Amstrad PCW

The Amstrad PCW (Personal Computer Word Processor) is a series of personal computers launched in September 1985 by Amstrad, the UK electronics company founded by Alan Sugar. It was designed as a dedicated, affordable word processing solution — a complete system with monitor, computer, printer, and software all in one box.

The PCW features a Z80A CPU at 4 MHz, 256-512 KB RAM, a built-in monochrome CRT monitor (720×256 pixels, 90×32 text), and a bundled printer. It runs CP/M Plus (CP/M 3.1) loaded from floppy disk, and comes with **LocoScript** — the bundled word processor that was the system's killer app. For many users, LocoScript was the entire reason to own a PCW. The system has no dedicated sound chip (internal beeper only).

Sugar identified a massive untapped market: millions of people who needed word processing but found existing PCs too expensive and complicated. The original PCW8256 launched at **GBP 399** including printer — undercutting both dedicated word processors and IBM PC clones.

Models:

- **PCW8256** (1985) — 256 KB RAM, single 3-inch CF2 floppy, dot-matrix printer, green-screen monitor
- **PCW8512** (1986) — 512 KB RAM, dual 3-inch CF2 floppies
- **PCW9512** (1987) — 512 KB RAM, 3.5-inch floppy (720 KB), daisywheel printer for letter-quality output

Amstrad sold over **8 million PCW units**, making it one of the best-selling computer lines in European history. It was particularly popular with writers, journalists, small businesses, and students. Despite being a word processor, a small games scene existed — developers found creative ways to work within the monochrome, beeper-only constraints.

The PCW and Amstrad CPC are entirely different architectures despite both being Amstrad Z80 machines. They share no software compatibility.

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



Quick reference

- **Emulator:** MAME, RetroArch
- **Core:** MAME, libretro: MAME
- **Folder:** `/userdata/roms/pcw`
- **Accepted ROM formats:** `.dsk`, `.mfi`, `.dfi`, `.mfm`, `.td0`, `.imd`, `.86f`, `.d77`, `.d88`, `.1dd`, `.cqm`, `.cqi`, `.zip`, `.7z`

BIOS

MD5 checksum	Share file path	Description
a846b928562ca8281bc279f41b475a06	bios/pcw8256.zip → 40026.ic701	PCW8256 ROM IC701
cefe4b0b7c701c1a80130e3390b007f5	bios/pcw8256.zip → 40027.ic801	PCW8256 ROM IC801
b664af93987d575b0248832832c61505	bios/pcw9512.zip → 40103.ic109	PCW9512 ROM IC109

`pcw8256.zip` is required for all PCW8256/8512 emulation. `pcw9512.zip` is additionally required for PCW9512 emulation. The BIOS files must match the MAME version used in Batocera. You can verify your BIOS files from the Batocera menu: **GAME SETTINGS > MISSING BIOS CHECK**.

ROMs

Place your Amstrad PCW ROMs in `/userdata/roms/pcw`.

Software was distributed on floppy disks — 3-inch CF2 format on the PCW8256/8512 and 3.5-inch on the PCW9512. The most common ROM format is `.dsk` (disk image). Most games are self-booting and don't require a separate system disk.

Emulators

MAME

MAME (Multiple Arcade Machine Emulator) is the primary emulator for the Amstrad PCW in Batocera. MAME supports the PCW8256, PCW8512, and PCW9512 models.

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 Amstrad PCW. It uses the same BIOS and ROM sets as the standalone version.

Controls

The Amstrad PCW is a computer system with a full-size **keyboard** and numeric keypad. A physical USB keyboard is strongly recommended.

See also

- Amstrad CPC — Amstrad's home/gaming computer (different architecture, not compatible)

Troubleshooting

Black screen on boot

Make sure the correct BIOS file (`pcw8256.zip` or `pcw9512.zip`) is in `/userdata/bios/` and matches the MAME version. Use **GAME SETTINGS > MISSING BIOS CHECK** to verify.

Game requires CP/M

Most PCW games are self-booting from floppy disk. If a game requires CP/M Plus, you need a CP/M system disk image loaded as the boot disk.

Further troubleshooting

For further troubleshooting, refer to the generic support pages.

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