switches for usage of the external/internal microphone when the external microphone is connected/disconnected.

1.2 Technical characteristics

1.2.1 Technical characteristics of the device are given in Table 1.

Table 1

Tuble 1				
Parameter	Va	lue		
Internal memory, Gb	3	32		
Sampling rate, kHz	32	16		
Recording time, h	76	153		
ADC resolution, bit	1	2		
Dynamic range, dB	8	32		
Power supply		-Ion battery mA·h		
Current consumption in power off mode, mA	not more	than 0,3		
Standby current consumption in voice activated recording mode, mA	not more	e than 0,5		
Current consumption in RC mode, mA	not mor	not more than 1		
Current consumption in recording mode (under fully charged battery), mA	1 not more than iii			
Continuous recording time from fully charged battery, h	not less than 160			
Transfer time of full volume of audio information to the computer's hard drive «Papyrus-III» /«Papyrus-III TITANIUM», min	not more t	han 320/80		
Dimensions, mm	77x4	3x11		
Temperature range, °C	from 0 to	o plus 50		

1.3 Package contents

1.3.1 The package content of the device is given in Table 2.

Table 2

Name	Number	Appearance
Digital voice recorder «Papyrus-III»	1 pc.	RECORDER PROPRIES II
External microphone	1 pc.	
USB - micro USB cable	1 pc.	
Charger (220 V)	1 pc.	
Vehicle charger 12 V	1 pc.	
Remote control unit	1 pc.	

Table 2 continued

Name	Number	Appearance
USB flash drive with software («Papyrus Tool»)	1 pc.	Transcend
Case with compartments	1 pc.	
User manual	1 pc.	-
Certificate	1 pc.	-

1.4 Appearance and functions

1.4.1 The device has compact and user-friendly design.

The device has exceptionally user-friendly interface and does not require any prior training before use. Only basic skills of working with programs in Windows operation system are required.

Audio information is recorded into the internal memory, making the device «invisible» for kinematic voice recorder detectors.

The voice recording in noisy environment is possible due to high dynamic range of recorded signals.

1.4.2 A special software «Papyrus Tool» must be installed to the computer before using the device (see part 2.2 of UM). The flash drive with the software is included in the package (see Table 2).

When the device is connected to the computer (see part 2.3 of UM), the user may change settings of recording quality, voice activation

settings (recording is automatically started when a preset acoustic level is exceeded – Voice Activation System «VOX»), settings for protection from unauthorized access to information and enabling/disabling of RC function.

The audio recordings can be listened to only after the device has been connected to the computer and files with extension «wav» have been downloaded from the internal memory of the device to the hard drive of the computer.

1.4.3 The device has built-in microphone, external microphone connection port, LED indicator, device operation control button, recording control slide switch, and micro USB port.

The appearance of the device is presented on Pictures 1 and 2.



Picture 1 – The appearance of the device (1)



Picture 2 – The appearance of the device (2)

The control button and LED indicator on the top panel of the device are used to control the operation mode of the device (Picture 1).

The upper side panel of the device contains micro USB port (1), external microphone connection port (2), built-in microphone (3) and recording slide switch (4) (Picture 2).

The various operation modes of the device and the corresponding colors of the LED indicator (Picture 1) are given in Table 3.

Table 3

The device mode	LED indicator s	signal and color		
	When the control button is pressed (Pic. 1)			
The device is not connected to	Blinking: recording is in progress	Shining: recording is stopped		
computer/charger	Green color: Battery is 100% full	Red color: Battery is 25% or less level		
	When the control butto	n is not pressed (Pic. 1)		
The device is	Blinking: recording is in progress	Shining: recording is stopped		
connected to computer/charger	Green color: Battery is 100% full	Red color: Battery is being charged from USB port		

1.4.4 The remote control unit, included in the package, allows to start/stop of the recording, and also to check the device status.

ATTENTION! An on / off recording by remote control from a digital voice recorder «Papyrus-III TITAN» is possible only when connecting a remote microphone.

ATTENTION! Before attempting to use remote control, unit check if remote control function is activated in the device (see part 2.6).

The appearance of the remote control unit is given on Picture 3.



Picture 3 – Remote control Unit

There are four control buttons and the status LED indicator on the front panel under the movable protection cover. Buttons functions of the remote control are listed in Table 4. The remote control vibrates in response to commands.

Table 4

Button	Purpose	Vibration response
•	Stop recording	2 long vibrations
6	Start recording	1 long vibration
A	Operation mode control (recording start/stop)	1 or 2 long vibrations
В	Battery charge level control	Short vibrations (3, 6 or 9), corresponding to the charge level of battery, from empty to full

The full list of the remote control vibration signals is given in Table 6.

