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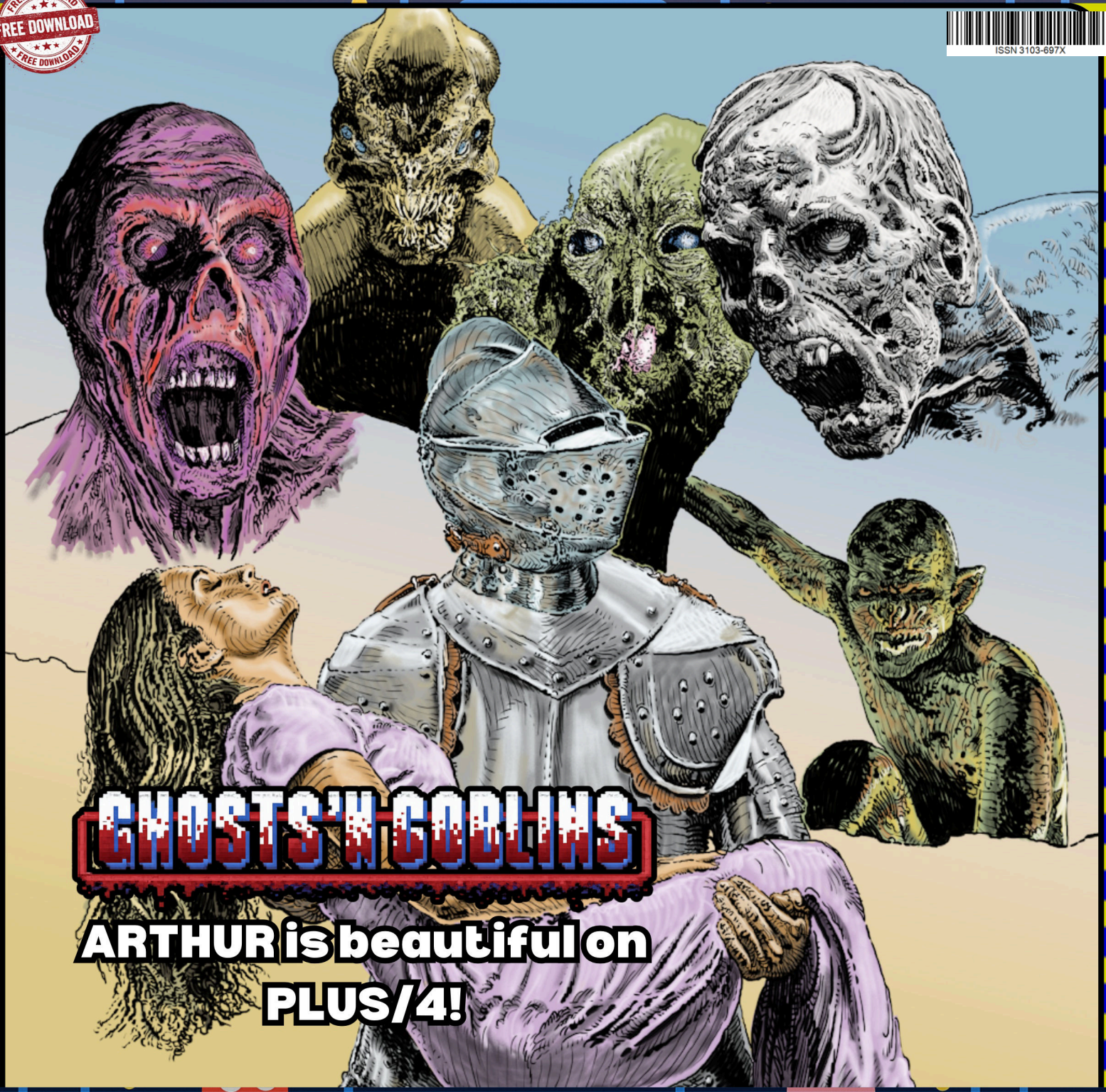
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GHOSTS'N GOBLINS

ARTHUR is beautiful on PLUS/4!



- TI-99/8: Chronicle of a Missed Future
- Commodore 64 Ultimate: The Review
- UNOCART+, the multicart for Atari 2600/7800+
- Amstrad CPC - Let's Play with Images!
- PTSource... More Than "Another DOS"
- Interview with Domenico Marsico - @EMD69

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If this is a dream, don't wake me up!

We are living in an extraordinary time for those who love retrocomputing. An era that, just a few years ago, would have seemed impossible to imagine. Thanks to modern technology, today we can rediscover and fully experience the machines of the 80s and 90s: not only through the original hardware, but also thanks to software and hardware emulators that are increasingly faithful, accurate, and respectful of the spirit of the historic platforms. Computers, consoles, operating systems, peripherals: everything is at our fingertips, often with a simplicity that we could only have dreamed of in the past.

And we're not just talking about video games. An impressive amount of software is now available online: educational programs, business applications, professional tools, management software, graphics software, music software, and writing software. A cultural heritage that was in danger of being lost and is now being recovered, archived, studied, and shared by a passionate and knowledgeable community. Every now and then, real gems emerge. Forgotten software, little-known projects, solutions that were surprising for the era in which they were created. This is the case with Microtext, which we review in this issue: a concrete example of how much there is still to discover, understand, and appreciate. Each discovery reminds us that the history of computing has not yet been fully told.

At the same time, we are witnessing a new creative flowering. Hardware and software projects are constantly emerging: expansions, FPGA boards, modernized systems, new applications, new games, development tools. All this thanks to an ever-growing audience of enthusiasts who, out of pure passion, devote their time, skills, and creativity to keeping this world alive. Retrocomputing is no longer just nostalgia. It is experimentation, study, sharing, personal growth. It is an open laboratory where the past dialogues with the present. Sometimes it really feels like living a second youth. An era in which everything is accessible, in which technical barriers are lowered, in which anyone who is curious can learn, build, program, create. A time when everything seems possible.

If it's a dream, don't wake me up. If, on the other hand, as it seems, this is reality, then I can only say thank you. Thank you to those who preserve archives, write emulators, restore hardware, document, translate manuals, develop new projects, and share knowledge. Thank you to those who dedicate part of their lives to making this heritage available to everyone.

Long live retrocomputing. And long live the child in all of us. The one who continues, even today, to try to be helpful, to aid others, to build something beautiful starting from passion. Because, after all, we are not just preserving machines and software, we are preserving our future!

Francesco Fiorentini

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- Cover image:
  Giuseppe Mangini
- Cover layout:
  Carlo N. Del Mar Pirazzini

Atari 2600+: the review

The Atari 2600+ Pac-Man Edition: the perfect surprise for retrogame lovers

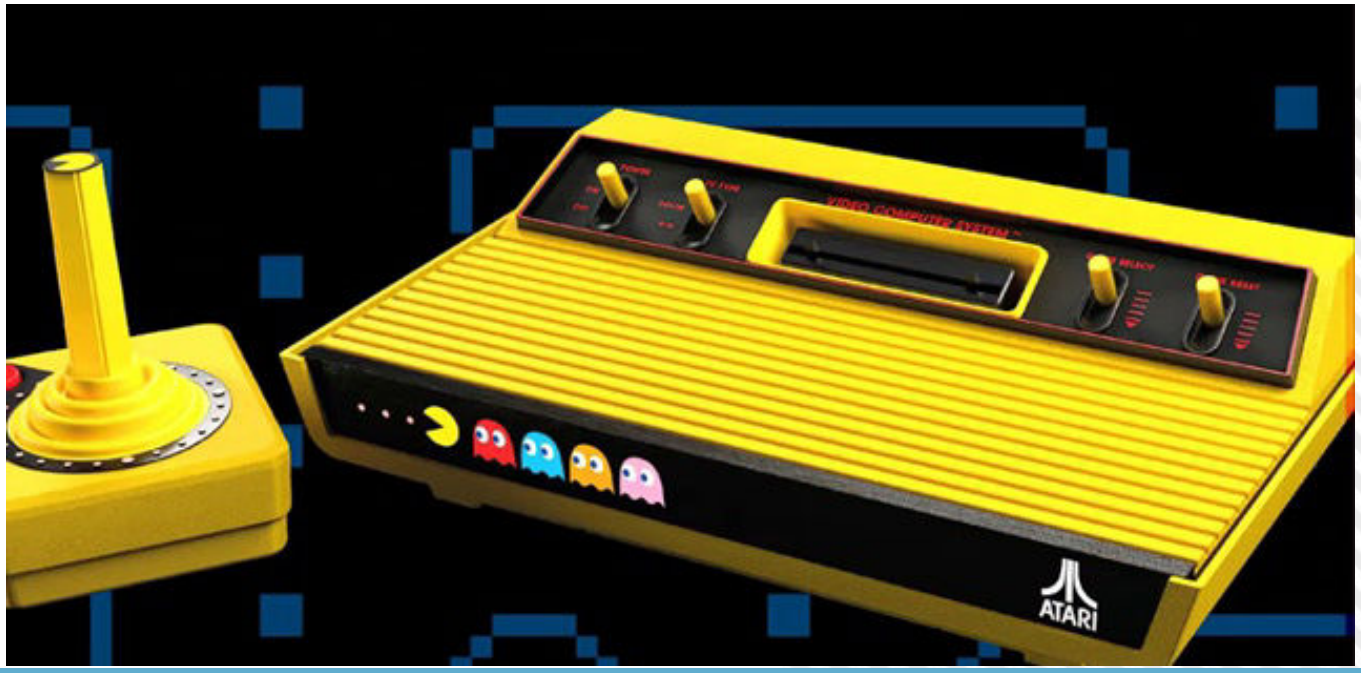
by Carlo Nithaiah Del Mar Pirazzini

The all-yellow Pac-Man 2600 Plus console is quite small, especially when compared to the massive modern consoles. Although it is lightweight, the construction is solid and sturdy. There are four large toggle switches on the sides of the cartridge slot, which are pleasant to use. While Atari's standard model 2600 Plus console features a beautiful late-70s wood finish, the Pac-Man Edition, available for pre-order now and arriving in late November, has a distinctly 80s vibe, with bright yellow panels that create a stark contrast to the black trim. Best of all, the front illustration of Pac-Man and the four ghosts light up when the console is turned on. It's a classy touch that gives the console a modern feel without sacrificing its retro charm.

The Atari 2600 Plus Pac-Man Edition also supports 7,800 games, and Atari has dozens of titles available in its online store, with cartridge prices reaching $35. If you have a collection of retro cartridges that you own, the 2600 Plus can support them. The special edition costs $169 and includes a CX40 Plus joystick in a vibrant matching shade of yellow, decorated with dots surrounding the joystick and a Pac-Man hat on top. Unlike the original 2600, the controllers are wireless and easy to set up thanks to the included USB dongle. Additional controllers cost $34.99 for the traditional black and $39.99 for the Pac-Man-themed colors.

Two PAC-MANs for the price of one!

The Pac-Man: Double Feature cartridge is the highlight of this package. Two versions of the Namco classic, separated by over forty years of history. First, there is the original 1982 Pac-Man for the Atari 2600, programmed by Tod Frye under intense commercial pressure. With only 4 KB of ROM and 128 bytes of RAM, Frye had to reinvent the game: fewer enemies, a simplified maze, flashing sprites, and inverted colors. Despite its limitations, this conversion became one of the platform's best-selling titles. The emulation faithfully reproduces these imperfections, including the flickering. A special graphics mode simulates the latency of CRT televisions by holding down the "Game Select" and "Game Reset" buttons when starting the game without a cartridge. This hidden menu, not documented in the instructions, also allows you to configure bilinear filtering and 50-60 Hz selection.



The second part of the cartridge features Pac-Man 7800, a brand new creation by homebrew developer Bob DeCrescenzo, also known as "Pac Man Plus." This new version takes full advantage of the superior power of the 7800 to deliver graphics and audio virtually identical to the arcade cabinet. DeCrescenzo, a veteran of Pac-Man conversions for Atari systems, studied the source code of the original arcade game to ensure maximum fidelity.



The game includes several hidden modes, including randomly generated mazes and customization options unlockable from the menu, reminiscent of typical 1980s Easter Eggs. A simultaneous two-player mode allows one player to control Pac-Man while the other partially controls Blinky. Pressing the "TV-Type" switch while viewing the menu opens up an additional option: a modern reproduction of Pac-Man 2600 that incorporates the improvements of the 7800 version.



The box and manual artwork is by Hiro Kimura, the artist who created the artwork for the original 2600 version.

Conclusions

In addition to its collectible value, this Atari 2600+ Pac-Man Edition proves that it is possible to revisit gaming tradition without betraying its essence. Its fidelity to the original cartridges and its respectful modernization make it a viable option for both newbies and veterans who grew up in front of CRT screens. The aesthetics of the Atari 2600 continue to inspire many creators, demonstrating its lasting impact on gaming culture.

Some ergonomic details may seem spartan by today's standards, and the overall plastic finish, while well-made, emphasizes its modern nature. The lack of SD card or USB slots may disappoint those hoping for an all-in-one solution, but Atari wanted to preserve the original concept: a physical cartridge-based machine intended for collectors and enthusiasts.

TI-99/8: Chronicle of a future that never was

A journey into an alternative world, where an innovative machine could have changed the future of computing

by Tommaso Pitturru

In the early 1980s, the home computer market was in turmoil. The price war, triggered mainly by Jack Tramiel's Commodore and Sir Clive Sinclair with his ZX Spectrum, left increasingly narrow margins and room for maneuver. In this scenario, Texas Instruments carved out a niche for itself with the TI-99/4A, which went on sale in June 1981. It was an evolution of the immature TI-99/4, released two years earlier, perhaps too ahead of its time.

The TI-99/4A was a decidedly unconventional machine. It was the only home computer featuring a 16-bit CPU: the TMS-9900, clocked at 3 MHz. This feature set the TI-99/4A apart from its competitors, which were mostly based on MOS 6510 and Zilog Z80 processors, both 8-bit.

Another interesting aspect of the Ti-99/4A was the high expandability of the system, guaranteed by a series of proprietary peripherals, including a bulky box for multiple expansions and an interesting voice synthesizer. On the other hand, the memory was limited to 16kb and did not adequately exploit the 16 bits of the processor due to the 8-bit bus.

The graphics modes were similar to those of the ZX Spectrum and first-generation MSX computers, and the 3+1 channel sound system, although good, did not excel like that of the C64.

In Dallas, headquarters of Texas Instruments, they were stunned by the enormous popularity of machines such as the Vic-20 first, and the Commodore 64 and ZX Spectrum



Fig. 1 - TI-99/8 prototype

shortly thereafter: products that were not perfect, but with a better overall balance, good software availability, and a price that quickly put the Texas-made computer on the ropes.

The response was the TI-99/8

Officially unveiled at the Consumer Electronics Show (CES) in Las Vegas in January 1983, this computer represented TI's counterattack to get out of the corner into which it had been pushed by its competitors. It was an ambitious project, designed to correct the critical issues of the TI-99/4A and finally unleash the full potential that the 16-bit architecture had only hinted at, without forcing old users to start from scratch.

Its features represented a huge step forward:

A new processor: the heart of the machine was the powerful 16-bit TMS9995 microprocessor, operating at 10 MHz, but with the ability to scale the speed to make it fully compatible with programs written for the previous model. Unlike in the past, this CPU could finally access 64 KB of high-speed RAM (expandable up to 15 MB), solving the biggest bottleneck that plagued the 99/4A and promising dramatically faster program execution. Added to this memory were 16 KB dedicated exclusively to video.

Advanced Software: when turned on, the computer displayed a menu through which it was possible to access TI Extended BASIC II, to ensure continuity and a familiar environment for 99/4A users; alternatively, the powerful UCSD p-System could be run, a professional software package that allowed programming with an advanced language such as Pascal.

Standard Voice Synthesis: the iconic voice synthesizer, one of the most sought-after but also most expensive accessories for the TI-99/4A, was integrated directly into the hardware of the 99/8, becoming a standard feature accessible to all programs at no additional cost.

The Hex-Bus: the TI-99/8 abandoned the cumbersome expansion system of its predecessor in favor of the new Hex-Bus: a sort of high-speed serial interface, much more compact and economical, which allowed a new generation of peripherals, such as floppy disk drives, printers, and modems, to be connected in a simple and orderly manner.

Graphics and Sound: The video and sound processors remained virtually the same as those of the TI-99/4A, ensuring 100% compatibility with the entire existing library of games and software. Performance would still be improved by the power of the TMS9995 and faster access to RAM. However, an increase in resolution and an extended color palette would have made the TI-99/8 superior to any other competing device in 1983.

Despite the excellent prospects and positive reception at CES, the fate of the TI-99/8 was already sealed. The price war of 1983 proved unsustainable. In the second quarter, Texas Instruments' home computer division recorded



losses of over $100 million, a colossal figure for the time. Management could no longer justify such a financial drain, especially considering that the expected price for the new product was unlikely to fall below $600. To complicate matters further, there was an internal war between the Dallas headquarters, where the TI-99/8 was conceived and prototyped, and the Austin headquarters, which was focused on other projects.

On October 28, 1983, Texas Instruments announced its withdrawal from the home computer market. Production of the TI-99/4A, whose price had meanwhile fallen to $99 in order to allow for the disposal of stock, would cease, and with it, any hope for its promising successor. The TI-99/8, the machine designed to win the war, never fired a shot.

For our part, we can only say that it was a missed opportunity. New 16-bit personal computers were then introduced en masse in 1984 with the Apple Macintosh, at much higher prices (around $2,495), and in 1985 with the Atari ST first and the Commodore Amiga shortly thereafter, achieving the well-deserved success that the many fans of the TI-99/4A had come close to achieving. It is not difficult to imagine a third player between the Commodore and Atari solutions, benefiting from a solid 16-bit base. A computer completed by those technological improvements which, in the wake of Texas Instruments' work, then took other paths: from the advanced graphics and sound chips of the MSX2 and 2+ standards, to the graphical interface that Myarc's Geneve 9640 expansion gave to the surviving TI-99/4As a few years later.



Fig. 2 - Texas Instruments TI-99/4 (immage from: www.ti99iuc.it)

Commodore 64 Ultimate: the review

by Alex "LEX" Fridman, translation by Carlo Nithaiah Del Mar Pirazzini

Last Christmas, the new C64 Ultimate arrived under the tree of many nostalgic fans. The creation of the "reborn" Commodore International Corporation led by Peri Fractic. Seeing it there, among other gifts, takes us all back in time a little. Back to the glorious 1980s, when everything seemed magical and still warms our hearts through our memories. The team behind the relaunch of the Commodore brand brings together historical figures and faces from the contemporary retro scene, lending credibility to the operation in the eyes of the most hardcore enthusiasts. Among the names involved are Al Charpentier, Bil Herd, Dave Haynie, Jeri Ellsworth, RJ Mical, and many others. This is testimony to a project that looks as much to the past as it does to the current community. But let's get down to business... it's time to open the box and see what's inside.

Introduction

It is always important to start with an introduction. The Commodore 64 Ultimate is an official revival of the C64 designed for those who want to use Commodore's 8-bit computer and not just "remember" it. Opting for FPGA implementation rather than simple emulation was the right choice because it offers an experience that is virtually identical to the original hardware, but with all the modern conveniences of connectivity and file management... perhaps further spurring the already very solid "homebrew" scene on this platform. Inside the classic "Breadbin" shaped case beats an FPGA heart based on AMD Artix 7 chips, which replicates the CPU (6510), graphics (VIC-II), and audio (SID) of the C64, ensuring high compatibility with vintage software and peripherals. Aesthetically, there are several versions available. The one pictured is the beige version, which reproduces the look of the 1982 model with almost obsessive fidelity, while the transparent "Starlight" variant reinterprets the legend in a spectacular way, thanks to the RGB case that looks like something out of a futuristic 1980s commercial (definitely "tacky" but with extreme charm). There is also the "Founder" model, but I haven't been able to take a look at it yet. In both cases, the keyboard incorporates modern mechanical switches but retains a layout and feel very close to the original, making it comfortable for both gaming and BASIC. The real strength of the C64 Ultimate, however, lies in its dual nature: on the one hand, it retains historical ports such as Datassette, serial for 1541 drives, cartridge slots, analog video outputs, and DB9 connectors for the original joysticks; on the other hand, it adds HDMI up to 1080p, USB, Wi-Fi, and Bluetooth, allowing you to switch effortlessly from CRT to 4K TV. The operating system alternates between the classic C64 BASIC prompt and the decidedly more modern and user-friendly Ultimate menu with a file browser and the ability to configure all possible settings (audio, video, network management, and more).



The "new" Commodore 64 Ultimate



Gorgeous... Brilliant!

"Let's open this damn box."

The box is beautiful. It smells like Commodore and is easy on the eyes. When you open the package, you immediately see the Commodore 64 Ultimate, well protected by polystyrene and plastic, alongside a box with cables, a power supply, and a red USB stick shaped like a "cassette tape" containing games, demos, and various files, as well as a voluminous ring-bound manual that echoes the style of the original guide (really nice!).

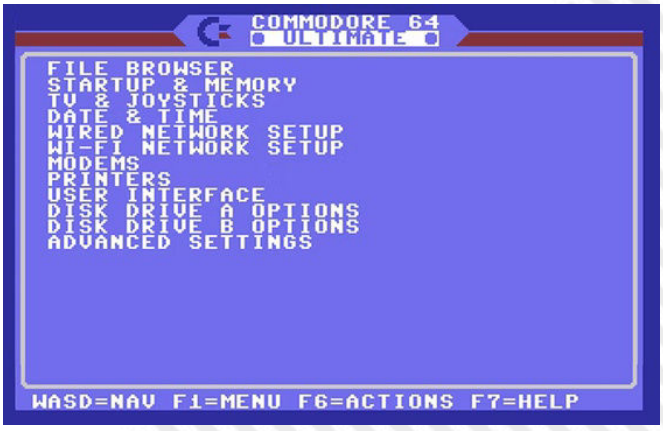
The C64U menu and its functions

I've already mentioned this, but I'd like to go into a little more detail about the C64U's management menu. As I said, it is a settings manager with many functions: from here you can load games and disk images from USB, microSD, or the network, configure Wi-Fi and Ethernet connections, adjust audio/video parameters, and even push the overclock from 1 MHz to 64 MHz, activating a virtual RAM Expansion Unit up to 16 MB if necessary (and thus playing Sonic becomes pure lust). The interface, while requiring a little getting used to due to the particular layout of the C64 keyboard layout (for newbies, us seasoned experts aren't scared!), it also allows you to adapt the resolution and image rendering to your monitor (up to 1080p), with the option to enable or disable scanlines as you wish to find the right balance between retro look and visual comfort. All in a rather pleasant way.

"... But can I connect everything to it?"

Yes! On paper, yes! In terms of compatibility, the tests I've done confirm that it works without any problems with original cartridges as well as some modern cartridges (Kung Fu Flash, for example), homemade 9-pin joysticks (I have a homemade one that I'll show you in the photo), Tapuino datasette emulators, and SD2IEC devices that simulate the 1541 drive. The only caveat concerns my archaic joystick, which works flawlessly... I made it at school!!!

To use an SD2IEC interface, you need to temporarily disable the "Built in Drive A" virtual drive from the menu to free up the bus, after which the commands work exactly



The convenient management menu



**My archaic joystick works flawlessly...
I made it at school!**

as they do on a real C64 and you can run demos and games from external media without any problems.

"... But what's inside the new breadbin?"

The PCB replicates the layout of the C64 motherboards, replacing the original logic with the FPGA. Everything else remains in its exact position: the ports for joysticks, cartridges, power supply, datasette, and drive remain where you would expect them to be. In place of the old User Port, we find HDMI, Ethernet, and USB. The white motherboard with black screen printing houses the Artix 7 module on a SODIMM-type socket, an ESP32 S3 for Wi-Fi, a P7 header for connecting an original C64 keyboard if desired, and two ZIF sockets labeled SID CHIP 1 and 2 that allow one or two real SIDs to be mounted in place of the integrated UltiSID emulation.

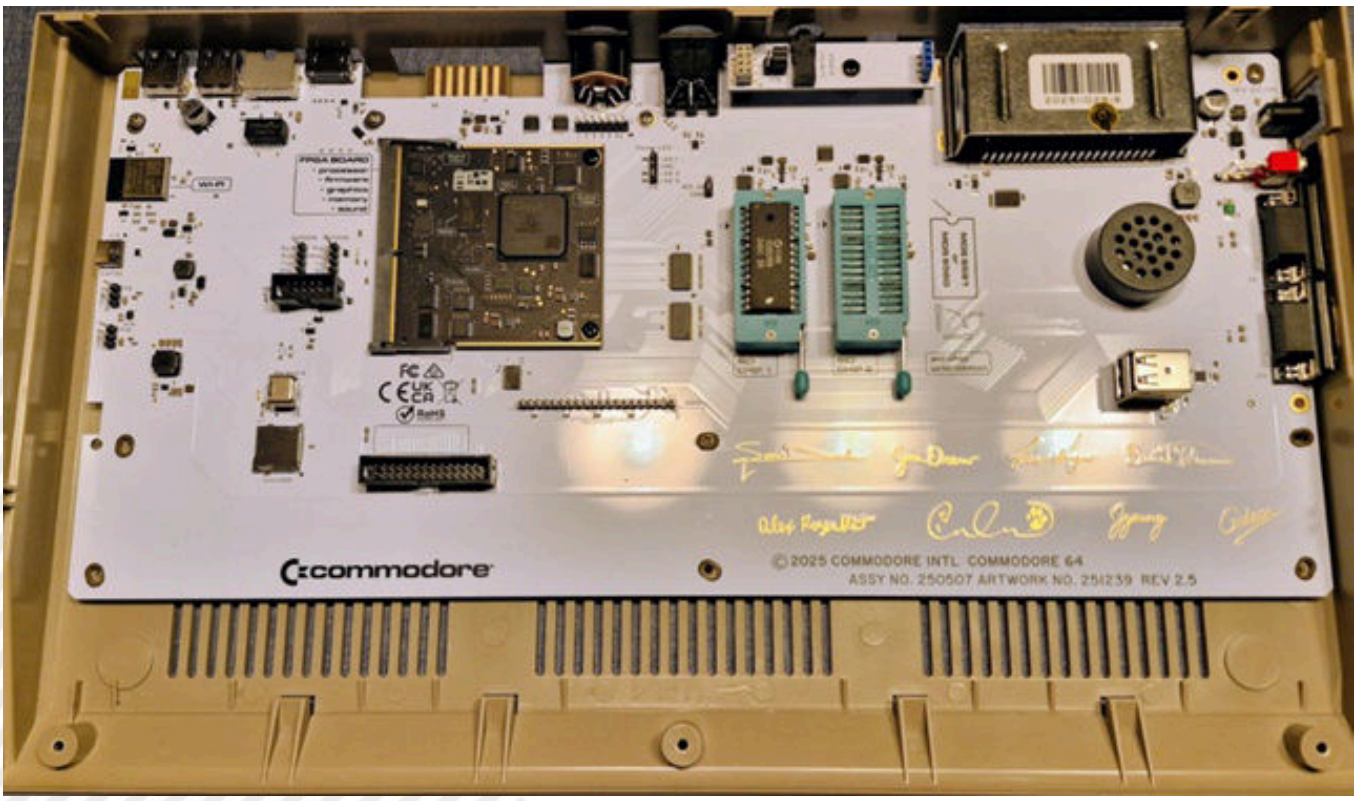
SID testing, game loading, and going online

The SID sockets on the board are really impressive, but the ability to install your own 6581/8580 chips and then select them from the menu allows you to hear that typical C64 sound again. As for software loading... what can I say?!... you can throw anything at it. In addition to the original cassettes, floppy disks, and physical cartridges, the machine reads USB directly with files of any type (.tap, .d64, etc.) via the file browser. I really like this mix of old and new!

Using the Commoserver/File Search tool, we can connect to the internet via Wi-Fi or Ethernet and download whatever we want. To top it all off, there is BASIC and the ability to view and test the 'inhuman' amount of applications, programs, and utilities, effectively extending to the direct development of new software.

Conclusions

The Commodore 64 Ultimate is not just a luxurious replica of a historic computer, but a complete platform designed to keep the C64 ecosystem alive in the long term. The Artix 7 FPGA hardware, the careful construction of the motherboard, and the involvement of key figures in Commodore's history make it a credible product even in the eyes of purists, while the advanced menu, integrated



The C64 Ultimate PCB

network, and support for both original media and digital images transform it into a powerful tool for gaming, development, and software preservation.

This 'care' comes at a price: the list price starts at around $299.99 for the beige version, placing it well above emulation-based solutions such as THEC64 and very close to, if not exceeding, the cost of a good original C64 on the second-hand market (depending on the model, of course). It is a machine designed for those who want the "ultimate way" to experience the C64 today, rather than for those who are just looking for an evening of plug-and-play nostalgia.

UnoCart+, the first multicart for Atari 2600/7800+

by Filippo Santellocco – www.santellocco.com

UnoCart+, the first true multicart for Atari+ Platform consoles: Atari 2600+ and 7800+, is now available.

To be honest, there is a previous multicart, the Dragonfly from 2020, but it is impossible to find because it was only produced for a short time. It is also compatible with A+ consoles thanks to the selection of titles via the built-in screen. In fact, traditional multicarts with on-screen menus do not work because they cannot communicate with the new Atari consoles, which simply copy the 2600 and 7800 ROMs and forward them to their respective emulators.

Launch date of the Atari Video Computer System

The UnoCart+ arrives just over two years after the release of the Atari 2600+, Plaion's replica of the 1977 Atari Video Computer System console.

In this regard, it is completely unfounded that the console was launched on September 11, 1977. At that time, there were no official launch dates; products arrived gradually, and there was no coordinated distribution as in subsequent years. The date originates from the misinterpretation of a caption in an advertisement from September 11, 1977, shown in the book "Atari Inc.: Business is Fun."



The firmware version tested: 2025-11

There are earlier advertisements dating back to August. In addition, there are newspapers announcing the distribution of the Atari VCS for July and confirming it for the beginning of August.

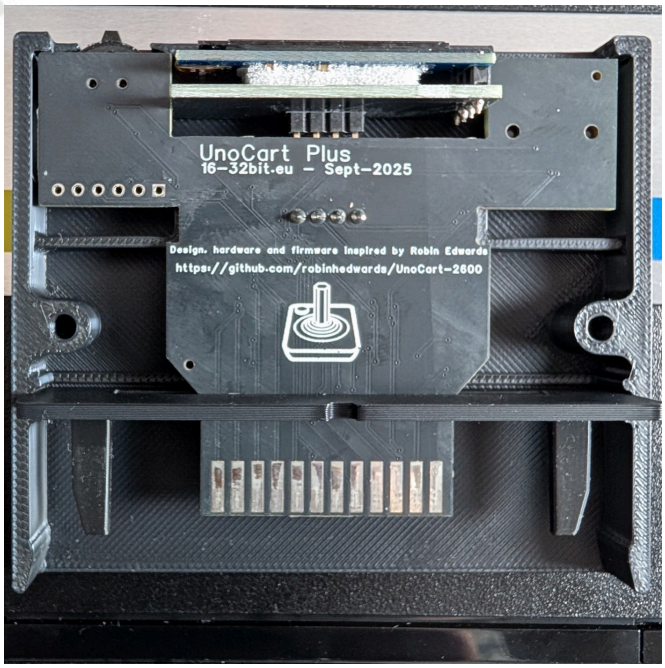
So let's leave September 11 to the commemoration of the tragic attacks of 2001.

Atari 2600

The main criticism levelled at the Atari 2600 console at the time of its launch, apart from the fact that it was not an FPGA solution, was that it was impossible to load legally owned ROMs.

But the aim of the product was to expand the market for cartridge users to include those who did not have original consoles connected to CRT screens, or modified or connected to video signal converters. This was a market that Atari had entered with the reproduction of old titles. The most superficial reviews underestimated the positive

The multicart label



As written on the printed circuit board, the UnoCart+ is inspired by Robin Edwards' UnoCart-2600

aspects of the new console, such as the ability to run cartridges, both PAL and NTSC standard, on modern screens. Those who had old cartridges in their attic or basement were able to dig them out and insert them into a device that, on a tactile and visual level, brought back the sensations of the past, something that similar solutions (Hyperkin Retron77) did not allow.

The Atari 2600+ achieved its goal: new enthusiasts appeared on the internet and sales were satisfactory, so much so that the Atari 7800+ and Atari 2600+ Pac-Man Edition consoles and new wireless controllers were subsequently launched.

New titles have been added to the re-releases of old titles, both for the 2600 and the 7800, offered at competitive prices thanks to international distribution. In October 2025, an agreement was signed with Toaplan to convert other games, after the popular Tiger-Heli, starting with Slap Fight. The introduction of the new consoles has been beneficial for everyone, even those who have valid reasons to do without them.

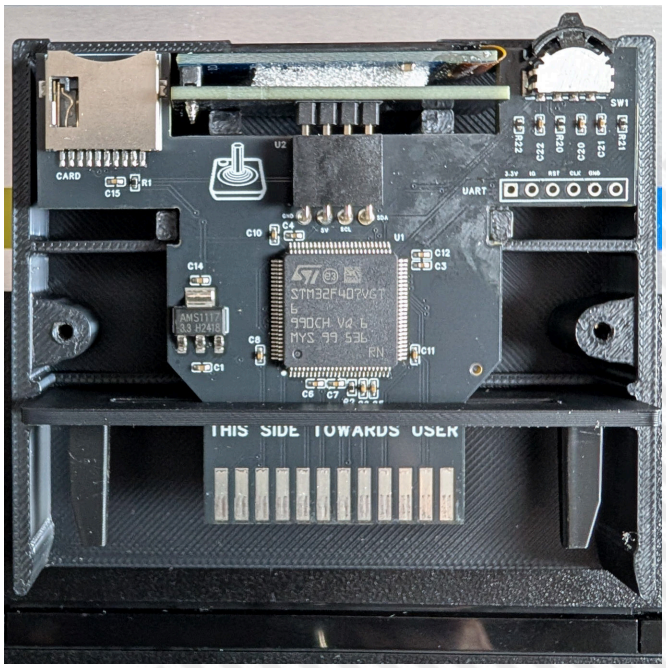
UnoCart+

The limitation of not reading ROMs is now partially overcome by UnoCart+, the work of Cyril Rossignol, a Frenchman living in the Grand Duchy of Luxembourg. His first computer was an Atari 1040 STf, followed by an STe and a Falcon, which he used until 1998. After a long hiatus, in 2022 he returned to Atari, producing several devices, including the ST ACSI2STM hard disk emulator and the UnoCart-2600 multicart. The UnoCart+ is partly based on the latter, allowing Atari 2600 (not 7800) ROMs to be loaded onto Atari 2600+ and 7800+ consoles.

The hardware—based on the STM32 microcontroller—simulates the electronics of the original cartridges so that the Atari+ console dumper correctly recognizes the ROMs. The operation seems simple, but there are dozens of different types of cartridges. Over the years, cartridges larger than 4KB were introduced that could be read directly by the Atari VCS. These cartridges, thanks to various bank switching techniques and additional RAM, improved the quality of the games. Pitfall II even integrated a coprocessor (DPC) that enhanced graphics and sound. The concept of the coprocessor has been revived in modern times by bank switching systems such as DPC+, CDFJ, and ELF. The extreme variety of cartridges is a problem that even Atari+ consoles have encountered. In this regard, Plaion deserves praise for collaborating with the AtariAge community to support its products (including the new Intellivision Sprint) with continuous updates.

Compatibility

So how compatible is the UnoCart+ with Atari+ Platform consoles? I would say very compatible, as shown in the



The printed circuit board with the ARM STM32F407VGT6 microcontroller in the center



Cartridge connector

photos accompanying this article.

According to my tests, all games from the past should work, with the exception of the ROMs from the Decathlon, Robot Tank, Pitfall II, and Megaboy cartridges. As for homebrews, those that use modern bank switching schemes such as DPC+/CDFJ/ELF (e.g., Champ Games) or those from Audacity Games do not work. Compatibility can only improve, as the firmware, which is easily updatable, is under development and will soon be made open source. The UnoCart+ also works with the original 2600 consoles, but compatibility is lower. In my opinion, this is not a big problem, because almost all of their owners have long had much more convenient multicarts with on-screen title selection.



MicroSD slot, OLED display and navigation selector

How to use

Using the UnoCart+ is very simple. Just put the ROMs on a microSD card, select one using a small OLED screen (128x32 pixels) and a navigation selector that can be pressed or moved left or right, and turn the console off and on again.

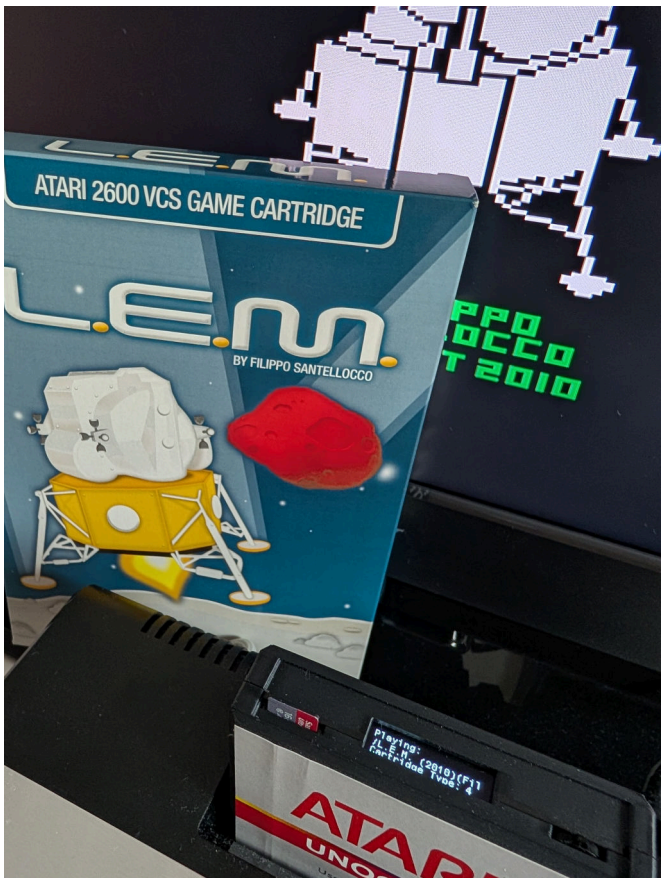
The titles are displayed in alphabetical order, and those exceeding 18 characters scroll across the screen. Folders are supported and recommended for easier navigation among the many ROMs.

Conclusions

The features and affordable price (€40 plus shipping from Europe) make this product attractive to Atari+ console owners who want to use 2600 ROMs, including the many homebrew titles that are not available in physical form.

