

This article needs some TLC. Read at your own risk.



Electron

The Electron is a computer developed by Acorn Computers. It was released in 1983.

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



Quick reference

- **Accepted ROM formats:** .wav, .csw, .uef, .mfi, .dfi, .hfe, .mfm, .td0, .imd, .d77, .d88, .ldd, .cqm, .cqi, .dsk, .ssd, .bbc, .img, .dsd, .adf, .ads, .adm, .adl, .rom, .bin, .zip, .7z
- **Folder:** /userdata/roms/electron

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BIOS

MAME and libretro-mess require the following BIOS files:

MD5 checksum	Share file path	Description
4688a93aa298b9431c1788c9b90378c8	bios/electron.zip	
2cc67be4624df4dc66617742571a8e3d	bios/electron64.zip	
df01cfe5894276de96bbd1c45b7e834c	bios/electron64.zip	
f3a39227b401a2ce8cdc7e4b7a860aaf	bios/electron_plus1.zip	
9aa334b4e8f6d7565e6323e0f77110de	bios/electron_plus3.zip	
83e15ca501899b0d5b2ce3f5ef696069	bios/electron_plus3.zip	
b60ee811f4b805638478acd5297b16e0	bios/electron_plus3.zip	
62f5e1d3dae3a68d8fe4406a6f603dc3	bios/electron_plus3.zip	
5c39baa89fe8a40a5167a53cc5ae7791	bios/electron_plus3.zip	

CLK requires the following BIOS files:

MD5 checksum	Share file path	Description
2cc67be4624df4dc66617742571a8e3d	bios/Electron/basic.rom	Acorn BASIC II ROM

MD5 checksum	Share file path	Description
b1707bd3132f6d791c9530dad623e7c6	bios/Electron/os.rom	Electron MOS ROM v1.00

ROMs

Place your Electron ROMs in /userdata/roms/electron.

Requires MAME BIOS files electron.zip, electron64.zip, electron_plus1.zip, electron_plus3.zip Using software list mode (cassette) is recommended. Tapes should auto-load, use the MAME menu to stop/play/rewind if needed.

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: electron.videomode, electron.videomode, electron.ratio, electron.shaderset, electron.smooth, electron.integerscale, electron.bezel, electron.bezel_stretch, electron.hud, electron.bezel.tattoo, electron.bezel.tattoo_corner, electron.bezel.tattoo_file, electron.bezel.resize_tattoo, electron.ai_service_enabled, electron.ai_target_lang, electron.ai_service_url, electron.ai_service_pause, electron.runahead, electron.secondinstance, electron.video_frame_delay_auto, electron.vrr_runloop_enable, electron.video_threaded

ES setting name batocera.conf_key	Description ⇒ ES option key_value
Settings that apply to all cores of this emulator	
GRAPHICS API electron.gfxbackend	Choose which graphics API library to use. Vulkan may not work for every core. ⇒ OpenGL gl, GLCore glcore, Vulkan vulkan.
AUDIO LATENCY electron.audio_latency	In milliseconds. Can reduce crackling/cutting out. ⇒ 256 256, 192 192, 128 128, 64 64, 32 32, 16 16, 8 8.

ES setting name batocera.conf_key	Description ⇒ ES option key_value
ALLOW ROTATION electron.video_allow_rotate	Allow cores to set rotation. ⇒ On true, Off false.
CONTROLLER TO LIGHTGUN electron.lightgun_map	Map controller inputs to lightgun inputs ⇒ On true, Off false.

libretro: mess

libretro: mess configuration

Standardized features for this core: electron.autosave, electron.netplay, electron.padtokeyboard

ES setting name batocera.conf_key	Description ⇒ ES option key_value
Settings that apply to all systems this core supports	
OVERCLOCK (UNSTABLE) global.mame_cpu overclock	Enhancement. Reduces system slowdown. Causes issues in some games. ⇒ default default, 30 30, 35 35, 40 40, 45 45, 50 50, 55 55, 60 60, 65 65, 70 70, 75 75, 80 80, 85 85, 90 90, 95 95, 100 100, 105 105, 110 110, 115 115, 120 120, 125 125, 130 130, 135 135, 140 140, 145 145, 150 150.
RENDERING RESOLUTION global.mame_altres	Enhancement. Increase the rendering resolution. Makes 3D objects clearer. ⇒ 640×480 640×480, 800×600 800×600, 960×720 960×720, 1024×768 1024×768, 1280×720 1280×720, 1600×800 1600×800, 1920×1080 1920×1080, 2560×1440 2560×1440, 3840×2160 3840×2160.
SHARE MAME ARTWORK global.sharemameart	Use the same art paths as standalone MAME - not recommended if using decorations or shaders. ⇒ On (Default) 1, Off 0.
CROP ARTWORK global.artworkcrop	Crop MAME artwork to maximize the game screen and only fill unused space. ⇒ On (Default) 1, Off 0.
CUSTOM MAME CONFIG global.customcfg	Set system-wide controls via MAME menu ⇒ On 1, Off 0.
ALT DPAD MODE global.altdpad	If the D-Pad is oriented incorrectly for your controller. ⇒ Off (Default) 0, DS3 Orientation 1, X360 Orientation 2.
Settings specific to electron	
SOFTWARE LIST electron.softList	Use MAME software lists to identify ROM ⇒ Don't Use (Default) none, Acorn Electron Disks electron_flop, Acorn Electron Cassettes electron_cass, Acorn Electron Cartridges electron_cart, Acron Electron ROMs electron_rom.
ELECTRON MODEL electron.altmodel	Select model to emulate ⇒ Electron w/64k Master RAM Board (default) electron64, Electron electron.