1.5 Operating Instructions

- 1.5.1 ATTENTION! If an incorrect PIN code is entered three times in a row, all audio files will be automatically deleted from the device memory.
- 1.5.2 It is strongly prohibited to disassemble the device to avoid its break down.
- 1.5.3 Protect the device from mechanical damage, moisture, temperature difference, direct sunlight.
- 1.5.4 Do not use physical force while disconnecting the USB-cable from the device.
- 1.5.5 Do not use physical force while connecting/disconnecting the external microphone to/from the device.
- 1.5.6 Avoid overheating of the device (over 80° C) this may cause battery inflammation or explosion.

- 1.5.7 The product is designed for use in normal environmental conditions (temperature range from 0° C to $+40^{\circ}$ C; relative air humidity from 30 to 80 %; atmospheric pressure from 645 to 795 mm mercury).
- 1.5.8 The built-in battery should be charged periodically while the Product is in use. The battery should be charged at least once for half a year even if the Product was not in use.

1.6 Computer requirements

- 1.6.1 The computer with the equal or higher parameters must be used with the device:
- operational al system: Windows XP SP3, Windows Vista, Windows 7;
 - free space on the hard drive of not less than 16 Gb;
 - port USB 2.0 (1.1);
 - audio card.

2 PREPARATION PROCEDURES AND OPERATION ORDER

2.1 Battery Charging

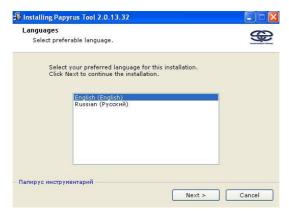
- 2.1.1 The internal battery of the device can either be charged via the USB port of the computer or the mains line of 220 V using charger included in the set or by use of vehicle electrical network (12V). The color of battery LED indicator (Picture 1) changes from red (battery is empty) to green (battery is charged) throughout the charging process. The total charging time is no longer than five hours.
- 2.1.2 For built-in battery charging from USB port the PC connect the device as given in part 2.3 of UM.
- 2.1.3 For built-in battery charging from 220 V mains line connect the micro USB USB cable from the set to the micro -USB port of the device (point 1 on Picture 2) and to the USB port of the Charger.
- 2.1.4 For built-in battery charging from a vehicle electrical network connect the micro USB USB cable from the set to the micro-USB port of the device (feature 1 on Picture 2) and to the USB port of the Vehicle charger 12 V connected to the vehicle electrical network.

2.2 Software installation

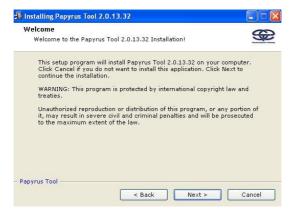
2.2.1 Place USB flash drive with software («Papyrus Tool») from the package (Table 2) to USB port of the PC. Launch «setup.exe» file located on the USB flash drive for «Papyrus Tooll» software installation.

ATTENTION! Disconnect the device from the computer before «Papyrus Tool» installation. ATTENTION! The «Papyrus Tool» software must be installed with administrator rights.

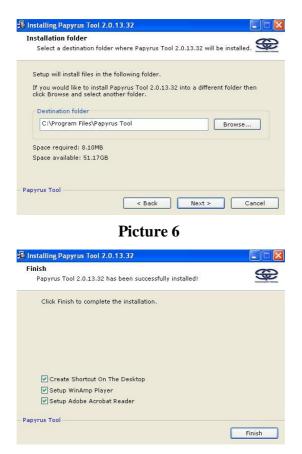
2.2.2 Select the language of the software interface from the language selection window, and follow the directions to install software (Pictures 4-7).



Picture 4



Picture 5



Picture 7

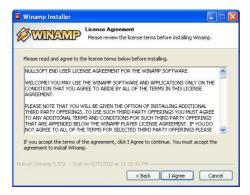
2.2.3 The programs «WinAMP» and «Adobe Reader» are necessory for the «Papyrus Tool» software to function correctly. The installation of these programs will be suggested automatically by the installation wizard.

If these two programs have been installed previously, the installation process of the «Papyrus Tool» software should be finished.

Follow the installation instructions to install «WinAMP» and «Adobe Reader» programs (Pictures 8-17).