Manufacturer's page:

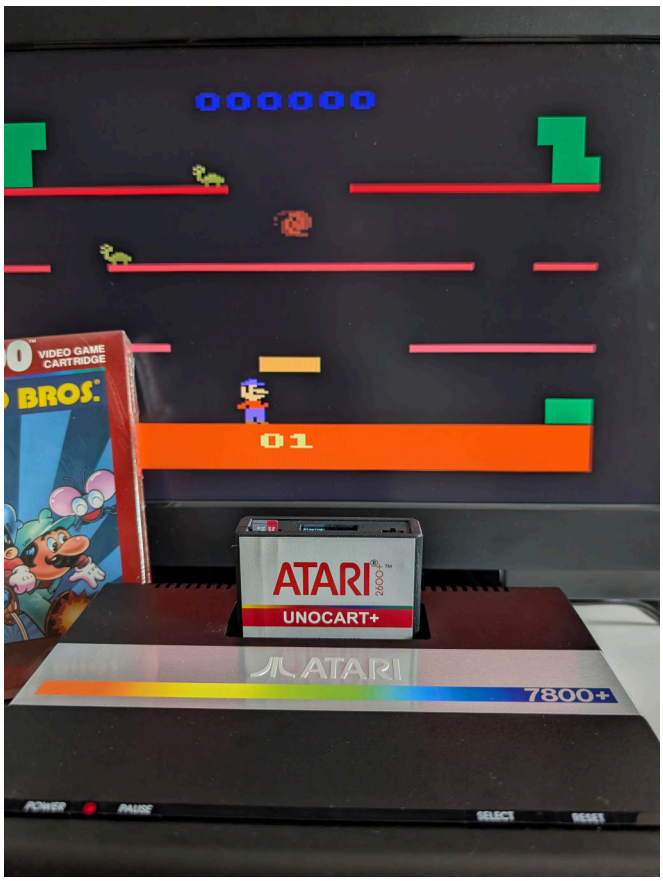
https://www.16-32bit.eu/

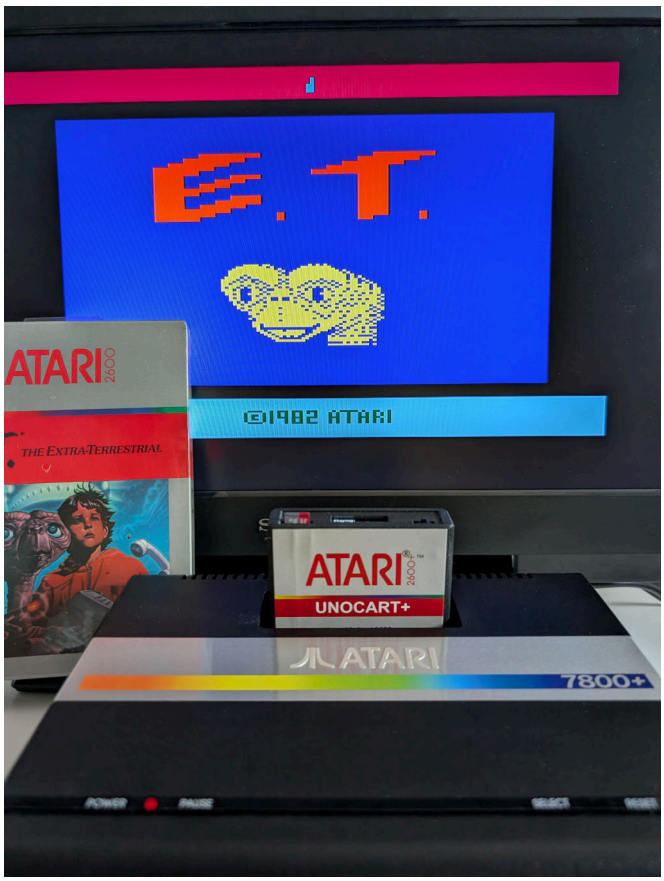


L.E.M. homebrew from 2012

Compatibility

According to my tests, all games from the past should work, with the exception of the ROMs from the Decathlon, Robot Tank, Pitfall II, and Megaboy cartridges. As for homebrews, those that use modern bank switching schemes such as DPC+/CDFJ/ELF (e.g., Champ Games) or those from Audacity Games do not work....









Microtext for Commodore 64 - part 1

by Francesco Fiorentini

When I find something interesting on Facebook that catches my attention, I usually save the post to use it later as material for my next articles. This is the case with this article, which is based on a post I saved over a year ago, in October 2024, about Perifractic's recovery of a piece of software called **MicroText** for Commodore 64.

Scrolling through the list of saved items, which are now quite numerous, for some reason the post caught my attention again and I wanted to look into it further. And thank goodness I did!

What I've missed over the past year and what I would have missed if I had kept this topic in oblivion...

What is MicroText?

To paraphrase the manual itself, scanned and made available along with the software by Perifractic on archive.org, MicroText is a powerful yet intuitive authoring system designed to simplify the creation of a wide range of human-computer dialogues. Text, graphics, and video can be integrated into a single presentation, offering a complete interactive experience. Even users without computer skills can quickly create effective teaching materials, while more experienced users can take advantage of a wide range of advanced features. Its applications range from interview and questionnaire systems to educational packages, from training courses to interactive demonstrations and simulations. You can think of it as a sort of hybrid between PowerPoint and early web pages, but without seeing what it can do, it is really difficult to understand its potential and possible uses.

After watching the Perifractic video, https://www.youtube.com/watch?v=DvSlWLgXcsU, I realized that we were dealing with something truly interesting and extraordinary, especially when we consider that this software is more than 40 years old.

MicroText was developed at the **National Physical Laboratory** (NPL) and is covered by Crown Copyright © 1983, while the Commodore 64 version is a later implementation, copyright © Ariadne Software Ltd 1985.

The National Physical Laboratory is the UK's national metrology laboratory, equivalent to our INRIM, the National Institute of Metrological Research.

It seems that the NPL created Microtext not as a commercial product, but as a prototype information network and communication standard for home computers.

It was a way to test technologies that we now consider to be the basis of the Internet and online services. This is probably also the reason why the software did not achieve the commercial success it deserved and why it was almost lost over the years.

The intention to make it a fully-fledged commercial product was there. In fact, the manual states that the software was already available for BBC Micro, Electron, Apple, IBM Micro, and CP/M systems, and that it was rapidly becoming a standard for computer-based training and related content creation on low-cost microcomputers, offering unique power and convenience to authors who were not computer experts. Evidently, something must have gone wrong in the following years.

What MicroText looks like

After this necessary, albeit lengthy, introduction, let's take a look at the MicroText software.

All the material made available by Perifractic, including software and manuals, can be downloaded from archive.org at this address:

https://archive.org/details/microtext-user-guide-from-perifractic

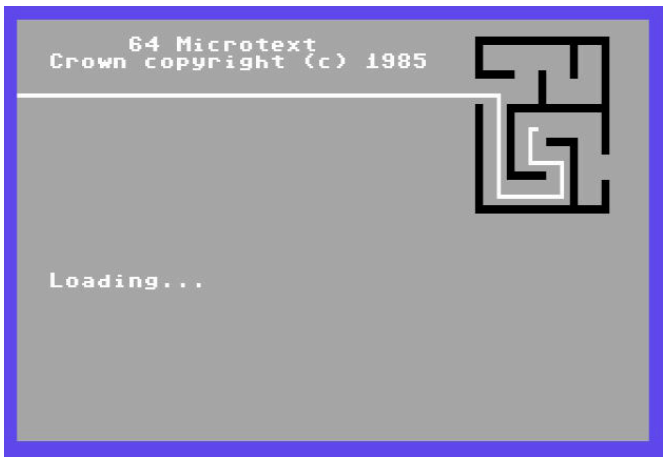


Fig.1 - Loading MicroText



Fig.2 - Loading MicroText



Fig.3 - MicroText development environment

Once the software has been downloaded, simply insert it into the emulator to immediately understand that we are dealing with something fascinating. In fact, the loading process is decidedly appealing for a commercial product (Fig. 1).

Once loading is complete, the introduction informs us that this version of MicroText is 2.60A (Fig. 2).

Finally, after pressing any key (who remembers Homer searching for the any key? cit.), we find ourselves in the MicroText development environment (Fig. 3). To find out what to do, we can read the manual, which provides a fairly intuitive walkthrough to understand the philosophy of the package, or we can type the HELP command (Fig. 4):

```
RUN (module)  loads and runs a module
TEST(module)  runs a module in test mode
<STOP>        edits existing frame
<RUN>         restore original frame

FRAME  (num)  creates or goes to frame
COMMENT(num)  creates a comment frame
COPY   (num)  copies current frame
ERASE(range)  removes frames
PRINT(range)  prints frames

LOAD(module)  loads a module
SAVE(module)  saves a module
NAME(module)  renames current module
NEW           removes current module

SUMMARY       displays current summary
VARIABLES     displays current variables
FREE          shows unused space
```

When you read the manual, you will immediately understand these commands because they are very intuitive.

However, before continuing to explore MicroText, it is a good idea to take a look at what is on the disk. Often, additional information is hidden among the files. Within MicroText, you can view the contents of a diskette using the **CAT** command (Fig. 5).



Fig.4 - Output of the HELP command



Fig.5 - Output of the CAT command

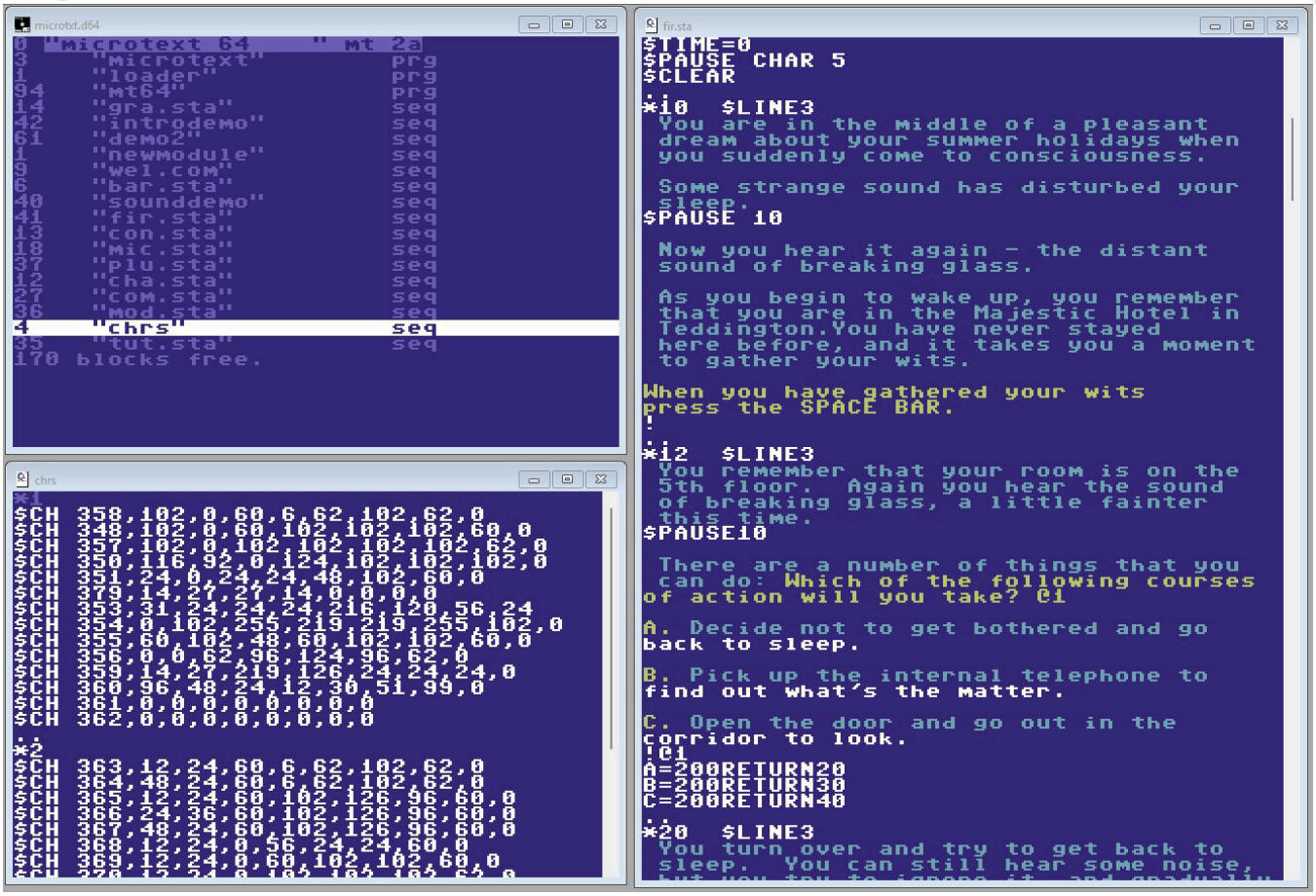


Fig.6 - Exploring the diskette with DIRMASTER

From this, it is immediately clear that MicroText modules are saved on disk with the **.STA** extension, and when opening one with DirMaster, we immediately notice that the information is stored in plain text within sequential files. There is no encoding, and the commands are readable as if the modules were displayed by the software.

This immediately gave me an idea for a possible development related to MicroText. Why not use modern software to create a module instead of editing it on the emulator with all the limitations that entails?

I already have a couple of ideas in mind on how to use MicroText profitably for RetroMagazine World, but I don't want to reveal anything for the moment. Stay tuned!

Let's look at some examples

So far, so good, but we haven't seen anything yet. As suggested in the manual, we load the module using the LOAD WEL.COM command and, as specified in comment frame C1, we type RUN to execute it.

After a couple of introductory screens, we will be presented with a list of demo programs (Fig. 7). The more attentive among you will already have associated the STA files on the diskette with the modules in this list. Let's try launching a few.

Escape from a hotel fire (FIR)

This appears to be a simple text adventure where, by making the right decisions at various narrative crossroads, it will be possible to escape a fire threatening the hotel where we are staying for the night (Fig. 8).

Plug faultfinding (PLU)

This is a demonstration program to show you some of the features of MicroText. The purpose of this program

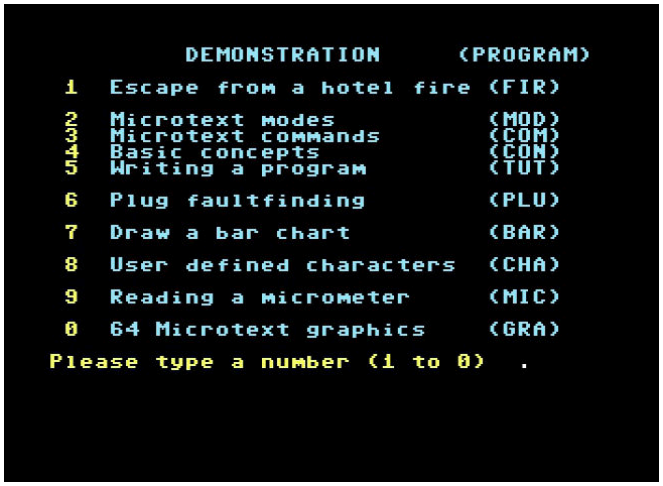


Fig.7 - The WEL.COM module

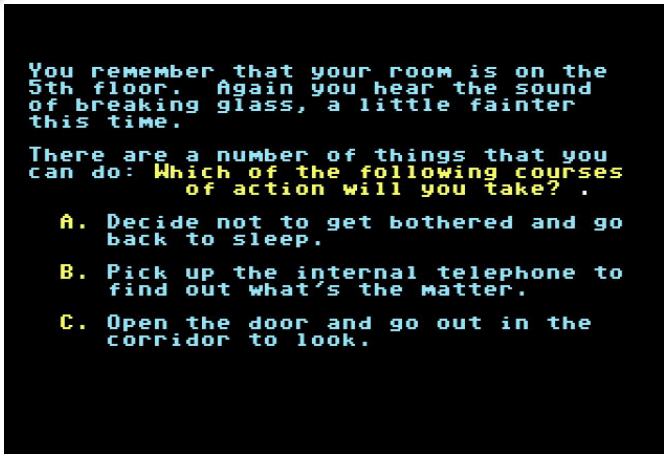


Fig.8 - Escape from a hotel fire



Fig.9 - Plug faultfinding

is to make you experts in diagnosing faults in 13-amp power outlets.

Here we are faced with something more complex, a module that shows MicroText's ability to combine text, graphics (characters), and user interaction.

Reading a micrometer (MIC)

This program shows the use of high-resolution graphics and random numbers in MicroText.

The theme of this demonstration is a practical session on the use of a micrometer (Fig. 10).

This is where things get interesting, because having access to high-resolution graphics so easily opens up a range of exciting opportunities.

Draw a bar chart (CHA)

The title is pretty self-explanatory. In this case, the program allows you to draw bar charts with user-provided information in real time (Fig. 11).

Think about something like this in 1987: having the ability to generate real-time charts and display them in a meeting using the portable Commodore SX-64.

The other examples are just as interesting, but I'll leave it up to you, the readers, to view them and, why not, explore the code to try to understand how they were created. After all, the manual is at your fingertips and will provide you with all the answers if you have any questions.

There is no doubt that MicroText is an incredible software with great potential, limited only by our imagination. It's just a pity that it is not possible to create executable files for distribution, as the development environment is always required for them to run. But now, 40 years on, this should no longer be a limitation.

In the next few issues, we will see how to create modules using MicroText commands.

Stay tuned!

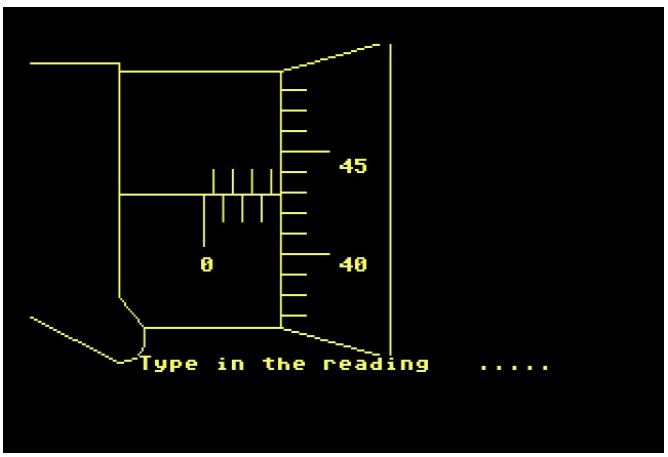


Fig.10 - Reading a micrometer

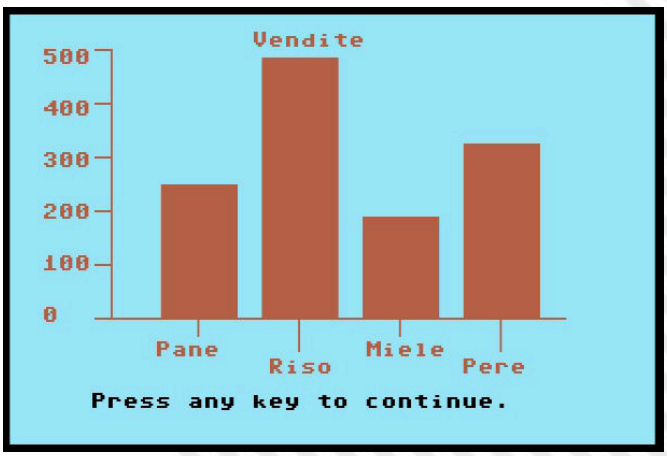


Fig.11 - Draw a bar chart

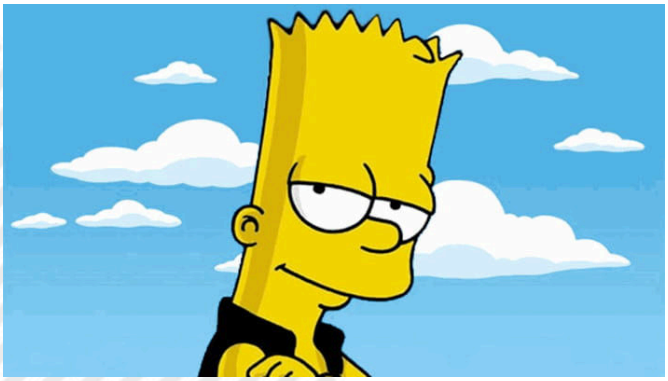
Amstrad CPC - let's play with images!

by Francesco Fiorentini

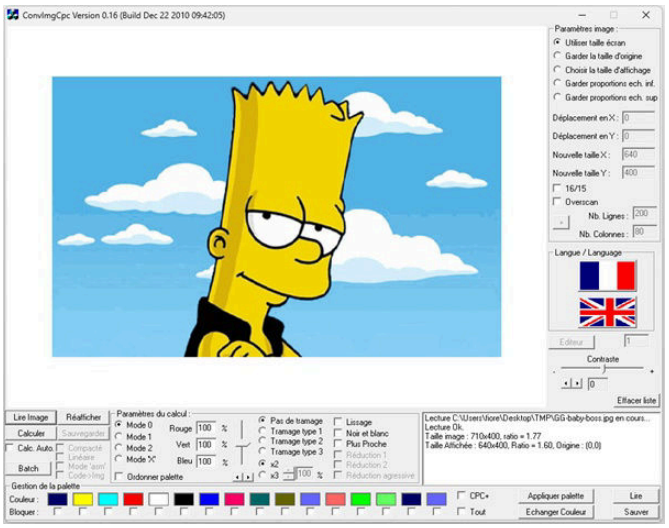
During last Christmas holidays, I have been enjoying transcribing, editing, and publishing some listings on RetroLiPS, RMW's listings repository. One of these concerned the porting of a text-based game, initially designed for PC-IBM, to Amstrad CPC. The game is called Dragster and can be found at this URL:
https://www.retromagazine.net/dragster-amstrad-cpc-locomotive-basic/

The porting of BASIC listings is an operation whose complexity depends largely on the differences between the dialects of the source and target systems. In the case of the listing in question, the necessary interventions proved to be limited and easy to implement, thanks to the flexibility and completeness of Amstrad's Locomotive BASIC dialect.
For this game, I wanted to add a simple graphic intro, an image to be displayed before loading. However, during my work I encountered some display problems on the CPC, which I managed to solve and whose solution I would now like to share.
To make the article more interesting, however, we will start with a new image, any .JPG, and see how it can be transformed into an .SCR file for use on the Amstrad CPC and with what results.

I decided to choose an image of Bart Simpson that gives



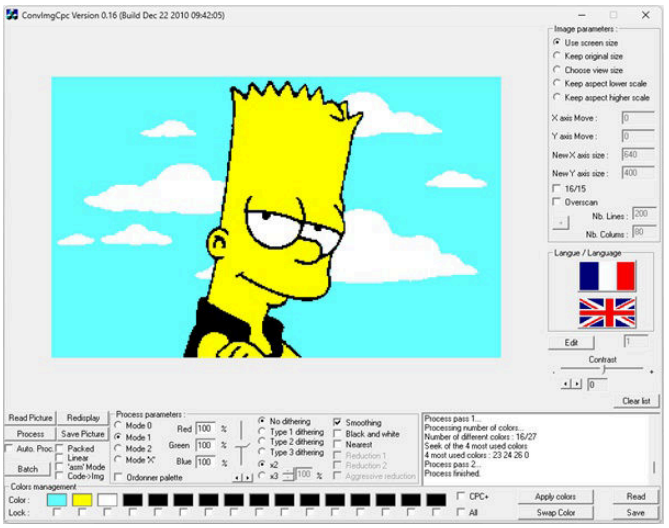
an idea of the graphic capabilities of our CPC.
The image in question is a JPG (710x400) found on the internet, but you can try it with any image you want.
To convert the image from JPG to SCR, we will use the **ConvImgCPC** program, which we have already used in some of our other articles a few years ago. ConvImgCpc is a small but useful program created by Demoniak, designed to facilitate the conversion of images from the PC world to the CPC graphic format.
The program supports several commonly used image formats, such as BMP, GIF, and JPEG, and also includes support for the SCR format, typical of images created with OCP Art Studio.
This is what ConvImgCPC looks like once our JPG image has been loaded.



To convert the image, we have a choice of Amstrad CPC graphics modes, which are listed below (we will leave Mode X aside for now):

- Mode 0: 160×200 pixels with 16 colors (4 bpp)
- Mode 1: 320×200 pixels with 4 colors (2 bpp)
- Mode 2: 640×200 pixels with 2 colors (1 bpp)

This image has few colors, so we can try converting it to



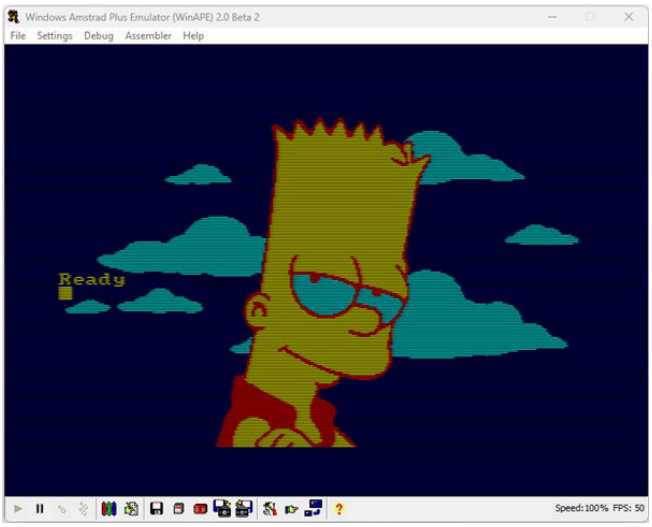
MODE 1 (320x200 with 4 colors). Let's activate the smoothing option to soften the transitions between colors and contours. In this case, it helps to hide overly obvious pixels and improves the rendering of shades and uniform areas.

Let's save the image with the name "bartm1.scr" and try to load it on the CPC.

Let's go to the emulator, we use WinAPE, and load the image into memory using the command:

LOAD “bartm1.scr”, &C000

And here is the image loaded into memory and displayed on the CPC.



Hey, but wait a minute... The image is the same as the one we saw on ConvImgCPC, but the colors are totally different... Why is that?

In this case, our computer is using the default colors. If we want to view the image with the correct colors, as we see it on ConvImgCPC, we have to force the computer to use the color palette with which the image was created.

If you look at the small text window at the bottom right of the ConvImgCPC program, you will see that the program tells you which colors from the standard CPC palette were used to create the image: 4 most used colors.

In this case, the colors used are: **23, 24, 26, 0**.

These correspond to the colors Pastel Cyan, Bright Yellow, Bright White, and Black from the standard CPC palette (as can be seen in the standard colors image).

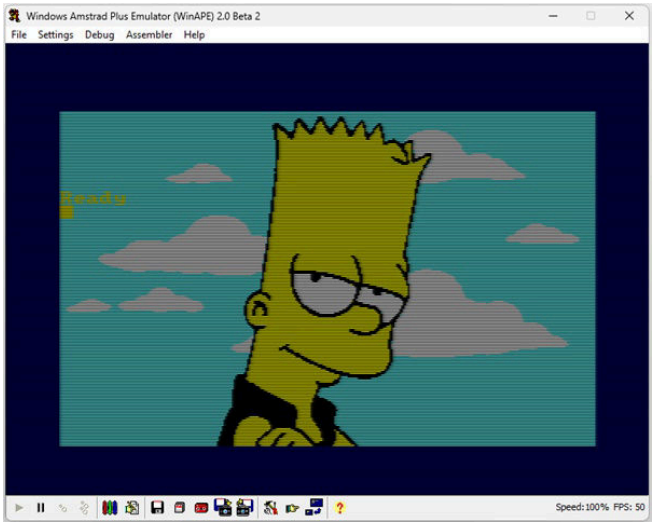
0 #000000 Black	1 #000080 Blue	2 #0000FF Bright Blue
3 #800000 Red	4 #800080 Magenta	5 #8000FF Mauve
6 #FF0000 Bright Red	7 #FF0080 Purple	8 #FF00FF Bright Magenta
9 #008000 Green	10 #008080 Cyan	11 #0080FF Sky Blue
12 #808000 Yellow	13 #808080 White	14 #8080FF Pastel Blue
15 #FF8000 Orange	16 #FF8080 Pink	17 #FF80FF Pastel Magenta
18 #00FF00 Bright Green	19 #00FF80 Sea Green	20 #00FFFF Bright Cyan
21 #80FF00 Lime	22 #80FF80 Pastel Green	23 #80FFFF Pastel Cyan
24 #FFFF00 Bright Yellow	25 #FFFF80 Pastel Yellow	26 #FFFFFF Bright White

So how do we tell the CPC to use these colors? We can use a small program in Locomotive BASIC:

```
12 FOR A=0 TO 3:READ B:INK A,B:NEXT
15 DATA 23, 24, 26, 0
20 LOAD"bartm1.scr",&C000
```

Then we type RUN and...

Much better, right?



But we can do even better.

Browsing the internet, I discovered that with ConvImgCPC it is possible to store the graphics mode and palette used directly in the SCR file.

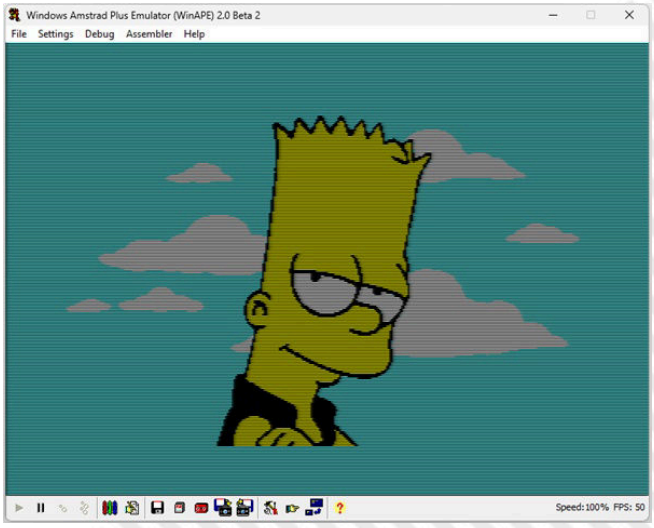
In the ConvImgCPC options, check

Code->Img e salvate l’immagine come “bartpal.scr”.

Then, on the emulator, type:

LOAD"bartpal.scr":CALL &C7D0

Et voila, as if by magic, the image is displayed with the correct colors and in the correct mode!



Truthful and... unreliable (for C64 - beginners)

by Eugenio Rapella

Captain Quirk lands on planet X, populated by the "TRUTHFUL," who always tell the truth, and the "UNRELIABLE," who always lie.
Quirk finds himself face to face with three aliens, whom he names Alfy, Betty, and Gammy. To try to identify which category the three belong to, he asks three questions.
He first asks Alfy: "Which category does Betty belong to?" "She is UNTRUTHFUL!" replies Alfy.
He then asks Betty: "Do Alfy and Gammy belong to different categories?" "No!" replies Betty.
Finally, he asks Gammy the same question he asked Alfy; Gammy's answer is: "Betty is TRUTHFUL!"
Which category does Alfy belong to? Which one does Betty belong to? Which one does Gammy belong to?

Questions like this are quite common in "Math Games" columns (this one is presented in the form of a short story in Ian Stewart's "Professor Stewart's Cabinet of Mathematical Curiosities") and, let's be honest, they are rather boring. This one is actually solved very quickly, but... is it within the capabilities of the C64? After all, its BASIC is not really the most suitable language for problems of this type.

We can do this: let's introduce the variables A, B, and G, which represent Alfy, Betty, and Gammy. Each variable can be "0" if the corresponding alien is UNRELIABLE, or "1" if it is TRUE (since we don't have the "boolean" type, we use integer variables with 0=false and 1=true).

Let's run A, B, G in the eight possible ways, obtained through the three "for-next" cycles of instructions 1 to 9, and, for each situation, determine the answers, RA, RB, RG, that the three would give in the situation considered. If the RA, RB, RG obtained correspond to those actually provided by the three aliens, the triplet A, B, G is printed and constitutes the solution (1 > TRUE; 0 > UNRELIABLE).

PROGRAM 1:

```
1 for a=0 to 1:for b=0 to 1:for g=0 to 1
2 if a=0 then ra=1-b: goto 4
3 ra=b
4 if a<>g then rb=b: goto 6
5 rb=1-b
6 if g=0 then rg=1-b: goto 8
7 rg=b
8 if ra=0 and rb=0 and rg=1 then print"a,b,g > ";a;b;g
9 next:next:next
```

In PROGRAM 1, instructions 2 and 3 deal with the question asked to Alfy: if A=0, i.e. if Alfy is UNRELIABLE, his answer will be the opposite of what Betty is at that moment, therefore RA=1-B (if B=0, RA=1; if B=1, RA=0) and we jump to 4; if, on the other hand, Alfy is TRUTHFUL, A=1, instruction 3 is executed and Alfy will say what Betty is at that moment: RA=B. The use of "goto" is necessary because the C64 Basic does not provide for the IF..THEN..ELSE.. construct, which would have been ideal (if a=0 then ra=1-b else ra=b).

The pair of instructions 4 and 5 takes care of the question asked to Betty: if Alfy and Gammy really belong to different categories (i.e., if "a<>g"), then RB=B: if B=0, it means that we are examining a case in which Betty is UNRELIABLE and Betty's answer (RB) is "zero=false," which is the opposite of what we are examining, while Betty's answer will be "true" if "a=g," which is also the opposite of the correct answer. If, on the other hand, we are evaluating a situation in which Betty is TRUTHFUL (B=1), if "a<>g" Betty's response RB=B will confirm that Alfy and Gammy belong to different categories.
The pair of instructions 6 and 7 is analogous to 2 and 3 with regard to Gammy.

When we get to instruction number eight, RA, RB, and RG contain the answers of Alfy, Betty, and Gammy in the situation being examined, and we proceed with the check as mentioned above.
These "if" statements with "go to" are not very elegant, but our Commodore has... a secret weapon. In C64 Basic,



an expression of the type (a>b) has a value of "-1" if "true" and a value of "0" if "false" (for example, typing PRINT (2=2) gives "-1", while PRINT (2<1) gives "0"). So, the instruction IF a=0 THEN ra=1-b ELSE ra=b, which is not directly available, can be obtained with ra=(a=0)*(b-1)+(a=1)*(-b).

In fact, if a=0, we have ra=(-1)*(b-1)+0*(-b)=1-b; if a=1, we have

ra=0*(b-1)+(-1)*(-b)=b as desired. We proceed in a similar way in the other two situations.

Here is PROGRAM 2, which solves the problem in a more elegant and compact way:

```
1 for a=0 to 1:for b=0 to 1:for g=0 to 1
2 ra=(a=0)*(b-1)+(a=1)*(-b)
3 rb=(a<>g)*(-b)+(a=g)*(b-1)
4 rg=(g=0)*(b-1)+(g<>0)*(-b)
5 if ra=0 and rb=0 and rg=1 then print"a,b,g > ";a;b;g
6 next:next:next
```

In both programs, the "for next" loops continue until they are completed; the fact that PRINT is executed only once ensures that the solution found is also unique.

Be honest, you didn't expect your C64 to do so well with logic problems...

Starpost

by Javier Gonzalez traduzione

A few weeks ago, while watching Youtube, I discovered a game called Starpost for the VIC20. It was the first time I heard about this cartridge. It caught my attention how similar the mechanics, unknown to me, are to that of a small game for the Amiga I had seen some months ago.

The paddles again

I found the game by searching on my own hard drive. I managed to start a game on the emulator, but I couldn't control the ship movement. I looked for the instructions on the internet and I found the box cover. Indeed the game can be played with a joystick, keyboard or paddles. This last option should have made me suspicious. Anyway, now I knew the actual keys, but I still was unable to control the game.

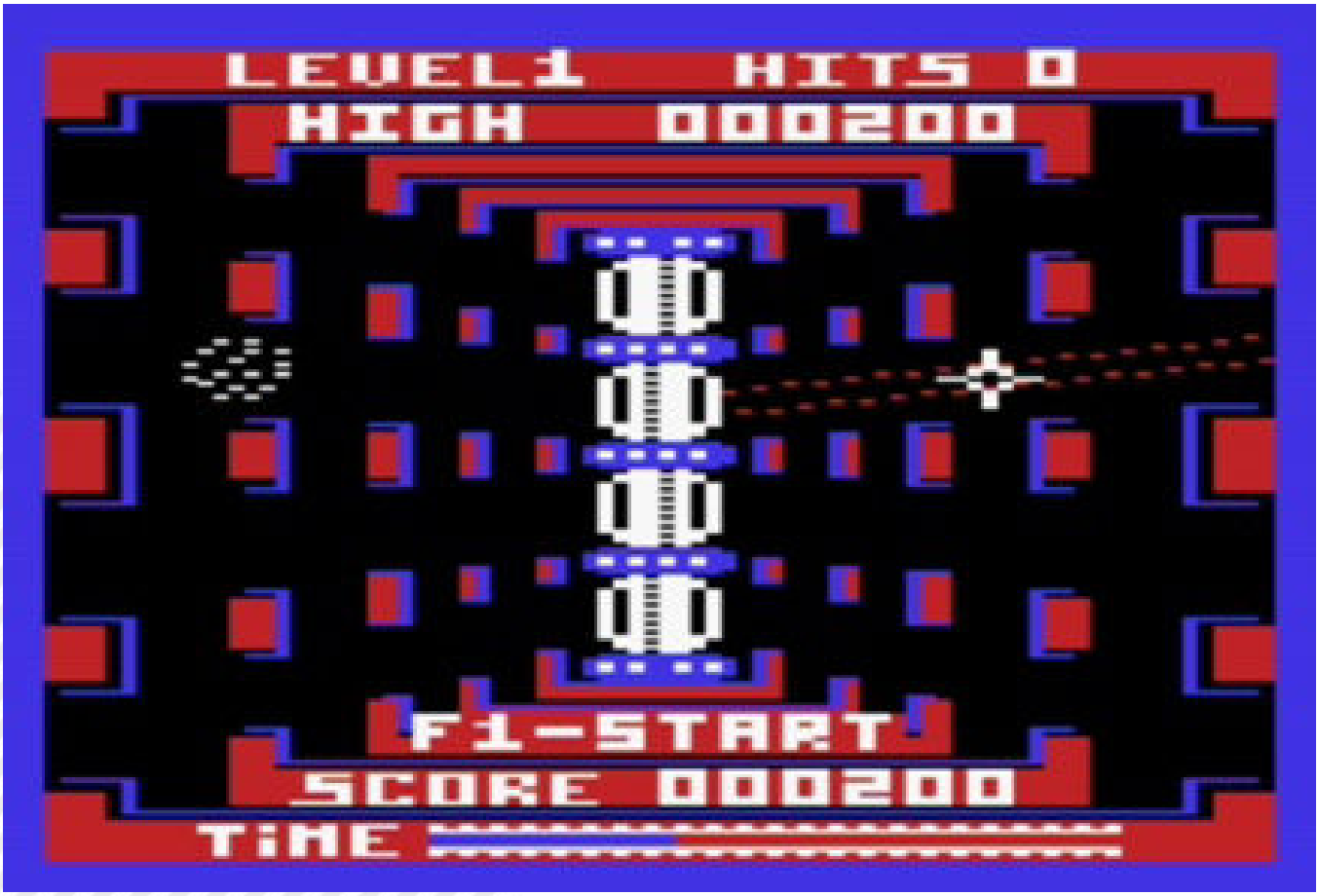
I happen to have an old version of VICE, 2.3 along with the up to date version 3.8. I think I've run VICE 2.3 on a Pentium 4. Anyway, the game runs fine in this dated version of the emulator.

