

Personal Audio Recorder™ 1.2

User Documentation

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1. Introduction

Personal Audio Recorder (PAR) turns your Treo600(R) smartphone into an audio recorder. PAR can record voice memos to RAM or on the external card such as SD and MMC.

You can play back recorded voice memos with easy. PAR is very flexible and configurable. Option includes different sample rates and record in mono or in stereo mode.

Recorded voice memos can easily be beamed or transferred to the desktop using a card reader or a card exporter software. Voice memos can also be emailed with your email client.

PAR includes one button press recording feature, keyboard short cuts, export voice memos to the card, import wave files from the card to RAM, pause recording, pause play, start playing at any part of the voices memo.

For professional users PAR includes industry standard AES 256 encryption to secure your voice memos. Authentication is optional to launch PAR application.

2. System Requirement

- Handspring® or PalmOne® Treo600®.
- New 3.05 firmware update with Extended Sound Manager. To get new firmware update go to

http://www.palmone.com/us/support/downloads/treo/treo_600_updater.html

- 190K of free memory for the main program.
- External SD/MMC card optional.

2.1 Compatibility

- Handspring® or PalmOne® Treo600®. All versions.
- 3.05 firmware update
- Compatible with desktop wave player. Voice memo can be read on the desktop without and conversion software.
- External SD/MMC card

3. Installation

To install PAR.prc™ double click on the file PAR.prc and then press the HotSync® button on the cradle. The HotSync® manager will install the file PAR.prc on to your Palm.

For encryption you need to install both AESLib.prc and SHALib.prc in ram.

4. Launching Personal Audio Recorder™



To launch Personal Audio Recorder™ look for the icon **P.A.R.** in the Launcher and tap on it.

5. User Interface

5.1 Play

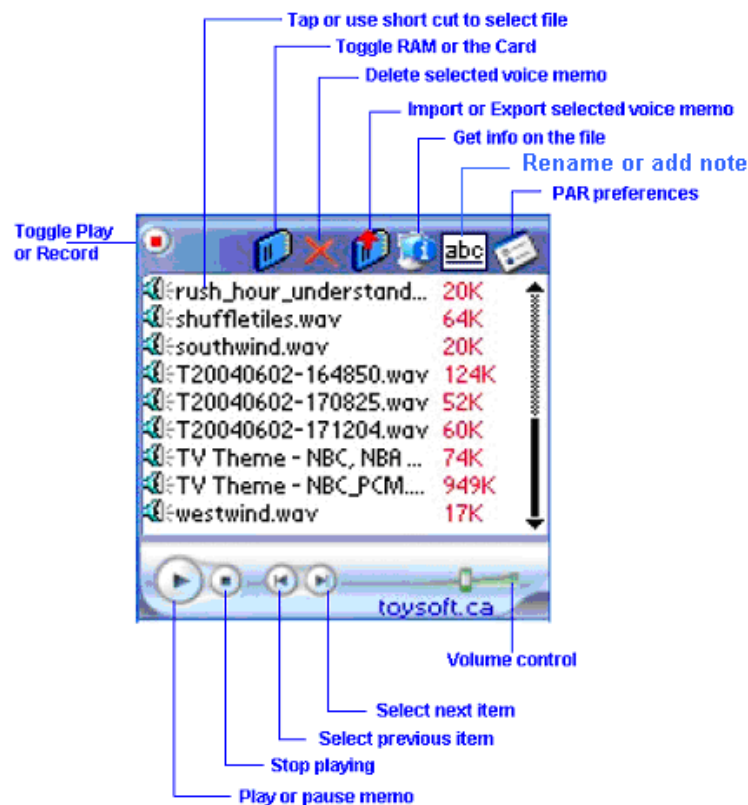


Diagram 1: Play Voice Memo Screen.

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5.1.1 Playing Voice Memo/Wave File

To play a voice memo or wave file tap on the file and then tap on the Play button. The status indicator will move from left to right. Alternatively you can setup key short cuts in the Preferences.

5.1.2 Pause Play

During play you can tap on the Play button again to pause the playing. To un-pause tap on the Play/Pause button.


5.1.3 Volume Control

You can adjust the volume before and during play. Tap and hold on to the volume slider and move left to right to adjust the volume. The volume setting is saved to the preference. Play and Record volume is independent of each other.