Picture 8



Picture 9



Picture 10



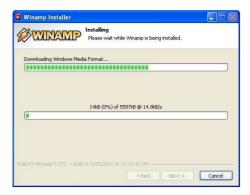
Picture 11



Picture 12



Picture 13



Picture 14



Picture 15



Picture 16



Picture 17

2.3 Connection to the PC

2.3.1 Connect the micro USB - USB cable from the set to the micro USB port of the device (feature 1 on Picture 2) and to the USB port of the computer.

2.4 Launch the «Papyrus Tool» software

- 2.4.1 Turn on the power of the computer and wait until the operation system is loaded.
- 2.4.2 Connect the device to the PC (following instructions from part 2.3 of this manual).

ATTENTION! During the first connection of the device to the computer wait for the message from the computer that the voice recorder is detected. If the message does not appear, wait several minutes.

2.4.3 Press the «Start» button and select «Programs \rightarrow Papyrus Tool \rightarrow Papyrus Tool».

2.5 Description of the «Papyrus Tool» software

2.5.1 Software window

2.5.1.1 The appearance of the software window is shown on the Picture 18.



Picture 18 - Appearance of the «Papyrus Tool» software window

2.5.2 Control panel

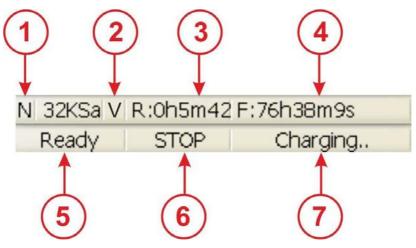
- 2.5.2.1 The control buttons of the device are located on the control panel (Picture 19):
 - «Record» begin recording;
 - «Stop» stop recording;
 - «Download» download information to the computer;
 - « Delete» delete from the device memory.



Picture 19 - Control panel

2.5.3 Status bar

2.5.4.1 The operation mode of the device is displayed on the status bar (Picture 20):



Picture 20 - Status bar

- 1) $\langle N/L \rangle$ recording mode indicator:
- «N» «Normal» mode: recording stops after the memory of the device is full:
- «L» «Continuous loop» mode: recording continues in cycle until timer stops the recording or until the battery runs out.
 - 2) «V/_» «VOX» mode indicator:
 - «V»- the device is in «VOX» mode;
 - «_» «VOX» mode is disabled.
 - 3) R:<h>.<min>.<sec> duration of recorded audio information.
- 4) F:<h>.<min>.<sec> remaining time available for the recording.
 - 5) «Ready/Busy» status indicator of the device:
 - «Ready» the device is ready for use;
 - «Busy» the device is busy.

- 6) «RECORD/PAUSE/STOP/READ/DELETE/WAIT/ERROR/FORMAT» recording process indicator:
 - «RECORD» recording is ongoing;
 - «PAUSE» recording is paused during «VOX» mode;
 - «STOP» recording is stopped;
 - «READ» recorded data downloading;
 - «DELETE» deleting of the recorded data;
 - «WAIT» settings updating;
 - «ERROR» error:
 - «FORMAT» hard drive formatting.
 - 7) «Charging../Charged» battery charging process indicator:
 - «Charging..» battery is charging;
 - «Charged» battery is fully charged.

2.5.4 Main menu of the software

- 2.5.4.1 The main menu of the software contains the following instructions:
- to open and play back audio files («File» tab) (Picture 21), downloaded to the hard drive of computer using «Download» button (Picture 18);



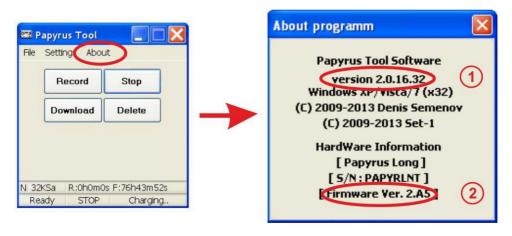
Picture 21 «File» tab

• to control the device settings («Settings» tab) (Picture 22);



Picture 22 – «Settings» tab

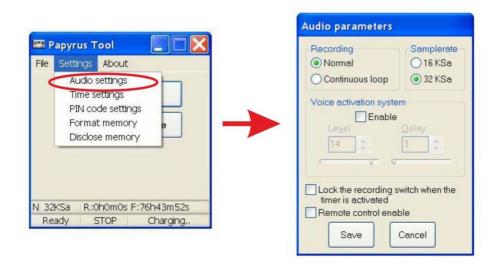
• to open the help windows for program (Picture 23, item 1) and device (Picture 23, item 2) - «About» tab. The location of the «About» tab is shown on Picture 23.



