

ZX SPECTRUM 48k

NAME	ZX SPECTRUM
MANUFACTURER	Sinclair
TYPE	Home Computer
ORIGIN	United Kingdom
YEAR	April 1982
END OF PRODUCTION	1984
BUILT IN LANGUAGE	Sinclair Basic
KEYBOARD	QWERTY rubber keyboard (40 keys) with up to 6 functions by keys !
CPU	Zilog Z80 A
SPEED	3.5 MHz
RAM	16k or 48k (42k left for programming)
ROM	16k (Basic & OS)
TEXT MODES	32 x 24
GRAPHIC MODES	256 x 192
COLORS	8 with two tones each (normal and bright)
SOUND	1 voice / 10 octaves (Beeper)
SIZE / WEIGHT	23 x 14,4 x 3 cm / 550g
I/O PORTS	Expansion port, tape-recorder (1200 bauds), RF video out
POWER SUPPLY	External PSU, 9v DC, 1.4A (centre polarity = -ve)
PERIPHERALS	ZX printer, ZX microdrives
PRICE	16k: 282 € (France, 1983) - 48k: 365 € (France, 1983) 16k: £99 (U.K. 1984) - 48k: £125 (U.K. 1984)

The **ZX Spectrum** ([UK: /zɛd ɛks/](#)) is an [8-bit home computer](#) that was developed by [Sinclair Research](#). It was released in the United Kingdom on 23 April 1982, and became Britain's best-selling [microcomputer](#).^{[5][6]}

Referred to during development as the *ZX81 Colour* and ZX82, it was launched as the *ZX Spectrum* to highlight the machine's colour display, which differed from the black and white display of its predecessor, the [ZX81](#).^[7] The Spectrum was released as six different models, ranging from the entry level with 16 [KB](#) RAM released in 1982 to the ZX Spectrum +3 with 128 KB RAM and built in [floppy disk](#) drive in 1987; altogether they sold over 5 million units worldwide (not counting [unofficial clones](#)).

The Sinclair ZX Spectrum was one of the most popular European computers of the 80's. Two models were launched: one with 16 kb RAM and one with 48 kb RAM. One of its most "interesting" characteristics is its keyboard! Some keys have more than five (!) functions! It is impossible to type BASIC keywords letter by letter, instead you have to use function keys. A lot of peripherals and programs were developed for this computer. It seems that several models of this computers were launched (at least 3), but I've no technical details about them. It was replaced in 1984 by the Spectrum + and in 1985 by the [Spectrum 128](#).

Alan Wilson reports: "The 16K version of the computer had only the 16K ram chips loaded, while the 48K version had both banks full. To keep the prices down Sinclair used faulty 64K chips (internally 2 X 32K). All the chips in the 32K bank of RAM had to have the same half of the 64K chips working. A link was fitted on the pcb in order to choose the first half or the second half. It was possible with a few logic chips for the experimenter to have access to the faulty 32K bank."

References:

Sinclair ZX Spectrum 48K – The Centre for Computing History:

<https://www.computinghistory.org.uk/det/424/sinclair-zx-spectrum-48k/ZX>

Spectrum 48K – Spectrum Computing:

https://spectrumcomputing.co.uk/entry/1000486/Hardware/ZX_Spectrum_48K

Reliving the Sinclair ZX Spectrum – BCS, The Chartered Institute for IT:

<https://www.bcs.org/articles-opinion-and-research/reliving-the-sinclair-zx-spectrum/>