5.1.4 Random Play Voice Memo

Before you press the Play button you can move the status indicator to any location in the voice memo and start playing.

5.1.5 Toggle between Play and Record

To toggle between the Play and Record screen tap on the Toggle Screen button located on the top left of the screen. 

5.1.6 Toggle between RAM and External Card

To query files in RAM or on the card tap on the Media button. 

5.1.7 Import and Export VoiceMemo/Wave Sounds

You can export selected voice memo as wave file to the card or import wave files to RAM.

5.2 Recording Voice Memo

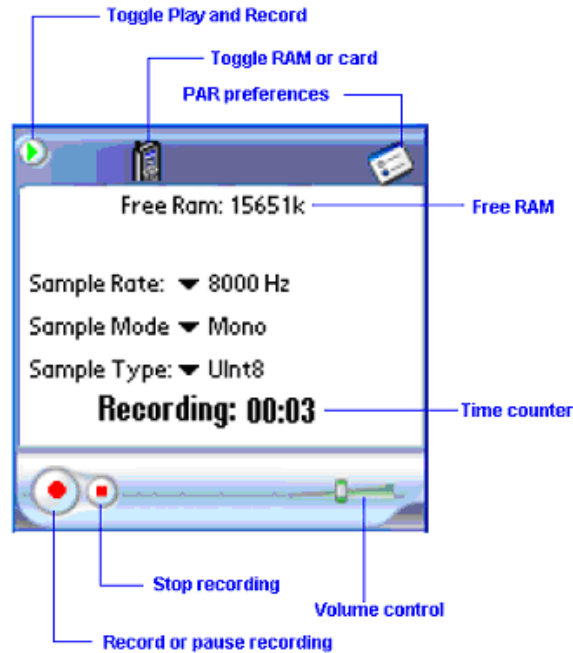


Diagram 2: Recording Voice Memo

5.2.1 Record a Voice Memo

Before you start recording you should adjust the settings to fit your needs such as changing the default filename, sample rate, mode and type. These settings will affect the quality of the voice memo recorded.

Sample Rate

Generally the lower the Sample Rate the less the quality. If you want high quality voice memo you should set the Sample Rate to at least 16000 Hz. 22050 would be best for mobile devices.

Sample Mode

You should set the Sample Mode to Mono to reduce the size of the voice memo. If space is not an issue then use Stereo mode. Note that recording Stereo to the card maybe result in choppy quality. Experiment to get the correct setting.

Sample Type

This is processor specific and both settings will work fine on the Treo600®.

To record a new voice memo tap on the Record button or press the short cut key.

5.2.2 Pause Recording

At anytime you can pause the recording by tapping on the Record button or the short key cut. This will pause until you un-pause or stop the recording.

5.2.3 Recording to RAM and External Card

To toggle recording between RAM and the external card tap on the Media button.



This icon indicates recording to RAM



This icon indicates recording to the external card

Recording RAM is faster than recording to external card and most of the times recording quality is better. The negative side to recording to RAM is the size limitation. Where as recording to the external card can be very lengthy and it does not pose the problem of erasing the voice memos during a hard reset.

5.2.4 Recording Tips

1. For better quality use Sample Rate 22050Hz
2. For short voice memos record to RAM then export to the card. This gives better quality.
3. When recording do not hold the MIC to close to the subject. This may create cracking sounds.
4. Recorded voice memos on the card can be directly read by desktop applications
5. Play around with the recording volume. Generally setting it to mid range is OK. If you can not hear the recording then adjust the volume higher.
6. When recording do not try to scratch or make any noise on the Treo. Any unwanted sound will be recorded since the MIC is very close to the keyboard.

6. Preferences

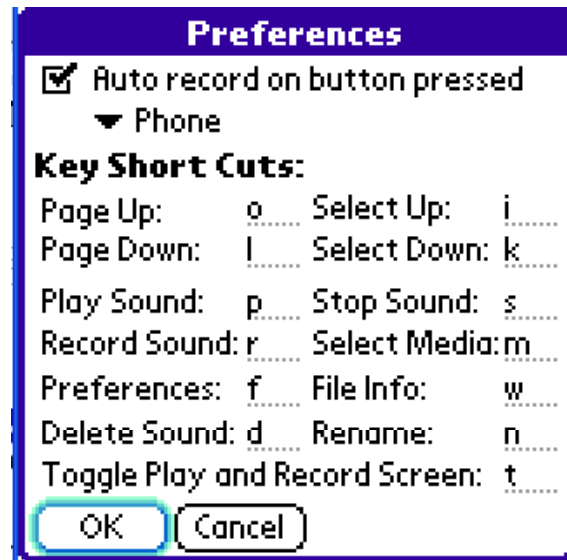


Diagram 3: PAR Preferences

6.1 One Button Recording

One button recording allows you the launch Personal Audio Recorder anywhere and start recording immediately. To activate one button recording press and hold the activation key until PAR is launched.