Picture 23 – Location of «About» tab

2.6 The recording settings

2.6.1 Choose the «Audio settings» from the «Settings» tab in the main menu to setup the recording settings. The window «Audio parameters» appears when the «Audio settings» option is selected. The appearance of the window «Audio parameters» is shown on Picture 24.



Picture 24 - Window «Audio parameters»

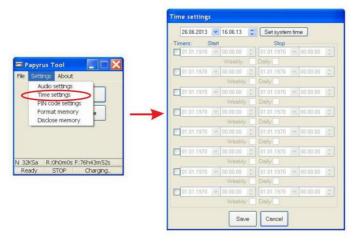
2.6.2 The description of parameters from the «Audio parameters» window is given in Table 5.

Table 5

Console	Indicator	Function	Meaning
	Normal		Recording stops when the memory is full
Recording	Continuous loop	Recording mode selection	«Cyclic» recording mode – when the memory is full, recording continues by overwriting the earlier recorded fragments
Complanata	16 KSa	Audio sampling	16 KHz
Samplerate	32 KSa	rate selection	32 KHz
	Enable		«VOX» is an indicator of voice activation function
Voice activation system	Level (1-16)	Voice activation function	Level of the sound when the device activates recording (from 16 (low sensitivity) to 1 (high sensitivity) standard units)
	Delay (1-255)		Time delay in seconds for recording stoppage after the latest sound level threshold crossing
Lock the recording switch when the timer is activated	V	Locks recording button	Lock the recording switch if at least one of the preset recording timers is activated.
Remote control enabled	V	Remote control activation	Enables remote control function
Save	Closes «Audio	parameters» windo	ows and saves chosen parameters
Cancel	Closes «Audio	parameters» windo	ow without saving of chosen parameters

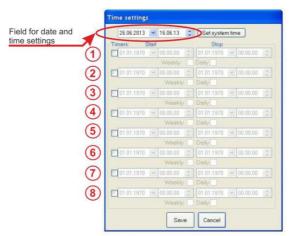
2.7 Setting up clock and timer

2.7.1 Select «Time settings» from the «Settings» tab from the main menu to set up clock and timer. The appearance of the window «Time settings» is shown on Picture 25.



Picture 25 —«Time settings» window

2.7.2 Press the «Set system time» button to set date and time from the computer. After pressing the button the field of date and time settings in the «Time settings» window (Picture 26) will have the same data as the program running computer.



Picture 26

2.7.3 The program provides setting of up to eight independent timers (Picture 26).

To set up a timer:

- 1) Choose timer with a tick (Picture 27).
- 2) Choose date and time for the beginning of the recording. (Picture 28).
- 3) Choose date and time when recording should be stopped (Picture 29).
- 4) When «Every Week» is ticked (Picture 30) the recording will be turned on once a week (starting from the set up date) at the time preset on the timer. Recording will be turned off once a week (starting from set up date) at the time preset on the timer.
- 5) When «Every Day» is ticked (Picture 30) the recording will be turned on every day once a day (starting from the set up date) at the time preset on the timer. Recording will be turned off every day once a day (starting from the set up date)at the time preset on the stop recording timer.

ATTENTION! If «Every Week» and «Every Day» are not ticked the recording will be started and stopped at the preset date and time.

ATTENTION! If «Every Week»/»Every Day» is ticked the date and time of the timer will be automatically changed to one day/week ahead, after recording is complete.

6) Save selected settings by pushing «Save» button, in case the settings are selected noncorrectly push «Cancel» button.



Picture 27



Picture 28



Picture 29

Once a week timed Recording Start / Stop



Daily timed Recording Start / Stop

		16.12.05	Y	Set syster	n tin	ne l	
imers: S	Timers: Start			Stop			
26.06.2013	*	16.11.06	-	26.06.2013	~	16.11.06	\$
		Weekly	C	Daily 🗸			
01.01.1970	٧			01.01,1970	V.		
		Weekly		Daily			
01.01.1970	8	00:00:00		01.01.1970	٧	00.00.00	
		Weekly		Daily			
01.01.1970	٧	00.00.00	0	01.01.1970	V		
		Weekly		Daily			
01.01.1970	v		0	01.01.1970	0		4.3
		Weekly		Daily			
01.01.1970	.y.		0	01.01.1970	W	00.00.00	
		Weekly		Daily			
01,01,1970	V	00.00.00	2	01.01.1970	¥	00.00.00	0
		Weekly		Daily			
01.01.1970	¥	00.00.00	4	01.01.1970	w	00.00.00	0
		Weekly		Daily			