I decided to investigate a little more and debug the program on VICE, with the help of its monitor. I found the addresses in the code where keypresses are expected, tracing the keyboard matrix registers. I noticed the program flow was skipping this part of code, then I focused on the paddles.

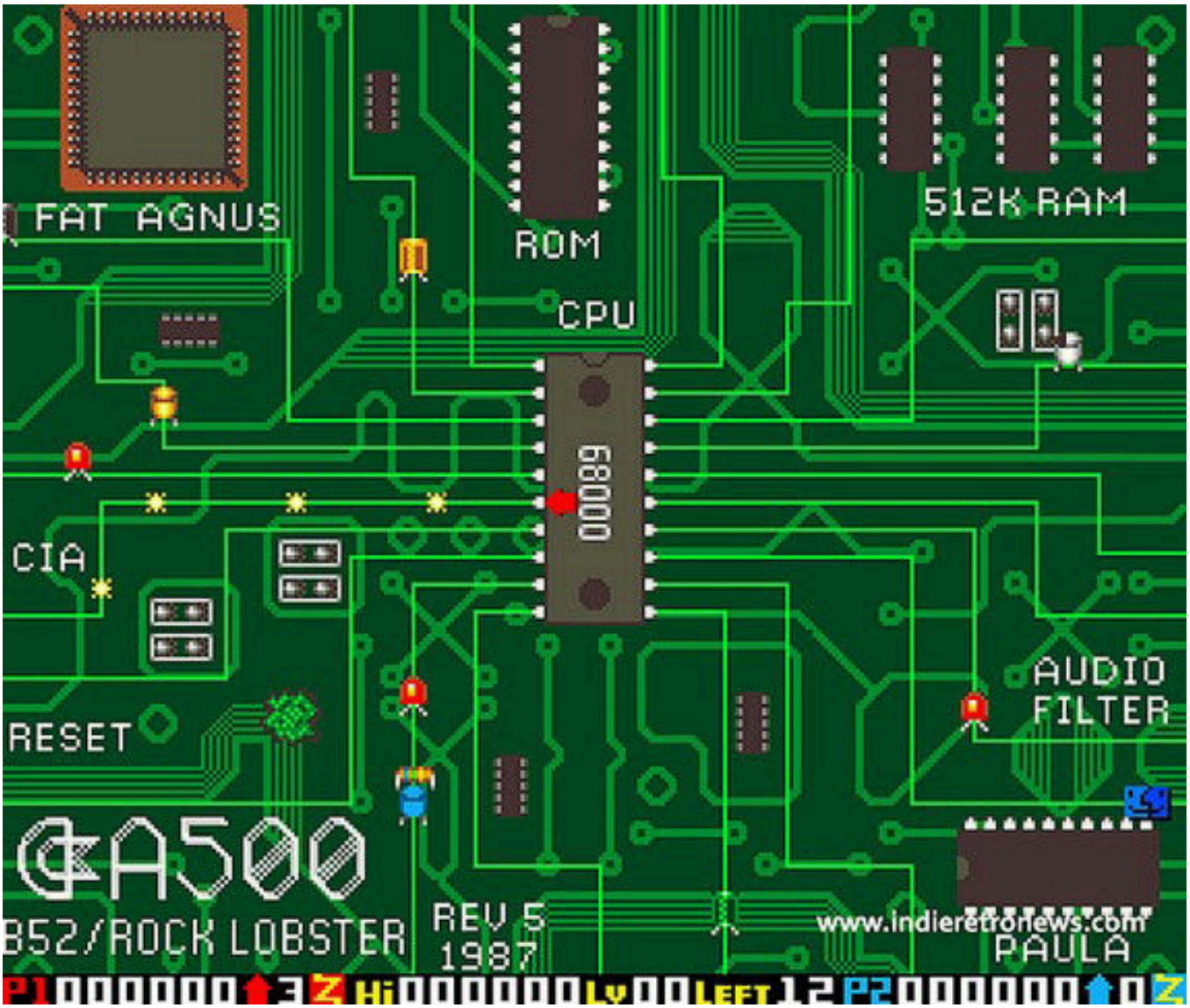
Indeed, the game runs fine on VICE 3.8 if instead of a joystick the paddles are selected as the input peripheral. The paddles are emulated via the mouse. I don't really like it. Finally, it was by comparing the program execution step by step in both 2.3 and 3.8 VICE emulator monitors, how I spotted the difference between both emulations. I can't provide details because even if this was a few months ago, I haven't kept any data.

But the difference is that peeking the VIC register in address $9008, without a paddle configured, yields a value of 0 in the more recent version of VICE emulator, whereas the older version yields a value of $FF which I suspect is the correct value.

So a trick to avoid the issue in the current version of VICE is to type POKE36872,255 as if it were RAM. The value



Starpost, cartridge game for the VIC20



Capacitors revenge on the Amiga 500

will remain unchanged even if a hard reset of the emulator is performed. This doesn't make sense on a real machine, but it doesn't harm one either.

Running the game in a RAM expansion

Like some other cartridge games, such as Tutankham, it relies on the ROM routines to initialize the VIC chip. This means the memory expansion can't be attached at the same time as the cartridge. Fortunately there's an easy fix, it just takes a small routine that we put in RAM, and a patch in the cartridge binary to divert the VIC inicialization.

In RAM:

```
20  $1226  20 18 E5    jsr $E518
21  $1229  A9 96       lda #$96
22  $122B  8D 02 90    sta $9002
23  $122E  A9 FF       lda #$FF
24  $1230  8D 08 90    sta $9008
25  $1233  60          rts
```

In the cartridge:

```
.C:a012  20 26 12    JSR $1226
```

Instead of:

```
.C:a012  20 18 E5    JSR $E518
```

This is necessary if you want to play the game on a real VIC20 with a RAM expansion, loading the binary from an SD2IEC. This is my favourite configuration. The paddles fix shouldn't have any effect on a real machine and it's included just for the same binary to be able to run in the VICE 3.8 emulator too.

Link to download the .d64 file:

- https://drive.google.com/file/d/1x3ein1HLwA5sdCj4A0HsR9WyLHW7pC4k/view?usp=sharing

Paola and Francesco (for C64)

by Eugenio Rapella

Paola and Francesco, husband and wife, take turns rolling a die: whoever rolls a 6 first wins (and the other loses). Paola starts. Evaluate the probability of victory for the newlyweds.

Before we get to work with some "Probability Calculations," let's put our C64 to work and see what happens if we simulate a few games: the frequency of wins for the two will suggest what the answer might be.
Here is a first version of the program:

```
100 print chr$(147);chr$(5):poke 53280,6:w=rnd(-ti)
110 input"how many simulations ";ns:us=1/6
120 for k=1 to ns:la=0:y=0
130 y=1-y:la=la+1:if rnd(1)<=us then 150
140 goto 130
150 if y then p=p+1
160 tl=tl+la
170 next
700 print:print" of";ns;"simulated games"
702 print p;"were won by paola"
704 print ns-p;"were won by francesco"
705 print:print"perc. victories by paola";100*p/ns
710 print"(expected value 54.5 %)":print
720 print"average number of throws per game.";tl/ns
730 print"(expected value 6)"
```

Line 100 contains the usual initializations (screen clearing, white characters, blue border); line 110 requests the number of simulations (NS). To simulate the roll of the dice, it will not be necessary to use the classic INT(RND(1)*6)+1 (which provides a random integer between 1 and 6), since, for the game in question, it is sufficient to discriminate between the outcome of 6 and a value other than 6. Since the probability of a fixed number coming up is 1/6, it is sufficient to compare RND(1), which provides a random number between 0 and 1, with the value 1/6. If RND(1) is less than or equal to 1/6, the 6 will be rolled (using US=1/6 outside the simulation loop means that the C64 does not waste time recalculating the result of 1/6 each time).
The simulation program is resolved in just six instructions in the for-next loop from line 120 to line 170.
For each simulation (K acts as a counter), the variable LA, number of throws performed, is initially set to zero. The variable Y, set to zero in 120, changes to 1 at the beginning of line 130 where the first throw is made (LA becomes 1).
Until a six comes up, the IF is not met and line 140 returns control to 130 where Y=1-Y causes Y to alternate between 0 and 1. When a six is rolled, the IF passes control to line 150: if Y=1, it means that it was Paola's turn (she starts the game!) and Paola's total number of wins, variable P, is increased.
In line 160, the variable TL, which contains the total number of throws performed in the various simulations, is updated.
When all the simulations have been performed, we arrive at 700 where the final results are printed: the number of games won by Paola (P), those won by Francesco (NS-P), Paola's winning percentage (100*P/NS), and the average number of throws made to complete a game (TL/NS). These values can be compared with those predicted by theory; we will discuss this shortly.
With the VICE emulator, the program takes about 25 seconds to simulate 150 games.

If you want to follow what is happening a little more closely, you can use the following program: during processing, our Commodore will tell us the number of the simulated game, the name of the winner, and the number of throws that were necessary to complete it.
At the end, the number of throws for the "longest" game, the one that required the most throws to complete (variable MAXL), will also be printed.
Of course, due to the intermediate PRINTS, the program

is slower: 150 games are completed in about 55 seconds. Here it is:

```
100 print chr$(147);chr$(5):poke 53280,6:w=rnd(-ti)
110 input"how many simulations ";ns:us=1/6
120 for k=1 to ns:la=0:y=0
130 y=1-y:la=la+1:if rnd(1)<=us then 150
140 goto 130
150 if y then p=p+1
160 tl=tl+la
170 print chr$(147)
300 print"----------------------------"
310 print"simulation no.";k;"(on";ns;")"
320 v$="francesco":if y then v$="* paola *"
340 print"won > ";v$
350 print"number of throws > ";la
355 print"----------------------------"
360 if la>maxl then maxl=la
370 next
700 print:print" of";ns;"simulated games"
702 print p;"were won by paola"
704 print ns-p;"were won by francesco"
705 print:print"perc. of paola's wins";100*p/ns
710 print"(expected value 54.5 %)":print
720 print"average number of throws per game.";tl/ns
730 print"(expected value 6)":print
740 print"maximum number of throws"
750 print"required in a game";maxl
```

And now, for those who want to continue reading, ... a little math.

Paola's probability of winning (she has an advantage: since she starts the game, if she rolls a 6 right away, she doesn't even give Francesco time to roll the dice!) can be calculated in several ways using "conditional probability." If H and K are two alternative events (in our case H={rolls a 6}, K={does not roll a 6}) and A is an event, the probability of A, P(A), can be calculated using the relationship

P(A)=P(A/H)·P(H)+P(A/K)·P(K)

P(A/H) refers to the probability that A will occur if we assume that H has occurred (similarly for P(A/K)).

It is often useful to visualize the calculation using a "tree graph": arrows branch out from each node to indicate the alternatives, and each arrow shows the conditional probability of the "arrival" event occurring, assuming that the "departure" event has occurred.

The "long road" is shown in Fig. 1: the graph ... has no end because, although it is certain that the game will end sooner or later, the number of throws is not limited: even if it is increasingly unlikely, a game could require 100, 200, 1000, or more throws.

Those who do not want to get bogged down with geometric series can skip ahead; masochists can follow the graph in Fig. 1 and focus on the situations in which Paola wins (VP). Let P be the probability of Paola winning, then we have:

$$P = \frac{1}{6} + \left(\frac{5}{6}\right)^2 \cdot \frac{1}{6} + \left(\frac{5}{6}\right)^4 \cdot \frac{1}{6} + \left(\frac{5}{6}\right)^6 \cdot \frac{1}{6} + \cdots$$

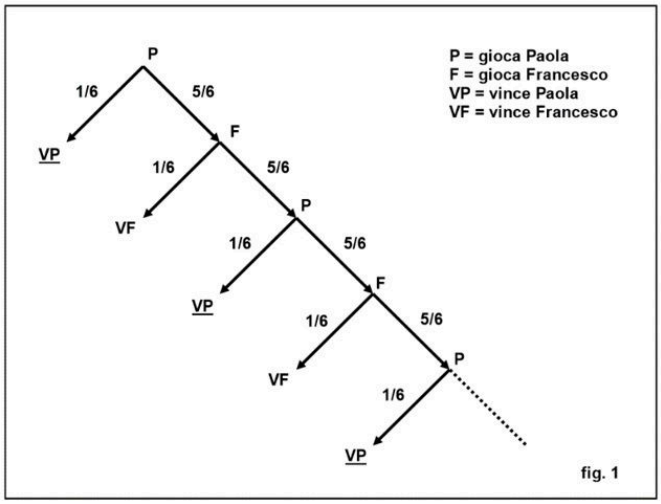


fig. 1

With a probability of 1/6, Paola wins on the first roll. With a probability of 5/6, the turn passes to Francesco, but Paola can still win if Francesco does not roll a 6 while she does on the third roll: $\frac{5}{6} \cdot \frac{5}{6} \cdot \frac{1}{6}$

(Paola does not roll a 6; Francesco does not roll a 6; Paola rolls a 6). Alternatively, Paola could roll a 6 on the fifth roll if none of the previous rolls produced the blessed 6. This occurs with a probability of $\left(\frac{5}{6}\right)^4 \cdot \frac{1}{6}$

and so on. The sum has infinite terms, but it is a convergent geometric series with a ratio of 25/36:

$$P = \frac{1}{6} \cdot \left[1 + \frac{25}{36} + \left(\frac{25}{36}\right)^2 + \left(\frac{25}{36}\right)^3 + \cdots \right] = \frac{1}{6} \cdot \frac{1}{1 - \frac{25}{36}} = \frac{1}{6} \cdot \frac{36}{11} = \frac{6}{11}$$

The result can be obtained more quickly with a couple of shortcuts.

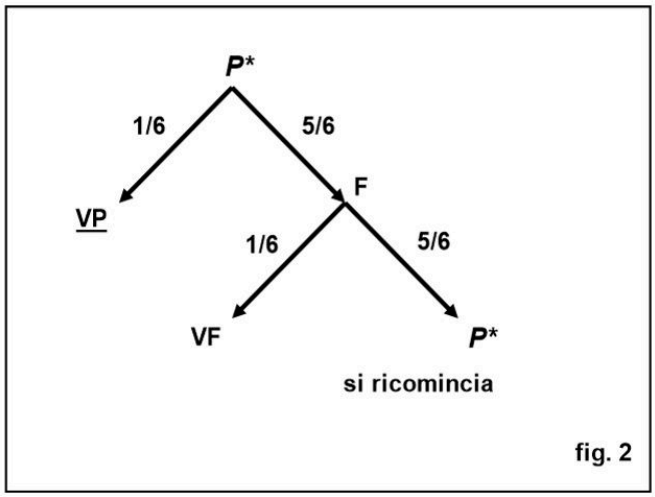


fig. 2

Let's indicate with X the probability that Paola will win the game; with the help of Fig. 2, we note that

$$x = \frac{1}{6} + \frac{5}{6} \cdot \frac{5}{6} \cdot x$$

because if Paola does not get 6 on the first throw and neither does Francesco, it is Paola's turn again and her probability of winning returns to what it was at the beginning, i.e. X. Solving the equation gives X=6/11.

Another way to reach the same conclusion is to note that if Y represents the probability that Francesco will win the contest, then Y = (5/6)*X. In fact, if Paola does not get 6 on the first roll (and this happens with a probability of 5/6), Francesco finds himself in the role of the first player and, starting from this situation, his probability of winning becomes that of Paola, i.e., X. Since X+Y=1, we have X+(5/6)*X=1, from which, again, X=6/11=0.545454... approximately 54.5%.

The number of dice rolls needed to complete a game (regardless of who wins) depends on chance and is what mathematicians call a "random variable."

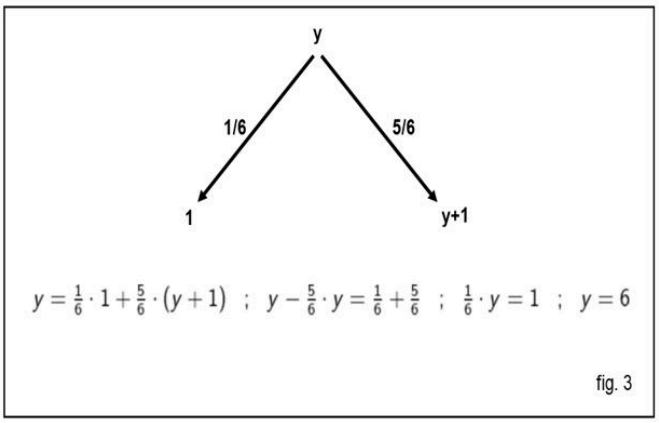


fig. 3

To calculate its average value, we can use a similar argument to the one made above: if Y now represents the number of rolls, we can see that (fig. 3) Y is equal to 1 with a probability of 1/6 (if a 6 comes up on the first roll, the number of rolls needed to complete the game is 1), while with a probability of 5/6, the first roll is, in a sense, wasted and from there it will take, on average, another Y rolls, therefore, a total of Y+1. In fig. 3, the equation is solved: the average number of throws is equal to the reciprocal of the probability of obtaining a 6, i.e., 6.

This explains the "theoretical values" with which to compare the results of the simulations performed, patiently and diligently, by our dear Commodore 64. Doesn't it deserve a round of applause?

RetroLiPS - Retro Listings Preservation Society

by Francesco Fiorentini

In issue 30-IT (08-EN) of RetroMagazine World in June 2021, we announced the creation of an area of our website dedicated to the preservation of listings.
Now, about five years later, we want to take stock of the situation and see what we can do to make it even more appealing for the future.

Let's look at the numbers
There are currently 82 listings in our archive. As you might expect, the Commodore 64 takes the lion's share with 25 listings, but the Amstrad CPC and Ti99/4A also hold their own with 13 and 10 listings available respectively.

In total, there are 15 machines represented:
- Amiga
- Amstrad CPC
- Atari 8bit
- BBC Micro
- Commodore 128
- Commodore 64
- Commodore PET
- Commodore VIC20
- Dragon 32/64 Basic
- GEOS C64
- MSX
- Oric
- TI99/4A
- TRS-80 Model III
- ZX81

Preserving listings is a time-consuming task. Often, the listings in magazines from that era are difficult to read or contain errors that require an understanding of the code to resolve. Personally, that's what I like about this activity. If, after typing a listing, it worked on the first try, I confess that part of the fun would be lost... Fortunately, that has almost never happened to me. :-)

Operating mode - OCR
"Do you really write the listings by copying the code line by line from magazines from the 1980s?"
Of course not. Fortunately, for some time now we have been able to rely on OCR (Optical Character Recognition) services. This is a technology that converts images, scans, or photos of documents into digital text. The problem with OCR is that it is excellent for natural languages (English, Italian, etc.) because it can rely on context, word frequencies, and linguistic models to correct errors and interpret ambiguous characters, while it is much less reliable for programming languages, where each character has syntactic value and a single recognition error makes the code un executable.

Operating mode - AI
This is where AI - Artificial Intelligence - comes into play; while OCR transforms images into text, AI transforms images into working code.
AI services such as DeepSeek not only read characters, but also understand the original programmer's intention, correct scanning errors, and reconstruct the logic of the program.
Of course, this is not always the case, but the leap in quality from a simple OCR scan to AI recognition of the listing is surprising.

But do you only recover listings, or do you do other things at RetroLiPS?
Good question. With RetroLiPS, we don't just recover code from magazines; whenever possible, we try to improve it and/or port it to other machines.
These are activities that help us understand the code and the differences between the various machines. After all, the BASIC dialects of the machines of the 1980s were profoundly different from each other, and to make some conversions, you really have to rack your brains or look for shortcuts.

But now it's your turn. Some readers have already collaborated by sending us listings, old or new, it makes no difference, but we want more!

RetroLiPS area on the RetroMagazine website:
https://www.retromagazine.net/category/retrolips/

Dir Browser - Modern file browser on C64

by Giampaolo Moraschi

Dir Browser is a file browser designed for the C64 that aims to replace classic "directory" tools such as CBM File Browser with a more modern interface and some well-designed tricks. It is a complete alternative even to the most renowned systems integrated into new generation cartridges, while remaining a project within the reach of those who use traditional hardware.



Interface and usability

The most obvious strength is the UI. Well-designed and readable, with an information layout that makes navigating files and directories much more intuitive than historical browsers. The program offers a clear list structure, quick commands, and well-designed visual feedback for everyday use on the C64, without forcing you to remember a thousand obscure keys.



Features and "peculiarities"

Dir Browser is described as a file browser with "fantastic peculiarities," advanced enough to rival cartridge-integrated systems such as Ultimate or Sidekick. Its strength lies in allowing convenient management of files and programs even for those who do not have modern hardware solutions, while maintaining a high level of comfort in the selection, launch, and organization of content.

Who is it for?

The software is particularly recommended for those who still use more "classic" configurations and do not have a latest-generation cartridge, but still want a powerful and practical browser.

In this sense, Dir Browser positions itself as a sort of "CBM File Browser 2.0." Same purpose, but with much more attention to presentation and user experience.



Verdict

The presentation reveals a tool that does exactly what it promises: it makes file management on the C64 more enjoyable and faster, with a modern interface and some "big" features, while remaining usable on the original hardware. It is not just an alternative to CBM File Browser, but a natural upgrade for those who spend a lot of time loading, testing, and organizing software on their beloved C64.

Where to find it:

- https://graham-it.itch.io/dirbrowser

StoryCraft System - DIY adventures on ZX Spectrum Next

by Giampaolo Moraschi

StoryCraft System is a toolkit for ZX Spectrum Next designed for those who want to create narrative adventures with a "move, talk, interact" game structure without having to write a line of BASIC, but still retaining the ability to go deeper if desired. It is an environment built with great care "by developers for developers," with ready-made examples and a modern pipeline that communicates well with the PC.



What it is and how it works

StoryCraft allows you to create story-based games in which the player explores maps, talks to characters, and interacts with objects to advance the plot you have in mind. At the heart of the system is an engine that reads precompiled maps and event data, handling all the basic logic (movement, collisions, message management) while the user focuses on settings, dialogues, and narrative scripts.

The most interesting feature is the use of a visual map system to define events and logic, reducing "programming" to design work on TILED and related tools.

To work, we need:

• TILED, Thorbjørn Lindeijer's free map editor, to draw tilemaps and layouts.

• TILED2BIN by Rusty Pixels, which converts maps into a format compatible with Next.

• MESSAGE MAKER included in the package, which runs directly on Spectrum Next and is used to manage game texts and messages.

The author explicitly recommends setting up a hybrid PC/Next workflow (for example with VSCode) to speed up testing and iterations, and the download contains everything organized into folders: a "NEXT" folder with the files to be copied to SD to run the system, and a "WINDOWS" folder with tutorials and templates to use as a basis for projects.

To avoid leaving us with a blank page, the package includes a minimal game template and a more substantial example, "The Chronicles of Pard," which shows in practice what can be achieved with the system. A previous version of the engine has already been used in "Santa's Magic Cookies," published in Nexter No. 3 (an English-language magazine for Next users), which shows that this is not a theoretical experiment but a tool that has already been tested in production.

The combination of tile-based maps, user-designed sprites, and advanced message management allows you to build experiences that are halfway between a light graphic adventure and an action adventure with a strong narrative emphasis, taking full advantage of the Next's graphics capabilities.

Our opinion

StoryCraft System is clearly aimed at those who want to tell stories on the Spectrum Next rather than those who dream of writing engines from scratch. Artists, storytellers, level designers, or simply enthusiasts who want to see their world come to life without immediately having to grapple with BASIC. At the same time, it leaves room for "power users" who want to go further, allowing customization for those who are not afraid to get their hands dirty with code.

In the landscape of tools for Next, it is a valuable piece because it is not just a technical utility, but a true authoring system designed to lower the barrier to entry for the development of story-driven adventures, with structured documentation and a modern pipeline that communicates well with the PC. For those who love Next and have more ideas than time (or desire) to make custom development engines, it is definitely worth considering.

Where to find it:

- https://sunteam.itch.io/storycraft

PTSource MiniVMDOS - More than "just another DOS"

by Carlo Nithaiah Del Mar Pirazzini

PTSource MiniVMDOS is more than just "another DOS"; it is a small, turnkey retro computing platform. A multitasking/multi-user DOS environment, heavily equipped on the networking and development side, designed to run inside MiniVM or other modern VMs, while maintaining the aesthetics and workflow of a 1990s machine.

What it is and what it includes

MiniVMDOS is a DOS-style operating system, 100% compatible with MS DOS, PC DOS, and DR DOS, with support for Windows 3.11 enhanced mode. It can be installed both in a virtual machine (MiniVM, VirtualBox, VMWare, QEMU) and on real hardware. It was created to run legacy software in a modern context, but it is clearly also designed as a sandbox for programmers and retro enthusiasts. Inside the image you will find:

• A set of about 300 DOS commands and utilities.

• A "commander"-style file manager (MiniVMDOS Commander) and an X-like environment (MiniVMDOS XSystem) to provide a minimally structured interface.

• Editor, online help, advanced memory manager, and various disk and user management tools.

In practice, it is not the classic "bare" DOS, but a complete, ready-to-use operating kit.

Focus on networking and modern tools

The really interesting part, especially for savvy users, is the obsessive attention to networking and the tools typical of a modernized *nix system.

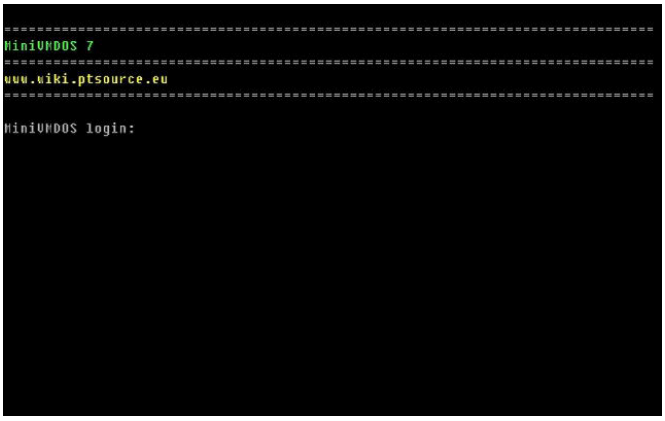
Inside we find:

• TCP/IP stack with NetNode client/driver, Samba client, multi-user support, and complete network environment.

• Text tools such as Lynx, Gopher, WGET, Curl-like (FTP, RSYNC, IRC, VNC, SSH, and more) to navigate the web and modern networks from a DOS prompt.

• Bash, CSH, and CMD interpreters, along with Python, Perl, TclSH, NASM, and the proprietary PTSource Basic (interpreter + compiler).

This combination places MiniVMDOS in a very special niche. It is DOS, but armed like a small text-based workstation for development, scripting, and network administration.



"Suite" functions: viewers, archives, system tools

Another feature is the extensive set of viewers and archive tools already included.

• Viewers for images (gif, jpg, bmp, pcx), videos (mpeg, fli, flc), documents (doc, wkb), and spreadsheets (dbf, xls, various Lotus/Works formats).

• Extractors for almost all historical formats: ZIP, ARJ, ZOO, RAR, PAK, LZH, LHA, ARC, etc.

• Dedicated utilities such as User Manager, Menu Shell, Enhanced Disk Performance Driver, plus integrated help and tutorials.

For those who like to have their "DOS toolbox" always at hand, it is almost a definitive toolkit, with the difference that everything is already pre-installed and configured.

PTSGet, extra packages, and ready-to-use environments

The distribution does not stop at the base image. MiniVMDOS integrates the PTSGet package manager, which manages the installation, update, and removal of extra packages from a dedicated repository. There is a public list of additional packages for MiniVMDOS, so you can expand the environment without having to manually hunt for zips scattered across the web.

The following are available:

• Installer for Windows that includes MiniVM with MiniVMDOS preconfigured, pointing directly to network functions and print support for Windows printers.

• Ready-made VMDK image for VirtualBox, designed for those who want to attach it on the fly and get started.

From a user experience perspective, this greatly reduces the hassle of configuration typical of manually pressed DOS/VM installations.

```
TEST       NG     230580   28-09-03   11:13
ALL        MID     36669   13-07-24    1:58   MIDI                        13
TOASTER    MPG     78093   11-04-95    9:54
TEST       ARC     48466   13-07-24   13:26   ARC     4 Files   41 %   Crunched
CINDY      MPG    121290   13-01-95   14:40
TEST       ZOO     16952   13-07-24   13:28   ZOO     7 Files   35 %   ZOO Norm.
TEST       ARJ    206641   13-07-24   18:35   ARJ    21 Files   96 %
TEST       DOC    159214   09-03-92   13:00
TEST       WKB     30302   09-03-92   13:00
BARN       GIF    243878   17-07-24    0:51   G87a    768 x 512 x 256   16777216   LZW
XTALBONG   GIF    179108   17-07-24    0:56   G89a   1024 x 768 x 256   16777216   LZW
ACCOUNT    XLS      3191   31-10-87   12:00
ORDER      XLS      2102   31-10-87   12:00
FIREGIRL   FLI     59010   31-12-89   17:20   AFLI    320 x 200 x 256
2ARMS      FLI    234908   19-08-92   14:51   AFLI    320 x 200 x 256
APACHE     FLI    650700   28-03-92    0:48   AFLI    320 x 200 x 256
STARSHIP   ANS     18021   25-02-90   13:22
TEST       JPG    214197   21-10-24   14:00   JPEG    626 x 418 x    0   16777216   DCT
TEST       A26      8192   24-12-96   22:32
PTANS      ANS      3132   20-05-25   19:55
TEST       LZH    106210   20-02-25   16:50   LZH     1 Files   12 %
TEST       MPG      1241   28-06-93    7:43
   33 file(s), 14988061 bytes, 595509248 bytes free

MiniVMDOS C:\HOME\MCTESTS$
```

Ideal target and limitations

MiniVMDOS is specifically geared towards:

• Retro programmers and geeks who want a modern DOS environment, ready for NASM, Basic, scripting, and networking.

• Those who develop or maintain legacy software and need an MS DOS/Windows 3.11-compatible platform that is integrated into modern workflows (VM, printing to host, web access).

• Retro computing enthusiasts who want a "definitive DOS" to use as a sandbox, with a declared tribute to Gary Kildall and the CP/M–DOS tradition.

The main limitations

• It is not a "lightweight" distribution like FreeDOS that can be tailored to your needs. It is full of stuff; if you are looking for absolute minimalism, this is the opposite.

• The installer is not digitally signed, so you need to ignore Windows warnings, which may bother those who are very cautious about security.

• The interface remains fiercely text-based. Those who are not comfortable with CLI, multi-tools, and prompt configuration will feel lost here.

Key features

DOS compatibility: Very high (MS DOS, PC DOS, DR DOS, Win 3.11 enhanced mode).

Setup: Very easy with preconfigured MiniVM/VirtualBox; zero basic tuning.

Included tools: Huge suite of commands, viewers, archivers, SDKs, and system tools.

Networking: Complete (TCP/IP, Samba, Lynx, SSH, FTP, IRC, RSYNC, etc.).

Development: Basic PTSource, NASM, Python, Perl, Tcl, multiple shells, dedicated SDK.

"Retro" spirit: Very pronounced, with explicit tribute to Gary Kildall and the CP/M world.

Flexibility: High in VM and on real hardware, but with a non-minimal "suite" setup.

```
MiniVMDOS C:\$ptsget
ptsget - PTSource Package Manager
Usage : ptsget [action] [parameters]
Where action is one of the fallowing:
update              - Download a fresh copy of the master package list
list                - Lists all installed packages
search [string]     - Search for package containing 'string'
install [pkgname]   - Install the package 'pkgname'
remove [pkgname]    - Remove the package 'pkgname'
repair [pkgname]    - Repair and update the package 'pkgname'
show [pkgname]      - Display information on given package
category  [string]  - Display all packages from a given category

MiniVMDOS C:\$_
```

If you like the idea of a hyper-equipped "deluxe DOS" for programming and networking, ready to use in VM, MiniVMDOS is exactly that kind of powerful toy, consistent with the aesthetics and philosophy of the DOS era, but without the configuration headaches of the past.

Reference website:

- https://store.ptsource.eu/soft/mvmdos/start

PTMiniVMDOS Suite - Journey into a parallel world

by Giampaolo Moraschi and Carlo Nithaiah Del Mar Pirazzini

An impressive suite of "modern" tools for DOS and compatible environments, clearly designed for those who still (or once again) live in a 16-bit ecosystem and want to equip themselves with a complete, consistent software package optimized for MiniVMDOS without sacrificing compatibility with other DOS systems.

The common thread is the PTSource philosophy, which is to take historical concepts and tools (GW-BASIC, Norton Guides, VisiCalc, less, vi, rsync, sed, compress, etc.) and re-release them in polished, packaged, and homogeneous versions that work well together and give an old PC the feel of a small Unix-style distro masquerading as DOS.

Development and scripting tools

The "power user" heart of the collection is the programmer tools.

• PTSource Basic: GW BASIC and IBM BASIC compatible clone with editor, interpreter, compiler, linker, and runtime, designed to combine nostalgia and real productivity; includes syntax highlighting via TSR and PDF manual, effectively becoming a small standalone BASIC development environment for DOS.

• PTSource Guides: a reimagining of Norton Guides, with compiler, linker, make, NG decompiler, and HTML conversion; already includes guides on Turbo C, TBASIC, ASM, and PERL and requires the PTGUIDES environment variable to work best.

• PTSource Python and PTSource Perl: minimalist but functional ports of the two languages, with HTML documentation for Python and libraries set up via PYTHONPATH and PERLLIB, ideal for replacing complicated batches and bringing "high-level" scripting to real mode environments.

• Advanced editors: PTSource VI (aspiring vi clone), FED (folding editor with syntax highlighting, macros, multi-file search, even binary/hex mode and internal mini tetris) and THE (text editor for developers with REXX integration and configurable highlighting) cover virtually the entire spectrum of preferences, from modal minimalism to

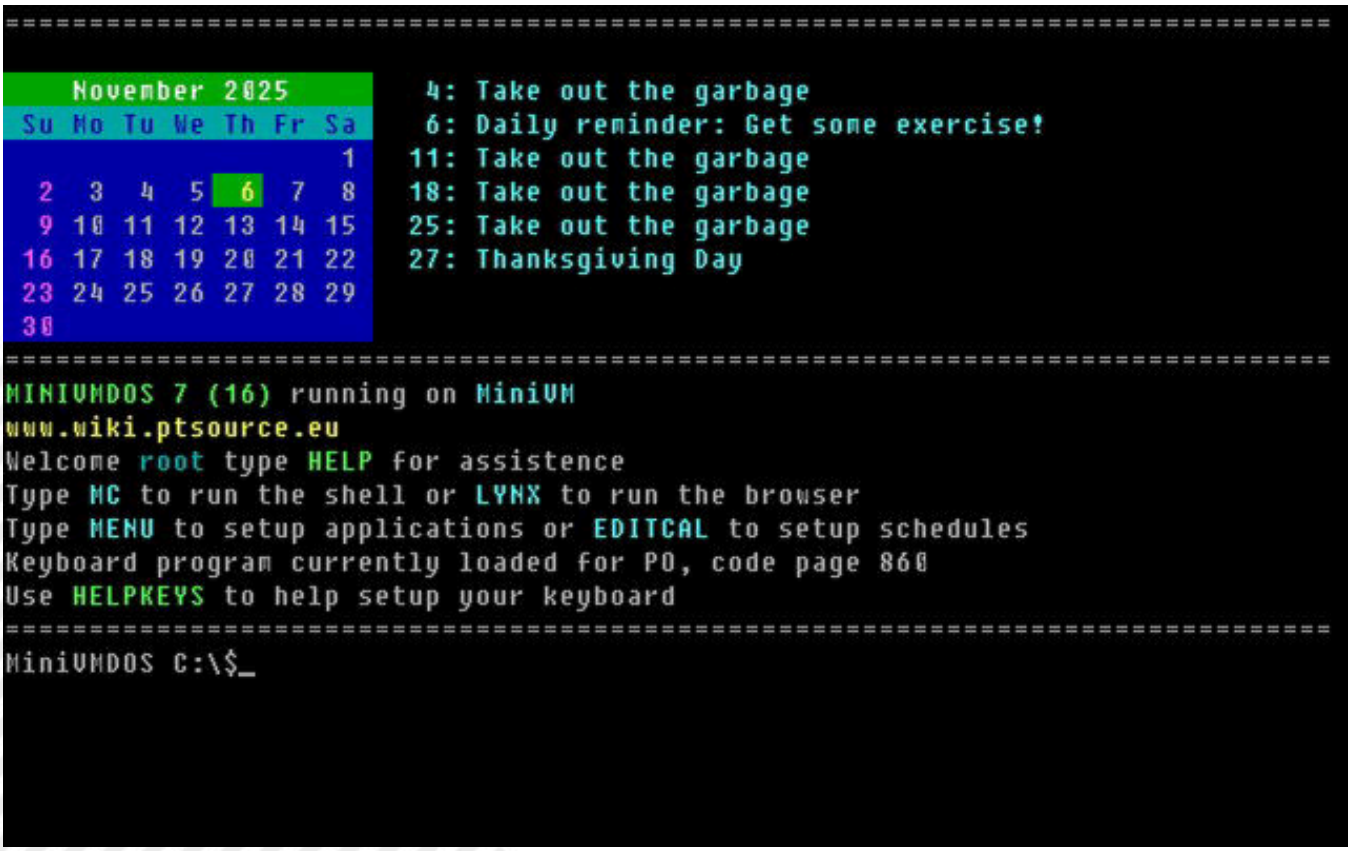


Fig. 1 - MiniVMDOS

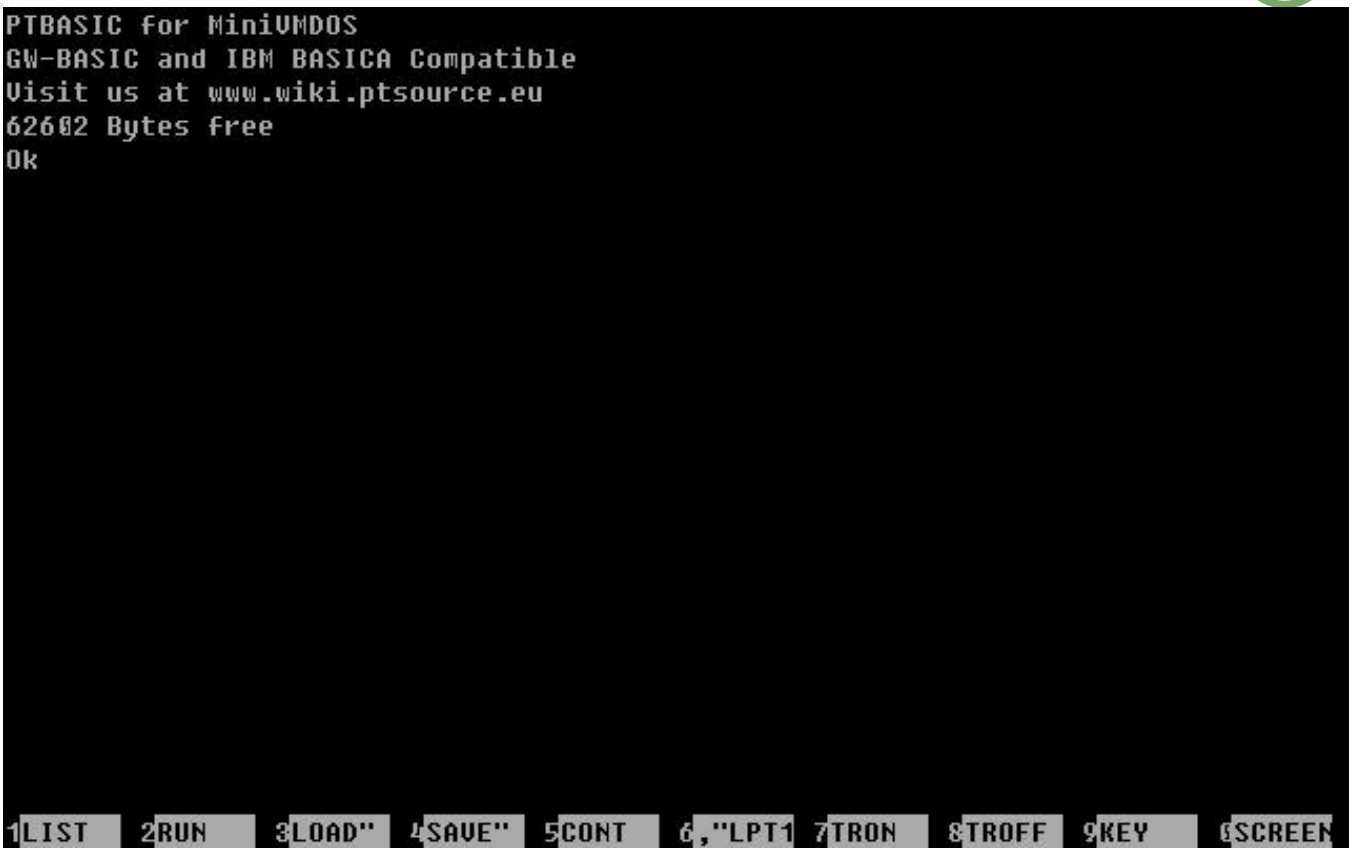


Fig. 2 - PTBasic

extreme power editing.