ES setting name batocera.conf_key	Description ⇒ ES option key_value
UI KEYS electron.enablelui	Toggle with hotkey + D-pad up or Scroll Lock in-game. ⇒ Off at Start 0, On at Start 1.
CUSTOM GAME CONFIG electron.pergamecfg	Enable per-game custom configuration via MAME menu. ⇒ On 1, Off 0.

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: electron.videomode, electron.padtokeyboard, electron.videomode, electron.bezel, electron.bezel_stretch, electron.hud, electron.bezel.tattoo, electron.bezel.tattoo_corner, electron.bezel.tattoo_file, electron.bezel.resize_tattoo

ES setting name batocera.conf_key	Description ⇒ ES option key_value
Settings that apply to all versions of this emulator	
VIDEO MODE electron.video	BGFX for post-processing, accel/opengl for raw image. ⇒ BGFX bgfx, Accel accel, OpenGL opengl.
BGFX GRAPHICS API electron.bgfxbackend	Depends on video mode being set to BGFX. Vulkan is better, when supported. ⇒ MAME Detect automatic, OpenGL opengl, OpenGL ES gles, Vulkan vulkan.
BGFX VIDEO FILTER electron.bgfxshaders	Apply a post-processing effect. ⇒ Off None, Bilinear default, CRT Geom crt-geom, CRT Geom Deluxe crt-geom-deluxe, CRT Geom Deluxe (RGB) crt-geom-deluxe-rgb, CRT Geom Deluxe (Composite) crt-geom-deluxe-composite, Super Eagle eagle, HLSL hlsl, HQ2X hq2x, HQ3X hq3x, HQ4X hq4x.
CRT SWITCHRES electron.switchres	Allows the use of switchres profiles if present. ⇒ Off 0, On 1.

ES setting name batocera.conf_key	Description ⇒ ES option key_value
VERTICAL ROTATION (TATE) electron.rotation	Rotates screen by 90 degrees. Intended for rotating displays. ⇒ Off None, Rotate 90 autoror, Rotate 270 autorol.
ARTWORK CROP electron.artworkcrop	Crop artwork to only unused space, keeping the game as large as possible. ⇒ Off (Default) 0, On 1.
ALT DPAD MODE electron.altdpad	If the D-Pad is oriented incorrectly for your controller. ⇒ Off (Default) 0, DS3 Orientation 1, X360 Orientation 2.
CUSTOM MAME CONFIG electron.customcfg	Set system-wide controls via MAME menu ⇒ On 1, Off 0.
DATA PLUGIN electron.dataplugin	Make game history, setup instructions, and special moves viewable in the menu ⇒ Enabled 1, Disabled (Default) 0.
Settings specific to electron	
SOFTWARE LIST electron.softList	Use MAME software lists to identify ROM ⇒ Don't Use (Default) none, Acorn Electron Disks electron_flop, Acorn Electron Cassettes electron_cass, Acorn Electron Cartridges electron_cart, Acron Electron ROMs electron_rom.
ELECTRON MODEL electron.altmodel	Select model to emulate ⇒ Electron w/64k Master RAM Board (default) electron64, Electron electron.
UI KEYS electron.enableui	Toggle with hotkey + D-pad up or Scroll Lock in-game. ⇒ Off at Start 0, On at Start 1.
CUSTOM GAME CONFIG electron.pergamecfg	Enable per-game custom configuration via MAME menu. ⇒ On 1, Off 0.

CLK

[CLK aka Clock Signal](#) is a multi-system emulator that is focused on low-latency emulation, that can be used for Electron. CLK has been added to Batocera 42.

Controls

Here are the default Electron's controls shown on a [Batocera RetroPad](#):



Troubleshooting

Further troubleshooting

For further troubleshooting, refer to the [generic support pages](#).

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