Picture 30

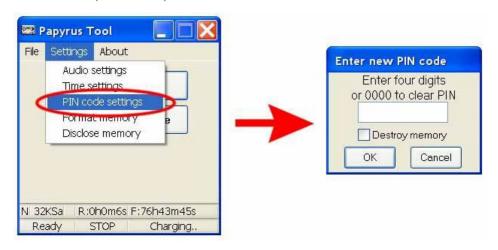
2.8 Setting up a PIN-code

2.8.1 Set up a PIN-code to protect the data, saved on the recorder, from unauthorized downloading. The window with the PIN-code request will appear when the downloading of audio files from protected device is attempted.

ATTENTION! If a wrong PIN-code is entered three times in a row, all audio files will be automatically deleted from the device memory.

2.8.2 Setting up a PIN-code

1) Select «Pin code setting» from the «Settings» tab from the main menu. (Picture 31).



Picture 31

2) Enter a new four-digit PIN-code in the field «Enter four digits or 0000 to clear PIN» in the «Enter new PIN code» window (Picture 32), and confirm by pressing the «OK» button.



Picture 32

At this stage it is possible to set option to delete all data stored in the device memory without the future possibility of recovery, when wrong PIN-code is entered three times. The option can be selected by ticking the «Destroy memory» field (Picture 33). Press «Yes» button at the pop-up window «Warning» (Picture 34) to confirm your choice.



Picture 33



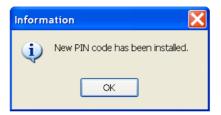
Picture 34

3) Confirm PIN-code by reentering of earlier entered PIN-code's four digits in the «Enter four digits or 0000 to clear PIN» field (Figure 35), and press «OK» button to finish. If the PIN-code is wrongly keyed in during PIN-code confirmation, software will prompt to select a new PIN-code and confirm it.



Picture 35

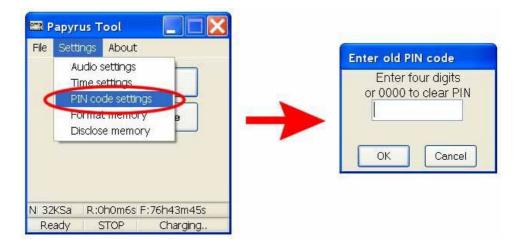
4) PIN-code confirmation window will appear (Picture 36). Press «OK» button to continve.



Picture 36

2.8.3 PIN-code changing

1) Select «Pin code setting» from the «Settings» tab from the main menu (Picture 37).



Picture 37

2) Enter old four-digit PIN-code in the field «Enter four digits or 0000 to clear PIN» of the «Enter old PIN code» window (Picture 38) and confirm by pressing the «OK» button.



Picture 38

3) Enter a new PIN-code (Picture 39) and confirm by pressing «OK» button.



Picture 39

4) Confirm new PIN-code by entering 4 digits of new PIN-code in the field «Enter four digits or 0000 to clear PIN» (Picture 40), confirm by pressing «OK» button to finish the procedure.



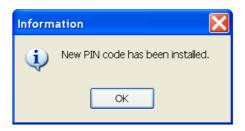
Picture 40

ATTENTION! In case the previous PIN-code (Picture 38) is noncorrectly entered the program will notice a wrong PIN-code entering (Picture 41). If the previous PIN-code is noncorrectly entered 3 times in a row all the audio files will be deleted from the device memory.



Picture 41

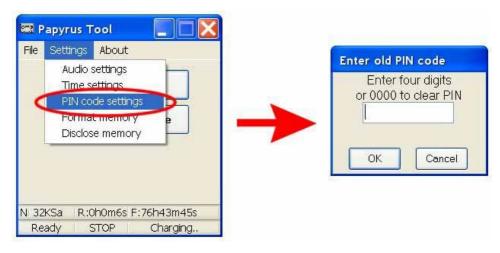
5) If the PIN-code was set up correctly information window will pop up (Picture 42). To continue press «OK».



Picture 42

2.8.4 PIN-code cancellation

1) Select «PIN code settings» from the «Settings» tab in the main menu (Picture 43).



Picture 43

2) Enter old four digit PIN-code in «Enter four digits or 0000 to clear PIN» in the pop up window «Enter old PIN code» (Picture 44), then press «OK» button to confirm.



Picture 44

3) Key in four zeros in the «Enter four digits or 0000 to clear PIN» field (window «Enter new PIN code») (Picture 45), then press «OK» button to confirm.