PTSource Guides

For a retro dev working on C, ASM, or BASIC code directly under DOS, the combination of Basic + Guides + editor (FED/THE/VI) creates a surprisingly modern environment, while respecting the limitations of the hardware. The fact that everything is optimized for MiniVMDOS but also runs on other DOS systems makes the suite very flexible.

Office and productivity utilities

The page is not limited to development; there are also tools designed to transform DOS into an everyday work environment.

• PTSource CALC: a clone of VisiCalc, with documentation included, for those who want the feel of the first spreadsheet but in a polished and maintained version.

• PTSource SC: a lightweight, command-line, "nano command mode" style text spreadsheet, with formulas similar to those in Excel/Calc and a short introductory guide.

• PTSource CAL: a calendar and scheduler that displays the month/year with the current day highlighted, useful as a mini terminal agenda.

• PTSource VIEW: multi-file viewer for text and data, with keyboard navigation and search, perfect for logs and sources without opening an editor.

These tools bring functions to the DOS world that we would take for granted elsewhere, while maintaining lightness and total keyboard control, which is essential on older machines.

File management, backup, and compression

One area where PTSource shines is file and archive management. It's almost like a "definitive kit" for managing disks and directories.

• Compressor Pack, 7Z, SHRINK, Compress & Expand: between ZIP/ARJ/ZOO, 7 Zip ports with LZMA/LZMA2 and AES 256, LZW-based SHRINK utilities, and clones of the old MS DOS COMPRESS/EXPAND, it covers virtually every compression scenario, from light archiving to serious backups.

• PTDIR, Fast File Find, DUP, CMPDIR, XCopy, RSYNC:

• PTDIR is an enhanced DIR with ANSI colors, sorting, and advanced options.

• Fast File Find searches for files on multiple disks and inside archives (ARC, ARJ, LZH, PAK, ZIP, ZOO), a killer feature for administrators of yesteryear.

• DUP finds duplicates and allows selective deletion or archiving, while CMPDIR compares directories for backup or synchronization.

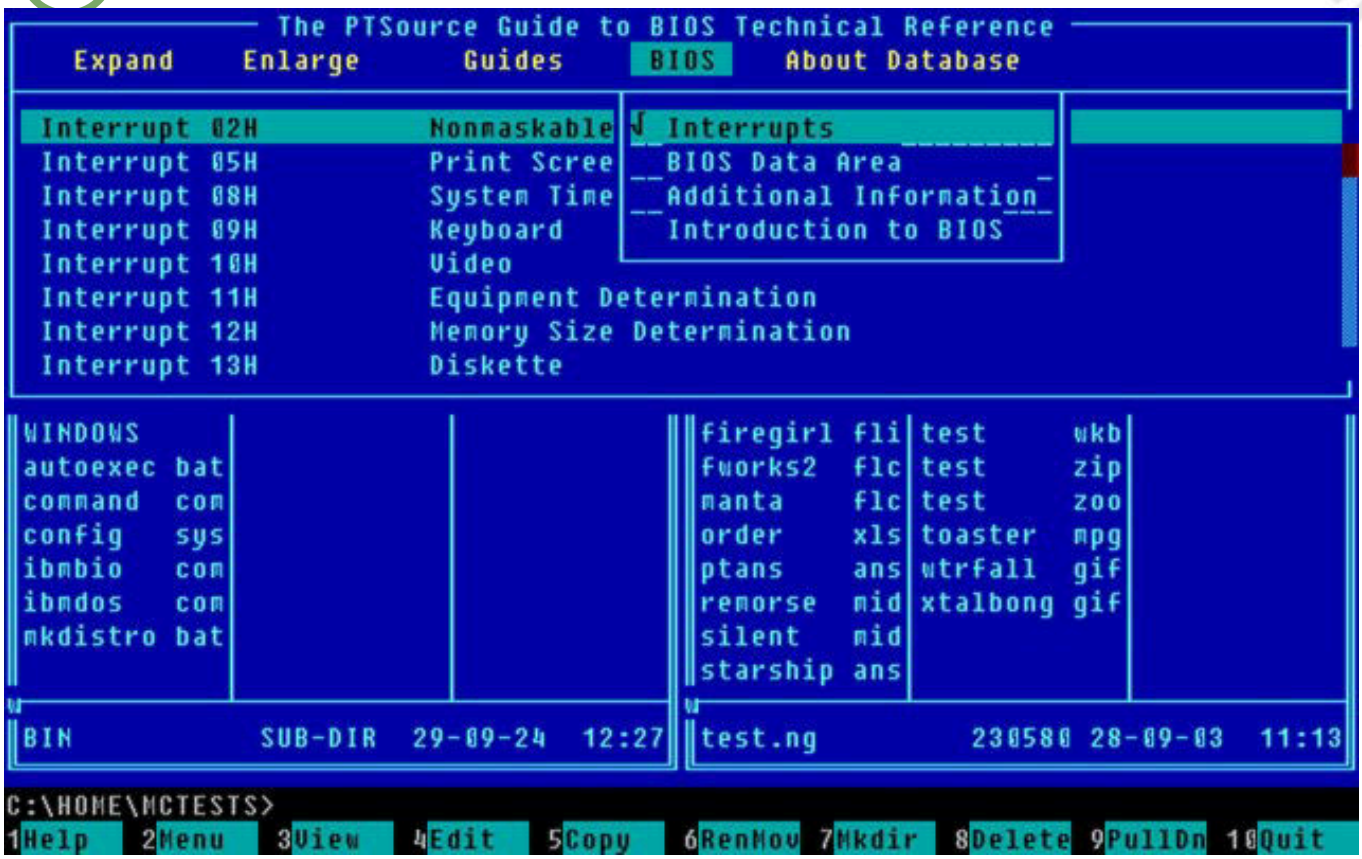


Fig. 3 - PTSource Guide to BIOS Technical Reference

• Extended XCopy makes incremental backups more flexible, and the real mode rsync port is the most impressive feature: Unix-like synchronization on an 8086 with 640 KB.

• Wee Commander and PTShell: Wee Commander is a 13 KB dual-panel file manager written in assembly, with integrated viewer/editor, clearly inspired by classics such as Norton Commander but ultra-lightweight. PTShell, on the other hand, is a complete GUI with icons, windows, drag & drop, file association applications, and desktop shortcuts, which effectively transforms DOS into a pseudo-graphical shell similar to Windows 3.x.

For those who love to "live" in DOS, these tools are not only convenient but also redesign the user experience, moving it from a single spartan command to a coherent and rich ecosystem.

System, diagnostics, and tuning

There is also a whole family of utilities for understanding and squeezing the most out of your machine.

• **PCINFO, Disk Stats, DMI**: show CPU, RAM, BIOS, interrupts, video adapter, disks, file systems, loaded drivers, used/free space, and even a graphical representation of memory and storage; a dream come true for those who need to document or debug old PCs.

• **TRAMDISK**: RAM disk in EMS that can be resized on the fly without rebooting, an elegant solution for speeding up slow systems or managing temporary data.

• **PART and Boot Manager**: PART is an advanced partitioner, compatible with a host of filesystems (FAT12/16/32, extended, NTFS, HPFS, ext2, XENIX, DR DOS secured, Linux, etc.), suitable for multi-boot setups and partition recovery; Boot Manager (described later on this page) completes the picture by managing multi-OS boot.

• **COLOR, SET, ADDPATH, mapmem, keyswap, and similar**: small tools that improve the daily experience (colors, environment variables, dynamic PATH, memory map, key remapping), especially useful in script-heavy environments. This block highlights the "distro" intent: not only applications, but also low-level tools for understanding and shaping the system as you would with a Unix toolkit.

Overall assessment

Taken individually, many of these programs are "just" good ports or well-packaged clones of historical tools, but taken together, they form a coherent platform that transforms MiniVMDOS (and any other DOS) into an incredibly rich working and development environment for the 16-bit world. The care taken in documenting each utility, the attention to environment variables, tutorials, and real compatibility with other versions of DOS make

it clear that these are not mere exercises in style, but an ecosystem designed for everyday use on real hardware or vintage virtual machines.

For retro computing enthusiasts who love tinkering with batch files, text editors, compressors, and system tools, this page is a gold mine: you can literally build a complete, modern DOS "desktop" starting from just these packages. If, on the other hand, you are looking for user-friendly 'end-user' applications and are not interested in the system side, you may find the package a little overkill: it is clearly designed for power users, developers, and nostalgic administrators, rather than for those who just want to launch a game from a nice menu.

Reference website:

- https://store.ptsource.eu/start



Interview with Domenico Marsico (@EMD69)

20 questions to an electronics technician: an important figure in retrocomputing whom we turn to for repairing or "resurrecting" our old systems

by David “Cercamon” La Monaca

Meeting technicians, repairers, and retrocomputing hardware experts means entering the beating heart of digital history. Over time, their presence on social media has become increasingly relevant: figures with different skills, but united by a wealth of technical knowledge that today represents a rare and precious resource.

The central question is: how can all this experience be passed on? The electronics of home computers and vintage consoles, which dominated the 1970s to 1990s, survive thanks to the passion of users and repairers. But time is unforgiving: even machines built to be robust are beginning to show signs of age. When an 8- or 16-bit computer breaks down, the question immediately arises: is it worth repairing? It depends on the extent of the fault, of course, but spare parts are sometimes difficult to find, and labor and transport costs are high. What's more, finding a competent technician is not a given.

In this scenario, retro machine hardware repairers play a crucial role, even though they often remain out of the spotlight and undervalued. With patience and skill, they tackle motherboards and circuits, damaged memory chips and capacitors, corroded batteries, and broken tracks that are invisible without the aid of a microscope. They are indispensable figures in our world, yet often take a back seat.

For this reason, RMW, since its last issue, has launched a series of interviews dedicated to them: professionals and enthusiasts who work "behind the scenes" of retrocomputing. We ask them twenty questions to gather testimonials, anecdotes, and reflections from those who, with dedication and sacrifice, bring authentic icons of computer history back to life.

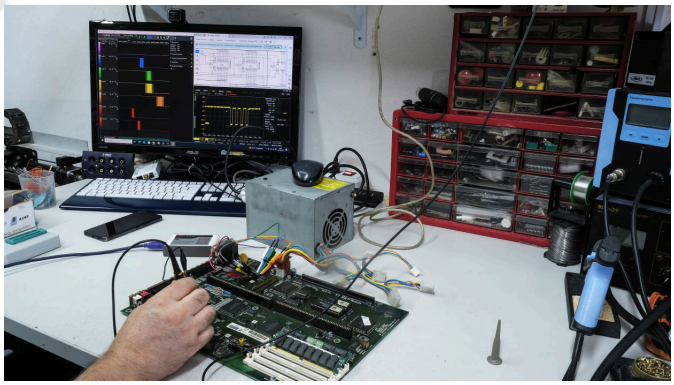
In this issue, we meet Domenico Marsico, promoter of the EMD69 project, who for some years now has turned his work as a repair technician into a highly popular channel for dissemination on the web and social media.

Q&A - 20 questions/20 answers

1. DLM - Hi Domenico and thank you for kindly agreeing



Domenico in his workshop



Domenico at work on the workbench

to the interview. First of all, we ask you to briefly introduce yourself with a few notes on your personal history in relation to the world of electronics and retrocomputers.

My name is now public knowledge for those looking for content on Commodore computers. I am 56 years old and was born in Tiriolo, a small town in the province of Catanzaro; A few months after my birth, my family moved to Turin, where I attended compulsory school. When we returned to our hometown, I continued my studies and became passionate about electronics, which I began to study privately through books and magazines such as Nuova Elettronica, Elettronica 2000, and Elettronica In.

I started working at a very young age for various private companies in the field of repairs and small electronic designs, which allowed me to gain a more solid and professional education, until I was hired by a sales and technical assistance company that later became the official Commodore Technical Assistance Center (CAT). During those years, I worked directly with many enthusiastic Commodore customers, both during the brand's golden age and in the subsequent period of decline, when the company I worked for severed its ties with Commodore Italia. I then remained in the business for many years, dealing with diagnostics, repairs, and restoration of vintage hardware.

Today, I work as an electronic designer at my current company: I mainly deal with the design and prototyping of control units, both manual and numerically controlled, which manage portable industrial machines often made to the end customer's specifications.

Since March 2020, I have been sharing my know-how and projects on the YouTube channel @EMD69, with the aim of preserving and passing on the technical memory of retrocomputers.

2. DLM - How did you become interested in repairing electronic boards and computers? Which machine are you most passionate about repairing and why?

I got into repairs purely out of a passion for electronics: as a boy, I spent all my free time taking apart and understanding circuits. With my savings, I bought my first Commodore VIC-20 during the Christmas period, I think in 1981, but it soon turned out to be faulty and the seller refused to honor the warranty.

Some time later, a friend bought the same model and, having a machine to compare it with, I was able to diagnose the problem with my VIC-20 and repair it. Obviously, I didn't have much experience in electronics in general, and in particular with the very first home computers, but I used a methodical, if not particularly sophisticated, approach that led me to solve the problem. From that moment on, restoring and repairing Commodore machines became my path in life.

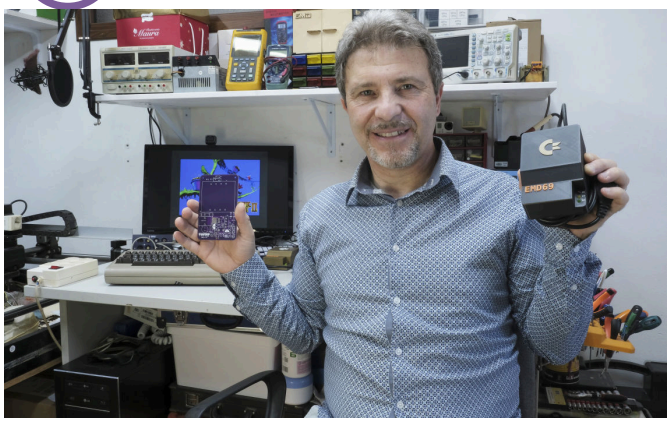
I don't have an absolute preference for a single model: every machine has a history and represents a challenge, and for me, it deserves to be restored to its former beauty and functionality. Certainly, Commodore computers are the ones I know best from experience.

3. DLM - What are the most common challenges you face in restoring and repairing retro hardware? What are the most frequent faults you encounter in your experience?

The most common challenges are repairs that have been started and then abandoned by other technicians or by people who improvise repairs: inadequate attempts often aggravate the original damage and make diagnosis much more difficult, because the real causes are no longer directly related to the apparent defect. The most frequent faults depend greatly on the type of machine; for this reason, in my opinion, it does not make sense to draw up



Part of Domenico's retro-hardware collection



ALMC64U, one of the EMD69 hardware projects

a ranking that is valid for all systems: each platform has its own recurring critical issues.

4. DLM - Do you have a "mission impossible" that you have successfully completed? Is there one that you are particularly proud of? Can you tell us about it briefly?

I don't have a real "mission impossible" that I am proud of: many of the repairs are fairly straightforward, solvable with established procedures for common faults. However, there are cases that initially seem very complex and require more time, in-depth measures, and creative solutions, but once the cause is identified, the solution becomes obvious and the seemingly difficult repair turns out to be trivial.

That moment (when a new investigative path proves successful) is the most rewarding part for me, because it transforms a problem into experience and knowledge that can be shared.

5. DLM - How do you source spare parts or original materials? How difficult is it to find them after more than 30/40 years?

A lot depends on the component needed. Common spare parts can still be found without too much trouble, especially for widely used machines (we are talking about over 22 million C64s sold worldwide), while other components are now replaced by modern reconstructions (e.g., firmware on EPROM/EEPROM, reproduced modules, FPGA-based solutions, or regenerated PCB boards).



The ALMC64U power supply at work

For truly rare parts, you need more than anything else luck: flea markets, online auctions, enthusiast groups, and old repairers' stocks remain the main sources, but prices often tend to rise.

For transparency, in the videos shown on the YouTube channel, I always work on subscribers' machines: I ask for a voluntary donation (often non-monetary) and the components are purchased directly from the owners, so as to avoid ambiguity about provenance and costs.

6. DLM - What role does the retrocomputing community play in stimulating your business? Are you often able to intervene personally in what you have created on YouTube?

The community that has formed around my YouTube channel is very large. Until a few weeks ago, the community that had formed around the Telegram group (which I unfortunately had to close) was intended to be a fundamental space for discussion. I had designed it to give enthusiasts a free place to exchange advice, guides, materials, and offers, helping each other out. The community was very active, and often the members themselves came up with solutions to problems, exchanged components, and offered lots of technical advice. Unfortunately, there was a real degeneration of the goals I initially wanted to achieve through the use of Telegram, which convinced me that closing it down permanently was the only way forward.

My presence in the Telegram group was, however, rather limited compared to that of other members. For day-to-day management, I also relied on a number of volunteer collaborators—administrators who moderated topics, kept order, and, when possible, provided direct technical support to other users. On the YouTube channel, on the other hand, I mainly create video content, publish restoration cases, and personally present some complex or particularly interesting issues.

In summary: I strongly believe in a community that is a collaborative and, as far as possible, self-sufficient space. In fact, I am already working on a new tool around which to create a new community of retrocomputing enthusiasts,

which will bring together the many users who had become accustomed to the Telegram group. With the start of the new year, I am confident that we will have this new platform fully operational, and I will certainly always be available as the first point of contact for content, for the most challenging repairs, and to ensure transparency, while volunteers will help keep the tool for sharing knowledge, techniques, and experiences alive and functioning.

7. DLM - In your experience, how important is it to preserve not only the devices themselves, but also the software and documentation related to the hardware (technical diagrams, circuit drawings, tables, and data on the components used)?

For me, the importance of preservation is not just about the objects themselves, but the entire technical and human context that produced them: hardware, software, and documentation. Passion plays a huge role—those who lived through the Commodore era know how much these machines paved the way for computing for everyone, but beyond nostalgia, there are practical and scientific reasons for preserving all the original material. Schematics, circuit diagrams, tables, and datasheets are essential for diagnosing, repairing, and, when necessary, rebuilding obsolete components; firmware dumps and software files are used for emulation, functional testing, and keeping the systems 'running' even when the physical hardware becomes irretrievable.

The documentation also allows technical knowledge to be transferred to new generations, repairs to be reproduced, and historical research to be supported: without accurate data, everything becomes much more difficult, and we risk losing not only the pieces but also the ability to understand how they worked. For these reasons, it is important to digitize, catalog, and share (with due legal precautions) schematics, manuals, and software in accessible archives, with metadata and redundant copies. Only in this way will the technological and emotional memory of those years remain available to future enthusiasts and researchers.

8. DLM – In recent years, have you noticed a resurgence of interest in retrocomputing/retrogaming among the younger generations and beyond? Who are the people who come to you for technical advice or repairs?

Yes, I see a resurgence of interest in retrocomputing and retrogaming, even among the younger generations, but to a lesser extent than among those who lived through that era. Those who come to me for technical advice or repairs can be roughly divided as follows: about 70% are people between the ages of 40 and 65 (peaking around 55) who are trying to recover the machine of their youth for nostalgic reasons; 25% are other technicians, hobbyists, and collectors who try to do repairs themselves or seek technical advice; the remaining 5% are people who turn their hobby into a source of income, sometimes with speculative approaches, but as we know, there's a bad apple in every barrel.

9. DLM - What is your opinion on emulation (software) and reproduction (FPGA) of old systems? In your opinion, do they help or harm the preservation of the original systems?

Software emulation and FPGA reproduction are different tools with advantages and limitations: both can aid preservation, but neither completely replaces the original. Software emulation is great for preserving and enjoying software (games, programs, demos), for quick testing, for teaching, and for accessibility to new users. It reproduces functional behavior but often fails to capture important "physical" details (timing, noise, analog characteristics of chips, small imperfections that sometimes affect software). It is valuable but should not be considered equivalent to the original hardware.

The use of FPGA systems reproduces behavior at the digital hardware level and can be a pragmatic solution when custom chips are no longer available. It offers greater fidelity than pure emulation and allows you to



A C64 with the ALMC64U in operation



The JAU2 controller project

recreate features that are difficult to simulate, while remaining a reconstruction: analogies, tolerances, and certain physical interactions may still differ from the original.

The original hardware remains irreplaceable for historical research, for authentic experience, and for studying real defects/solutions. Preserving real machines, schematics, and software remains, in my opinion, essential.

In conclusion, emulation and FPGAs are complementary tools to the actual preservation of original systems. They are very useful for keeping usability and research alive, but they must be used in conjunction with the protection of original hardware and documentation. Modern projects such as the C64 Ultimate show how well-made reproductions can be positive if done with respect for history and the community.

10. DLM - If you could restore a single legendary piece, perhaps for a retrocomputing museum, which one would you choose and why?

I don't have a clear preference: I like working on different machines because each one tells a story and presents particular challenges. However, if I had to name a "legendary" one that fascinates me, I would say the Commodore 65: it is a rare and interesting piece from a historical point of view (a bridge between the C64 and more advanced machines), but I have to be honest, I have never seen it in person and I don't have any documentation, schematics, or original components. This makes any repair very complex today.

If I were entrusted with it for a museum, my approach would first and foremost be conservative and methodical: find and catalog all possible documentation, search for original specimens or parts through the network of collectors, involve the community in information exchange, and always record every intervention to preserve its historical memory. But I repeat: without access to basic materials and schematics, a complete and faithful restoration would be very difficult.

11. DLM - What basic hardware and software tools do you typically use to diagnose faults on vintage systems?

To diagnose faults, I rely on a combination of basic electronic tools, some specific tools for electronics, and diagnostic software/ROMs.

The tools I use most frequently are an oscilloscope to analyze signals, a multimeter for quick measurements and continuity, and a logic analyzer when I need to capture and decode data buses and digital protocols.

For workshop hardware, I also have an adjustable bench power supply, a soldering station with temperature control, a hot air gun for desoldering SMD components, a soldering iron, tweezers, and a microscope for working on SMD components.

Other practical and useful tools include a logic analyzer for buses, addresses/data, etc., an ESR meter for checking electrolytic capacitors, a universal programmer (TL866) and dumpers for ROM/EPROM/EEPROM, various diagnostic cartridges/ROMs, test cartridges, and ROM monitors to start up certain models and isolate faults more quickly.

As for software and other digital resources, I have various software for logic analyzers and oscilloscope displays, ROM/EEPROM dumping and programming tools, hex editors, and checksum utilities. As for documentation, I often use online archives, datasheets, and forums/collectors to compare signals and schematics.

12. DLM - When working on a historic or valuable motherboard, do you prefer to keep it as is or make modifications/adaptations?

My approach is always conservative: the primary goal is to restore the motherboard to its original function with the utmost respect for its historical integrity. Modifications or adaptations are a last resort and are only undertaken if strictly necessary (safety, availability of spare parts, or other technical impossibilities). When I intervene, I look for solutions that are as reversible and discreet as possible, avoiding flying bridges, "rough" soldering, or repairs that

visually alter the PCB.

In my work, I follow certain practical principles, such as prioritizing the aesthetic and functional preservation of the PCB through careful and invisible track reconstructions and the use of professional methods (copper, coatings, protective varnishes). Then, whenever possible, I try to use components that are consistent with the original; if these are not available, I use modern but documented reconstructions. Aesthetic interventions must be minimal: no flying bridges or visible "hacks"; every repair must be clean and professional.

If the repair requires very invasive reconstructions, I consider producing a separate replica/conversion (e.g., a rebuilt PCB), leaving the rest as intact as possible.

13. DLM - How do you deal with oxidation and degradation of electrical contacts after decades of inactivity? What maintenance techniques do you usually recommend to those who receive a machine after your repair?

I deal with oxidation and degradation on a case-by-case basis: each problem (oxidation, rust, electrolyte or acid residues from batteries) requires a different solution. Among the products I usually use are alcohol vinegar (preferable for restoring rust damage), turpentine (not odorless), 70° water, and liquid soap (for cleaning battery/capacitor acids). The well-known glass cleaner that starts with "Q" also has a place :-D

For those who receive the repaired machine, I provide basic maintenance advice: periodic external cleaning, positioning away from direct sunlight, and... turning it on for at least 10 minutes once a month!!! :D

14. DLM - Have you ever had to recreate or replicate components that are no longer in production? Or improve the original ones with modern designs? If so, how did you do it, where did you start? What resources did you use to document yourself?

Yes, sometimes I had to redesign components that were no longer in production. The most recent and functional project is a professional power supply for Commodore 8-bit machines: the original power supply is minimalist and undersized, with no output protection (only an input fuse) and often causes machine failures.

I started with the features I wanted to integrate without compromise, designing a fully protected and reliable power supply with redundant active protection. The result is a unit that can save itself and protect the machine even in extreme cases, for example if an IC is inserted backwards, and is very useful in the laboratory when the conditions of the machine to be powered are unknown.

15. DLM – Do you use FPGA-type hardware emulators or reverse engineering systems to test obsolete parts? What do you think are the fastest tools for diagnostics?

At the moment, I don't use hardware emulators (FPGA) operationally, I've only experimented with them out of curiosity. For diagnostics, I rely on practical tools: DiagROM for Amiga is excellent if you know the machine's hardware well, and for the C64, DeadTest is very effective and fast at detecting problems.

16. DLM - How do you manage the storage of data from fragile magnetic media (floppy disks, cassettes, hard disks)? Do you look for the most appropriate solution on a case-by-case basis, depending on the machine and system you have at hand?

I don't deal directly with software backup on behalf of clients, but I take care of my personal archive. Over time, I have found that optical media (CD-ROM, DVD, Blu-Ray), especially in bulk versions, are terrible for storage; on the contrary, many magnetic media are unexpectedly more durable, audio cassettes, for example, have proven to be very resistant.

For backup purposes, it is best to convert the media into standard digital formats: for example, ADF for Amiga, CRT/PRG/D81/D64 for 8-bit Commodore computers. Once digitized, the files can be stored on a standard PC or NAS: the file sizes are so small that it is possible to save almost all existing software in a small amount of space and in a short amount of time.



The JAU2 bridge in all its glory



The KBSX64U keyboard

17. DLM - What is your opinion on the use of modern capacitors to replace vintage ones in repairs? In general, do you think it is easier or faster to carry out common repairs today than it was when the systems were first sold?
Well, replacing the original capacitors with modern components is often not a choice but a necessity, in some cases even a priority (e.g., Amiga 600 and Amiga 1200). Apart from the date of manufacture, I don't see any major differences between the electrolytic capacitors of 40 years ago and those of today, except for size and reliability, so the use of modern components is necessary and irrelevant. As for the ease of repairs, I don't think much has changed since the machines were sold: there are a few more diagnostic tools, but nothing revolutionary that makes the job substantially easier.

18. DLM - What programming languages or software environments do you use to interface with legacy hardware, especially for firmware updates or ROM/EPROM-related updates or integrated circuit programming?
Today, I no longer use programming languages directly on vintage machines. I have created some external boards that interface with these systems (I hope to present an interesting and complex project soon) and I am responsible for programming the board-side firmware: for this I mainly use the C language.



The KBSX64U keyboard in position

19. DLM - How do you document your work: do you create diagrams, write guides, or share code on public repositories or multimedia content? Are you a technician who is "jealous" of your techniques, or are you willing to share your knowledge and experience with others?
I mainly document my work through videos on my YouTube channel: I don't just show the repair, but I explain procedures, motivations, and techniques for those who want to learn. Previously, I used to supplement my consulting work by writing tips and suggestions in the Telegram group (@EMD_69), which, as mentioned above, has been closed. I am not at all jealous of my techniques: the interactive channel that will open early next year is designed precisely as a space for free knowledge sharing.

20. DLM – How much do you really enjoy carrying out repairs, diagnosing faults, and how much satisfaction do you get when you manage to solve a problem that initially seemed insurmountable? Have you ever had to

EMD69 PROJECTS

ALMC64U: a power supply for VIC20, C64, PLUS4 which, as I wrote in the interview, includes all possible input and output protections: OVP, OTP, OCP;

KBSX64: a microswitch keyboard for the SX64, the portable computer that is often sold without a keyboard today (they are now impossible to find). The project includes a PCB and components to be 3D printed (see photo KBSX64) and painted. The latter were conceived and designed by Igor Baldachini, a member of the EMD69 group who also designed the ALMC64U power supply case and made it available free of charge on 3D printing platforms;

JAU2: a very special joystick that works on all Commodore computers. It has 3 outputs, 2 of which are independent and opto-isolated (it is possible to connect two computers simultaneously, even with different voltages), fully programmable, each button can be mapped to any function, creating macros for multiple and complex movements. It also has side buttons for pinball simulators and can function as a paddle in games that support it.



KBSX64U keyboard and membrane in operation on an SX-64

give up because of too many faults in a system or because the cost was not worth the effort?

Frankly, I don't enjoy it at all; what really motivates me is the satisfaction of returning a machine that someone is attached to. That's why I always put in the maximum effort necessary to complete a repair.

Solving complex cases gives me a lot of professional satisfaction. Out of hundreds of repairs I've done, I've had to give up on about 4-5 because there were too many faults or the cost/time involved didn't justify the effort.

Conclusions

We thank Domenico for telling us about his business and his many ongoing projects. Sometimes in the field of electronics, it is not easy to find people who are willing to talk and allow us to properly document their achievements, difficulties, and, more generally, their valuable work. But this is certainly not the case with Domenico, who, in all his activities, shows great willingness to share his vast technical knowledge of computers and vintage systems.

On his YouTube channel, which at the end of 2025 had around 9,000 subscribers and approximately 2 million views of over 280 videos, we can easily see that his passion for our beloved retrocomputers is the real driving force behind his work to preserve and restore vintage systems that have given us so many years of fun and carefree enjoyment.

If you also have a passion for the machines of yesteryear and want to learn more about how to repair them, subscribe for free to the social channels of the EMD69 project. You will find lots of useful information, experiences, and documents, but above all, you will become part of a virtual place to exchange messages, send requests for help, and receive support from numerous other retrocomputing and electronics enthusiasts.

LINKS AND REFERENCES

YouTube channel:
- https://www.youtube.com/c/EMD69

The new forum (under construction, available from January 2026):
- https://www.emd69.com

Japan Episode 28: Gachagachagachagachagacha...pon!

by Michele Ugolini

Dear readers, are you ready for yet another episode on gachapon? On my last trip, what fantastic and bizarre Japanese finds did I come across in the endless rows of these machines scattered throughout countless shopping streets or in large dedicated rooms on the floors of various buildings? In your opinion, in 2026, will the popularity of Japanese scoops have decreased or increased in sales?
Here are some answers.

Let's start with what I would probably classify as one of the most bizarre gachapon I've found on my travels. A capsule that will solve the problem of public toilets forever, wherever you are in the world, with a single rule regarding the compactness of the volumes you will have to expel! During your travels, have you ever found yourself in difficulty when it comes to finding public toilets? Maybe you're in the open mountains, no one can see anything, the need is uncontrollable, so you proceed silently, moving a few meters away from the main road. But what if you're in an Italian historic center with bars, shops, or takeaways that may not have a public toilet, or the toilet is out of order? This can happen in Italy, so be careful, dear Japanese friends. Plan your trips well, checking that there are toilets near your destination. In Japan, there is a super-clean toilet on every floor of every commercial building, but in Italy, the rules can vary considerably. In any case, in this gachapon, I found the ultimate solution to never having to look for a public toilet anywhere on the planet again: a ball containing a toilet, not a Washlet for now, but a very useful toilet measuring just a few square centimeters, which is absolutely pocket-sized.
At the bottom of the page, you can admire the majestic miniaturization of the toilet, including a tiny piece of plastic in the perfect shape of, well, you know what, with a healthy light brown color and a density very, very similar to plastic. Obviously, you have to leave home with the idea that your bowel movements will have to be compatible with the amount handled by the toilet, otherwise the company that manufactures this item may not respond to complaints or refunds, and the warranty



may be void in a very complex situation. For five coins, you can have this exquisite item. Before leaving home, you must obviously fill the clean water tank and empty the toilet water tank. I recommend leaving the mold in the original packaging that I mentioned earlier at home, otherwise you will find it difficult to retrieve it.
The instruction manual is fairly intuitive. By lifting the doughnut-shaped toilet seat, you can flush the toilet by releasing the water from the upper tank. Also remember that it's one shot, one kill, meaning you have one and only one chance to flush the toilet and hope that everything goes well.
Thank you, Toys Spirits, for creating such a fantastic item.
I can't wait to collect them in all colors, especially the miniaturized mold, which is very miniaturized!

So far, so good.
Now let's take a look at an extremely cute and extremely useful gachapon, especially if you're on a crowded bus and the stop reservation button is far away, difficult to reach, or... broken!
What did I find in an adorable little ball? A stop reservation button, yes, exactly, in the machine there were obviously many colors, the button is the classic one found inside Japanese buses, but being portable, I think you can use it anywhere in the world. I would love to be there with you when, on a crowded bus in a big city, perhaps in India, you take the button out of your pocket and this useful object with a light and a sound reserves your stop. I would like to see the frozen looks of the people around you as they meet your gaze, obviously proud and confident. I would like to touch the icy fog that will descend along with a surreal silence throughout the bus. Probably even the driver could actually stop the bus and let you get off quickly.
Remember that it is not perfection that counts but functionality, and in this case, the means will justify the end. You will get off and wave goodbye to the bus as it leaves without you, with all the eyes of the composed, frozen, and speechless passengers staring at you in unison as they drive away.
Very important: the batteries must be charged, otherwise there will be no light and no sound effects!

Continuing my hunt for Kinnikuman, I regret to inform you that I have noticed a drastic reduction in this type of 'wrestler' character. In Italy, we know this phenomenon by the name of Exogini and, worldwide, MUSCLE. Well, I counted very few machines, at most one distributor for each entire shopping street full of gachapon. Often, on the floors of buildings, there were no machines containing Kinnikuman or similar characters, neither soft rubber nor hard rubber, nor transparent ones with glitter inside. The very few machines I found were light pink flesh-colored Kinnikuman, made of soft rubber, or beautiful metal characters with a shiny chrome-like paint finish in gold or silver. In any case, they were always perfect in every detail and reasonably priced at five 100-yen coins or less. This is usually the stage when collectors start creating lists, databases, and censuses about an object, which will soon be fed to the dark side of collecting, with surreal prices and chronic suffering for the unfortunate buyers. Probably on my next trips, I will be able to better suggest whether this shortage of "wrestlers" is temporary, deliberate, random, planned, or something else. In the meantime, I strongly recommend that you read up on Kinnikuman and various rubber characters from Japan. I couldn't even imagine how many types of characters have



been put on sale in Japan in recent decades, but looking at their second-hand market, I can assure you that our Kombattini, Exogini, and the like are a drop in the ocean. A disturbing ocean for the poor Japanese collector. I don't know, I see it a bit like the insect in Kafka's famous book, suffering and searching frantically along the streets and shopping malls of the whole of Japan, following blogs and social media in order to obtain useful information to find the last pieces of the collection.

Let's move on to the incredible uses that gachapon have in store for us.
Have you ever found yourself without a phone? Or with a phone but with a dead battery? Or a phone that suddenly shows no signs of life? Or a phone that has fallen into a manhole, into the harbor, violently snatched away by a hungry crow or hawk? Or more trivially, have you run out of credit, or is the network not reaching your location, or are they working on the antennas and there is no signal? It's a real nightmare. How can you make a call if there is no radio signal? It's very simple. Since phone booths are now a thing of the past, a relic of the 1990s, and analog landlines are almost obsolete in homes, could we hope for a phone line similar to the analog one, with a dial to select and dial the number? Perhaps with the surreal possibility of a wireless line?
Here is the incredible solution from Gachapon to eliminate stress and possible panic attacks. Turn a dial to dial any number you want.
Never again without a phone, never again network or antenna problems. Never again without the luxury of being able to call whoever you want.
Colors? I found it in red, the mechanism rotates perfectly, and the precision in selecting the number is maniacal. There is a chain to use it as a key ring, but by now, if you have read my other past articles, you know that I recommend keeping these items safe in a display case, as they will most likely enter the world of collecting. Also consider that, in two or three generations, young people will have absolutely no idea how to use an analog telephone with a dial. Probably only photos will remain in history books, and perhaps these funny collectible gadgets will also remain, simulating a glorious and now very distant past.