6.2 Key Short Cuts

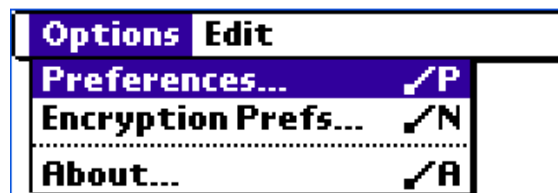
The key short cut allows you to assign different keys to different functions in PAR and get quick access to them using the keyboard.

7. Encryption

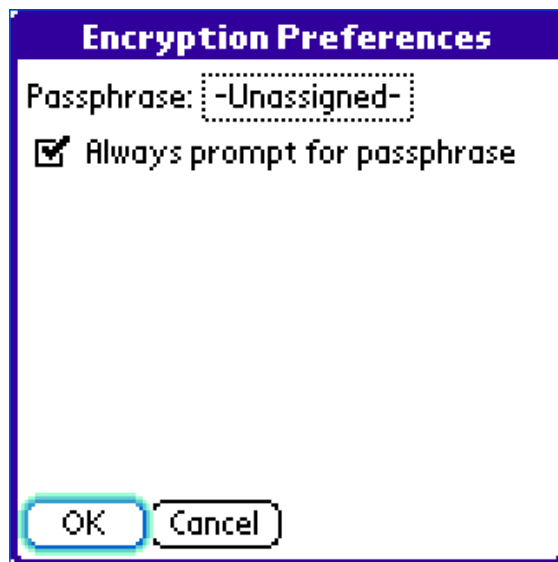
PAR uses the industry standard AES 256bits encryption to protect your voice memos. Memos that are encrypted can only be read by you when you successfully authenticate with the correct passphrase. If you forget your passphrase then there is no way to decrypt or recover the encrypted memos.

You need to install both AESLib.prc and SHALib.prc to ram to use encryption.

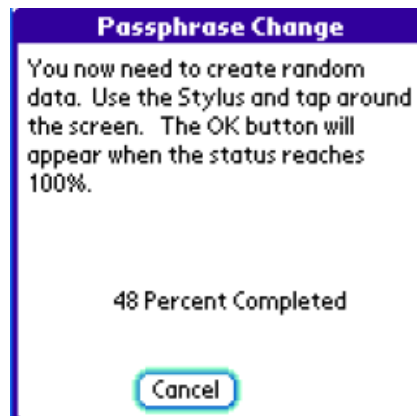
7.1 Assigning Your Secret Passphrase



Your first step is to assign your secret passphrase. Tap on the Menu key on the keyboard then the above menu will be displayed. Select **Encryption Prefs...** item and the following window will be opened.



Tap on the **-Unassigned-** toggle button to assign your passphrase. The Passphrase change window will be opened.



You will need to tap around the screen to create the random key to use for encrypting the voice memos. The more randomly you tap the more secure the random key will be. When the status displays 100 Percent Completed tap on the OK button. The following window will be opened.



This is where you assign your secret passphrase. When assigning your passphrase, make sure you make it at least 6 characters long. The longer the passphrase the harder it is for people to guess it.

7.2 Encrypting a Voice Memo

To encrypt a voice memo select the voice memo then tap on the Menu key and select the Edit->Encrypt menu item. After the memo is encrypted the icon for the voice memo will change to a lock.

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7.3 Decrypting a Voice Memo

To decrypt a voice memo select the voice memo then tap on the Menu key and select the Edit->Decrypt menu item. After the memo is decrypted the icon for the voice memo will change back to the standard icon.

7.4 Change Your Passphrase

You can change your passphrase anytime. To change your passphrase tap on the “-Assigned-“ toggle button in the Encryption Preference. When you do change your passphrase PAR will decrypt all the encrypted voice memos first.

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