Picture 45

4) To confirm PIN-code enter four zeros in the «Enter four digits or 0000 to clear PIN» field (window «Confirm PIN code») (Picture 46), to confirm press «OK» to finish operation.



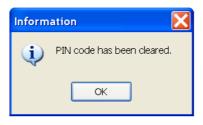
Picture 46

ATTENTION! In case the previous PIN-code (Picture 44) is noncorrectly entered the program will notice a wrong PIN-code entering (Picture 47). If the previous PIN-code is noncorrectly entered 3 times in a row all the audio files will be deleted from the device memory.



Picture 47

5) Information window will pop up to confirm clearing of the PIN-code (Picture 48). To continue press «OK».



Picture 48

2.9 Memory testing

- 2.9.1 ATTENTION! Preventing the recorded data erase one should download all the recorded files to the computer hard drive before starting of device memory formatting procedure, otherwise all the data will be erased.
- 2.9.2 Select «Format memory» from the «Settings» tab from the main menu to test the device memory. The window with warning about the data loss will appear (Picture 49).

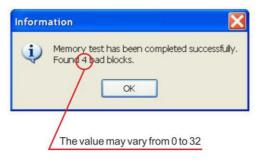


Picture 49

Press «Yes» button to confirm or «Cancel» to cancel.

After memory testing (Picture 50) information window about faulty sectors of built-in memory will appear. Number of faulty sectors may vary from 0 to 32.

ATTENTION! This information is significant for manufacturer only. Faulty sectors won't affect the quality of the device performance.



Picture 50

2.10 Downloading and playback of audio files

- 2.10.1 In order to download audio files from the device to the PC:
- 1) Connect the device to the computer (see part 2.3).
- 2) Launch the «Papyrus Tool» software and press the "Download" button in the main window (Picture 51).



Picture 51

3) The «Download recordings» window will appear on screen (Picture 52).

The «All» button is for all information (all files) downloading, the «Select» button is for downloading of files selected by the user.



Picture 52

4) Pressing the «All» button will launch the «Select Folder to Save» window, where folder for saving files can be selected (Picture 53).



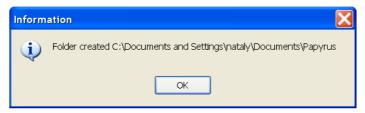
Picture 53

- 5) It is possible to save files either in the default folder located at the address: C:\Username\Documents\Papyrus («Username» is the name of particular user of the PC) or in any other folder:
 - press «OK» button to save files in the default folder;
- press «Browse» to save files in the existing folder, select the desired folder in the appeared window and press «OK» button (Picture 54);



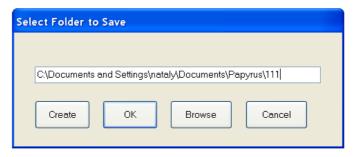
Picture 54 – «Folder selection» window

• press «Create» to make a new folder for saving files. Information window will pop up (Picture 55). To confirm creation of the folder press «OK».



Picture 55

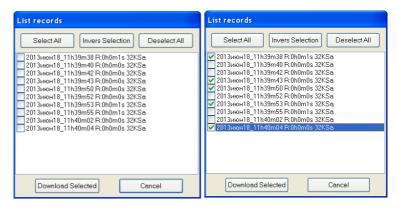
After confirmation «Select Folder to Save» window (Picture 56) with folder address will appear. To save files in the new folder press «OK».



Picture 56

- 6) Press «Select» button on the «Download recordings» window to download selected files (Picture 51).
- 7) After scanning, the «Records List» window displaying list of recordings will appear and the required files can be selected by putting ticks in the boxes beside them (Picture 57).
- 8) Press «Deselect All» button to cancel selection of all selected files.
 - 9) To exclude some files from downloading, select them and press

«Inverse Selection» button – unnecessary files will be excluded from the list.



Picture 57

- 10) Press «Download Selected» button.
- 11) Select the folder to download files (see part 2.10.1, point 4).
- 12) If the recorder is protected with PIN-code (see part 2.8), it is necessary to enter PIN-code before downloading the information.

ATTENTION! If a wrong PIN-code is entered three times, all audio files will be automatically deleted from the device memory.

2.10.2 Choose tab "File" of the main menu and select tab «Play» (Picture 58) for listening to the downloaded files. The default application for playing files is Nullsoft company's «WinAmp» player distributed for free.

Also «Papyrus Tool» program establishes files within indicated folder according to the start time of each record (Picture 59). One can listen to these files by use of any Windows media application.