Other interesting items I've seen but haven't collected? Mini arcade cabinets from the past, Street Fighter 2, Pac Man, Virtua Tennis, etc.
I didn't buy them for one simple reason: they are such miniaturized plastic objects that the joystick on the dashboard seemed incredibly delicate to me, at risk of being destroyed with a single glance. Besides, honestly, I wouldn't even know how many thousands of cabinets could be produced in an unlikely collection of all the arcade games of the past: do we realize how many titles are in the MAME database? Thousands and thousands. So what would I do with a lone Street Fighter 2 in my display case? I haven't started such an unlikely collection, but I would be really curious to see what a wonderful row as far as the eye can see a collector could create with all the cabinets on display. That's assuming that all the cabinets of all past and present titles from all the world's arcades were produced! Too many doubts. I gave up on the idea.
Unfortunately, I cannot confirm that these micro arcade cabinets can emit any sounds characteristic of the video game they represent, or perhaps some lights or special effects. They seemed to me to reflect the precise style of the arcade cabinet, but I did not see any indication of the insertion of



batteries.
In any case, if I find them on my next trips, I will give it some thought.

Finally, I'll tell you about a very cute ball I bought, which is a miniature version of the classic game of the pirate in a wooden barrel and swords stuck in the barrel that make the pirate jump out of the barrel: "Pop up Pirate."
The game was originally created and marketed by the Japanese company TOMY (now Takara Tomy) in 1979–1980. It has become very popular over the years and has also been re-released by other licensed manufacturers.
Inside this ball is a fully functional miniature version of this game. The differently colored swords fit perfectly into the slots in the barrel, and one of these slots contains the mechanism that will pop the pirate out. Everything works perfectly. Once the stickers have been applied and the swords removed from the plastic mold, everything looks incredibly perfect for playing.

Well, dear readers, in my recent trip, I obviously didn't tell you about all the oddities and curiosities of the gachapon world. In the next episodes, if you like, we can continue the list of these funny objects. The only thing that hasn't changed in all these years of traveling is definitely my surprise at seeing how eagerly children and especially adults flock around these machines like bees around honey, and it's really very entertaining. Until next time, dear friends, we'll have to add another gacha to the title, and maybe spend an extra 100 yen coin!



Absolutely Brilliant! The History of Codemasters

di Carlo Nithaiah Del Mar Pirazzini

It was school days. It was the "fabulous" 1980s. They were passionate and talented young nerds.

I'm talking about Richard and David Darling, brothers and founders of the longest-running and most recognizable British video game company. A history made up of a flood of classic titles that began with the passion of these two young "nerds."



Brothers Richard and David Darling in a vintage photo

The beginning

While attending school in Vancouver, Richard Darling and his older brother David learned programming with punch cards and had free access to the computer room outside school hours thanks to the help of one of the janitors.

Another great passion was programming their father's Commodore PET, where they were creating a text version of their favorite role-playing game, Dungeons & Dragons. Their resourcefulness led them to recruit another schoolmate, their friend Michael Heibert, the proud owner of a VIC 20. In no time, they founded Darbert Computers and created several clones of popular titles of the time, such as Galaxian and Defender.



Intro of BMX Simulator for C64

Shortly thereafter, the Darling brothers returned to England, where they purchased their own VIC 20 (with the proceeds from their first games) and founded Galactic Software. An advertisement in the popular magazine of the time, Popular Computing Weekly, caught the attention of Mastertronic, a British publisher impressed by the team's capabilities.

The arrival of Mastertronic coincided with the Darling brothers leaving school to devote themselves 100% to developing low-cost titles for the company (the famous Budget Games). Among these, we cannot fail to mention Space Walk, BMX Racers, Jungle Story, Orbitron, Pigs in Space, and Sub Hunt.

They also developed the "primordial" editor called The Games Creator (re-released years later under the name "Creations"). A game creation tool that was sold with moderate success.

Their success and speed of development earned them £200,000 when they were 16 and 17 years old, respectively. By 1985, the two owned 50% of Mastertronic, which they sold in March 1986 to become independent.

With the help of their father, they founded Codemasters in October 1986. It was a "family" business, so much so that their older sister was the secretary.

The early years of Codemasters

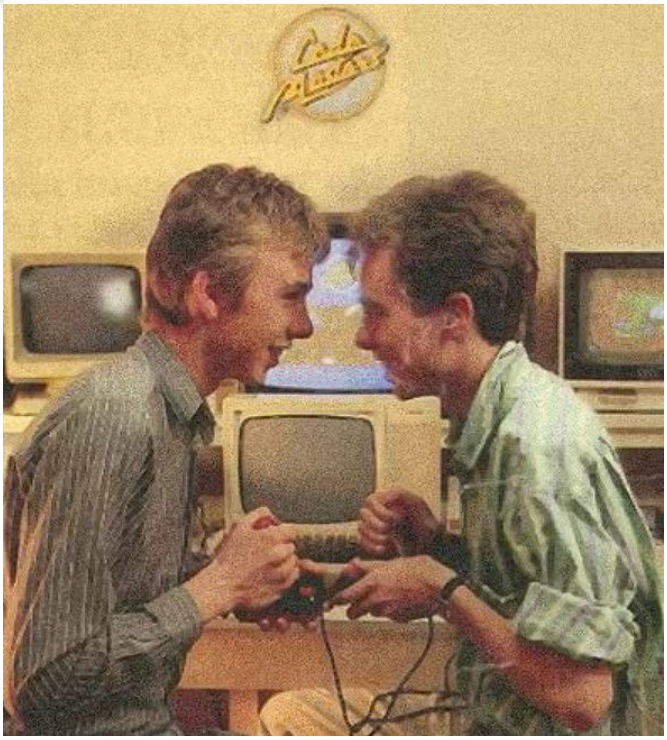
The first Codemasters game was BMX Simulator, the successor to BMX Racers.

David Darling says that the company aimed at the low-cost games market but focused on the quality of full-price titles. This would expand the customer base and generate greater visibility.

One way to get titles out faster was to hire several freelance developers and assign them to specific titles.

Examples of this strategy include:

- G-Man and Danger Zone by Mike Clark
- Terra Cognita by Stephen Curtis
- "Super Robin Hood," "Ghost Hunters," and "Dizzy" by



The Codemasters studio in 1986

the Oliver Twins
- "Super Stuntman" by Peter Williamson
- "Lazer Force" and "Poltergeist" by Gavin Raeburn
- "ATV Simulator" by Tim Miller.

Targeted and specific work to maintain focus and quality in the final product.

Titles were produced to the highest quality standards but with prices ranging from £1.99 to £2.99 for home computers such as the ZX Spectrum and Commodore 64.

With titles such as BMX Simulator, Rock Star Ate My Hamster, and Pro Skate Simulator, Codemasters earned a reputation as a solid and innovative company (it was one of the first to include cooperative play for up to four players in BMX Simulator, for example).

Among the great successes, I would also mention the Dizzy series of games, developed by the Oliver Twins. Literally the UK's video game "mascot."



The Codemasters studio (one of three) in 2025

The 1990s

The decline of the 8-bit computer market led Codemasters to develop for 16-bit platforms and consoles. It was also the period when the company abandoned the budget market to focus on the 'full range' market.

The 1990s were also the years of the Micro Machines series, a hugely successful franchise on Sega consoles (particularly Mega Drive).

The game cartridge included the J-cart, which allowed two extra controllers to be connected without additional adapters and enabled fierce multiplayer challenges.

The same system was also used for another Mega Drive title, Pete Sampras Tennis. A rather entertaining sports game.

Codemasters devoted itself to developing the vast majority of games published by Camerica, which bypassed Nintendo's lockout chip by glitching it and produced unlicensed NES games.

These NES games were known for being sold in shiny gold and silver cartridges.

Many Codemasters titles were also featured in Camerica's Aladdin Deck Enhancer.

In 1990, it developed a device called Game Ganie, which started out as a cheat cartridge for the NES. The cartridge was initially designed to unlock the protections on NES titles, but was later transformed into a different "utility."

In May 1999, Codemasters acquired Sensible Software, a historic British development company. Sensible co-founder Jon Hare has always maintained a close working relationship with the Darling brothers' company, designing several titles.

The 2000s

Years of collaboration and major productions for the "new



A moment in the game Pro Golf Simulator



Colin McRae Rally for Playstation 1

wave." Codemasters launched sports series (Colin McRae Rally, Dirt, LMA Manager, Project CARS, F1Grid, etc.), relaunched the historic Dizzy franchise, and entered into a collaboration with Warner Bros. for the distribution of titles in North America. These were the years of multiplayer online role-playing games such as The Lord of the Rings Online.

The present day

In 2010, 50% of the company was acquired by India's Reliance Big Entertainment. The working style remained the same and some classic titles were continued, but with fluctuating sales. Titles such as Onrush were a complete flop on the market and several internal developers were laid off.

In 2021, EA acquired Codemasters for $1.2 billion with the aim of strengthening its presence in the racing game sector. However, after a few years of coexistence, the studio seems destined to lose its autonomy.

Recent rumors speak of the closure of the main office and the transfer of staff to internal development teams at EA.



One of the many BMX Simulator tracks.
A must in 4-player mode!

The title F1 25 could be the last project entirely under the Codemasters name.

There is no official confirmation as yet, but it seems clear that Codemasters' identity is at risk of disappearing and being absorbed, as has already happened to other historic publishers.

It marks the end of an era for one of the most representative names in British gaming.

BMX Simulator – C64, Atari8bit, ST, Amstrad CPC, Amiga, Zx Spectrum, MSX, Plus/4, and Commodore 16

Let's pedal our way through Codemasters' first simulator, programmed by founder Richard Darling himself. Set on different dirt tracks, each race features two bikes competing in three laps of each circuit. Polished and fun, BMX Simulator set the benchmark for the Simulator series.

For its time, the realism was incredible: potholes, bumps, and ramps worked really well. Seven different tracks, each more difficult than the last. The two-player option and the fantastic ACTION REPLAY option with SLO-MO make this the best BMX game ever!

Colin McRae Rally - Windows, PS1

The series dedicated to rally driver Colin McRae (who provided development support for the occasion).

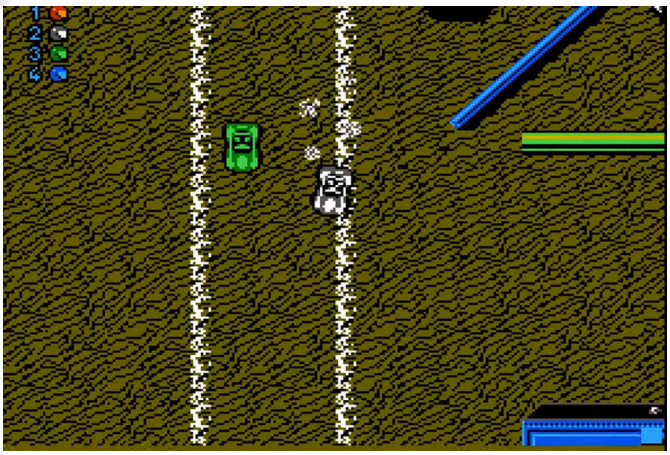
The first title represents the 1998 world championship season with 8 official cars and 4 extras. One of the most manageable driving titles of the time. Received enthusiastically by the public and critics alike.

Psycho Pinball – MS-DOS and Sega Mega Drive

A fast-paced and fun pinball game with a great soundtrack. There are four differently themed tables, three normal



Psycho Pinball. Incredible gameplay



Micro Machines. A killer application on whatever platform it was released on

ones and one 'psycho' one that unpredictably increases the gameplay. One of the main features of the game is the mini-games on each table, which are all great fun.

Micro Machines – NES, Amiga, Master System, Game Gear, Mega Drive, MS-DS, CD-i, SNES, and Game Boy

Considered one of the greatest video games of all time for fun and gameplay. A title with all the mechanics in the right place and a virtually perfect difficulty and learning curve. Magazines at the time praised it for its unique in-game design experience and for the action and adrenaline rush throughout the game. An immortal title!

Dizzy (the whole series)

A series of video games that began in 1987 on ZX Spectrum and continued over the decades. The cute little egg was born from the minds of the Oliver Twins, brilliant twins and game designers. Most of the games are platform games or adventure games with a strong emphasis on puzzle solving, collecting items, and interacting with other characters. It was the mascot of Codemasters throughout the 1980s.



Dizzy on Amiga. The saga is one of the most beloved in the United Kingdom

The Wonder Twins!

The Oliver Twins and their connection to Codemasters. Philip and Andrew Oliver began developing video games while still attending Clarendon School in Trowbridge, England. Their interest in computer science came about thanks to their older brother and the purchase of a ZX 81 and later a Dragon 2. The first title they developed was Road Runner, which was published as code written in Computer and Video Games Magazine in January 1984. They joined Codemasters in 1986 with the creation of Super Robin Hood on Amstrad CPC. Their relationship with Codemasters grew stronger until the birth of the Dizzy series and the Simulator series.

In 1992, they founded Interactive Studios, later renamed Blitz Games Studios. They were directly responsible for porting titles such as Theme Park and Syndicate to Sega consoles.

After several adventures with numerous publishers, in 2015 they found an incomplete and uncompiled source code for Wonderlard Dizzy, a game written 22 years earlier for the NES but forgotten. Through contact with a fan of the series, the game was fixed and corrected and released on October 24 of the same year. The series continued with new releases and several Kickstarter campaigns dedicated to the saga of the explorer egg.



The Oliver Twins in 2025

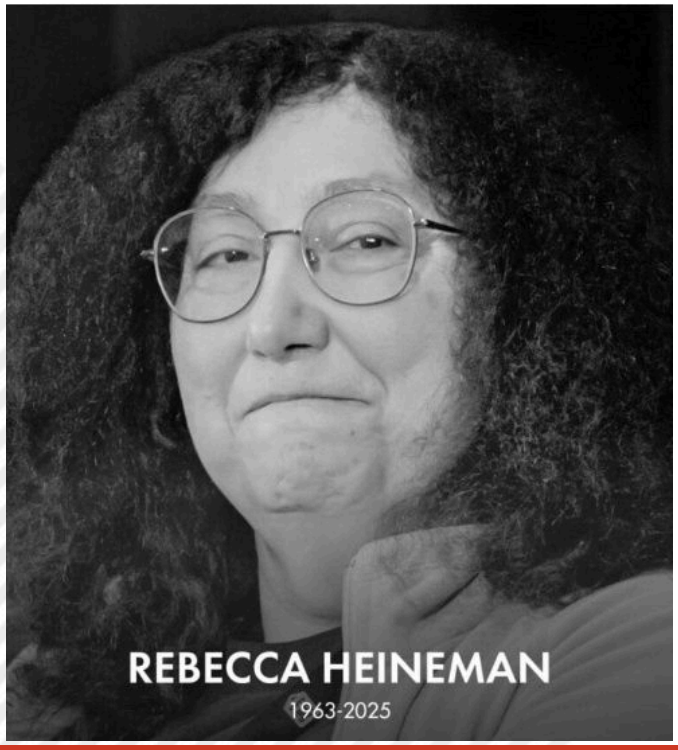
Fun fact: in 2017, Guinness World Records awarded the Oliver Twins the record for "Most prolific 8-bit video game developers." This was thanks to the development of 26 different commercial titles between 1984 and 1992 and for writing a total of 49 titles during the same period.

Remembering gaming legend Rebecca Heineman

by Carlo Nithaiah Del Mar Pirazzini

Gaming icon Rebecca Heineman passed away in 2025 after battling cancer. She was an openly transgender woman and is remembered throughout the gaming industry for her pioneering leadership and throughout the LGBTQ community for her tireless advocacy.

Heineman had previously served on the GLAAD Board of Directors and in early 2025 was honored with Gayming Magazine's Icon Award, which stated, "Her commitment to LGBTQ+ inclusion, accessibility, and diversity in technology has inspired countless developers and gamers." She was the first female champion of a national video game tournament in the United States and is known for founding Interplay Productions, creating beloved video game franchises such as The Bard's Tale. She later founded Contraband Entertainment, assisting in the development of several original games, including Myth III: The Wolf Age, Baldur's Gate II, and Icewind Dale. She later led programming projects for Electronic Arts, Bloomberg, Amazon, Microsoft/Xbox, and Sony/PlayStation, and co-founded Olde Skϋϋl with her late wife.



Heineman called gaming a refuge, a place where she could be herself as a transgender woman. And she sought to make gaming a welcoming place for everyone. Her commitment extended to her corporate roles as a leader for LGBTQ inclusion at Amazon, Microsoft, Sony, and other companies.

Her life

Rebecca was born William Salvador Heineman on October 30, 1963, in Whittier, California. As a young girl, she couldn't afford to buy titles for her Atari 2600, so she taught herself how to copy cartridges, building up a large collection of pirated titles. This sparked her passion for reverse engineering code to understand how video games were created. In 1980, she participated in the first national Atari Space Invaders tournament, winning the final in New York.

After winning the tournament, she was offered a role as editor for the monthly magazine Electronic Games and a consulting job for a book titled How to Master Video Games. During this time, she told a magazine editor that she had reverse engineered the Atari 2600 code, and the editor arranged a meeting between Heineman and the owners of the game publisher Avalon Hill. After the meeting, she was hired as a programmer. She was only 16 years old, but she immediately set her sights high. For Avalon Hill, she created a programming manual for the company's team of developers, a new game engine, and code for several software projects, including her first title, Londo Blitz.

After leaving Avalon Hill, she returned to California to work for the Boone Corporation. There, she programmed the titles Chuck Norris Superkicks and Robin Hood, acquiring programming skills on Commodore 64, Apple

II, VIC-20, and PC. In 1983, Boone ceased to exist, and Rebecca, along with Brian Fargo, Jay Patel, and Troy Worrell, founded Interplay Productions. Here he took part in projects such as Wasteland, The Bard's Tale, various ports of Out of This for Mac OS, 3DO, and Apple IIGS of Wolfenstein 3D. He also worked on The Bard's Tale III: Thief of Fate, Dragon Wars, Tass Times in Tonetown, Borrowed Time, Mindshadow, The Tracer Sanction, and several ports of Battle Chess.

In 1995, he left the company and co-founded Logicware, where he served as technical director and lead programmer. In addition to original games such as Defiance, Heineman oversaw the company's porting activities, which included Out of This World, Killing Time, Shattered Steel, Jazz Jackrabbit 2, and a canceled Mac OS port of Half-Life.

In 1999, Heineman founded Contraband Entertainment and served as its CEO.

The company developed several original games, as well as ports for various platforms for other developers. Projects led by Heineman included Activision Anthology and Mac OS ports of Aliens vs. Predator, Baldur's Gate II, and Heroes of Might and Magic IV. During this time, he also consulted directly for other companies: serving as Senior Engineer III for Electronic Arts, updating engine code for Barking Lizards Technologies and Ubisoft, optimizing code for Sensory Sweep Studios, serving as Senior Software Architect for Bloomberg LP and Amazon, providing Xbox 360 development training for Microsoft development studios, and working on kernel code for PlayStation Portable and PlayStation 4 at Sony.

In addition to her technological role, Heineman was also the "Transgender Chair" of Amazon's LGBTQ+ group, known as Glamazon. More recently, Heineman worked on self-driving cars at Cruise.

In October 2025, Heineman revealed that she had been diagnosed with adenocarcinoma, an aggressive form of cancer, and had begun treatment the previous month. She had started a fundraiser on GoFundMe for her medical treatment, but on November 16, she told her followers that she had been told her condition was terminal and asked that the funds be used for her funeral.

Rebecca Heineman died in Rockwall, Texas, on November 17, 2025, at the age of 62.



Happy Birthday Shining in The Darkness

by Roberto Del Mar Pirazzini

Shining in the Darkness for Mega Drive is a key piece in the history of JRPGs on consoles, because it grafts the tradition of first-person dungeon crawlers (à la Wizardry) onto the aesthetic and structural framework of 16-bit Japanese role-playing games. In 2026, it will be 35 years since its creation, and we at RetroMagazine have decided to dedicate a few lines to it.



The game and its structure

The whole thing is built around a single, large multi-level labyrinth, with an external city that serves as a place to rest, manage equipment, and advance the narrative (an essential refuge hub).

The absence of an automap is a significant design choice: it forces the player to mentally or physically map the dungeon, transforming exploration into a central cognitive activity rather than a simple 'container' for combat.

The gameplay pattern is extremely codified: enter the labyrinth → explore to the limit of your resources → return to town → heal, equip, save → repeat. This cycle sets the pace for the entire game and makes backtracking an integral part of the experience, in line with many dungeon crawlers of the period (and future ones).

Combat, experience, and progression

Combat is turn-based, with random encounters and a menu interface with "classic" management of attack, magic, items, and escape: the depth lies not so much in the individual options as in the relationship between risk (proceeding) and safety (turning back).

The balance is designed so that the player is 'underleveled' in the early stages, forcing initial grinding which, once overcome, makes the party's growth noticeable: each level gained and each new piece of equipment tangibly changes the duration and safety of expeditions.

The difficulty is built less on impromptu gimmicks and more on systemic friction: frequency of encounters, resource consumption, length of routes between safe points, positioning of bosses and minibosses.





Everything revolves around us

The choice of first-person perspective is crucial: unlike the top-down JRPGs typical of the era, here the player perceives the dungeon as a "closed" three-dimensional space, made up of corridors, blind turns, and few landmarks, rather than an abstract map. This was a rather new choice for Japanese console games of the period.

The interface is reduced to the essentials during exploration: few indicators, no information overload, with the aim of keeping the focus on the "step-by-step" pace in the dungeon. The clear transition between the city (seen through illustrated screenshots and well-characterized NPCs) and the dungeon (an abstract, repetitive, hostile space) creates a clear dichotomy of perception: safety vs. the unknown, sociality vs. strategic isolation.

Visual identity and character roles

The artistic direction, linked to the work of Kan Naito, Hiroyuki Takahashi, and the Climax team, shapes a "hybrid" imagery. A Western fantasy filtered through Japanese sensibility, with characters featuring a soft and recognizable design, far from the anonymity of many Western dungeon crawlers for PC and Amiga.

All this translates into a strong 'emotional anchor': even when moving through a very repetitive labyrinth, the player maintains an emotional connection with the city, the faces, and the illustrations, which give meaning to the progression during the adventure. The narrative is simple but functional: it does not 'invade' the gameplay, but frames it, allowing the game to remain mechanically linear without appearing cold or purely numerical.

Historical influence

Shining in the Darkness represents a form of cultural mediation: it takes a niche "computer" genre (the dungeon crawler) and makes it accessible to console users through accessible aesthetics, a simplified interface, and a clear loop. It is, in fact, a laboratory for the Shining series: many aesthetic, thematic, and world-building solutions will later be reworked in the transition to the turn-based strategy of Shining Force and the subsequent return to dungeon crawling with Shining the Holy Ark.

In terms of game design, the title clearly shows the tension between two lines: on the one hand, the "hard" legacy of Wizardry, and on the other, the need, typical of the console genre, to offer a readable product with carefully crafted music and a strong visual identity.

Conclusions

From a contemporary perspective, its limitations (lack of an automap, heavy grinding, repetitiveness of individual dungeons) are clear, especially when compared to later dungeon crawlers that automate mapping and lighten the initial load. However, it is precisely these characteristics that make Shining in the Darkness an interesting case study even today: it shows how, in the early 1990s, JRPG design was still halfway between "CRPG" rigor and "living room" comfort.

Analyzed as a whole, Shining in the Darkness is less important as a "perfect single game" and more relevant as an evolutionary node: a bridge between Wizardry and Shining Force, between Western dungeon crawling and Japanese console sensibilities, and a very clear example of how structure, interface, and aesthetics can be used to make an otherwise severe loop acceptable, and even fascinating. Happy Birthday!

The fascinating, complex, and long-standing history of The Legend of Zelda. Its first forty years...

by Takahiro Yoshioka and Carlo Nithaiah Del Mar Pirazzini

Since his gaming debut in the mid-1980s, Link has always been the protagonist called upon to showcase every new piece of Nintendo hardware, and even some of the strange and wonderful gadgets that remained confined to Japan. Even during the GameCube's most difficult period, when even historically infallible IPs struggled to replicate Nintendo's magic, there was always at least one title in the series that guaranteed the Seal of Quality. It is no coincidence that a Zelda game closed the GameCube's life cycle, and it was Zelda again that Nintendo turned to for a true launch title on Switch.



Before Hyrule, video games were often single-screen worlds filled with beeping and chirping sprites, where progression and skill were measured by entering three letters into a ranking. Before The Legend of Zelda, a game's "story" was often limited to a single paragraph on the cabinet or a few rough lines on the menu screen; the rest was left to intuitive images and a modicum of common sense: run away from ghosts, shoot invaders, avoid asteroids. In the wake of the resounding success of Donkey Kong, Nintendo was able to finance three projects that would transform it from a Hanafuda card manufacturer into a leader in the electronic entertainment market: Famicom, Super Mario Bros., and The Legend of Zelda.

The development of Zelda began more or less in parallel with Super Mario Bros., with Shigeru Miyamoto supervising both teams. The idea behind The Legend of Zelda was to create a vast "virtual garden," a lush world that would reveal itself and evolve over time. Super Mario Bros. would offer an immediate, technical, "home arcade" experience; Zelda, on the other hand, wanted to give the player the freedom to shape their own adventure.

Despite their differences, both games decided to abandon the scoring logic and focus on the concept of completion: finishing the experience and unlocking a final screen as a reward. It was a philosophy unthinkable for coin-operated



You must remember... You must remember... You slept... You slept for a hundred years...



This introduction still makes my heart race!

arcades, but perfect for the living room. Miyamoto, who grew up in the town of Sonobe near Kyoto, had spent his childhood exploring houses, hills, and fields, developing a strong sensitivity for art, music, architecture, and design that would guide him in his work at Nintendo. Above all, he wanted to convey that same sense of discovery to the player.

The idea of dungeons—now a cornerstone of the series—stemmed from Miyamoto's childhood explorations of his family home, while the lakes and forests of Hyrule reflect his trips to the fields and countryside around Sonobe. The name "Zelda" was inspired by Zelda Fitzgerald, wife of F. Scott Fitzgerald, often referred to as the "first American flapper": Miyamoto was fascinated by her strong and independent character and chose her as the ideal model for the princess.



The traditional houses of Sonobe village, where Miyamoto "shaped" The Legend of Zelda

As with Donkey Kong and Mario, Miyamoto built the story around three central characters: Link, Princess Zelda, and Ganon. The protagonist is an elfin-looking boy who enters the scene by rescuing an elderly woman, Impa, servant of the princess of Hyrule. From her, he learns that Zelda is a prisoner of Ganon's army and that the dark lord is after the Triforce and dominion over Hyrule.

Link agrees to recover the eight fragments of the Triforce of Wisdom and face Ganon at the top of Death Mountain. In the first game, the Triforce is described as "three magical triangles" capable of conferring great power, but its mythology will be enriched in subsequent chapters. Within Hyrule, the Triforce exists in three parts: Power (held by Ganon), Wisdom (which Link must reassemble in the dungeons), and Courage, which is destined to make its appearance in Zelda II: The Adventure of Link.

The Famicom Era

The Legend of Zelda was released in 1986 on the Famicom Disk System, a rewritable disk drive that never officially made it to the West. In Europe and America, the game was distributed on iconic gold cartridges with internal batteries, the first of their kind to allow players to save their progress. Miyamoto's idea of creating a non-linear game was evident: a vast world, few explicit clues, and

everything left to the player's free exploration and observation.

Miyamoto himself told Superplay how worried he was at the time of release: he feared that players would get bored or stressed by such an unguided concept. The exact opposite happened: puzzle solving, secret discovery, and freedom of movement became the most beloved elements of the game, and Zelda quickly became a phenomenon.

The success was enormous: The Legend of Zelda sold over six million copies and, as with Donkey Kong, Nintendo rushed to release a sequel. In 1987, Zelda II: The Adventure of Link arrived, supervised by Miyamoto but developed by a different team. The game abandoned the top-down view for a side-scrolling perspective, adding platform sections and RPG mechanics such as experience, statistics, and magic: a bold move, not always appreciated by fans. The basic structure, however, remained similar: find a certain number of items (nine crystals in this case) to access a large palace that holds a legendary power, the Triforce of Courage. It's a formula that would often return in the saga. Zelda II also introduced villages full of NPCs to talk to for clues and side quests, laying the groundwork for many narrative elements in future chapters.

Meanwhile, on the hardware front, Nintendo was preparing the transition to the Super Nintendo and a new evolution for the series.

A Link to the Past and maturity on SNES

With the launch of the SNES, Nintendo signed important partnerships (such as the one with Capcom for the ports of Street Fighter II and Final Fight) and prepared Link's grand return after a few years of absence. In 1991, The Legend of Zelda: A Link to the Past was released, still considered by many to be the "seminal" chapter of the series. The first two stories were written by Miyamoto and Takashi Tezuka; for A Link to the Past, screenwriter Kensuke Tanabe came on board. The game restored the top-down view of the first Zelda but introduced significant improvements to the controls: diagonal movement, running with Pegasus Boots, and a wider and more precise sword. New items, such as the Hookshot and the Magic Mirror, allowed Link to switch between the Light World, a lush Hyrule, and the Dark World, a distorted and disturbing version of the kingdom.

A Link to the Past was also the first chapter to introduce the idea of different incarnations of Link, Zelda, and Ganon: the game is set centuries before the first episode, and the protagonists are described as "predecessors" of the original characters. This is where the famous "temporal confusion" of the saga takes shape: direct sequels such as Zelda II, Link's Awakening, Majora's Mask, and Phantom Hourglass coexist with chapters that feature new generations of heroes in different eras, such as A Link to the Past, Ocarina of Time, and The Wind Waker.



The Legend of Zelda disk for Famicom Disk



The second chapter of the saga

Curiously, despite its enormous success, the Super Nintendo had only one "traditional" Zelda game in the West. In Japan, however, the world of Hyrule returned through Satellaview, a satellite modem for SNES born from the collaboration between Nintendo and Bandai. This saw the release of BS: The Legend of Zelda, an episodic remake and reworking of the first game, and BS The Legend of Zelda: The Sacred Stones, considered a sort of side story to A Link to the Past. Both were only playable during specific broadcast times, complete with "live" commentary and tips from Nintendo: a sort of interactive TV series from the 1990s.

Between CDs, curious failures, and the 3D revolution

At the same time, Nintendo was working on the idea of a CD add-on for the SNES, initially in collaboration with Sony, but this fell through in favor of an agreement with Philips after a complex contractual dispute. This led to the unfortunate CD-i experiments: Link: The Faces of Evil, Zelda: The Wand of Gamelon, and Zelda's Adventure. Two side-scrolling action games and a top-down attempt with pre-rendered graphics and disastrous acting, universally panned by critics but now bizarre cult objects for collectors and curious onlookers.

The real revolution, however, came in 1998 with The Legend of Zelda: Ocarina of Time on Nintendo 64, built on a deeply modified version of the Super Mario 64 engine. The transition to 3D, the introduction of Epona, a lock-on combat system, and the story of Link as a child growing up and becoming an adult made Ocarina a milestone. Miyamoto described the development as tending a "miniature garden" called Hyrule, and the feeling of a living, vast, and coherent world was truly unprecedented. The sequel, Majora's Mask (2000), began as a "Gaiden" project and broke with the usual Triforce of characters: no Ganon on the scene, Zelda reduced to a brief appearance, a dark tone, and a structure based on a three-day cycle that had to be rewound continuously to prevent the moon from crashing into Termina. It was a strange, oppressive, and very divisive game, but for many, one of the most creative and evocative chapters in the series.

From the cartoon style of Wind Waker to the shadow of Twilight Princess

After the "realistic" tech demo at Space World 2000, many fans expected a dark Zelda on GameCube. Instead, Nintendo surprised everyone with The Wind Waker, all in cel shading, with a "toon" Link and a marine world made up of islands and boat crossings. The absence of a large single landmass, the strong humorous component, and the emphasis on characters took many by surprise, but the expressive rendering of the faces and the elegance of the animation made Wind Waker a cult title in the long run. To appease the more traditionalist fans, the game came bundled with a bonus disc containing Ocarina of Time and the Master Quest version, a more difficult remix originally designed for 64DD. Four Swords Adventures, the second installment of the "Four Swords trilogy," was also released on GameCube, designed for cooperative multiplayer for up to four players via connected Game Boy Advance and link cable.

The real "return to dark origins," however, was The Legend of Zelda: Twilight Princess, born on GameCube but also used as a launch title on Wii. Inspired by Ocarina in structure and tone, with influences from the dark atmosphere of Majora's Mask and some cinematic solutions from Wind Waker, Twilight Princess offered many dungeons, a larger world, and a more mature story. Curiously, the Wii version featured a mirrored world compared to the GameCube



Zelda: The Wand of Gamelon for CD-i... terrifying!

version, to adapt Link's sword grip to the majority of right-handed players using the Wii Remote.

DS, 3DS, and the motion control experiment

On the Nintendo DS, the "toon" line continued with Phantom Hourglass, a direct sequel to Wind Waker, which introduced touch control via stylus and brought Link back to sail the seas in search of Tetra, who had disappeared on a ghost ship. Despite some concerns about the non-traditional controls, the game was a success and sold over 4.1 million copies.

In 2009, Spirit Tracks arrived, replacing the sea with a network of railways and seeing Link in the role of train driver. Here too, the stylus was the main method of control: a deliberately different approach, which divided part of the user base but confirmed the desire to experiment.

On the 3DS, Ocarina of Time 3D brought the N64 masterpiece back to life with revamped graphics and clever use of the 3D effect, receiving excellent reviews and sales. In 2011, Skyward Sword arrived on the Wii, a chronological prequel to the entire saga: less gloomy than Twilight Princess, with a visual style halfway between realistic and pictorial and heavy use of Wii MotionPlus for motion-based sword control. Despite some criticism of its precision and backtracking, the game was very well received.

Meanwhile, on the Wii U, the initial absence of a new Zelda game was mitigated by the remasters Wind Waker HD (2013) and Twilight Princess HD (2016), while A Link Between Worlds was released on the 3DS, a direct sequel to A Link to the Past with a valuable wall-merging mechanic. The game was a huge success, selling over 4.2 million copies.

From wild beginnings to the present day

In 2015, Majora's Mask 3D brought the unique three-day structure of the N64 chapter back to the 3DS, with a meticulously crafted remaster. During the same period, experiments such as Tri Force Heroes and the spin-off Hyrule Warriors attempted to shift the Zelda universe towards cooperative multiplayer and musou action, with more mixed results on a creative level.

The real revolution, however, came with The Legend of Zelda: Breath of the Wild, which was born on the Wii U but became the flagship title for the Nintendo Switch when it launched in 2017. Here, Zelda was transformed into a vast open world, in which classic mechanics—exploration, dungeons, physical puzzles—were fused with a freedom of action and systemic physics reminiscent of series such as Assassin's Creed, but with an identity all its own. The game became the best-selling installment in the series and one of the most acclaimed ever.

Its sequel, Tears of the Kingdom, further expanded and layered the world of Hyrule, raising the bar even higher in terms of environmental storytelling, building mechanics, and experimentation.

In 2024, The Legend of Zelda: Echoes of Wisdom arrived on Switch, an adventure that finally puts Zelda at the center of the action and echoes the style of the Link's Awakening remake, with a more compact structure but full of interesting gameplay ideas.



The fascinating Wind Waker on Nintendo GameCube



The splendid Twilight Princess on Wii (and GameCube)

Conclusion

What makes the Zelda series so special? Why does each new installment generate an anticipation that is almost unique in the gaming world, with fans ready to analyze every screenshot and every single rumor?

Miyamoto summed it up perfectly in an interview with Superplay in 2003:

"I think many people dream of becoming heroes. For me, it has always been important that players grow up with Link, that there is a strong relationship between the person holding the controller and the person on the screen. I have always tried to create the feeling of really being in Hyrule. If you don't do that, the game loses some of its magic."

And that magic, after decades, is still there. Happy birthday, The Legend of Zelda!



The Legend of Zelda: Echoes of Wisdom, the evolution of the franchise on Switch with a classic twist

L'evoluzione degli FPS: dove tecnologia e game design si incontrano

di Giampaolo Moraschi e Nithaiah Del Mar Pirazzini

In the world of video games, first-person shooters (FPS) are one of the genres that best embody the joint advancement of hardware, graphics engines, and game design practices. From the pioneering era of wireframe mazes to today's always-connected platforms, the genre has constantly rewritten technical standards and interactive languages, influencing not only shooters but the medium as a whole. While for the general public, FPS is often synonymous with "shooting games," for those working in the industry, it is a privileged laboratory where they can observe the evolution of control systems, network architectures, level modeling, in-game economies, and business models. Analyzing the history of the genre therefore means following, in parallel, the transformation of the user experience: from a closed, long-development product to an iterative and continuously updated service.



Maze War, 1974

Origins: from simulation to interactive first-person perspective

The origins of FPS games can be traced back to experiments in the 1970s and 1980s, when universities and specialized studios began working on basic 3D interfaces and first-person perspectives. Maze War and Battlezone are emblematic examples of a phase in which the representation is still wireframe or vector-based, but the first-person point of view already introduces the core of the experience: the coincidence between the player's gaze and the avatar's gaze.

From a game design perspective, these prototypes define some technical cornerstones:

• management of depth and field of view in three-dimensional environments

• mapping of controls between two-dimensional inputs and navigation in 3D space

• early experiments with collisions and lines of fire in three-dimensional space

The hardware of the time imposed drastic compromises, but the choice of the subjective view anticipated a clear direction: to focus on perceptual immersion and control responsiveness.

