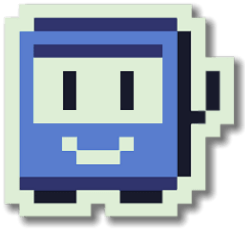
TIC-80



Very similar and inspired by Pico-8, TIC-80 is a fantasy console for playing tiny games inspired by the 8-bit consoles era. It has never been physically released, but runs as a software on computers like Windows / Mac / Linux and web browsers. The main difference between Pico-8 and TIC-80, besides the fantasy hardware constraints, is that TIC-80 is fully free and opensource, with its code available on Github. They also have a Pro version for faster development, if you like this project, please support them, it's well worth it.

Fantasy hardware constraints

- Display: 240×136 16 colors
- Cartridge: .tic file, max 64kB
- Sound: 4 channel chiptunes
- Code: Lua, Moonscript, Javascript, Wren or Fennel
- Sprites: 256 8×8 foreground sprites, and 256 8×8 background tiles

This system scrapes metadata for the “tic80” group and loads the `tic80` set from the currently selected theme, if available.

Quick reference

- **Emulator:** RetroArch
- **Core:** libretro: tic80
- **Folder:** `/userdata/roms/tic80`
- **Accepted ROM formats:** `.tic`

BIOS

No BIOS is required for TIC-80

ROMs

Place your TIC-80 ROMs in `/userdata/roms/tic80`.

"Cartridges" and games format

TIC-80 games are distributed as text files (mostly) with the code, sprites and sounds embedded in them. You can download hundreds of .tic games, music and programs from the TIC-80 official website.

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: `tic80.videomode`, `tic80.ratio`, `tic80.smooth`, `tic80.shaders`, `tic80.pixel_perfect`, `tic80.decoration`, `tic80.game_translation`

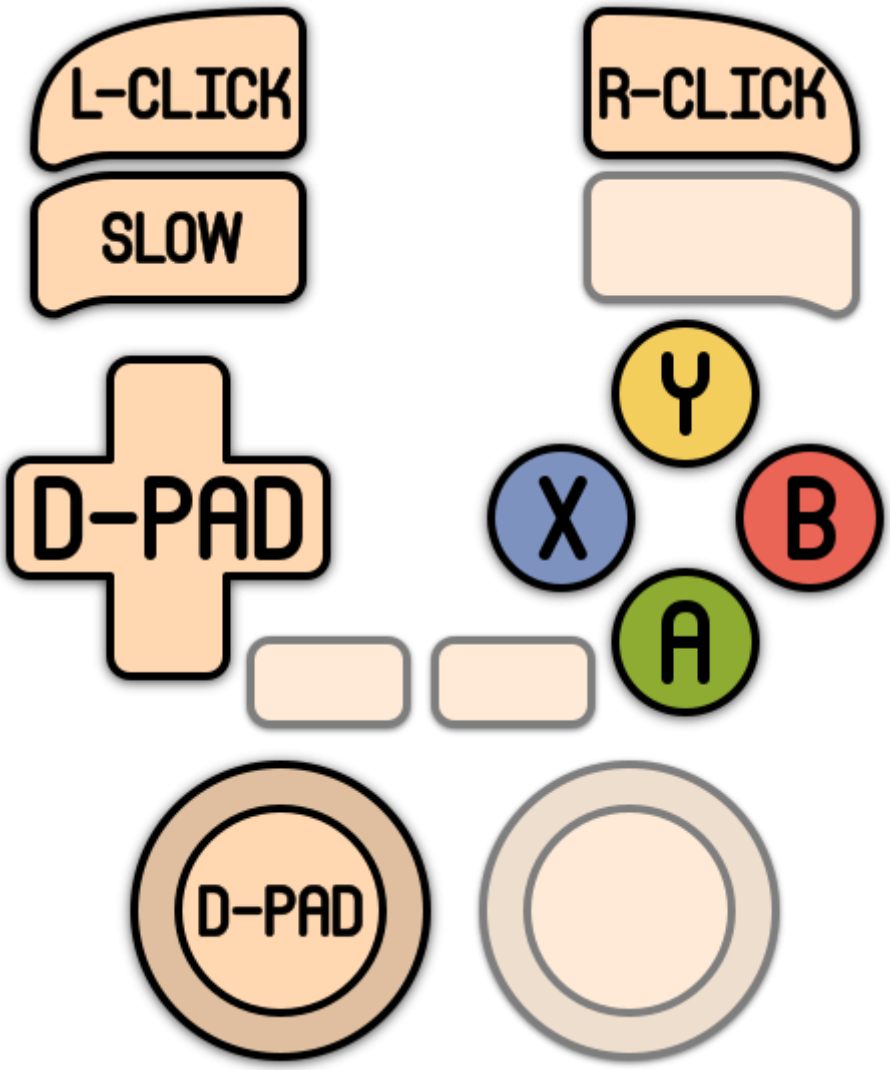
ES setting name `batocera.conf_key`	**Description ⇒ ES option `key_value`**
Settings that apply to all cores of this emulator	
GRAPHICS BACKEND `tic80.gfxbackend`	Choose your graphics rendering ⇒ OpenGL `opengl`, Vulkan `vulkan`.
AUDIO LATENCY `tic80.audio_latency`	Audio latency in milliseconds, turn it up if you hear crackles ⇒ 256 256, 192 192, 128 128, 64 64, 32 32, 16 16, 8 8.
THREADED VIDEO `tic80.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: tic80

libretro: tic80 configuration

Controls

Here are the default TIC-80's controls shown on a Batocera Retropad:



Troubleshooting

Further troubleshooting

For further troubleshooting, refer to the generic support pages.