Picture 58

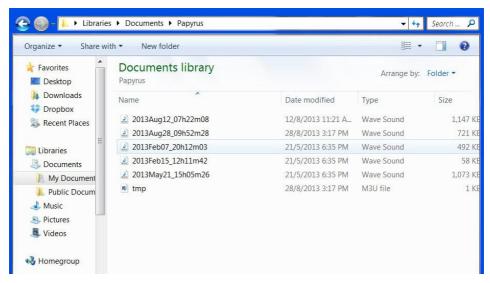


Figure 59 – «Papyrus» folder

2.11 Deleting of the recorded data

- 2.11.1 To delete recorded audio files from the device, it is necessary to:
 - 1) Connect the device to the PC (see part 2.3).
 - 2) Run «Papyrus Tool» program according to part 2.4.
- 3) Press «Delete» button in the window of the «Papyrus Tool» program (Picture 60) to delete all files from the memory of the device.



Picture 60

2.12 Restore of deleted data

2.12.1 To restore the deleted data, select «Settings» tab from the main menu and press «Disclose memory» (Picture 61). Recorded data will become available for downloading to PC.

ATTENTION! If the «Destroy memory» option was activated during set up of the PIN-code (see part 2.9.2 point 2) and the data was deleted because PIN-code was keyed in incorrectly, the data cannot be restored.



Picture 61

2.13 Setting up remote control Unit

2.13.1 Install batteries in the remote control Unit by taking off the back panel of the device (Picture 62).



Picture 62 – Remote control Unit with opened battery compartment

ATTENTION! Follow the polarity when installing batteries.

ATTENTION! Only silver-zinc 1.5 V batteries should be used.

ATTENTION! Do NOT use expired batteries.

2.13.2 After batteries have been installed the remote control Unit is

2.14 Remote control operation

- 2.14.1 ATTENTION! Before attempting to use remote control, check if remote control function is activated in the device (see part 2.6).
- 2.14.2 ATTENTION! Avoid using several devices with activated remote control option simultaneously. It can lead to faulty operation of the devices.
- 2.14.3 ATTENTION! Do not forget to switch off remote control function after finishing of the recording. It can help you to extend battery life time in the standby mode and avoid situation described above.
- 2.14.4 To operate the remote control press one of four buttons on it. Button functions are described in Table 6.
- 2.14.5 After pressing remote control button red LED indicator will blink to confirm the data exchange between the remote control and the device (Picture 63), to confirm data exchange the remote control Unit will vibrate. Different vibration signals are described in Table 6.



Picture 63

Table 6

Button/purpose	Vibration response	Voice recorder mode
Any button	No signal	Device is out of the remote control's operating range or remote control option is disabled
"start recording"	1 long	Recording began or in progress
	3 long	Error*
"stop recording"	2 long	Recording is stopped or is not in progress
"Operation mode control (recording start/stop)"	1 long	Recording is in progress
	2 long	Recording is not in progress
"Battery charge level control"	1 short	Battery is empty
	3 short	Battery charge level is around 10%
	6 short	Battery charge level is around 30%
	9 short	Battery is fully charged

^{*}In case of an error occurrence it is recommended to check if similar devices with activated RC function are located in the operating range. If there are no similar devices in the RC operating range one should shorten the distance between the voice recorder and the RC Unit. In case of recurring error it is recommended to apply to the manufacturer.

2.15 Using the device

2.15.1 The control button and the LED indicator (Picture 64) are used to control the device when it is not connected to the PC.

The signals of the LED indicator during various operation modes of the device are listed in Table 7.



Picture 64

Table 7

The device mode	LED indicator signal and color		
The device is not connected to computer/charger	When the control button is pressed (Pic. 64)		
	Blinking: recording is	Shining: recording is	
	in progress	stopped	
	Green color: Battery is 100% full	Red color:	
		Battery is 25% or less	
		level	
	When the control button is not pressed (Pic. 64)		
The device is connected to computer/charger	Blinking: recording is	Shining: recording is	
	in progress	stopped	
	Green color: Battery is 100% full	Red color: Battery is being charged from USB port	

2.15.2 To start the recording, move the recording switch towards the microphone. To stop the recording, move the recording switch away from the microphone. The location of the recording switch and the microphone are shown on Picture 65.



- 1 micro USB port
- 2 external microphone connection port
- 3 microphone
- 4 recording switch

Picture 65

2.15.3 Connect the external microphone to the external microphone connection port (Picture 66) of the device to record using the external microphone. The external microphone connection port is located on the top panel of the device (point 2 on Picture 65).