The splendid Battle Zone

id Software and the codification of the FPS language

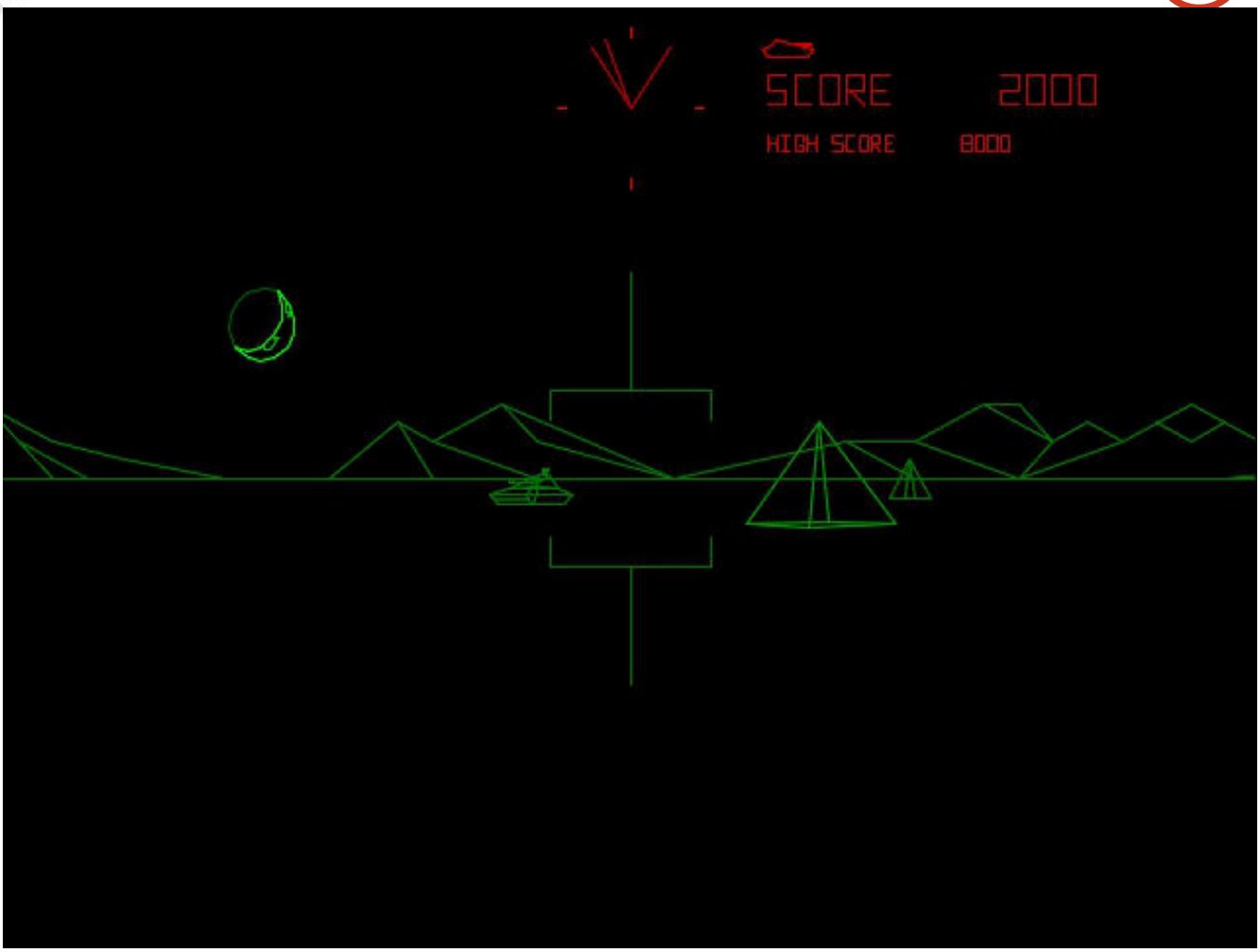
In the early 1990s, id Software formalized what is now considered the fundamental grammar of the genre. Wolfenstein 3D, Doom, and Quake were not only commercial successes, but also turning points that intertwined technological innovation and systemic design.

On a technical level, Doom used techniques such as ray casting and intelligent height management to simulate complex three-dimensional environments on extremely limited hardware. This allowed it to support multi-layer levels with variations in height and lighting, maintain high frame rates (a critical condition for reflex-based gameplay), and offer a modular basis for creating custom maps and mods.

Quake represents the decisive step towards full 3D rendering, with polygonal models and native support for the first dedicated GPUs, paving the way for licensable graphics engines and a modding ecosystem that anticipates today's centrality of creator tools. At the same time, the design introduced concepts that would become established, such as deathmatch, spawn management, weapon balancing in competitive contexts, and maps designed specifically for multiplayer.

Narrative, systemic level design, and console success

While the "id" era focused on FPS as a high-intensity shooter, the second half of the 1990s and early 2000s opened up a broader vision. Two evolutionary lines are particularly relevant for game designers. On the one hand, narrative research; on the other, the optimization of the console experience.



The splendid Battle Zone

Half-Life shows how it is possible to integrate storytelling and interaction by foregoing traditional cut scenes and entrusting narrative progression to environmental direction, in-game scripts, and the player's constant control. Level design takes on a dramaturgical function: each space is designed not only in terms of cover and lines of fire, but as an element of narrative pacing, alternating pressure and decompression.

GoldenEye 007 on Nintendo 64, on the other hand, represents a benchmark for adapting FPS to the gamepad. The use of an assisted aiming system, sensitivity calibration, and split-screen map geometry anticipate solutions that will become standard on consoles in the following years. Input design, at this stage, became a crucial area of experimentation, with repercussions that would then affect the entire industry.

Halo, Call of Duty, and the standardization of a model

With the release of Halo: Combat Evolved on Xbox, console FPS found its manifesto. The decision to limit active equipment to two weapons, partially regenerating health, and the systematic introduction of checkpoints redesigned the relationship between perceived difficulty and accessibility. These design solutions simplified input management, sped up feedback cycles, and reduced the frustration caused by excessive backtracking.

Halo Combat Evolved for XBOX...the Killer Application!

At the same time, Call of Duty takes the "spectacular" dimension of FPS to the extreme, offering heavily scripted, almost cinematic campaigns in which the player's agency coexists with very restrictive direction. On the multiplayer side, the series codifies a loop based on:

• persistent level progression;

• gradual unlocking of weapons, accessories, and perks;



Iconic! Doom in 1993



Golden Eye 007 on Nintendo 64

• killstreak-based rewards that accentuate the risk-reward ratio.

These choices help standardize the idea of the modern FPS and heavily influence the design of subsequent games, including those produced by studios outside the strictly "shooter" genre.

Looter shooters: integration between gunplay and loot economy

The 2010s saw the emergence of looter shooters, which combine the structure of FPS with that of persistent role-playing action games. Borderlands, Warframe, and Destiny are paradigmatic examples of design centered on granular reward cycles, fueled by procedural loot and rarity systems with very extended power curves.

From a systemic design perspective, these titles shift the focus from the single game to the progression of the player profile, requiring a delicate balance between drop rate, time to kill, and time to loot, and imposing a strong integration between arsenal tuning and long-term retention.

On the production side, the shift to the "game as a service" model implies constant content, internal tools for telemetric analysis, and iterative balancing cycles based on metrics such as engagement, churn, and microtransaction spending. The FPS thus becomes a framework for the continuous delivery of content and no longer just a "closed" product at launch.

Hero shooters and battle royales: role design and competitive macro systems

Hero shooters introduce an additional layer of systemic complexity, combining gunplay with roster design and team synergies. Overwatch, Apex Legends, and Valorant define a paradigm in which each character is a "design package" that includes:

• primary and ultimate abilities;

• role in composition (tank, support, DPS, controller, etc.);

• character-specific skill ceiling.

For those in the know, this means dealing with multidimensional balancing issues. Every change to a single ability has an impact on the meta, pick rates, and the perception of fairness within the competitive community. Hence the importance of regular patch pipelines, transparent communication of changes, and internal tools for simulating competitive scenarios.

The battle royale genre, established by PUBG and then consolidated by Fortnite (in a hybrid form) and Call of Duty: Warzone, works instead on macro systems of risk, space, and scarcity. The shrinking circle, pseudo-randomly distributed loot, and single competitive life create a very different kind of tension compared to traditional deathmatches, turning each match into a sequence of micro-decisions about positioning, engagement, and resource management.

Enabling technologies: graphics, AI, and network infrastructure

On the technological side, the evolution of FPS has often been the driving force behind the adoption of new hardware and software solutions. The transition from software-rendered solutions to the first general-purpose GPUs, and then to real-time ray tracing and machine learning-based upscaling techniques, has been driven by the need to manage increasingly complex scenes while maintaining latency and frame rates within competitive ranges.

Artificial intelligence has gone through several phases: from scripted enemies with relatively simple behavioral states to more advanced systems, such as those in F.E.A.R., capable of handling dynamic cover, flanking maneuvers,



Halo Combat Evolved for XBOX... the Killer Application!



The first, crazy Borderlands

and plausible team behavior. Today, however, the main focus has shifted to online multiplayer, where AI is mainly used for fill-in bots, training, or anti-cheat support, while much of the design revolves around netcode management, prediction, and latency compensation.

Network infrastructure is now an integral part of design: server tick rates, client-server or peer-to-peer architectures, matchmaking strategies, and lobby classification directly affect the perception of fairness and responsiveness of gunplay.

VR, cloud, and future prospects for the genre

Virtual reality represents a radical departure from first-person perspective, in which the relationship between the player's body and digital avatar is fundamentally redesigned. Titles such as Half-Life: Alyx show how input design, locomotion management, and physical manipulation of objects require completely different approaches than traditional FPS, posing new challenges in terms of comfort, motion sickness, and action readability.

At the same time, cloud gaming and the spread of increasingly powerful portable devices are opening up scenarios in which competitive FPS experiences are no longer tied to the local machine. This requires new considerations regarding video encoding, end-to-end latency, and dynamic quality adaptation, with direct impacts on level design (e.g., silhouette readability at different resolutions) and hitbox tuning.

Looking ahead, the genre seems destined to continue along two main lines:

• increasing hybridization with other genres (roguelike elements, open-world structures, survival components);
• strengthening of the service model, with multi-year roadmaps, themed seasons, and strong interoperability with transmedia ecosystems.

For industry professionals, FPS games will continue to be a privileged testing ground for experimenting with new solutions for control, rendering, monetization, and community management, maintaining their role as a "hinge" genre between technical innovation and mainstream gaming culture.



From glorious LAN parties to a future yet to be discovered!

Retrocomputing and Hacks

by David "Cercamon" La Monaca

In recent times, the phenomenon of retrocomputing (and perhaps even more so that of retrogaming) has been attracting increasing interest from many enthusiasts who we can safely say are no longer in the first flush of youth. But recently, even the kids of the so-called "Gen Z" are discovering the pleasure of 8- and 16-bit gaming, thanks to original systems, emulated (on PC/Mac) or reproduced (FPGA). We at RMW can only be happy about this. Our readership and follower base is slowly but surely growing every day. We can see and appreciate this from the feedback we get on social media: the feedback and exchanges with readers, some more expert than others, are growing and becoming increasingly specific and detailed.

But what really attracts all these people to a world that, all things considered, can rightly be considered "obsolete"? In the field of information technology, we know that systems that are 30 or 40 years old are equivalent to dinosaurs from distant geological eras. Let's try to understand more together: undoubtedly, the possibility offered by certain multi-system consoles to play the glorious titles of the computer or console owned in youth (all quick and easy, no need to restore the systems and find the old cartridges, cassettes, and floppy disks to start playing) is a very attractive "hook." Retrogaming is therefore the main driving force behind the majority of those who approach the retro world. New releases of "nostalgic" hardware (e.g., C64 Ultimate, ZX Spectrum Next, TheC64 / TheATARI / TheAmiga500 series, reissues of Atari and Nintendo consoles) convince many to buy due to their ease of use (HDMI video outputs, USB joysticks, preloaded games).

In addition to the video game offering, others are approaching (or rather 'reapproaching') the systems of yesteryear because these forerunners of today's modern and powerful PCs are essential, efficient in their relative structural simplicity, and because they provide the opportunity to program with few resources available, thus forcing us to study processors, custom chips, and hardware

13_37 demo by Fairlight - C64

The Bad Apple animation in ASCII in the Impulse Tracker channels - It still makes my heart beat faster!

in general. Direct access via code to the hardware components of a relatively simple system such as an 8/16-bit machine is enormous, even if it takes many hours of study and trial and error. And in this narrow field, one step below, there is something that is appreciated by technicians, geeks, and nerds (and even "hackers," if you like, but only in the sense of knowing how to dig into the folds of coding in order to exploit every last byte of a system): 'hacks', tips, clever tricks, 'goodies' that only experienced coders are able to find or produce within a programming language, application, or operating system.

Think of the "intros" of pirated games, demos specially designed and written for different platforms of the past (C64, ZX, Amiga, ST, etc.), music disks (compilations of original songs based on the use of sound chips), disk magazines (floppy disk magazines published by groups in the digital scene or "demoscene"), and game trainers, all examples steeped in "hacks," capable of using bugs and CPU and coprocessor functions to circumvent the limitations of individual home computers. For me and many enthusiasts, it is precisely these particular pieces of code, these clever tricks, these ingenious "deceptions" of the hardware that make our hair stand on end and leave us speechless, even today, after 30 or 40 years of these amazing little systems of ours.

It could be a new way to create a super-fast, high-resolution

4 byte demo - C64

The CHRGET routine modified by the 4 bytes of the demo

fr-025 - the popular demo by Farbrausch - Windows

tunnel (see Linus Akesson's "Quondam Tunneling" - C64), a demo in just 4KB (take any one at random from Farbrausch for PC/Win), a demo of over 13 minutes from Fairlight (C64), a song/module .MOD/.IT module for a tracker that plays an ASCII animation (https://www.youtube.com/watch?v=SDvk3aL78fI) in the tracker's audio channels while it plays! Or a demo for C64 in just 4 bytes! Don't believe it? Here's the code (all you need is a software monitor to type the "source" in machine language) 7e 00: 8d 20 d0 50 - ref. https://nickm.com/post/index.html%3Fp=5095.html - A brief explanation: the first two bytes (7e 00) are just the initial memory location of the "mini-demo", the remaining 4 are the actual code. The hack consists of inserting the 4 bytes 8d 20 d0 50 into an operating system routine called CHRGET (which starts just before location $73). The byte 8d represents the mnemonic code STA, which is used to insert the value contained in the accumulator register A into the following location, i.e., the one represented by the next two bytes 20 d0 ($d020 = 53280). In the C64, location $d020 contains the current border color. Finally, the last byte 50 represents the BVC operator, which jumps to a location provided by the following two bytes in memory (which are 73 00, i.e. $73 on page zero), so that the CHRGET routine is continuously re-executed. The STA operator ($8d) therefore continuously changes the border color. The 4 bytes actually modify the system routine so that the border color is "cycled" quickly, so quickly that it creates a "striped" effect that is somewhat reminiscent of the effect seen during tape loading or when decompressing a compressed program into memory. Simply brilliant!

Each of us, in our passion for retrocomputing, finds something irresistible that keeps us hooked despite the passage of time. For many geeks like me, it's mainly hacks like the ones I've described. And the list would be very, very long. If you also enjoy this, send your hacks on your favorite systems to the editorial staff (retromagazine.redazione@gmail.com). It would be great to create a special column to share them!

Quondam Tunneling hack - C64

NEW GAME

BUBBLE BOBBLE REMASTERED

Year: 2025
Editor/Developer: Retro Forge
Genre: Platform
Platform: Commodore 64
Website: https://daves-retro-forge.itch.io/bubble-bobble-c64-remastered

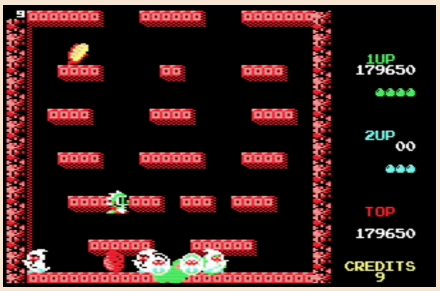
Sooner or later it had to happen with Bubble Bobble too, and probably many of you were waiting for it, given the continuous remastering of games released a few years ago on old-generation consoles and now also on home computers from when we at the magazine were children or teenagers.

Bubble Bobble was hugely successful in the era of the 8-bit Commodore, almost a perfect arcade game with excellent playability both alone and in pairs. But not content with that, we really wanted a brand new conversion with even more details that closely resemble the arcade version found in bars and arcades. The sprites have been redesigned and the objects are less 'predictable' than in the original version; in addition, that nice 'pop' sound has been added when a bubble with nothing inside is popped.

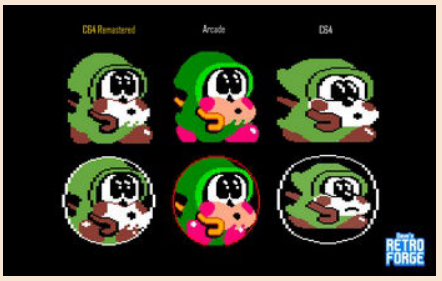
The new graphics are also quite appealing and immediately make you want to play a game to see the changes that have been made. While playing, I noticed something that perhaps many people missed: in some levels, especially the final ones, it is almost impossible to pass them unless you play in pairs; after all, the arcade was also designed to be played that way and not alone.

In my humble opinion, there were other things that deserved a revamp, such as the 'extend' screen or the game ending. Great move with the color of the enemies! I'd say they hit the mark on that front. If many of you haven't had the pleasure of trying it yet, I recommend you do so immediately because, as well as being a big hit forged on the biscuit, it is also full of surprises and, needless to say, very playable! If you want to finish it on your first try, play with someone else: your children, friends, wives, lovers (not both together)...

by **Daniele Brahimi**









OUR FINAL SCORE

» Gameplay 90%
Just like the original!

» Longevity 90%
100 levels may seem like a lot or a little, depending on your point of view, but in reality it's infinite!

NEW GAME

ANOTHER WORLD

Year: 2025
Editor/Developer: Delphine Software/Edd Biddulph
Genre: Action/Platform
Platform: MSX TurboR
Website: https://www.generation-msx.nl/software/delphine-software/another-world/9119/



Another World for MSX Turbo R is an unofficial but extremely ambitious conversion of one of the cornerstones of modern video gaming: the cinematic masterpiece created by Éric Chahi for Delphine Software in 1991, here reconstructed for Z80 hardware with results that go far beyond mere technical curiosity.

Another World began as a "cinematic" action platformer on the Amiga and was subsequently ported to numerous platforms, distinguishing itself with its implicit narrative, fluid animations, and strong directorial style.

The MSX version is a new-generation amateur port, developed for machines equipped with V9990 and OPL4, with the explicit goal of getting as close as possible to Chahi's original vision on an 8-bit system.

The game follows the story of Lester, a young scientist catapulted onto an alien planet after an experiment gone wrong, forced to survive among hostile creatures, captivity, and daring escapes.

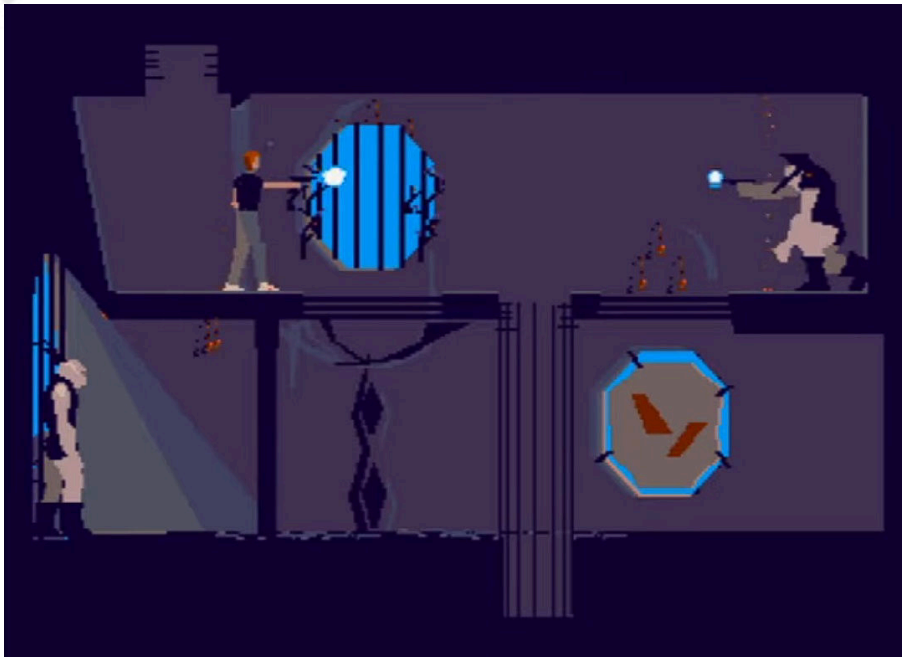
The progression remains typical of the original game, i.e., a sequence of highly choreographed "scenes" in which platforming, environmental puzzles, and short combat sections intertwine in a flow without HUD, without dialogue, and with almost no text on screen.

The absence of explicit explanations and invasive interfaces means that everything is conveyed through animation and context: character movements, alien reactions, small graphic details that suggest solutions or dangers.



This conversion takes advantage of advanced hardware extensions (V9990 for graphics, OPL4 for audio) to recreate backgrounds, silhouettes, and animations with surprising fidelity compared to the 16-bit versions, despite starting from a Z80 base.





The work on the animations is particularly significant: Another World relies on rotoscoped sprites and highly articulated movements; bringing them to MSX while maintaining readability and fluidity requires careful management of video memory, frame streaming, and synchronization with scrolling. An impressive and spot-on job.

The sound department also benefits from OPL4, which allows it to approach the minimalist but impactful atmosphere of the original game, with effects and themes that support tension and moments of calm without overwhelming the action.

As in its historical incarnations, Another World is a demanding title: the margin for error in escape sequences is often small, and many situations require multiple attempts before finding the correct timing.

The controls, necessarily linked to an 8-bit system, may be less immediate than in modern remastered versions, but the "cinematic trial & error" setting remains consistent with the original experience.

Those already familiar with the game will find the same level design solutions and narrative progression; those playing it for the first time should expect a steep learning curve, offset by a strong sense of "first-person adventure."

In the MSX landscape, Another World represents a sort of "dream come true": a title designed for more powerful machines, reinterpreted with great respect and technical and artistic care on an enhanced 8-bit platform.

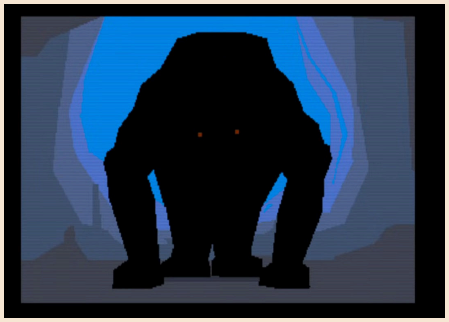
It is not a game for everyone: it requires patience, tolerance for repeated death, and a taste for heavily scripted experiences, but for those who appreciate the cinematic dimension and the craftsmanship of the design, this version is an important and prestigious piece in the history of homebrew conversions, even on MSX.

by **Carlo Nithaiah Del Mar Pirazzini**

OUR FINAL SCORE

» Gameplay 90%
It's been 35 years and it still has a lot of charm and playability.

» Longevity 90%
Not easy and not suitable for everyone, but always a great game!





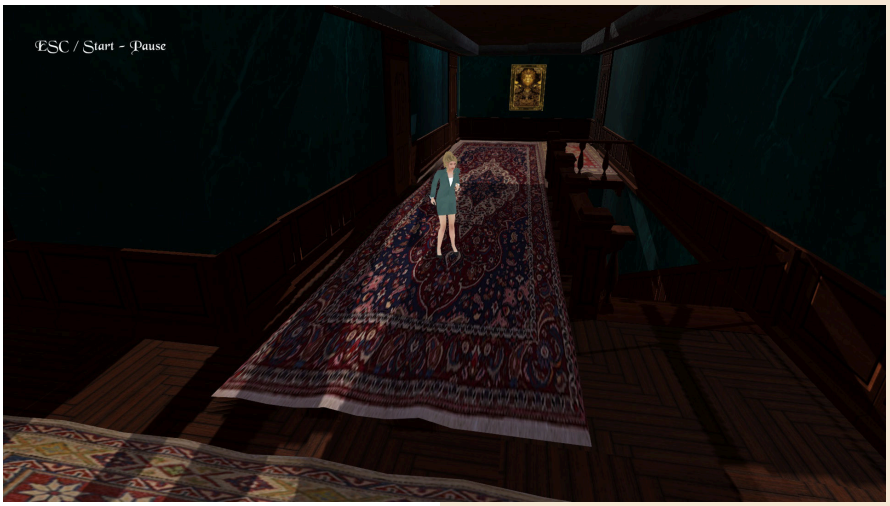


NEW GAME

THE MANSION OF THE MACABRE

Year: 2024
Editor: Team Tatou
Musiche: Team Tatou
Genre: avventura/horror in terza persona
Platform: Windows

In 1992, Frédérick Raynal released Alone in the Dark, a horror video game inspired by the works of H. P. Lovecraft. The title has since become a cornerstone of the horror genre in video games.

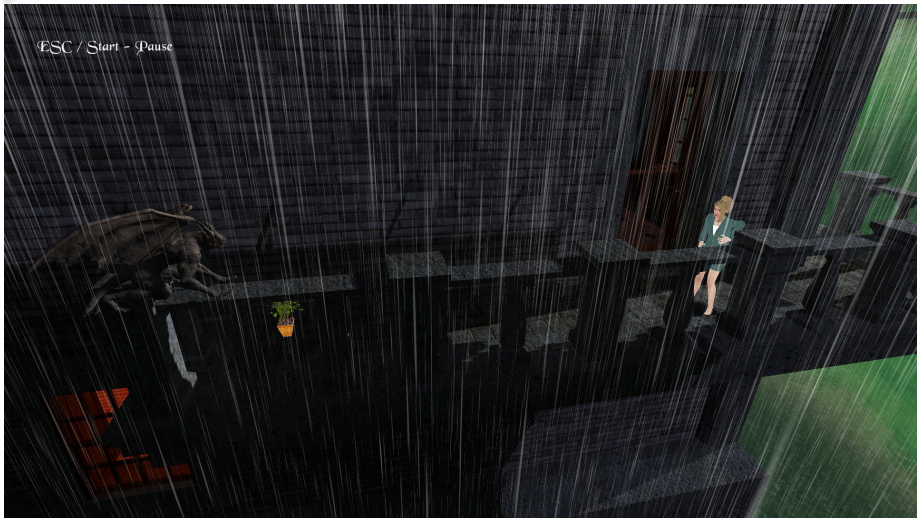


Team Tatou set to work on a remake of the title with improved mechanics and graphics.

The Mansion Of The Macabre is a new version of Alone in the Dark in every way, using the Unity graphics engine, with better quality graphics, audio, and lighting. It also features a more modern and simplified control scheme, with the option to play with the original scheme, and controller support.
At the beginning of the game, we will have the option to choose between two different characters: Edward Carnby and Emily Hartwood. We will then enter a mysterious mansion haunted by strange creatures and zombies. We will have to go around and explore the various floors and rooms of the mansion, searching







everywhere for weapons to defend ourselves, supplies, items to investigate, and keys.

The game world is large and full of places to explore, ranging from rooms of various sizes to corridors, balconies, etc.

There is no shortage of enemies of various kinds, reminiscent of those seen in the original Alone In The Dark.

In conclusion, this title is a remake of the classic horror game, with improved graphics and gameplay, the option to choose a control scheme more similar to the original, and the possibility of using a controller. The execution is successful, even if at times it may seem too similar to the original title rather than presenting itself as a new experience, but it is still enjoyable.

It is available on Steam and GoG, as well as on the Nintendo store in a Switch version.

by **Maurizio Aaron Diamanti**

OUR FINAL SCORE

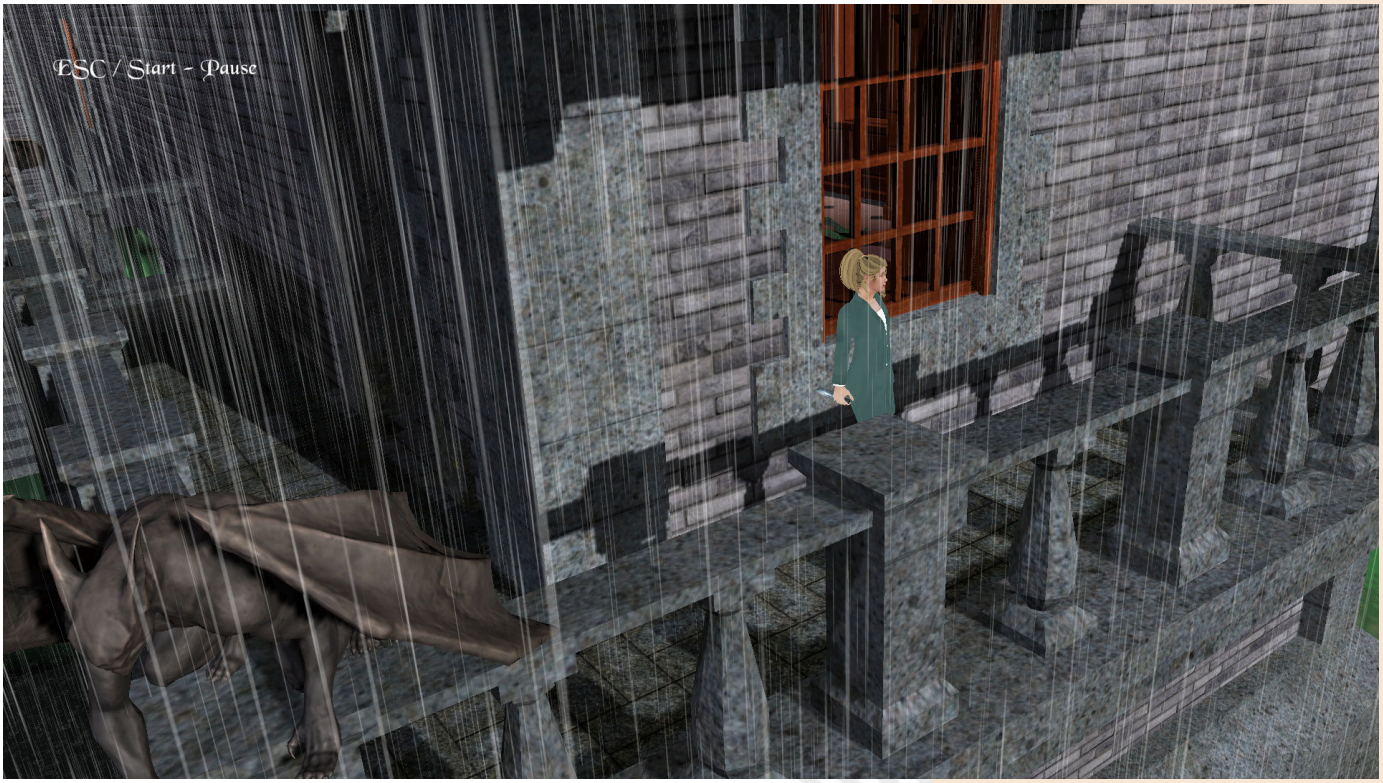
» Gameplay 80%

A title that features classic and enjoyable gameplay, with controls that can be easily changed according to preference, as well as the option to use a controller.

» Longevity 80%

It features a story similar to that of Alone in The Dark, with a similar longevity, guaranteeing several hours of gameplay, enriched by a fairly large map with many rooms to explore.





NEW GAME

ASTRO CLIMBER

Year: 2025
Editor/Developer: BadComputer
Genre: Platform/Arcade
Platform: Sega Master System
Website: https://badcomputer0.itch.io/astro-climber

I love the graphic palette of BadComputer games for Master System... their use of blue and light blue. Wonderful!

Astro Climber is a new title developed by BadComputer, already the author of other incredible homebrew projects, created to celebrate 40 years of Sega's 8-bit console.

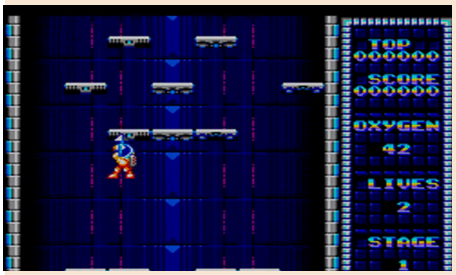
The game belongs to that strange genre of titles that mix pure arcade action with platform games. Those beautiful games of yesteryear that put our reflexes and knowledge of the field to the test. Astro Climber is a beautiful tribute to this genre.

The player takes on the role of an astronaut trying to escape from the Frontier Prime space station, using a grappling hook to climb upwards while facing hostile drones, traps, and progressively moving platforms.

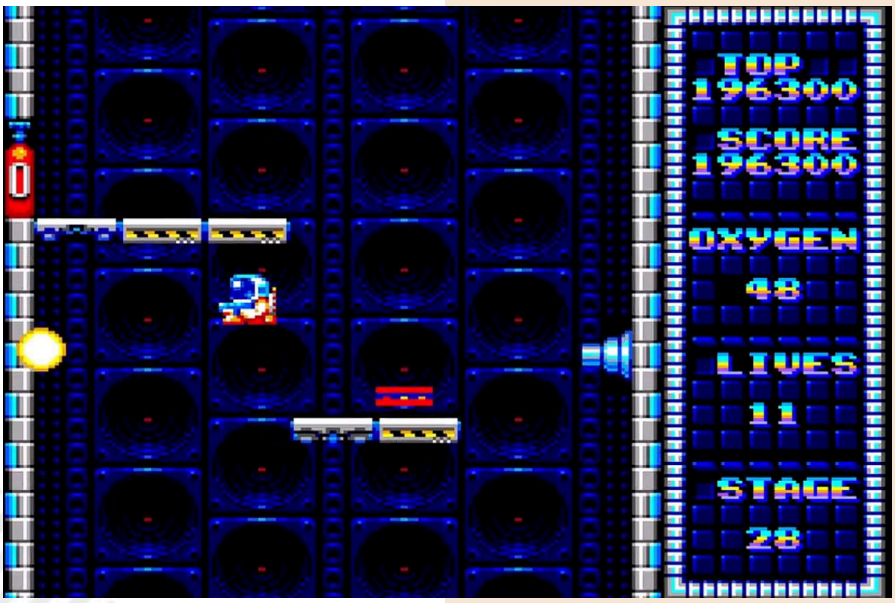
Oxygen management acts as a global timer: the resource decreases constantly and can be restored by collecting O2 tanks, imposing a fast pace and forcing a continuous compromise between caution and speed.

The level design, divided into 32 levels, gradually introduces new combinations of platforms, enemies, and environmental hazards, building a well-calibrated learning curve that rewards memory, timing, and the ability to read the screen immediately. The overall difficulty is high but generally never exaggerated... I would call it fair: the first levels serve as an introduction, while the subsequent sections require greater mastery of the grappling hook and a refined understanding of enemy and platform patterns.





The presence of three continues and the absence of save systems or passwords may turn off new "casual gamers," but the title was created as a ruthless "arcade game" with the intention of paying homage to the 8-bit era.

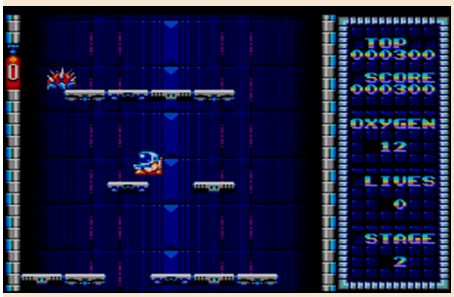




OUR FINAL SCORE

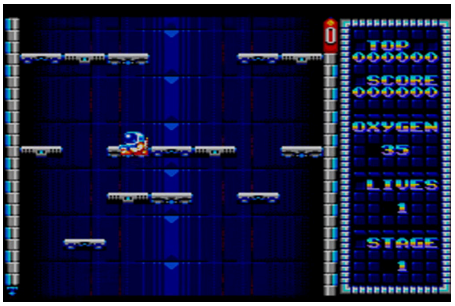
» Gameplay 85%
I like the control system and its implementation. Nice!

» Longevity 75%
A game suitable for hardcore arcade gamers! Difficulty reigns supreme!



The duration of a complete game, estimated at around 20 minutes, makes Astro Climber suitable for short, repeated sessions, favoring progressive performance improvement over structured narrative progression.

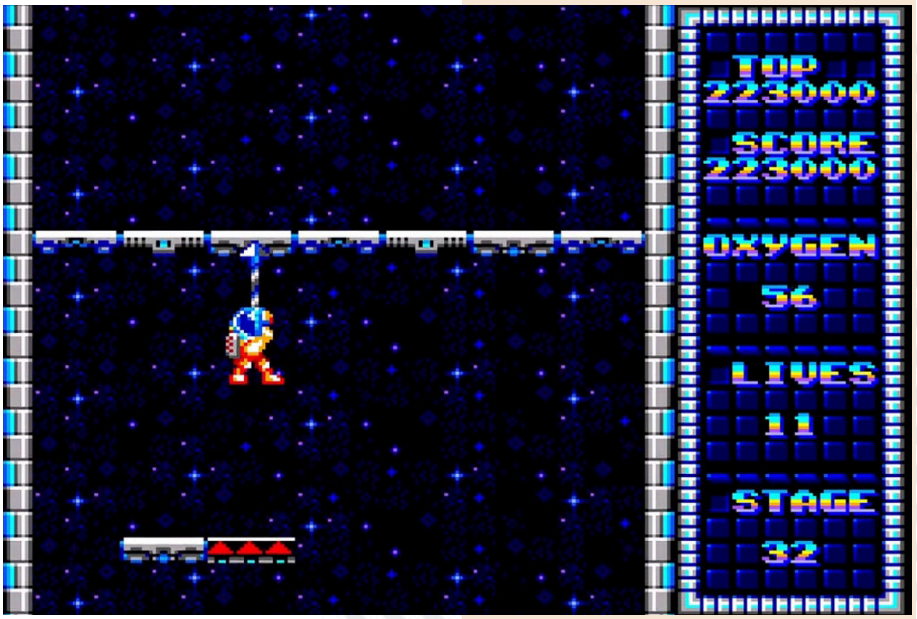
Aesthetically, it is very enjoyable, clean, and readable, characterized by remarkable overall fluidity. The action never slows down and is a real pleasure to play!



In the context of homebrew productions for the Master System, Astro Climber stands out for its technical quality and fast-paced gameplay. It's not a title for everyone, but it's a game suited to us old nostalgics ready for yet another challenge.

by **Roberto Del Mar Pirazzini**





NEW GAME

FLOPPYVERSE

Year:2025
Editor/Developer: JuanGM
Genre: Puzzle game
Platform: ZX Spectrum 128K
Website: https://jgajete.itch.io/floppyverse

In the year 3088, a terrible magnetic storm called "Checksum Collapse" destroyed almost all of the Milky Way's solid-state memory.

