

Rockbox - or how to crash my iPod

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Agenda

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What is Rockbox?

Rockbox is.. (from rockbox.org)

..an open source firmware for mp3 players, written from scratch. It runs on a wide range of players.

Rockbox is.. (from wikipedia)

..a free software replacement for the firmware held on various forms of digital audio players (DAPs). Rockbox offers an alternative to the host device's operating system firmware (in many cases without removing the original firmware) which provides a plug-in architecture for adding various enhancements and functionality to DAPs which are not present in the original OS

Supported Players

Rockbox supports

- Apple: 1st through 5.5th generation iPod, iPod Mini and 1st generation iPod Nano
(not the Shuffle, 2nd/3rd gen Nano, Classic or Touch)
- Archos: Jukebox 5000, 6000, Studio, Recorder, FM Recorder, Recorder V2 and Ondio
- Cowon: iAudio X5, X5V, X5L, M5 and M5L
- iriver: H100, H300 and H10 series
- SanDisk: Sansa c200, e200 and e200R series
- Toshiba: Gigabeat X and F series (not the S series)

Differences to the original firmware

General

- better audio playback quality
- sound codecs - Mpeg-audio/Ogg/AAC/Midi/...
- plugins - applications/games/demos
- different configuration files
- open source

Model specific

- use iPod without iTunes
- voice control
- ...

How does Rockbox work?

① iPod bootloader

This boot loader is stored in special flash memory in your Ipod. It is already installed on your player, so it is never necessary to modify this in order to install Rockbox.

② Rockbox bootlader

It is responsible for loading the Rockbox firmware and for providing the dual boot function. It directly replaces the Ipod firmware on the player's disk.

③ Rockbox firmware or the original firmware

Installation

- Get Rockbox Release/CurrentBuild/ArchivedBuild
- Extract files to the root of your mounted player's drive (.rockbox)
- Get fonts package from <http://www.rockbox.org/daily.shtml> (only for current/daily builds)
- Extract fonts to .rockbox

- Get ipodpatcher from <http://download.rockbox.org/bootloader/ipod/ipodpatcher/linux32x86/ipodpatcher>
- run ipodpatcher and follow the instructions
- reboot your player.

Using Rockbox

Advantages

- File Browser - access to complete harddisk
- Database - seperated from original firmware
- Dynamic/Static playlists
- ...

Disadvantages

- more battery consumption

Customize Rockbox

- Themes `.rockbox/themes`, `.rockbox/backdrops`, `.rockbox/wps`
(While playing screen)
- Fonts `.rockbox/fonts`
- Languages `.rockbox/langs`
- Codecs `.rockbox/codecs`
- Plugins `.rockbox/rocks/games` - chip8-emulator,
`.rockbox/doom`, `.rockbox/viewers` - MPEG/Text/..
- Other Firmware(s) (testing/upgrade) `.rockbox/*.ipod`

Links

- <http://www.rockbox.org/twiki/bin/view/Main/DocsIndex> (documentation index)
- <http://www.rockbox.org/manual.shtml> (manual)
- <http://www.rockbox.org/daily.shtml> (sources)

Questions?

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- ???

Thanks

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