The switch from the built-in microphone to the external microphone is automatic.



Picture 66

3 TROUBLESHOOTING

3.1 The list of possible malfunctions of the device, their reasons and possible way to repair them are given in Table 8. Please contact the manufacturer if the problem cannot be resolved.

Table 8

Malfunction	Possible reason	Way to remove
	The LED indicator is shining in red color – battery is empty	Charge the battery (see part 2.1)
The LED indicator is shining continuously when the recording is started	In the "Record Normal" mode the memory of the voice recorder is full	Empty the device memory (see part 2.11)
	In the voice activated recording mode, the level of signal is lower than the recording threshold	Change the settings of the Voice Activation System "VOX" (see part 2.6)
The RC Unit LED indicator is not shining	The batteries are low or not installed	Change/install RC Unit battery (see article 2.13.1)
	RC function is not activated	Activate RC function for the device (see article 2.6)
The remote control produces 3 long vibration signals when the recording is started/stopped ("Error")	RC is out of operation zone	Shorten the distance between the device and the RC Unit (see article 1.1.3)
	Similar devices with activated RC function are located within the RC Unit operating range	Disable the RC function of the similar devices

3.2 The current consumption in the standby mode (see Table 1) must be considered when the voice activated recording function "VOX" (see part 2.7) is used. An example of estimation of the operation time of the voice recorder in the voice activated recording mode is given below:

Standby time of voice activated recording: 1000 hours;

Current consumption in standby voice activated recording mode: $350 \, \mu A$;

Capacity of fully charged battery: 1320 mA·h;

Current consumption in recording mode: 6 mA;

Maximum recording time with fully charged battery: 160 hours;

Remaining recording time after the voice activation: (1320-(1000*0,35))/6 = 161 hours.

4 TECHNICAL SERVICE

- 4.1 The presence of all required parts of the device and their condition must be checked carefully to ensure the device is fully functional before the intended use.
- 4.2 The battery must be charged periodically. The battery must be charged once every six months, regardless of the usage frequency of the device.
- 4.3 It is recommended to charge battery before use, if the device was not in use for a long period time.

ATTENTION! It is forbidden to use expired batteries.

5 STORAGE AND MAINTENANCE

- 5.1 The device must be stored in the environment protected from the influence of atmospheric precipitation, in the absence of corrosive and other damaging fumes.
- 5.2 Store the device in dry room in the temperatures between +15 °C and +35°C.
- 5.3 If the device was stored at temperatures out of the working range, it must be kept for at least 30 minutes in the temperatures from 0°C to +40°C before it can be used.
 - 5.4 Do not store the device with empty battery.
- 5.5 The extended storage of the remote control, included in the package, must be done without the batteries.
- 5.6 The device must be stored in the closed case provided by the manufacturer. The arrangement of the device and the components inside the case is shown on Picture 67.



Picture 67 – Case with compartments containing the voice recorder and other components

6 TRANSPORTATION REGULATIONS

- 6.1 Avoid overheating (over 60°C) and overcooling (under –30°C) the device.
- 6.2 Transport the device in the casing that protects form mechanical damage and moisture. The device can be transported by any means of transportation (by air in the airtight compartment).
- 6.3 Avoid falls and other impacts that may lead to mechanical damages during transportation.

7 UTILIZATION

- 7.1 The service time of the device is 5 years. The use of the device must be terminated beyond the service time.
 - 7.2 Utilize the device according to the user-company rules.
- 7.3 In case the device was sent to the manufacturer for repair and was deemed unfit for repair, the manufacturer will recommend in writing utilizing the device.
- 7.4 Utilize the used batteries according to the local environmental rules.

ATTENTION! Improper utilization of batteries may lead to environmental pollution.

ATTENTION! Utilization of batteries in the fire may lead to burns and explosion.

8 PRODUCT LIFETIME AND MANUFACTURER'S WARRANTY

- 8.1 The lifetime of the device is 5 years.
- 8.2 Manufacturer guarantees the functionality of the device and compliance to the technical specifications during 12 month from the date of sale, the user has to follow the use regulations. Warranty repair is free of charge.
- 8.3 Manufacturer is not responsible (including the warranty period) for malfunctions resulted from not following the user manual instructions.
- 8.4 The warranty repair is void for devices with mechanical damages, signs of external impacts or out of order due to users not following use regulations given by manufacturer. The repair of such devices may be arranged with manufacturer, and the cost of repair is borne by user.
 - 8.5 The warranty does not extend to the batteries.