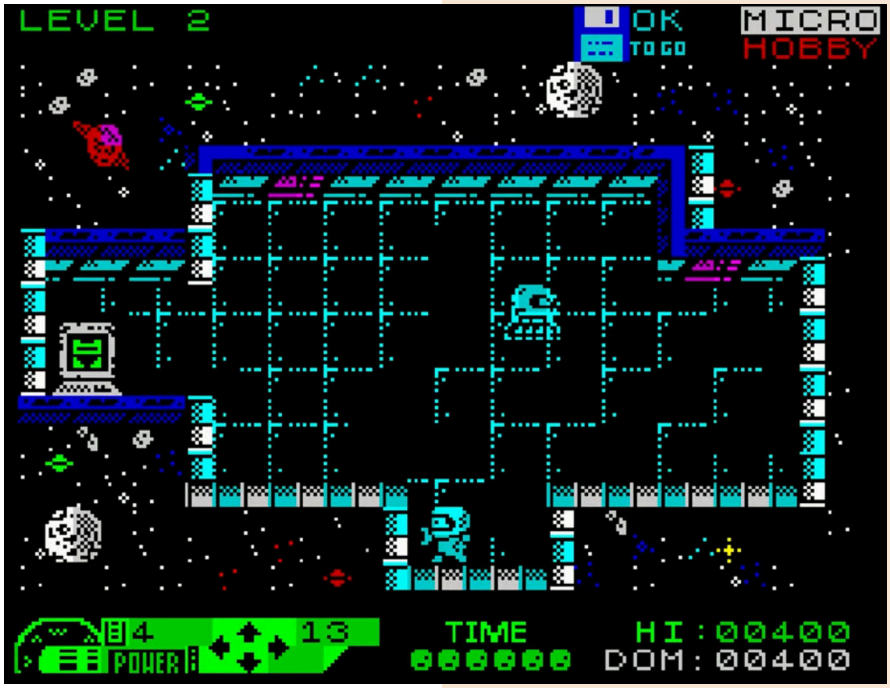
The only hope is the little robot FLP 82, on a mission to recover some data storage devices scattered throughout the galaxy, which contain crucial information for restoring Earth's systems.

This is the story behind FloppyVerse for ZX Spectrum 128K, a new title from JuanGM. Needless to say, our task as players is to guide the little robot in search of these objects... and in 3088, these objects are... floppy disks! Humanity can be truly bizarre!

FloppyVerse for ZX Spectrum 128K is a classic puzzle game with a modern twist, characterized by a clear basic idea, careful technical implementation, and a level of challenge designed for players who appreciate thoughtful planning rather than immediate action.

The game structure is simple: each screen is a self-contained puzzle in which the goal is to collect all the floppy disks and reach the final terminal, within a maximum number of moves.

The protagonist's movement follows an "inertia-based" logic: once the direction has been chosen, the robot proceeds until it encounters an obstacle, with the possibility of "braking" by intentionally leaning against the walls, a solution that generates an interesting range of tactical situations.



As the levels progress, enemies, traps, and increasingly complex environmental configurations come





into play, requiring the player to optimize paths, avoid wasted movements, and exploit the level design in an increasingly precise manner.

JuanGM designed the game specifically for the 128K platform, taking advantage of its additional resources for the number of levels, graphics management, and sound.

The visual style favors readability: tiles and sprites are well defined, with a judicious use of colors that reduces attribute clash and makes robots, floppy disks, terminals, and obstacles immediately distinguishable.

The audio uses the AY chip to offer a pleasant soundtrack consistent with the sci-fi setting, accompanied by essential sound effects appropriate to the genre.

The title was developed using ZX Spectrum Game Maker and Boriel ZX Basic, tools that combine rapid production with satisfactory performance on real hardware.

In addition to the ZX Spectrum 128K version, ports are available for PC, macOS, Linux, and Android, significantly expanding the potential audience without betraying the original nature of the project.

FloppyVerse is a title with interesting dynamics and a polished appearance, which proves challenging and has a progressively increasing difficulty curve, rewarding observation skills, logical reasoning, and memory.

It is particularly aimed at those who appreciate thoughtful experiences based on finding the optimal solution and perfecting attempts; it is not recommended for those who prefer more immediate action or platform games.

Overall, FloppyVerse is a significant addition to the modern catalog for the ZX 128K: a solid and technically well-made game that combines nostalgia for floppy disks with a modern and well-structured gaming experience.

by **Carlo Nithaiah Del Mar Pirazzini**

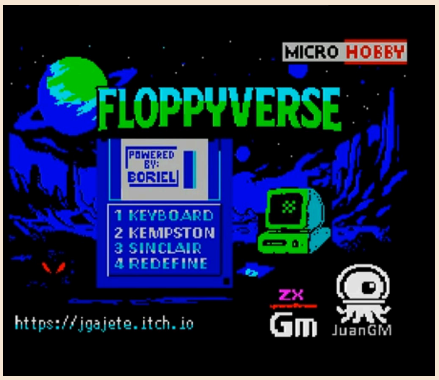
OUR FINAL SCORE

» Gameplay 85%

The mechanics based on the inertia of movement require a minimum of initial adaptation, but once you get the hang of it, the game flows smoothly and satisfactorily.

» Longevity 85%

Challenging but never cruel: you have to love this kind of puzzle to enjoy it to the fullest, but those who do will find it a rich and rewarding experience.







NEW GAME

GHOSTS'N GOBLINS ARCADE VERSION

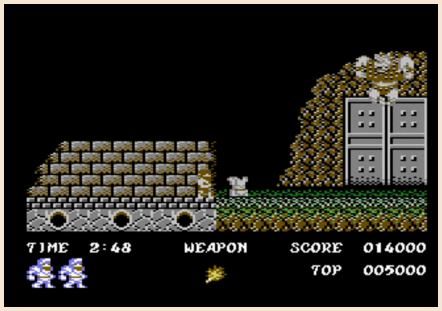
Year:2026
Editor/Developer: TCFS, Csabo, Unreal, Siz, Murphy
Genre: Platform/Arcade
Platform: Plus/4
Website: https://plus4world.powweb.com/software/Ghosts_N_Goblins_Arcade_Version

The return of the knight in his underwear! This time on Plus/4 and in truly incredible form.

This Arcade Version is, first and foremost, a great example of knowledge of 264 hardware: a complete reconstruction of the Capcom coin-op on a 64 KB machine, with only the TED chip managing graphics and audio, without the support of the hardware sprites present on the C64. The original version for Plus/4 saw the light in 1986. It was limited to 16 KB in order to run on the C16, had only two levels, no in-game music, and numerous cuts to the graphics. This version clearly never sat well with TCFS (and the rest of the team), who put together this Arcade Edition. Here we find all seven original stages, all the bosses and cutscenes, with a much more complex input/graphics/audio management routine. The data structure has been optimized to the maximum to stay within the RAM limits, and the work is truly impressive. To compensate for the absence of the C64's VIC II advanced sprite system, this Arcade Version uses software sprites and intensive use of bitmap/char mode to represent Arthur and everything around him. Horizontal scrolling, a historical weakness of 264 systems, is handled through partial screen block updates and intelligent buffering, in order to maintain an acceptable and playable frame rate even with numerous objects



on screen. The size and definition of the sprites are a good compromise between arcade fidelity and TED limitations: the result is graphics that are less "fine" than the C64 version, but with more readable and consistent action.



There is also a good reproduction of





OUR FINAL SCORE

» Gameplay 85%
A version that is finally worthy, with one flaw in the jumping mechanism.

» Longevity 90%
A historic game that entices from start to finish. Although extremely punishing.





the arcade game's logic. The monsters are positioned very close to the original patterns, and the weapon management closely follows the logic of the coin-op. Even the collision between sprites, despite operating on software sprites, is precise enough to maintain that feeling of "ruthless precision" typical of the arcade game.

In 1986, the original title gave up music due to space and CPU constraints; this version recovers a complete soundtrack, themes, and effects, and does so very well, while still remaining within the limits of the TED chip.

The perceived difficulty is very close to the arcade: the number of hits, level timers, boss patterns, and the need to memorize sequences have been kept almost unchanged, with only minor concessions (checkpoints and continues) to adapt to the home environment. The jump system needs to be reviewed, as if not executed perfectly, it often leads to certain death; this is an aspect that should be refined in subsequent releases after the official release.

Once again, we are faced with an excellent use of the small and mistreated Plus/4, thanks to the commitment and passion of developers and enthusiasts (the Czech Republic scene on this platform is truly remarkable). Ghosts'n Goblins Arcade Version is not only a nice port, but a concrete demonstration of how far the TED and CPU can be pushed when backed by knowledge, dedication, and a specific goal.

by **Carlo Nithaiah Del Mar Pirazzini**



NEW GAME

WOLFING RELOADED

Year: 2025
Editor/Developer:
Genre: Metroidvania
Platform: Commodore 64
Website: https://lazycow.itch.io/wolfling/devlog/1115447/c64-cartridge-of-wolfling-reloaded-is-available

Wolfling for Commodore 64 is that game where you start out as a poor, defenseless maiden in a cursed castle, and five minutes later you find yourself howling at the moon as if you'd spent the evening drinking Red Bull with a werewolf!

An independent mini metroidvania starring an 8-bit character: half princess, half werewolf, but 100% "just one more game and then I'll turn it off... I swear"!

In the shoes of the young prisoner with straight blonde hair, we must make our way through a castle full of deadly dangers, unfriendly creatures, and one important detail: in the moonlight, she will transform into a vicious werewolf.

Wolfling is a game that does not feature linear levels, but a single map to explore, keys to retrieve, and a true Metroidvania style of play.

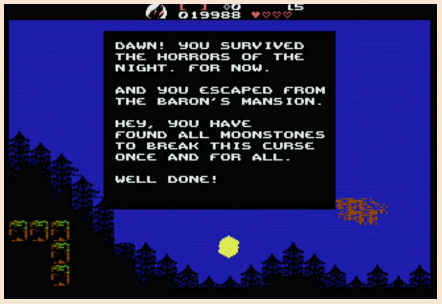
Our protagonist in human form is fragile, extremely fragile... but as agile as a gazelle: she can enter the most cramped places, climb like a novice Tarzan in a skirt, and... die horribly if she underestimates the first enemy she encounters...

In wolf form, she becomes an 8-bit version of a tank: strong, resistant, fighting like a beast and with much more confidence, but definitely less agile and less precise; therefore, each transformation is a little game within the game itself.

And the great thing is that you don't press any buttons to change form! It all depends on the moonbeams and how you approach them.



Graphically, it's a gem with lots of Gothic-style backgrounds, large and sparingly animated sprites, use of color above the standards of our beloved C64, with an atmosphere that mixes 1950s Hammer horror films and Castlevania.



This style is also found in the dark





OUR FINAL SCORE

» Gameplay 95%
Wow! Incredible game mechanics, well-designed levels, and great technical aspects. All in a small Metroidvania!

» Longevity 90%
I may be repeating myself... but it's a "small but dense" game! Hard but enjoyable!

and melodic soundtrack, a fine piece of work that is "very graceful."

Be warned! Wolfling is no walk in the park.

You die, a lot and badly... but you learn and try again... and after a few games, you'll start to move around the castle by heart, as if it were your own home (a home full of deadly traps... but that's just a detail).

If I had to find a suitable term for the difficulty curve, I would say... 'small but dense'. It doesn't last a hundred hours, but it squeezes every single second of gameplay, every glimpse of the moon and every room explored out of every screen... and the castle will transform from a chaotic/gothic labyrinth into our playground... still gothic!

In a modern collection of C64 titles, this title is a must-have.

It proves once again how you can create a platform game with a strong identity and brilliant gameplay mechanics on 1982 hardware.

If you love the C64, you can't miss out on this game!

by **Marta Rossmann**





TERRA INCOGNITA

Year: 1996
Editor/Developer: Team Fatal
Genre: Action RPG
Platform: Playstation Net Yaroze, PC, IOS, Android, PSP

Terra Incognita is a small cult classic for retro and homebrew enthusiasts: a hybrid between an RPG and a 3D platform game created on Net Yaroze which, despite its obvious limitations, still retains a special charm today.



It was created in 1996 as a homebrew title for the first PlayStation, developed by the independent Japanese group Team Fatal using the Net Yaroze kit. It was distributed as an official demo in PlayStation Magazine, but ended up going almost unnoticed at the time.

In the adventure, we take on the role of an unnamed hero armed with a sword, with the goal of recovering a golden crown within a time limit of 60 minutes.

The action takes place in a single large dungeon guarded by a dragon, where in order to advance, you will need to solve various types of puzzles and overcome some difficult sections in pure platform style. Our hero can jump, attack, and interact with various elements in the environment (wooden crates, bombs, signs), as well as collect keys, potions, and extra hearts in classic RPG chests. The puzzles mainly revolve around placing boxes to create steps or activate switches, with enemies reduced to variations of colored blobs that make the experience more exploratory than action-packed.

The graphics, with square environments and references to 2D tiles, give an aesthetic reminiscent of Zelda and the early Final Fantasy games, which still looks very polished, distinctive, and certainly charming today.



Some level design choices make





OUR FINAL SCORE

» Gameplay 75%
The controls aren't exactly the best, but the adventure is enjoyable.

» Longevity 78%
Not very long, but definitely interesting to rediscover in 2026.

jumping frustrating, and you'll often find yourself cursing and wasting time before finding the right approach. This is due to the structure of the control system, which was not designed for a true platformer.

The PS1 version is now difficult to find in physical format, but it is still possible to track it down online. The game has also been made available for PC, iOS, and Android, with HD graphics and a few other improvements. A PSP version has also been available for some time, faithful to the original title and very enjoyable on a handheld device.

The PlayStation homebrew scene is a world still to be discovered and rediscovered (as in this case), and we highly recommend this title to those looking for a hybrid challenge in the style of Zelda games.

This is not an absolute masterpiece, but a good example of development through that madness called Net Yaroze.

by **Roberto Del Mar Pirazzini**





NEW GAME

PTEROPUS

Year: 2025
Editor/Developer: Retroplasmid
Genre: Shooter
Platform: Nintendo NES
Website: https://retroplasmid.itch.io/pteropous

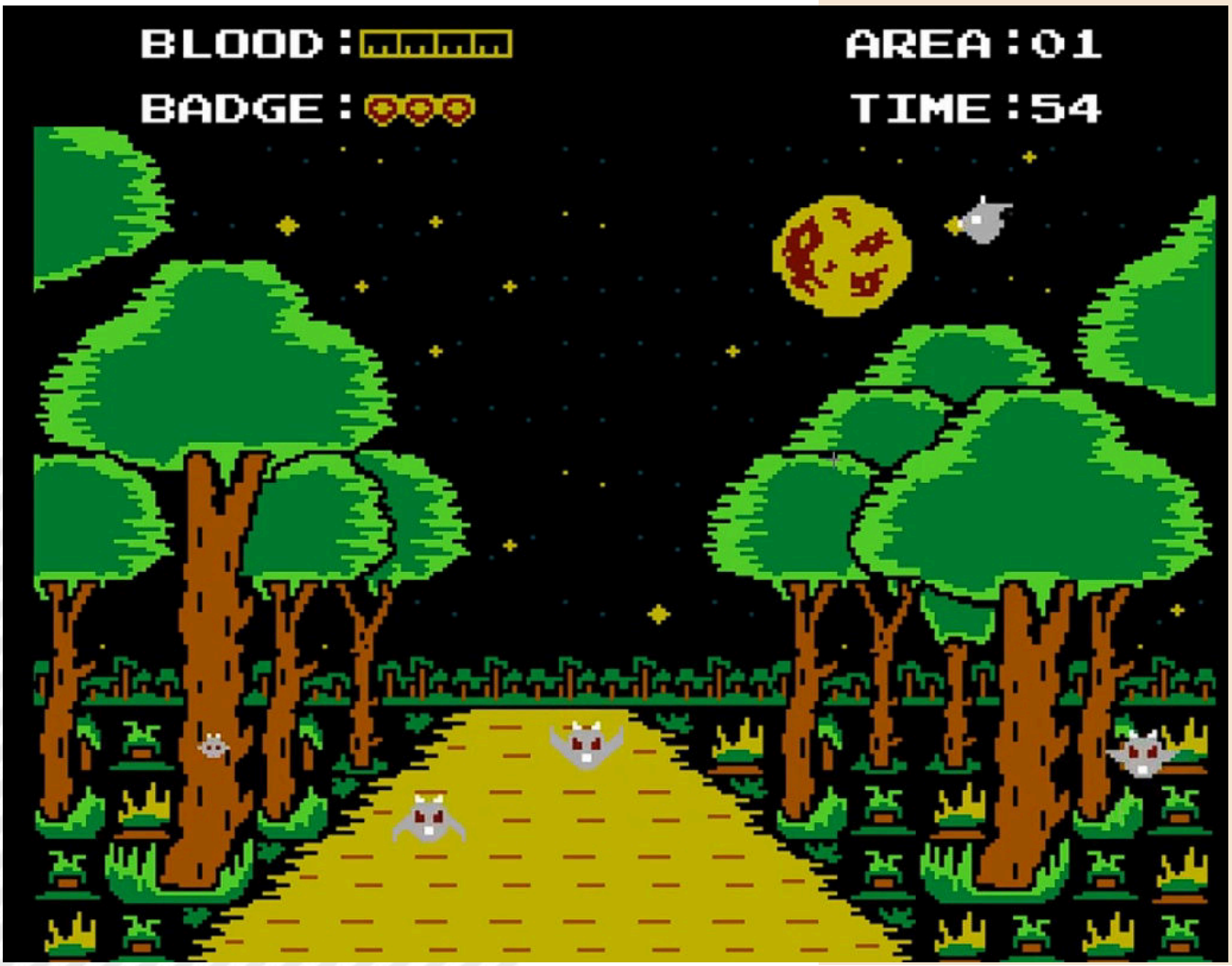
Pteropus for NES is the game that definitively proves one thing: the NES Zapper was not created to shoot ducks, but to save giant bats from a viral epidemic. Forget Duck Hunt, here we are in the midst of a deadly viral pandemic!

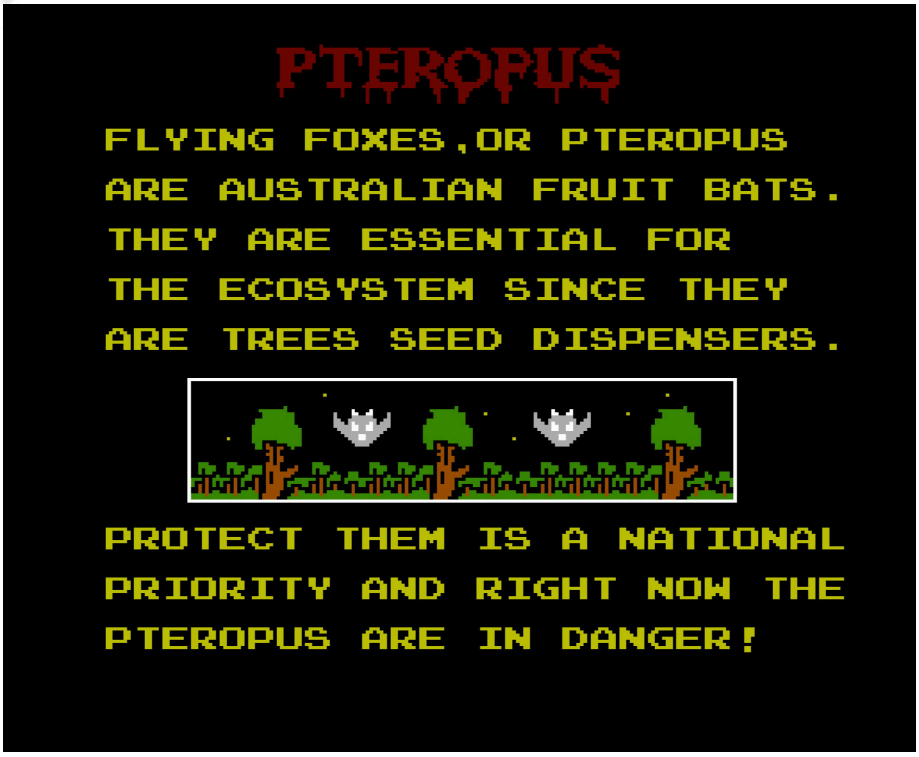
A virus threatens Australian flying foxes (a species of bat) and you, with extreme scientific delicacy, shoot them with the Zapper to collect samples and find a cure. It's the first shooter game where you feel a little guilty... but then who cares, it's for the good of humanity!

In terms of gameplay, it's super simple: the infected bats flutter around, time passes, you aim and blast all the bats until the screen is clear. The end. As you progress, our fluttering "friends" become less cooperative, faster, and harder to "tame."

Pteropus is made with NESmaker and features clean graphics, with simple backgrounds and cute bats, perfect







for targeting: no unnecessary virtuosity, everything designed to show you what you need to hit on the screen.

Going back to using the Zapper on a cathode ray tube is always a pleasure (actually, "borrowing" it from Uncle Nith is a pleasure) and, in the end, the game is fun.

Aesthetically, it's very simple, but it works well for what it's meant to convey.

All in all, I had fun blasting away, and if you have a Zapper, give it a try (P.S.: it also works great in emulation).

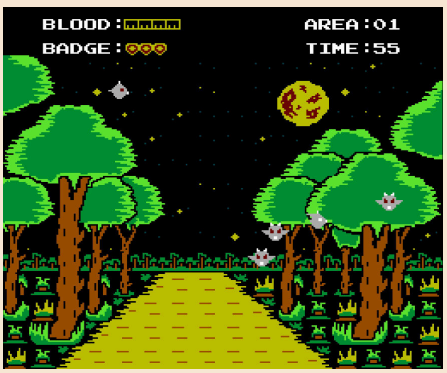
by **Ingrid Poggiali**

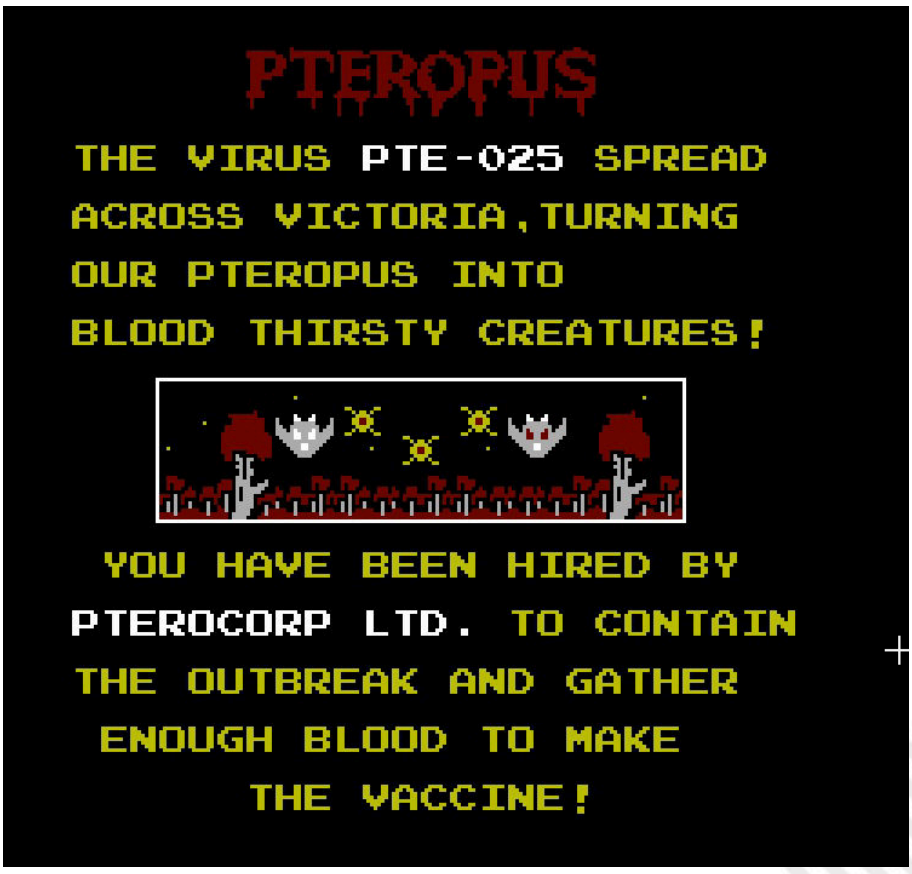
OUR FINAL SCORE

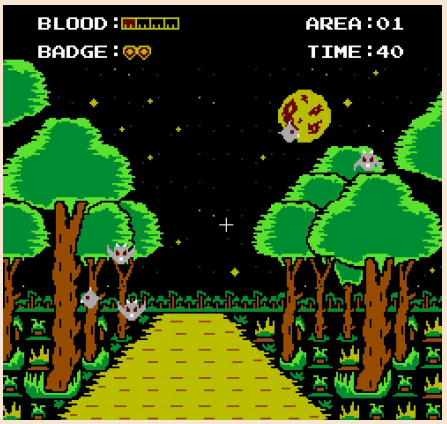
» Gameplay 80%
There are very few titles for Zapper in history, even fewer modern ones. It's always fun to blast away endlessly.

» Longevity 70%
The action is a bit repetitive, but it's fun.









NEW GAME

SONIC GX

Year: 2025
Editor/Developer: Condense
Genre: Platform
Platform: Amstrad GX4000/ PLUS
Website: https://www.pouet.net/prod.php?which=105245

Sonic GX for Amstrad GX4000 is the classic project that, on paper, seemed impossible but instead became the definitive manifesto of what homebrew can do when it decides to push a machine beyond common sense: Sonic on GX4000 is not just a curiosity, it is a first-rate technical and playful showcase.

The game was developed by the Condense team and comes after about seven years of work (and here at Retromagazine we followed it all), starting with a first preview at Alchimie XIII in 2019 and culminating in a surprise release at the Benediction Coding Party 2025. It is not based on the Mega Drive version, but on the 8-bit console version (Master System/ Game Gear), adapted to run on the 'maligned' Amstrad GX4000 and Plus, a choice that allows the limitations of the hardware to be respected while maintaining the fast and colorful spirit of the original.



The structure is all there: fast-scrolling levels, rings to collect, enemies to eliminate, and platform sections just like on the Master System, but with a bonus Special Stage that pays homage to the 3D-like one seen in Sonic 2 for Mega Drive.

The gameplay is surprisingly smooth for a Z80: the frame rate remains stable, Sonic's controls are responsive and readable, and even purists of the series recognize that the feeling of speed has been reconstructed with great care. There is some difference in response compared to Sega pads, but overall the control system is well done and the learning curve settles in quickly, providing a good balance between precision and accessibility. It runs in full screen at 50Hz, with





OUR FINAL SCORE

» Gameplay 92%
It's got everything 8-bit Sonic has to offer, with stunning graphics, great use of sound, and spot-on controls.

» Longevity 90%
Not easy but very enjoyable and with a great special bonus stage.

about 52 colors on screen at once, making full use of the extended palette, hardware scrolling, and sprite/DMA audio capabilities of the GX/Pluys line. The visual result is top-notch for the platform: rich backgrounds with numerous animated effects, parallax on the skyline, and overall great detail in sprites and animations. Without a doubt, this is an aesthetically incredible title on the GX4000. The audio is also interesting, with music and FX closely resembling the 8-bit versions but with a very clean rendition, demonstrating how the Amstrad sound chip, when well exploited, could hold its own against other contemporary systems. For those who collect or emulate the GX4000/Plus, this is a technically dazzling 'must-have' title that is truly playable and not just a 'demo' to show off. The Condense team has been able to rewrite the perception of this gaming system in the retro scene from scratch. If it had been released in the glorious "golden years," it would have easily earned a seal of approval or a rating of excellence in magazines: not only "the Sonic we never had on GX4000" (unlikely in the early '90s), but one of the best examples ever of an amateur port of a great classic.





by **Giampaolo Moraschi**

NEW GAME

BUBBLE BOBBLE LOST CAVE

Year: 2026
Editor/Developer: Dave's Retro Forge
Genre: Platform
Platform: Commodore 64
Website: https://daves-retro-forge.itch.io/bubble-bobble-lost-cave-c64

This issue 52 celebrates two new interpretations of Bubble Bobble on Commodore 64. You can read our friend Daniele's review of the Remastered version released at the end of 2025 and this article, dedicated to the Lost Cave version.

Bubble Bobble: Lost Cave for Commodore 64 is, to all intents and purposes, the "phantom" sequel that the 8-bit port of Bubble Bobble deserved in the 1980s. This is not a simple amateur hack, but a professional project that takes the legendary 2012 arcade ROM hack Lost Cave, created by Bisboch and Aladar, and rebuilds it on the Commodore machine, with 100 brand new levels and modern C64 technical features.



Lost Cave was born from the idea of recovering all the extra levels created by TAITO for the console versions of Bubble Bobble and merging them into a single 100-stage "mega-remix." Dave's Retro Forge brings this concept to the C64, using the Bubble Bobble C64 Remastered engine as a basis and treating this project as its natural evolution.

The structure is classic: wave after wave of enemies to trap in bubbles and pop, fruit and bonuses to collect in cascades, and that constant swing between more relaxed levels and others designed to make even veterans sweat.

The heart of the game remains strictly faithful to the original, with bubble physics, platform management, enemy logic, and overall pace that any Bubble Bobble fan will immediately recognize. The difference lies in the 100







completely new levels, meticulously adapted to the limitations of the C64 engine: layouts recreated with "arcade accuracy" as the stated goal, bubble airflows reproduced within memory limits, so that bubble paths, timing, and "firing lines" remain consistent with the original design, adding small technical tweaks where necessary (shapes of some openings, granularity of flows) so as not to break the difficulty and rhythm.

The result is that Lost Cave plays like a true "episode 1.5": not another clone, but a new 100-screen marathon that challenges even those who have played the original port.

Not born as a remake from scratch, but as a deep ROM hack of the C64 version, we are faced with completely redesigned graphics, just like in Bubble Bobble Remastered. Sprites and backgrounds are converted directly from the arcade, with a level of detail significantly higher than the historic C64 and an incredible look. The stated goal is to offer the best possible performance on both CRT and modern monitors: optimized palette, clean outlines, and perfect readability even in the most crowded situations. Everything runs on the engine prepared for Remastered, so as to maintain smooth animations and impeccable





response to commands on real hardware and emulators.

Among the modern goodies, we mention the optional two-button control (with jumping on the second button), just like in the arcade; some new bonus items taken from the console versions and compatibility designed for both real hardware and emulation.

Lost Cave is a "fan-made for fans" project, distributed on itch.io as a free download with the option to make a donation to support the team (which we 100% recommend doing). Leading this band of 8-bit heroes is Davide Bottino, who handles the graphics and levels and coordinates everything. At his side is Victor Widell for reverse engineering and code, with contributions from Aldo Chiummo and Antonio Savona, who took care of the introductory parts and various tweaks.

If, like me, you love Bubble Bobble on C64, here you will find 100 meticulously adapted levels. It's not just a nostalgic marketing ploy, but the "spiritual sequel" we've always dreamed of.

by **Carlo Nithaiah Del Mar Pirazzini**







OUR FINAL SCORE

» Gameplay 99%

One hundred new levels, new bonuses, arcade-style control options, and the same solid gameplay as always. What more could you want?

» Longevity 99%

Needless to say, this product is immense and has absolute longevity!

TREASURE HUNTER G

Year: 1996/2002 (Trad.)
Editor/Developer: Squaresoft, Sting
Genre: JRPG
Platform: Super Nintendo

Squaresoft, role-playing games, and Super Nintendo

Has there ever been a better combination in gaming? That alone was enough to make it an instant purchase for most of us who lived through that fantastic era. Absolute masterpieces such as the Final Fantasy series, Chrono Trigger, Secret of Mana, and Super Mario RPG are examples of Squaresoft's dedication to this genre and to Nintendo's 16-bit console. But what if there was a game from that period that you've probably never played, or even heard of? A forgotten title, never released outside Japan, the last SNES RPG published by Squaresoft before the switch to PlayStation, a sort of symbolic finale to a legendary era.

Intrigued? Well, I'm happy to tell you about this game: Treasure Hunter G. Released at the end of the Super Nintendo's life cycle, lost in the noise of the PlayStation and Saturn launches and just a few months before the arrival of the Nintendo 64, which would capture all the attention, it was only released on the Japanese market. Thanks to a fan-made English translation (and emulation), we can finally catch up on it and enjoy it to the fullest. But let's see what it's all about.



BEHIND THE PIXELS

Treasure Hunter G is a tactical role-playing game: you explore cities and dungeons with a traditional top-down view, then move to small grid-based



arenas when enemies appear.
Each turn, the group shares a pool of action points: every step, attack, spell, or item throw consumes a portion of this shared budget. This turns even the smallest encounters into tactical puzzles, where positioning and timing matter more than simply leveling up.

Red is the close-quarters sword combat specialist, Blue focuses more on the use of skills, Rain is the specialist in support magic and ranged items, while Ponga brings bizarre tricks and good damage output from the rear.
The main villain is a classic evil lord who wants to destroy the world: nothing particularly original in terms of name or concept, but we gladly accept another "SNES bad guy" in the catalog.

Outside of battle, you move around a large world map consisting of visible points of interest, rather than an entire freely explorable continent. And here, personally, I have no doubt: it's probably the most beautiful world map seen on the SNES.
Exploration strongly emphasizes the theme of "treasure hunting." We can break pretty much anything we see: vases, barrels, bushes, even trees. Destroying objects reveals items, money, or sometimes absolutely nothing. It's a repetitive but therapeutic activity that fits perfectly with the treasure hunter's fantasy.
Money comes mainly from selling the loot found, not from battles: a choice that aligns well with the overall theme.

The dungeons are constructed as small levels that mix enemies, light puzzles, switches, and hidden paths. Random combat is kept to a minimum, which keeps the focus firmly in place, but also means that you can't always "solve" a difficult situation by grinding your way through.
The difficulty curve starts off gently and increases in the later stages, where rash movements or misplaced priorities on objectives are quickly punished (very quickly, mind you, as it's easy to die). Some players will appreciate the fact that the game remains fair if you plan a few turns ahead, while others find the balance a bit uneven and stingy with experience. Personally, I appreciate the well-planned fairness.

The story progresses at a steady pace, with over-the-top scenes, simple emotional moments, and a clear sense of narrative progression. It's probably the weak link in the game and the reason it doesn't achieve the "divine" status of Final Fantasy VI and Chrono Trigger. The plot is short, simple, and less engaging than other Square RPGs: it tries to be both silly and serious at the same time, without really excelling in either register.
Visually, the game uses pre-rendered sprites and detailed backgrounds, closer

OUR FINAL SCORE

» Gameplay 90%
A unique and enjoyable game system and the most beautiful game map ever for this genre. It levels up carefully and is never boring.

» Longevity 90%
The translation helps a lot! Twenty hours of gameplay doesn't seem like much, but it's definitely right for this title and its storyline.





to Super Mario RPG than a traditional flat tileset. The characters are small but expressive, with several eye-catching details in the animations of attacks and spells.
If the story limps a bit, the graphics certainly don't.
The soundtrack is by Hitoshi Sakimoto and Masaharu Iwata: you'll find very distinctive brass-style orchestral themes, dark tracks for the dungeons, and airy music for the fields, which wouldn't look out of place in a future tactical title.

Overall, the game looks and sounds 'bigger' than its simple story and relatively short length would suggest.

GAME OVER

Why should you play it in 2026?
Treasure Hunter G deserves to be remembered as more than a footnote in Square's history. It's a good mid-range Square RPG, with high-level presentation and a really interesting battle system.
The approximately 20 hours it takes to complete it are perfectly suited to the type of story it wants to tell.

The humor hits more often than it misses, the interactions between characters in inns offer entertaining glimpses into the group's dynamics, and the "treasure hunt" loop remains satisfying from start to finish.
If you love tactical RPGs or have a soft spot for Square games from the SNES era, Treasure Hunter G is definitely worth the time it takes to track it down. The amateur translation makes it accessible, emulation makes it run smoothly, and the game, overall, holds up surprisingly well even today.
Sometimes it's the games we missed out on back in the day that are really worth chasing after.
Treasure Hunter G is one of those: a hidden treasure that has finally been brought back to light.

by **Roberto Del Mar Pirazzini**







NEW GAME

TRUE GALACTIC MISSION

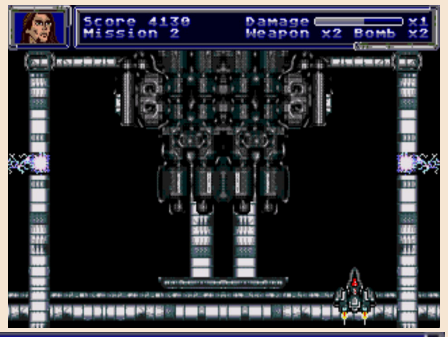
Year: 2025
Editor/Developer: Davila Games
Genre: Shoot'em up
Platform: Sega Mega Drive
Website: https://www.davilagames.com.br/truegalacticmission/it/

Five pilots, five playing styles... epic missions! An epoch-making event, deadly briefings... a $75 cartridge, several years of waiting... and then? Perhaps one of the ugliest titles recently produced for Mega Drive.
True Galactic Mission for Mega Drive is the space shooter that promises us the "ultimate galactic mission" and then, after half an hour, makes us wonder if we've just finished saving the universe or a corporate training course with cardboard spaceships. Hey kids, this game is missing everything!

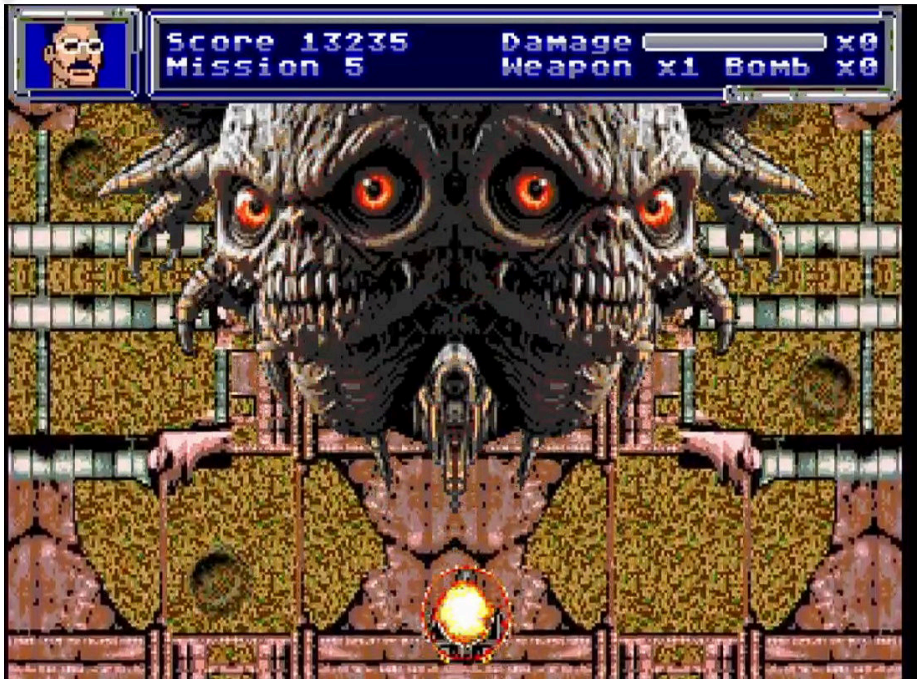


Each operation is presented as an epoch-making event... but often it seems more like a vertical scrolling version of "do the same exercise three times, changing the numbers": waves, end-of-level boss, debriefing, copy and paste, send, and start again.

