Nintendo Game & Watch

The Game & Watch is a series of self-contained handheld LCD games by 🔗 Nintendo, in which the first one was released all the way back on April 28, 1980. They are often seen as the precursor to the Game Boy/Color, although new Game & Watch games were still being released as late as 1991.

This system scrapes metadata for the "gameandwatch" group and loads the gameandwatch set from the currently selected theme, if available.

Grouped with the "lcdgames" group of systems.

Quick reference

> .mgb may also be supported, needs confirmation

- **Accepted ROM formats:** .mgw, .zip, .7z
- **Folder:** /userdata/roms/gameandwatch

Emulators	Accepted ROM formats
libretro: gw	.mgw, .zip, .7z
MAME	.zip, .7z

BIOS

No Game & Watch emulator in Batocera needs a BIOS file to run.

ROMs

Place your Game and Watch ROMs in /userdata/roms/gameandwatch.

Emulators

RetroArch

RetroArch (formerly SSNES), is a ubiquitous frontend that can run multiple "cores", which are essentially the emulators themselves. The most common cores use the libretro API, so that's why cores run in RetroArch in Batocera are referred to as "libretro: (core name)". RetroArch aims to unify

the feature set of all libretro cores and offer a universal, familiar interface independent of platform.

RetroArch configuration

RetroArch offers a **Quick Menu** accessed by pressing [HOTKEY] + ⊕ which can be used to alter various things like [RetroArch and core options](), and [controller mapping](). Most RetroArch related settings can be altered from Batocera's EmulationStation.

Standardized features available to all libretro cores: `gameandwatch.videomode`, `gameandwatch.ratio`, `gameandwatch.smooth`, `gameandwatch.shaders`, `gameandwatch.pixel_perfect`, `gameandwatch.decoration`, `gameandwatch.game_translation`

ES setting name `batocera.conf_key`	Description ⇒ ES option `key_value`
Settings that apply to all cores of this emulator	
GRAPHICS BACKEND `gameandwatch.gfxbackend`	Choose your graphics rendering ⇒ OpenGL `opengl`, Vulkan `vulkan`.
AUDIO LATENCY `gameandwatch.audio_latency`	Audio latency in milliseconds, turn it up if you hear crackles ⇒ 256 `256`, 192 `192`, 128 `128`, 64 `64`, 32 `32`, 16 `16`, 8 `8`.
THREADED VIDEO `gameandwatch.video_threaded`	Improves performance at the cost of latency and more video stuttering. Use only if full speed cannot be obtained otherwise. ⇒ On `true`, Off `false`.

libretro: gw

[gw-libretro]() is a simulator and not an emulator. This means that the games that can be played with it aren't actually the original games, but recreations of the games combined with the original artwork and an image of the handheld.

libretro: gw configuration

There are no specific configuration settings for this emulator.

MAME

[MAME](), the Multiple Arcade Machine Emulator, is a multi-purpose emulation framework which facilitates the emulation of vintage hardware and software. Originally targeting vintage arcade machines, MAME has since absorbed the sister-project [MESS]() (Multi Emulator Super System) to support a wide variety of vintage computers, video game consoles and calculators as well. MAME doesn't use an individual "core" for each system like RetroArch does, instead the ROM itself usually contains the necessary information to accurately emulate it, thus making it specific to the version of MAME it was made for. Overall it's a very complicated subject, we have a [guide specific to arcade]() just for it.

MAME configuration

MAME offers a **Menu** in-game ([HOTKEY] + or [Tab] on the keyboard). This can be used to manually adjust inputs or game settings. If you're having issues with a specific game, check the MAMEdev FAQ for that game here. For MESS systems specifically, you might find more information on MESS's wiki. All options can also be edited by opening the mame.ini file.

Standardized features available to all versions of this emulator: gameandwatch.videomode, gameandwatch.decoration, gameandwatch.padtokeyboard

ES setting name batocera.conf_key	Description ⇒ ES option key_value
Settings that apply to all versions of this emulator	
GRAPHICS BACKEND gameandwatch.video	Choose your graphics rendering ⇒ BGFX bgfx, Accel accel, OpenGL opengl.
BGFX BACKEND gameandwatch.bgfxbackend	Choose your graphics API ⇒ MAME Detect automatic, OpenGL opengl, OpenGL ES gles, Vulkan vulkan.
BGFX VIDEO FILTER gameandwatch.bgfxshaders	Apply a particular visual effect ⇒ Off None, Bilinear default, CRT Geom crt-geom, CRT Geom Deluxe crt-geom-deluxe, Super Eagle eagle, HLSL hlsl, HQ2X hq2x, HQ3X hq3x, HQ4X hq4x.
CRT SWITCHRES gameandwatch.switchres	CRT monitor SwitchRes support ⇒ Off 0, On 1.
TATE MODE gameandwatch.rotation	Rotating display to vertical mode rendering ⇒ Off None, Rotate 90 autoror, Rotate 270 autorol.
ALT DPAD MODE gameandwatch.altdpad	If the D-Pad does not work properly ⇒ Off (Default) 0, DS3 Orientation 1, X360 Orientation 2.

Controls

The inputs are game specific. Press START to get an overlay like the following example: