

Sharp MZ-80K

The 🇯🇵 [Sharp MZ-80K](#) is a home computer manufactured by 🇯🇵 [Sharp](#), released in 1978 in Japan and introduced to Europe in 1979. It was one of Sharp's first personal computers and a founding member of the long-running MZ series.

The MZ-80K features a Sharp LH0080A CPU (🇯🇵 [Z80A](#)-compatible) running at 2 MHz, 48 KB RAM (approximately 32 KB usable), and an all-in-one design integrating a monochrome CRT monitor, a 40×25 character text display, a keyboard, and a built-in cassette tape recorder. Graphics are character-based only — preset shapes and icons via a character generator ROM, with no native high-resolution pixel-addressable graphics.

The MZ-80K's most distinctive feature is its **“clean computer” philosophy** — the ROM contains only the **SP-1002 monitor program** for basic I/O and cassette loading, with **no built-in BASIC or operating system**. Users had to load their chosen programming language from cassette tape before doing anything. This approach invited third-party development — companies like 🇯🇵 [Hudson Soft](#) produced multiple languages and operating systems for the platform, and users could choose from various BASIC interpreters, Pascal, FORTRAN, and assembly language tools.

Models in this family:

- **MZ-80K** (1978) — original model, sold as a kit in Japan
- **MZ-80K2** — factory-assembled version
- **MZ-80K2E** — lower-cost variant
- **MZ-80C** — improved keyboard, 48 KB memory
- **MZ-80A / MZ-1200** (1982) — upgraded successor with improved keyboard and green-screen CRT

The MZ-80K is the ancestor of the entire Sharp MZ family. Other MZ systems in Batocera include [MZ-700](#), [MZ-800](#), [MZ-2000](#), and [MZ-2500](#). The [MZ-700](#) (1982) was the direct successor and is “more-or-less fully compatible” with MZ-80K software.

This system scrapes metadata for the “mz80k” group(s) and loads the mz80k set from the currently selected theme, if available.



Quick reference

- **Emulator:** [MAME](#), [RetroArch](#)
- **Core:** [MAME](#), [libretro: MAME](#)
- **Folder:** /userdata/roms/mz80k
- **Accepted ROM formats:** .mzf, .mzt, .m12, .wav, .zip, .7z

BIOS

MD5 checksum	Share file path	Description
	bios/mz80k.zip	Character generator ROMs (80kcg.rom, 80kcgf.rom)
	bios/mz80kj.zip	System program SP-1002 monitor ROM + floppy disk interface ROM

Both BIOS files must match the version of MAME used in your version of Batocera. You can verify your BIOS files from the Batocera menu: **GAME SETTINGS > MISSING BIOS CHECK**.

ROMs

Place your Sharp MZ-80K ROMs in /userdata/roms/mz80k.

Software was distributed on cassette tapes. The supported file formats are:

- .mzf, .mzt — MZ tape image files (the most common format)
- .m12 — MZ-1200/MZ-80A tape format
- .wav — raw cassette audio recordings

Using MAME's software list mode is recommended for best compatibility with verified software.

Emulators

MAME

[MAME](#) (Multiple Arcade Machine Emulator) is the primary emulator for the MZ-80K in Batocera. MAME supports the MZ-80K and its variants through the `mz80k` driver family.

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 MZ-80K. It uses the same BIOS and ROM sets as the standalone version.

Controls

The Sharp MZ-80K is a computer system that uses a **keyboard** for input. A physical USB keyboard is strongly recommended.

The original MZ-80K had a non-standard keyboard layout that was widely described as “difficult to use”. Key mapping in MAME may differ from what you expect.

See also

- [Sharp MZ-700](#) — direct successor (1982), adds color graphics, mostly compatible with MZ-80K software
- [Sharp MZ-800](#) — adds 640×200 graphics and SN76489 sound (1983)
- [Sharp MZ-2000](#) — business-oriented MZ (1982)
- [Sharp MZ-2500](#) — most powerful 8-bit MZ, Z80B at 6 MHz (1985)
- [Sharp X1](#) — Sharp's competing computer line from the television division

Troubleshooting

Black screen on boot

Make sure both BIOS files (mz80k.zip and mz80kj.zip) are in /userdata/bios/ and match the MAME version. Use **GAME SETTINGS > MISSING BIOS CHECK** to verify.

Software won't load from cassette

The MZ-80K has no built-in BASIC — the SP-1002 monitor loads software from cassette. If a program requires a specific BASIC interpreter, it must be loaded first. Many software distributions include the required language on the same tape.

Further troubleshooting

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

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