Sonic Retro Engine

The Sonic Retro Engine is an engine port developed by Rubberduckycooly. It was released in 2021.

These engines, part of the Ports section of Batocera, are enhanced versions of the original Sonic 1, 2 and Sonic CD for the Sega Megadrive/Genesis and CD32.

They require additional game files from the recent iOS/Android ports to setup the games.

This system scrapes metadata for the “sonicretro” group(s) and loads the sonicretro set from the currently selected theme, if available.

Grouped with the “ports” group of systems.

Quick reference

- **Accepted ROM formats**: .son, .scd
- **Folder**: /userdata/roms/sonicretro

<table>
<thead>
<tr>
<th>Emulators</th>
</tr>
</thead>
<tbody>
<tr>
<td>sonic2013</td>
</tr>
<tr>
<td>soniccd</td>
</tr>
</tbody>
</table>

BIOS

The Sonic Retro Engine port in Batocera does not need any BIOS file to run, however it is non-functionally without the appropriate .rsdk file for the Sonic game you wish to play.

Data Files Setup ("ROMS")

Sonic 1 and 2

This port requires the .rsdk files from the Android or iOS versions of Sonic 1 & Sonic 2.

The Android APKs can be opened up in an extractor program like 7-zip. You need to extract the file /assets/Data.rsdk.xmf and rename it to Data.rsdk and place it in a folder named [Game Name].son (for example Sonic 1.son).


**Sonic CD**

For Sonic CD, you can use the files from the Android, iOS, or Steam versions, as well as the video files from the Steam version.

The APK can be extracted the same way. If you're using the Steam version, the `Data.rsdk` file is in the game's folder.

The `Data.rsdk` file and videos folder should be in a folder named `[Game Name].scd` (i.e. `roms/sonicretro/Sonic CD.scd/`).

**Working game data files**

Here are the checksums of some data files that have been reported to be working.

<table>
<thead>
<tr>
<th>Sonic game</th>
<th>Game file</th>
<th>md5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonic 1</td>
<td>Sonic 1.son/Data.rsdk</td>
<td>f679e87477bbed17ff1bdb9a6793f49c</td>
</tr>
<tr>
<td>Sonic 2</td>
<td>Sonic 2.son/Data.rsdk</td>
<td>b7339e7a4cf4ae6264449eec06465c7c</td>
</tr>
<tr>
<td>Sonic CD</td>
<td>Sonic CD.scd/Data.rsdk</td>
<td>78a03b962acf3e2622addab9cdb8e2ce</td>
</tr>
</tbody>
</table>

**Emulators**

Batocera will auto-select the port to use based on the folder's extension - `sonic2013/rsdk4` for `.son` folders, or `soniccd/rsdk3` for `.scd` folders.

Selecting the wrong emulator will be ignored as the two versions are not compatible. The options are slightly different between the two, so you may need to manually select the emulator to change them.

The dev menu option is needed to run mods.

**sonic2013**

**sonic2013 configuration**

Standardized features available to all cores of this emulator: `sonicretro.videomode`

<table>
<thead>
<tr>
<th>ES setting name</th>
<th>batocera.conf_key</th>
<th>Description ⇒ ES option key_value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settings that apply to all cores of this emulator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LANGUAGE sonicretro.language</td>
<td>Change the game language ⇒ English 0, French 1, Italian 2, German 3, Spanish 4, Japanese 5, Portugese 6, Russian 7, Korean 8, Chinese 9.</td>
<td></td>
</tr>
<tr>
<td>VSYNC sonicretro.vsync</td>
<td>Enable vertical sync ⇒ Off 0, On 1.</td>
<td></td>
</tr>
<tr>
<td>ES setting name batocera.conf_key</td>
<td>Description ⇒ ES option key_value</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| SCALING MODE sonicretro.scalingmode | Screen scaling options  
 ⇒ Nearest Neighbour 0, Integer Scale 1, Sharp Bilinear 2, Regular Bilinear 3. |
| HQ Mode sonicretro.hqmode | Enable High Quality effects for special stages  
 ⇒ Off 0, On 1. |
| SKIP START MENU sonicretro.skipstart | Bypass the pre-game menu  
 ⇒ Off 0, On 1. |
| DEV MENU sonicretro.devmenu | Modding and other advanced options  
 ⇒ Off 0, On 1. |

**soniccd**

**soniccd configuration**

Standardized features available to all cores of this emulator: sonicretro.videomode

<table>
<thead>
<tr>
<th>ES setting name batocera.conf_key</th>
<th>Description ⇒ ES option key_value</th>
</tr>
</thead>
</table>
| LANGUAGE sonicretro.language | Change the game language  
 ⇒ English 0, French 1, Italian 2, German 3, Spanish 4, Japanese 5. |
| VSYNC sonicretro.vsync |  
 ⇒ Off 0, On 1. |
| SCALING MODE sonicretro.scalingmode | Screen scaling options  
 ⇒ Nearest Neighbour 0, Integer Scale 1, Sharp Bilinear 2, Regular Bilinear 3. |
| HQ Mode sonicretro.hqmode | Enable high quality effects for special stages  
 ⇒ Off 0, On 1. |
| SPINDASH TYPE sonicretro.spindash | Spindash type  
 ⇒ By Save -1, Sonic 2 0, Sonic CD 1. |
| DEV MENU sonicretro.devmenu | For modding and other advanced options  
 ⇒ Off 0, On 1. |

**Controls**

Here are the default Sonic Retro Engine's controls shown on a Batocera Retropad:

![Controls]

**Troubleshooting**

**Further troubleshooting**

For further troubleshooting, refer to the generic support pages.