Sega AI Computer

The Sega AI Computer (セガ AIコンピュータ) is an educational home computer released by Sega in 1986, exclusively in Japan. It was Sega's second home computer and one of the company's rarest systems, with only approximately 5,000 units ever sold, primarily through mail-order and direct sales. A planned North American release under the name “Sega DI 8300” was cancelled.

The “AI” in the name refers to the system's built-in implementation of **Prolog**, a logic programming language closely associated with artificial intelligence research in the 1980s (it was the language chosen for Japan's Fifth Generation Computer Project). The system ran “Sega Prolog”, a scaled-down version of the language, and was marketed as “the first computer with AI capabilities” for consumers.

The system features a NEC V20 CPU (16-bit, x86-compatible) at 5 MHz, 128 KB RAM, and a Yamaha V9938 video chip (the same as the MSX2). Sound is provided by a SN76489 PSG, the same chip used in the SG-1000 and Master System.

The system's defining feature is a large rectangular **touchpad** with interchangeable paper overlays. Each software title came bundled with custom overlays that provided context-specific buttons and interactive areas, transforming the input device for each application. The system also includes a microphone input and optional keyboard and Sound Box peripherals.

Software was distributed on **Sega My Cards** (.bin, 128-256 KB — the same card format used by the SG-1000 and Master System) and **audio cassette tapes** (.wav, .flac, .cas). 22 known titles were released between 1986-1989, all educational in nature, covering subjects from music and English to geography and creative writing.

The system was preserved in 2014 by the SMS Power team and first emulated in MAME in January 2024.

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

Quick reference

- **Emulator:** MAME, RetroArch
- **Core:** libretro: MAME
- **Folder:** `/userdata/roms/segaai`
- **Accepted ROM formats:** `.bin`, `.wav`, `.flac`, `.cas`, `.zip`, `.7z`

BIOS

MD5 checksum	Share file path	Description
	`bios/segaai.zip`	Sega AI Computer BIOS ROM set

The `segaai.zip` BIOS file must match the version of MAME used in your version of Batocera. The zip contains the system ROMs: 2×64 KB system/Prolog OS, 1×128 KB character ROM, and 2×128 KB speech ROM. You can verify your BIOS files from the Batocera menu: **GAME SETTINGS > MISSING BIOS CHECK**.

ROMs

Place your Sega AI Computer ROMs in `/userdata/roms/segaai`.

Software comes in two formats:

- **Sega My Cards** (.bin) — 128-256 KB cartridge dumps, the same card format as the SG-1000 and Master System
- **Cassette tapes** (.wav, .flac, .cas) — audio tape dumps, recorded at 9.6 kb/s FSK modulation (very fast for the era)

Emulators

MAME

MAME (Multiple Arcade Machine Emulator) is currently the only emulator that supports the Sega AI Computer. A working driver was created in January 2024 in collaboration between the SMS Power preservation team and MAME developers.

The MAME driver supports most standard inputs. The touchpad overlay system is emulated via mouse/pointer input.

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.

libretro: MAME

The libretro version of MAME can be used to emulate the Sega AI Computer. It uses the same BIOS and ROM sets as the standalone version.

Controls

The original Sega AI Computer used a large rectangular **touchpad** with interchangeable paper overlays as its primary input method, along with an 8-direction pad and 3 buttons. A mouse can be used to simulate the touchpad input in emulation.

The system also featured a **microphone** input used in some educational software.

See also

- Sega SG-1000 — shares the SN76489 sound chip and My Card format
- Sega Master System — shares the SN76489 sound chip and My Card format
- Sega Pico — later Sega educational console
- Advanced Pico Beena — successor to the Sega Pico

Troubleshooting

Black screen on boot

Make sure the correct BIOS file (`segaai.zip`) is in `/userdata/bios/` and matches the MAME version used in Batocera. Use **GAME SETTINGS > MISSING BIOS CHECK** to verify.

Cassette software won't load

Cassette tape emulation may have limited compatibility. If a cassette image (.wav, .flac, .cas) doesn't load, try a different format of the same tape dump. My Card (.bin) software generally has better compatibility.

Further troubleshooting

For further troubleshooting, refer to the generic support pages.