

MB Vectrex

As the console that brought the arcade into the living room, the **MB Vectrex** still has devotees.

Back in the early 80s, the Vectrex broke the mould of games consoles by not requiring a TV set. A standalone black unit with built-in monitor, it could justifiably be described in appearance as the anti-Macintosh – except that Apple was at least one year away from launching its all-in-one.

The Vectrex story starts back in early 1981, as a project to fit a load of small CRTs found in a liquidator's surplus store into a table-top home console called the mini-arcade. Jay Smith and his team at Western Electronics/Smith Engineering developed the concept further into a product licensed by General Consumer Electronics (GCE). The original 5in tube was replaced by a 9in model and an upright case was designed. Complete with a swish new name, the Vectrex was unveiled to the public at the Summer 1982 Consumer Electronics Show and was later available in the US for \$199. In spring 1983, GCE was acquired by board games giant Milton Bradley (MB), which later distributed the Vectrex across Europe (£150 in the UK).

The Vectrex was unique, not only for its built-in portrait aspect 9x11in monitor, but because it employed vector display technology. Similar to the tubes used in early oscilloscopes, the display could draw perfectly straight bright lines which didn't suffer from the stepped pixel appearance of raster-based systems. It was, in fact, the same technology used by the coin-op arcade classics Asteroids, Tempest and Star Wars. Like Asteroids, the Vectrex display was mono, so its game designers supplied clip-on coloured acetate overlays, delivering an effect not dissimilar to the original Space Invaders coin-op.

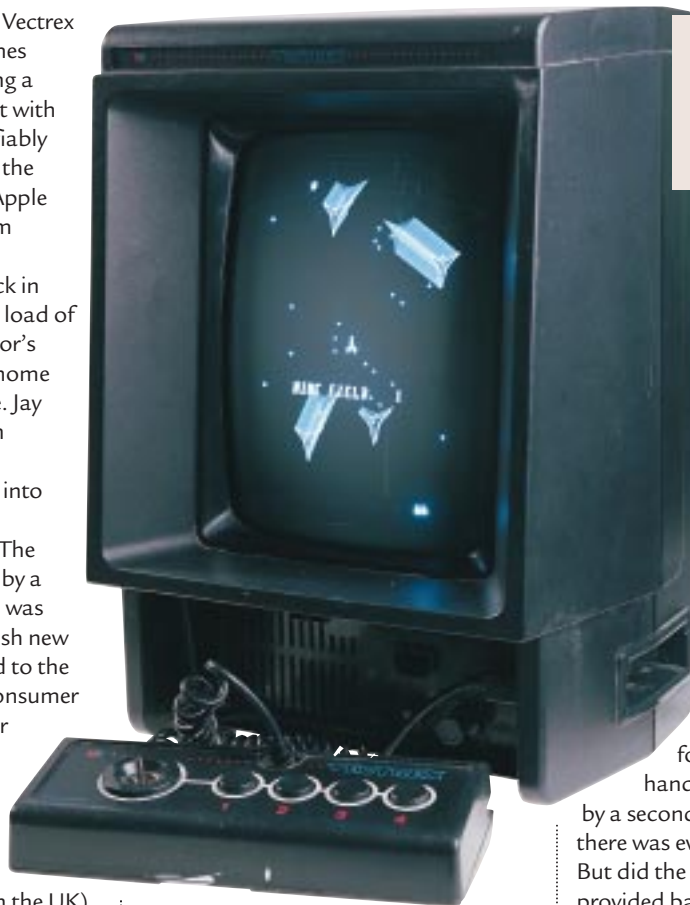
Atari may have owned the Asteroids brand and written a half-decent version for its VCS console, but it was down to GCE to produce the definitive home clone. Thanks to the same unique display

technology as the arcade coin-op, Vectrex Minestorm remains the most authentic home version of Asteroids today. Minestorm was actually built into the machine, although a bug that prevented early copies from progressing beyond Wave 13 was the driving force behind the Minestorm II cartridge.

The vector-based Tempest arcade coin-op was flipped back

to front and converted into the Vectrex classic Bedlam. Scramble and Berserk were licensed into highly playable conversions. The original Spike game (despite inspiration from Donkey Kong) even featured basic speech synthesis: 'Eek, help Spike!' and 'Oh no, Molly!' stunned many impressionable teenagers. Minestorm aside, the greatest Vectrex game borrowed the best bits of the Tempest and Star Wars coin-ops, resulting in the amazing 3D WebWarp.

The Vectrex started as a project to fit a load of small CRTs into a table-top home console



◀ **MB VECTREX: ITS LOYAL BAND OF FOLLOWERS WERE IN LOVE WITH ITS VECTOR-BASED TECHNOLOGY AND COIN-OP STANDARDS OF GAMING**

Powering the Vectrex was a 1.6MHz version of the Motorola 6809, called the 68A09, backed up by General Instruments' AY-3-8192 3-tone generator sound chip. Common subroutines and instructions were stored in an 8K x 8-bit 2363 ROM, while a pair of 1K x 4-bit 2114 static RAMs supplied storage during gameplay. Most games cartridges measured 4K, apart from a few rarities which included Spike at 8K.

The standard four-button analogue joystick handset could be complemented by a second for two-player games, and there was even a commercial light pen. But did the legendary 3D glasses, which provided basic colour support, ever make it out of the trade shows? Like ColecoVision's Adam, Vectrex even had a computer keyboard add-on – well, a good rumour of one anyway.

Sadly, in 1984, the Vectrex was discontinued as home computers took over. Its story doesn't end quite there though. In 1988, Western Technologies and Smith Engineering were rumoured to attempt a handheld Vectrex resurrection using the Sinclair pocket flat TV; Nintendo's Gameboy in 1989 scuppered that plan.

Like most classic consoles, however, the Vectrex lives on over the Internet. There's an excellent PC emulator and even development of new games, led primarily by John Dondzila with his Vector Vaders, a long overdue Space Invader clone. As the MB poster campaign used to state: 'If you think you've mastered video games, we have some bad news for you.'

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