The pace of the game is so polite and well-mannered that it almost apologizes when enemies attack us. It lacks the frenetic pace of the shoot 'em ups of yesteryear, and it lacks depth for those who want tactics. It's like the good kid in high school who gets straight A's and never causes any trouble.
Shall we talk about the five pilots? They have no influence on the dynamics of the game. And what about the upgrades to our spaceship? They are so linear that it feels like updating an old antivirus program, not a warship. But, damn it, couldn't you at least have made a decent smart bomb in 2026, with SGDK as the development engine?
The waves of enemies arrive in an orderly fashion, strictly in single file: rather than a galactic invasion, it looks more like an authorized demonstration with a route agreed upon by the police.







OUR FINAL SCORE

» Gameplay 20%

Many promises, few kept. Always the same pace of play, always the same approach, always the same thing at every level. Terrifying!

» Longevity 20%

The best moment? When the console was turned off!

Okay, the bosses make an impression. They're big, but they rarely give you that feeling of "how am I going to beat this?". More often than not, it's a matter of positioning yourself on the right or left and holding down the fire button.

Graphically, it's a C+, a 6. The graphics are simple, move well, and are fluid, but lack variety. It looks like the resume of an "average" programmer. We expect more from Mega Drive, especially now that we've seen ZPF and Earthion!

The soundtrack is neither here nor there, while the in-game effects are forgettable: simple "pwee pwee" sounds.

What drives you crazy is the cost of the cartridge: $75 (if you're lucky) for a game that's nothing special.
Seventy-five dollars for a cartridge when, for much less, you can take home new masterpieces of the genre (such as the aforementioned ZPF and Earthion).

New productions are welcome, but this is utter rubbish!

by **Carlo Nithaiah Del Mar Pirazzini**

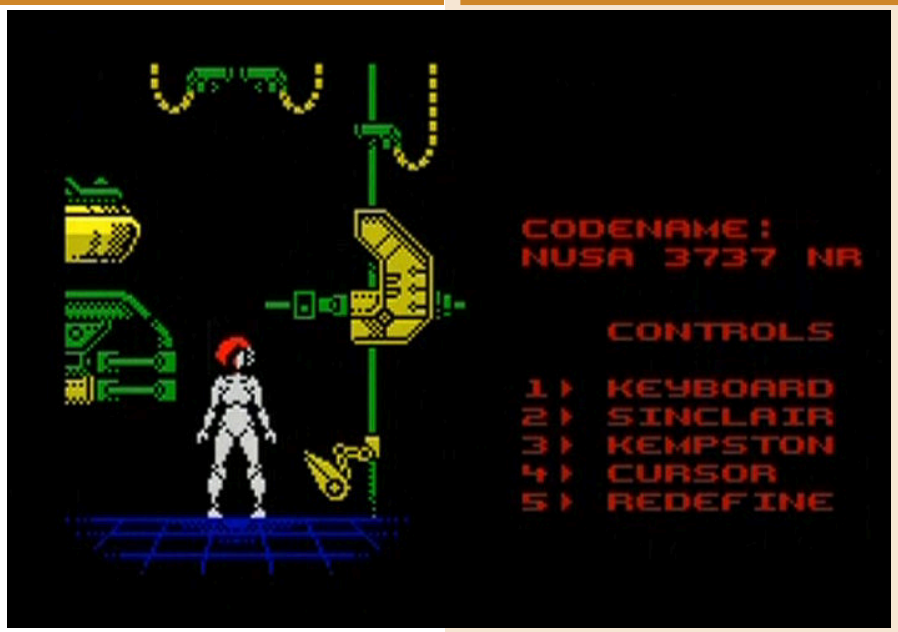




NEW GAME

ASYMMETRY

Year: 2025
Editor/Developer: Manu & Kit
Genre: Action game
Platform: ZX Spectrum 128k
Website: https://yrgb.org/



Asymmetry for 128K makes you swear in Klingon (petaQ!!!)! You hate it so much, but then you find yourself thinking "just five more minutes" and, an hour later, you're still there dodging bullets in front of your Speccy.

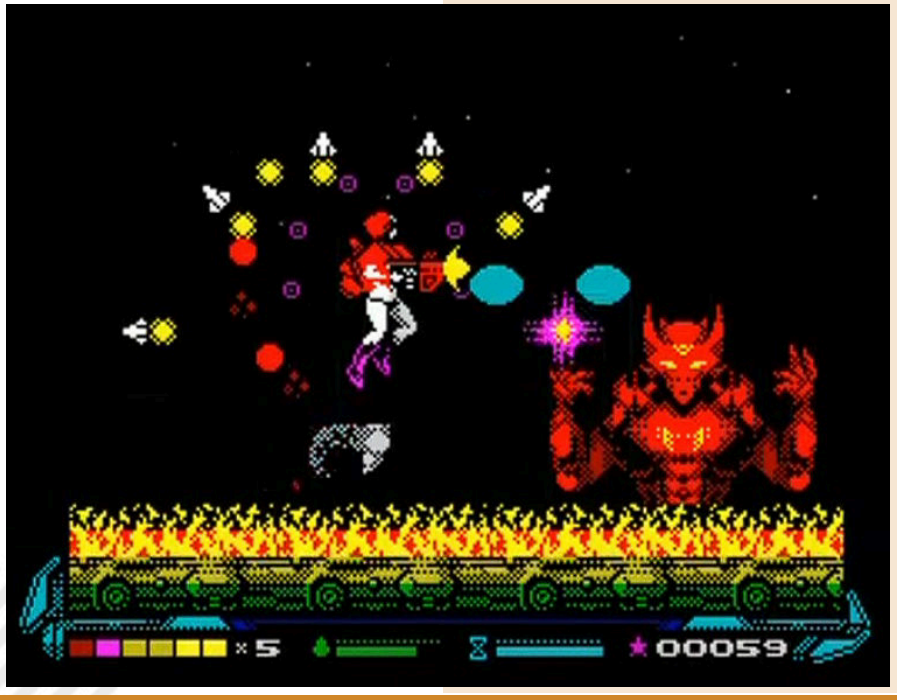
It's a side-scrolling action shooter: you move from left to right, jump, shoot anything that moves, and try to stay alive long enough to see the next stage. The levels alternate between more open corridors and narrow, "claustrophobic" sections, with turrets, drones, and crossfire forcing you to think about positioning and not just hold down the fire button. The difficulty is quite high but fair: the patterns are readable, death comes because you exposed yourself badly or were too hasty, not because the engine crashes or the screen becomes unreadable.

It focuses on continuous action: there are no downtimes, no noticeable loading between game segments, and a constant flow of enemies and bullets. Essential for survival is collecting power-ups, weapons, and additional bonuses, distributed in such a way as to break the monotony: getting the right upgrades at the right time makes the difference between "I was laughing" and "I just lost three lives in ten seconds."

Horizontal scrolling is very smooth on the ZX Spectrum: the game engine updates portions of the screen by rows/blocks, limiting complete redraws and minimizing tearing and slowdowns even with many software sprites present. Multi-level backgrounds with a slight parallax effect are used: the game layer (player/enemy/bullet sprites) remains in the foreground with high readability, while the backgrounds scroll at different speeds, simulating depth without putting excessive strain on the CPU.



The protagonist and enemies are





OUR FINAL SCORE

» Gameplay 95%
A killer technical component accompanies a practically perfect game system and awesome level design!

» Longevity 95%
Devastating but enjoyable! This is the title you'll replay most often in 2026, trust me!





medium-large software sprites. The voluptuous protagonist is easily distinguishable in shape and color contrast from the background and bullets, an essential requirement in a high-action context. The collision routine is fine enough to allow narrow passages between shots and obstacles: the hitboxes seem aligned with the graphic silhouette and not overly "inflated," reducing the sense of unfair death. Ocio because the screen can fill up with drones, turrets, and simultaneous shots while maintaining a stable frame rate: it is important to note that in these phases there are never any critical slowdowns, even in the busiest moments, a sign of great experience in development and excellent knowledge of the machine.

Asymmetry uses the 128K AY 3 8912 chip for a sci-fi-style soundtrack, with fast and rhythmically sustained tracks, consistent with the high input density required. The music plays alongside the sound effects (shots, explosions) without saturating the sound: this implies a balanced division of CPU cycles between audio routines and game logic, avoiding noticeable drops when the scene gets crowded. Truly a work of art.

It is still unclear to me why it did not come first in the YRGB 2025 (the ZX Spectrum game competition). It has everything it takes to be the new "killer application" for the 128K: perfect graphics, great sound, and fantastic level design. It's a shame, it definitely deserved to win. That said... why are you still here reading and not already playing? Come on, it's time to grab your joystick!

by **Carlo Nithaiah Del Mar Pirazzini**



NEW GAME

PHANTOM LEAP

Year:2025
Editor/Developer: APC&TCP, HooGames2017
Genre: Platform
Platform: Amiga
Website: https://www.amiga-shop.net/en/Amiga-Software/Amiga-Games/Phantom-Leap-Boxed::1443.html

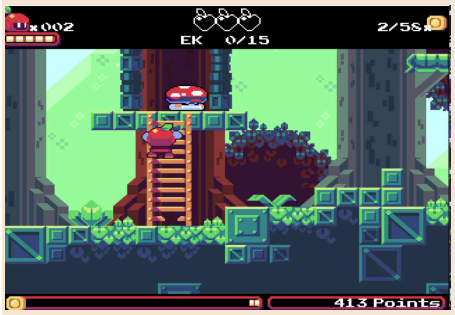
Phantom Leap is a modern platform game for Commodore Amiga that aims straight at the heart of those who want "new stuff" on their old 500, without betraying the aesthetics and rhythms of the classics of the 90s. The protagonist of the game is Kamin, a little adventurer with an apple stem on his head, who explores an ancient forest full of moss-covered ruins, platforms, ladders, and secret passages. The atmosphere is somewhere between classic fantasy and "the great mysterious forest": visually cute, but with that hint of danger that keeps you on your toes. The plot deliberately remains in the background: no epic cutscenes or lengthy story, just a pretext to push you level after level, focusing on controls, level design, and gameplay rhythm.

The game starts out as a classic 2D "jump, run, and grab" platformer: you run, jump, use ladders and platforms, land on enemies with your round butt, collect coins, puzzle pieces, and golden apples to score points and get bonuses. The levels are organized into multiple worlds, with clear objectives and readable layouts; the pace remains fluid, without gratuitous puzzles, even if some mechanics and enemy patterns are a bit repetitive.

Graphically, it aims for the style of late Amiga 500 games. All the magic of that period is there: colorful pixel art, clean outlines, well-animated



Kamin, and backgrounds full of forests, ruins, crates, trampolines, and ladders, without spectacular parallax but with effective scrolling and completely free of slowdowns on real hardware. The number of lives, energy, coins collected and to be collected, and the score are constantly displayed at the bottom of the screen. The final version uses music and effects by Virgill (Jochen







OUR FINAL SCORE

» Gameplay 85%
A classic platformer with classic mechanics and a style that is anything but innovative, but well done.

» Longevity 75%
Not long but enjoyable. Buy the boxed version: the digital version at 19 euros is a real rip-off.

Feldkötter), with chiptune perfectly in the style of Amiga platformers.

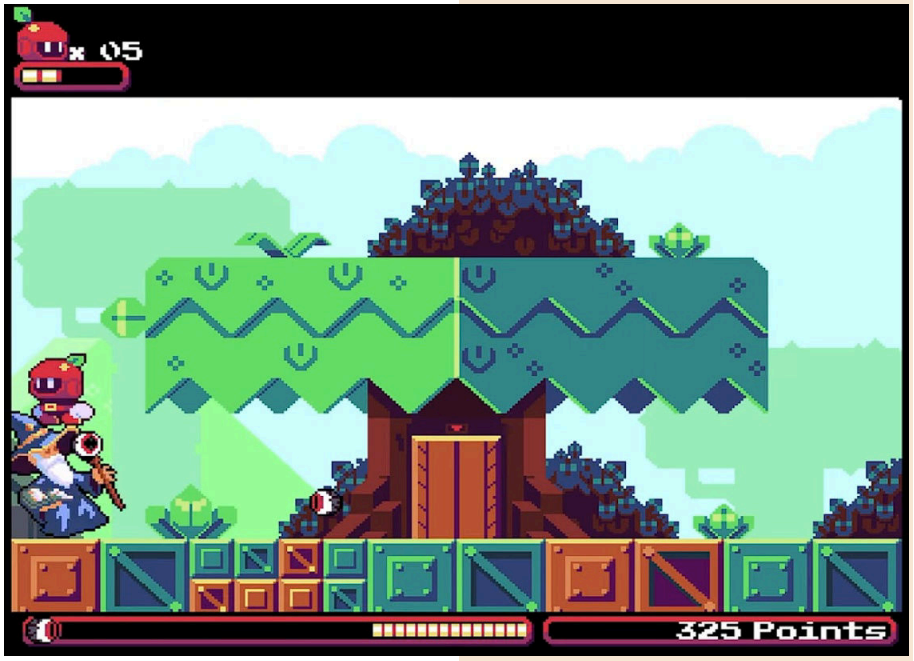
The game is the work of HooGames2017, already the author of Dr. Dangerous, and is built with Scorpion Engine, now one of the key tools of the Amiga homebrew scene. Phantom Leap started as a WIP demo on itch.io, then became a full title released in 2025 as a Collector's Edition, also designed to celebrate 40 years of the Amiga.

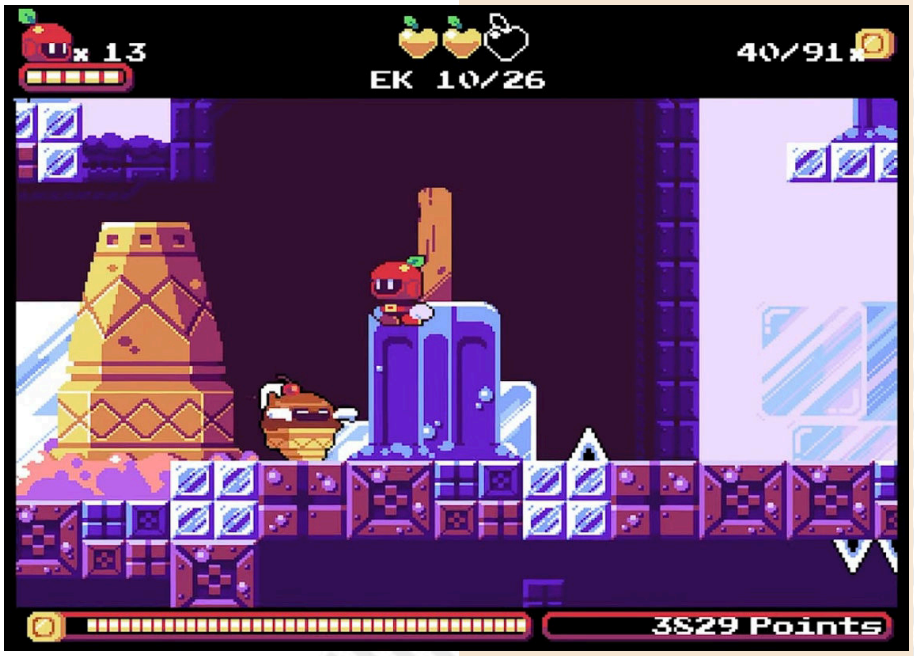
It is distributed in two versions on the APC&TCP store via Amigashop:

• the physical Big Box, with disk, poster, sticker, and color paper manual, a beautiful product for €29;

• the digital edition, which is the ADF file of the game and the manual in digital format.

It must be said that €19 for the digital version alone is a bit steep: the price is definitely high in proportion to what you get.





Coming to the final verdict, Phantom Leap is a nice game, solid and very "retro" in style. It is neither revolutionary nor innovative, but well-made and suitable for those who want something new that smells of "the good old days."

by **Carlo Nithaiah Del Mar Pirazzini**

NEW GAME

JUPITER FRACTURE

Year: 2025
Editor/Developer: Commodore International Corporation
Genre: Action game
Platform: Commodore 64 Ultimate – Commodore 64
Website: https://www.commodore.net/



Jupiter Fracture is an ambitious sequel to 1982's Jupiter Lander, developed by Johnny PvEin for Commodore 64 Ultimate and released in 2025, with core mechanics that evolve the classic lander game into a multi-level arcade experience exclusive to FPGA hardware. The game is available bundled with the new "modern biscuit" or downloadable via BBS. The nine stages unfold on multi-screen maps with mathematically modeled variable gravity (force inversely proportional to the square of the distance from the lunar center), requiring precise movements to land on platforms while dodging homing grenades, synchronized laser barriers, and simulated wind gusts. The radar mini-map at the bottom right calculates your relative position in real time. It's a title that responds perfectly to both joystick and keyboard controls, although I personally preferred the latter.

It uses the Artix-7 FPGA to rasterize parallax scrolling on three layers (starry sky, gaseous clouds, jagged surface with procedural heightmap), managing 8 multiplexed hardware sprites to simulate over 50 entities without flicker thanks to dynamic priority sorting and DMA bursts for texture updates. The custom 16-color palette optimizes the emulated VIC-II with dithering for atmospheric gradients (sulfurous oranges, ionized purples), seamless transitions via viewport scrolling, and particle effects for explosions and fuel depletion, maintaining a stable 50-60 FPS even in dense scenarios.







OUR FINAL SCORE

» Gameplay 85%
Tough and hard as rock. Requires precision and patience.

» Longevity 80%
Once you've honed both your precision and patience, you'll find it hard to put down.



The nine scenarios are quite varied, and the gameplay dynamics are those that have always distinguished its famous "prequel" and numerous clones. In 2025/2026, it's strange to see a Commodore-branded title again: the game itself is quite fun and challenging. It's one of those titles that pays homage to the "old guard" of gamers, requiring particular skills in precision and... patience! You'll often crash during a flight maneuver or landing: you must never give up!

As the first title developed specifically for the new Commodore C64, it's not bad. Simple, technically well done, and fun. Now we expect much more "difficult" and complex titles: we have the technology... we can do it!

by **Carlo Nithaiah Del Mar Pirazzini**







NEW GAME

DOUBLE DRAGON ONE

Year: 2025
Editor/Developer:
Genre: Beat'em up
Platform: Neo Geo AES/MVS
Website: https://ozzyouzo.itch.io/double-dragon



Double Dragon One for Neo Geo is the ultimate "what if": what if Technōs Japan and SNK had actually made a side-scrolling beat 'em up for the MVS in 1995? Here, the answer comes in the form of a free fan game, surprisingly close to the idea of an official 90s beat 'em up. The game takes the sprites designed by Brizo Interactive for the 2011 iOS version and transplants them into original 80s/90s arcade-style levels, with the stated aim of recreating "the" Double Dragon that fans would have liked to see on Neo Geo.

You'll find the four classic stages from the first episode (slums, factory, forest, enemy base), with the last three divided into two sections each, for a total of seven levels and about 25 minutes of beatings per run.

It's an unofficial, totally free project, openly defined as a homebrew/fan game/bootleg, with no connection to Arc System Works or Technōs Japan. The gameplay formula is ultra-classic and well-established. Billy and Jimmy run horizontally against hordes of Black Warriors to be knocked down with combos, kicks, and punches.

The control system uses all four buttons on the Neo Geo joystick. We have the classic punch, kick, jump, and special move for a total of about twenty moves and combinations (including moves shared between the two players). There are also the classic "Double Dragon" weapons. So we'll find knives, clubs, whips, dynamite, and barrels to throw with "viuuulence" at the various criminals that come our way.







OUR FINAL SCORE

» Gameplay 92%
In 2026, it's still fantastic to roll around in "Double Dragon"-style cartoons, and doing so in this splendid title is even more so.

» Longevity 90%
A satisfying and well-balanced challenge.





The cartridge weighs about 424 Megabits, a nice "fat" cartridge perfectly in line with SNK's BIG titles, and makes excellent use of the console's power, giving us huge sprites with smooth animations and a flood of enemies on the screen. Although derived from mobile graphics, it has been reworked to resemble the look of King of Fighter or Double Dragon Advance... but pumped up! The backgrounds are rich and there is a skilful use of the machine's palette. Praise that we can also extend to the metal/synth soundtrack. It's a nice mix that fits perfectly with the genre and wouldn't have looked out of place even in the console's heyday. It is available in several ready-to-use builds (ROM for AES/MVS, NeoSD, Darksoft, MVSX, MiSTer, MAME package with run.bat, etc.), with compatibility increasing as emulators and flashcarts are updated.
Double Dragon One is one of the most compelling fan games of recent years: respectful of the Technōs myth, consistent with the 4-button mechanics of an authentic Neo Geo, and technically robust, so much so that it really seems like the "lost episode" of the mid-90s. It doesn't reinvent the beat 'em up, but interprets it with philological taste, offering exactly what it promises: 25 minutes of pure arcade-style co-op beatings, with giant sprites and music that pumps at just the right moment. For those who love NEOGEO and Double Dragon, it's one of those titles to download immediately, put on your flashcart, and keep on your list alongside the SNK classics.

by **Giampaolo Moraschi**



NEW GAME

PAC-MAN DOUBLE FEATURE

Year: 2025
Editor/Developer: Atari, Plaion, Bob DeCrescenzo
Genre: Maze game.
Platform: Atari 7800, Atari 2600+, Atari 7800+
Website: https://www.amazon.it/PLAION-Pac-Man-Double-Feature/dp/B0FTMK9BTB



Pac-Man Double Feature for Atari 7800 is, in fact, the "definitive conversion" of Pac-Man on the machine: a package that combines arcade fidelity and convenient modern options, without betraying the feel of the Namco coin-op.

The cartridge offers a version of Pac-Man developed by Bob DeCrescenzo (PacManPlus), a long-time specialist in conversions of the character. The game is designed to work on both the original 7800 and new Atari-compatible systems (such as the 2600+ with 7800 support), maintaining the same code and visual rendering; it is released bundled with the new Atari 2600+ Pac-Man Edition. There are options for number of lives, difficulty level, and even a Ms. Pac-Man-style "sped up" mode, which makes the action faster for those who know the patterns by heart.

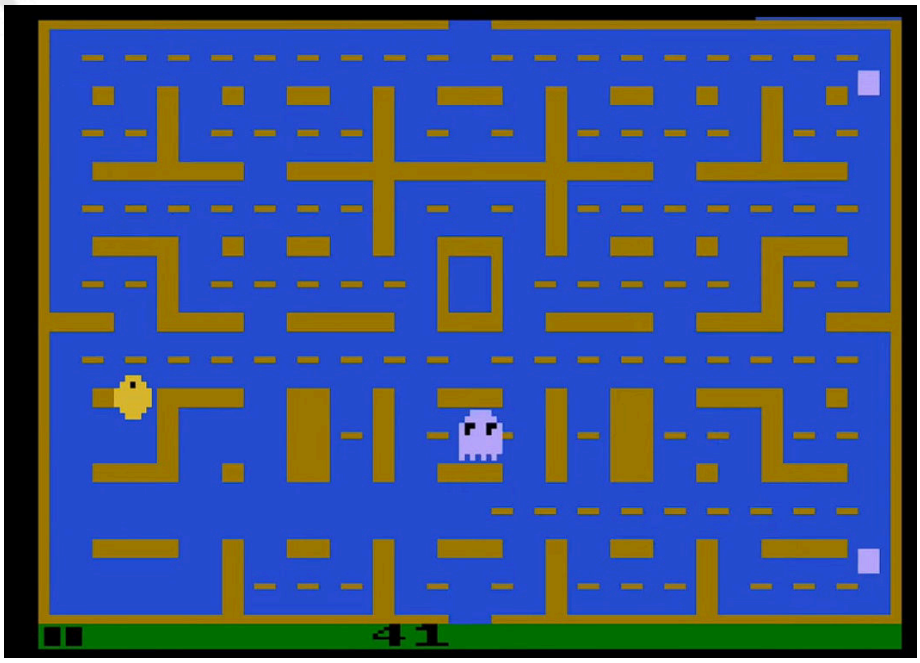
The maze design is faithful in terms of size, corridor layout, and placement of ghosts, power pellets, and various bonuses. There are no strange compromises, and the whole thing provides a 100% faithful immersion in the original. The chase patterns of the four ghosts have been retained, so all the classic strategies work: the feeling is simply perfect.

Visually, the maze fills almost the entire screen, with scores, lives, and bonuses neatly arranged in the side areas, just like in an arcade. The colors, animations of Pac-Man and the ghosts, and the rendering of the fruit icons are very close to the original, with only minor color differences due to the console. One of the most praised aspects is the absence of flicker: ghosts and sprites are solid, legible, and do not "flicker," which makes the game much more enjoyable than many historical 8-bit conversions. The audio, while not using an additional Pokey chip, is significantly better than the average for the 7800: the music and effects are recognizably "Pac-Man," with a perceived quality even better than Ms. Pac-Man 7800.





For Pac-Man and video game preservation enthusiasts, there is a bonus game. The original Pac-Man for Atari 2600 is also included in the



OUR FINAL SCORE

» Gameplay 95%

Faithful maze, precise controls, no flicker, more than decent audio, and modern options make it a must-have for both Atari collectors and those who want a home reference for studying coin-op patterns.

» Longevity 92%

Pac-Man Double Feature for Atari 7800 is one of those cases where "better late than never" really makes sense. You can play it over and over again.

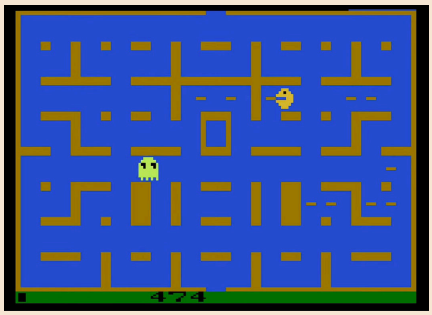
game. It is enabled via a switch on the cartridge itself. This is definitely a plus for all video game "historians."

This Pac-Man Double Feature "rectifies" an old Atari shortcoming: finally, the 7800 receives an official version of the title that lives up to expectations, after years in which the homebrew scene had filled the void. The fact that it was handled directly by DeCrescenzo, who studied the arcade code in depth, guarantees a fidelity that goes beyond a simple "nice conversion": it is designed as a reference point for those who love the original.

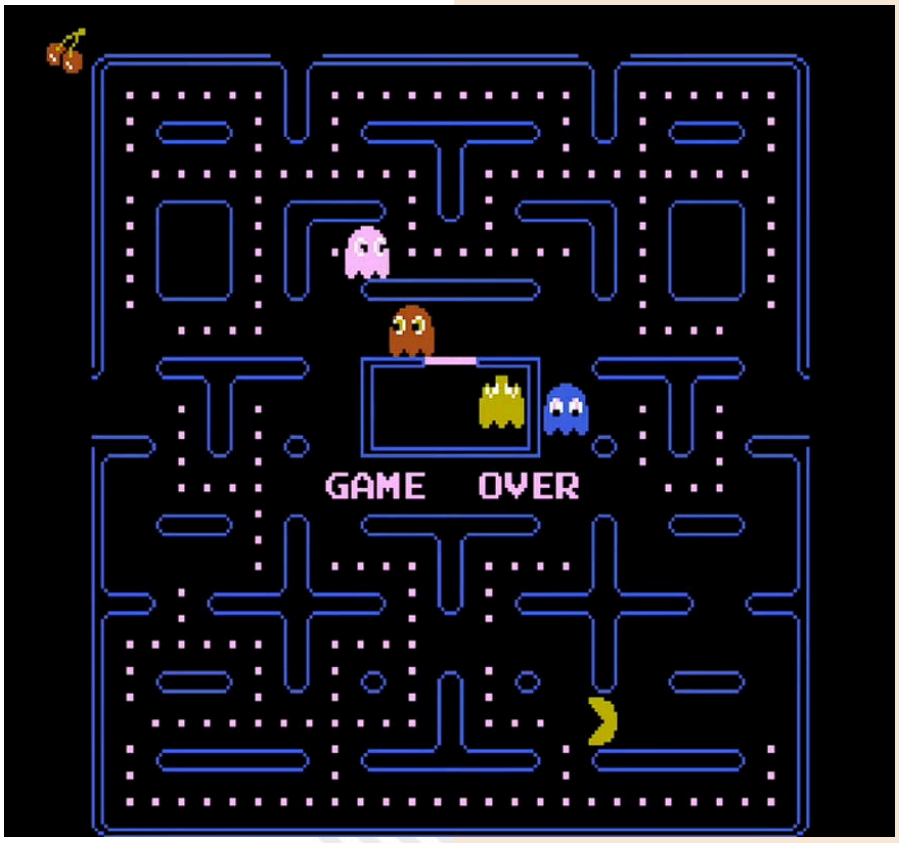
A Pac-Man that is practically arcade perfect on a console that deserved this treatment back in the 1980s.

by **Carlo Nithaiah Del Mar Pirazzini**









NEW GAME

STREET FIGHTER 2

Year: 2025
Editor/Developer: A8bit Redefined
Genre: Beat'em up
Platform: Atari 8bit (64Kb)
Website: https://gury.atari8.info/detail.php?id=16271&src=2

Street Fighter II for Atari 8-bit is one of those projects that shouldn't exist... a disturbance in space-time, an anomaly in history. But it's real: a 2025 homebrew port based on the Game Boy version, technically impressive in terms of aesthetic quality and use of resources on hardware born in the late 1970s.



The game is designed to run on machines with 64 KB of RAM and is packaged in a 4 MB "cartridge" file (there is also a very nice boxed version), supported by the latest subcart firmware. As mentioned, it is based on the 1995 Game Boy version: there are 9 opponents to defeat and 3 final bosses, slightly fewer than in the arcade version.

The control system, although limited by the Atari joystick, manages special moves and directional inputs with surprising solidity, considering the 8-bit portable starting point. The pace is clearly closer to the portable versions than to the CPS-1 arcade: less speed and fewer animation frames, but an overall consistent feel, especially when you remember that it is still an 8-bit Atari with 64 KB on board.

The graphics make heavy use of Player/Missile Graphics (PMG) for the characters, with separate palettes and experimentation with color combinations to make the fighters stand out against the background. The sprites are inevitably less detailed than the 16-bit versions, but by Atari 8-bit standards, this is definitely above-average work. The combination of music, FX, and voices puts a heavy strain on the system, but it shows







OUR FINAL SCORE

» Gameplay 90%
The control system, although limited, has been optimized to the fullest.

» Longevity 85%
A solid title even on the 8-bit Atari, despite the roster not yet being complete with all characters.

how much "hidden power" there still was in the 8-bit Atari.

Let's be clear: Street Fighter II on the Atari 8-bit is, objectively, something of a technical miracle. A huge cartridge, voice samples, RMT music, and a whole range of opponents on a system designed for other genres. It's not the CPS-1 arcade and it can't be, but as a demonstration of the power of 8-bit homebrew and as a 'show-off piece for friends', it's almost essential, especially if you grew up with green phosphor Ataris and thought Street Fighter II on them was pure science fiction. Priceless.



by **Giampaolo Moraschi**







NEW GAME

COLOCODX

Year: 2025
Editor/Developer: Texudo Gamedevs
Genre: Action game
Platform: Sega Mega Drive
Website: https://tuxedogamedevs.fwscart.com/product/coloco-dx



ColocoDX for Sega Mega Drive is an expanded remake of Coloco (on ZX Spectrum/Amstrad CPC in 2020) that transforms an already brilliant idea into one of the most original puzzle action games in the 16-bit homebrew park. A game based entirely on inertia, gravity, and precision landings, it feels like a cross between Lunar Lander and a 1990s Sega arcade game.

The full title, Cosmos Orbital Landing Outer Crash Officer DELUXE, already tells the story. The player takes on the role of a rescue pilot whose task is to take off from base, reach their missing colleagues, and return safely. Each level is a "space corridor" full of obstacles, walls, and narrow passages; the goal is always the same:

• take off
• rescue the astronaut
• land back at the base without crashing.

The game offers three worlds with ten stages each, for a total of 30 levels, plus a final bonus with two extra graphics modes that emulate the look of the ZX Spectrum and Amstrad CPC versions. The gameplay is based entirely on physics. The lander responds to gravity and inertia, and every touch with walls or obstacles consumes energy or causes immediate destruction, depending on the difficulty level. The difficulty levels modify the hit points and allow you to withstand a few extra hits: the lower the difficulty, the greater the margin for error.

The control system is simple but unforgiving! Precision in the use of the burners and the slightest touch







OUR FINAL SCORE

» Gameplay 80%
The control system must be mastered well in order to fully enjoy the solid level design.

» Longevity 80%
Challenging but rewarding, with a typical 90s arcade atmosphere.



on the pad determine whether you end up in a thousand pieces or whether you manage to rescue your colleagues scattered throughout the various levels. The difficulty curve is very well balanced: the first stages calmly teach you how to manage thrust and inertia, then the really tough sections begin.

Compared to the original 8-bit version, the Mega Drive version boasts clean and colorful graphics, with smooth scrolling effects, a clear HUD, and linear animations that make every movement of the shuttle easy to follow. The rendering is deliberately "arcade-like," so much so that it looks like a mid-90s 16-bit production, with vivid palettes and a basic but well-designed interface. The soundtrack and sound effects are one of the strong points, with energetic Sega-style tracks and very rewarding level completion jingles, which reinforce the feeling of a home coin-op.

ColocoDX is one of those titles that seem tiny on paper but, pad in hand, become dangerous for your free time. A very simple concept, rigorous controls, an intelligent difficulty curve, and physics that give you that "perfect landing" satisfaction typical of the great gravity classics. It's not a riot of extra modes or a "Sega-style" blockbuster, but as a 2025 homebrew cartridge, it's a surprisingly solid and polished package. If you love Sub Terrania, Lunar Lander, or games in general where you fight inertia more than enemies, it's practically a must-have on Mega Drive.

by **Carlo Nithaiah Del Mar Pirazzini**



NEW GAME

SPLATTERWORLD: RICK TO KYOUFU NO

Year: 1993/2025
Editor/Developer: Namcot, Now Production
Genre: JRPG
Platform: Nintendo NES/ Famicom
Website: https://tcrf.net/Splatterworld:_Rick_to_Kyoufu_no_Daiou

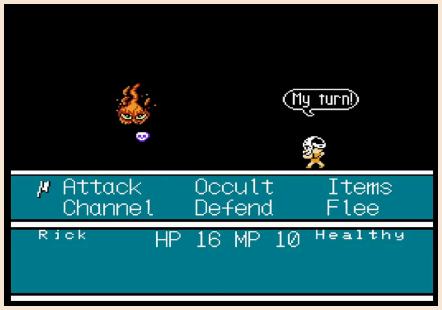


Splatterworld: Rick to Kyoufu no Daiou for NES (actually Famicom) is a "chibi" horror JRPG linked to the Splatterhouse series, conceived in 1993 as a sequel to Wanpaku Graffiti and remained unreleased until a complete prototype emerged online over thirty years later.

The game was developed by Namco as a spin-off of Splatterhouse: Wanpaku Graffiti, featuring a super-deformed version of Rick and a tone reminiscent of a horror movie parody. It was scheduled for release on the Famicom in 1993, announced in promotional VHS tapes for Japanese stores, but canceled before release. For decades, it remained a sort of "urban legend," mentioned only in old lists and magazines. In 2025, a ROM was dumped and distributed (initially via 4chan), confirmed as a playable build and translated into English by Aeon Genesis, finally making it available to fans via emulation (long live emulation).

Unlike the classic Splatterhouse side-scrolling action games, Splatterworld is a top-down RPG with exploration of maps seen from above, encounters with monsters, statistics, levels, and inventory in the style of early 90s JRPGs.

Rick moves through "movie-like" horror settings, facing caricatured versions of zombies, monsters, and bosses and talking to NPCs who often quote or parody cinematic clichés. The tone is deliberately light and satirical: it's not a serious horror game, but a continuous game of references, gags, and allusions, just



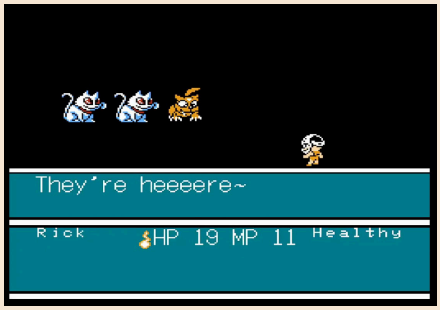


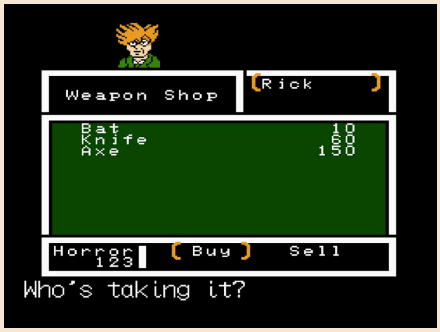


OUR FINAL SCORE

» Gameplay 75%
A classic console JRPG with everything you need to level up and a simple control system.

» Longevity 75%
Not very long but fun in terms of plot and setting. The translation is excellent!





like Wanpaku Graffiti, only translated into the language of JRPGs.
The graphics are "macabre kawaii." Rick and his enemies are small, super-deformed sprites, and the settings are reminiscent of cemeteries, castles, nighttime forests, and haunted interiors, but with a comic book style.

Today, Splatterworld is seen as a piece of gaming history recovered thanks to incredible research and preservation. It testifies to how willing Namco was to experiment in the past, transforming a super-gore series into a comical JRPG on the Famicom right at the end of the 8-bit cycle. For fans of Splatterhouse and 8-bit RPGs, it is above all a fascinating document, not a forgotten masterpiece, but a playable "what if" that shows a curious deviation in the history of the franchise.

Splatterworld: Rick to Kyoufu no Daiou isn't the best Famicom JRPG you can find, but as a crossover between Splatterhouse and a "miniature Dragon Quest" RPG, it's an irresistible historical gem. The parodic horror atmosphere, super-deformed style, and unusual RPG setting suggest an alternative line of the series that never existed.

For those who love Japanese retrogaming and stories of prototypes resurrected after decades, it's one of those ROMs you have to try at least once. Give it a try!!!!

by **Carlo Nithaiah Del Mar Pirazzini**



NEW GAME

ANGELIC WARRIOR DEVA

Year: 2020/2025
Editor/Developer: Team DEVA
Genre: Action-RPG
Platform: MSX2
Website: https://www.msx.org/news/software/en/angelic-warrior-deva-becomes-freeware



Angelic Warrior DEVA is one of the most significant productions in the contemporary MSX2 scene, standing out as a technically and artistically high-profile action RPG. It is a title that combines excellent audiovisual production with a challenging and rigorous gameplay structure, capable of fully exploiting the potential of the 8-bit hardware for which it is intended. The game is a modern project (Team DEVA, 2020) designed specifically for MSX2, with a "luxury" homebrew soul. A small team, but with the ambition of a commercial production from the golden years. Players take on the role of Deva, an angelic warrior launched into a war against rebels and monsters in an area called the Death Zone, in a plot that frames a long series of missions, bosses, and backtracking in the style of Japanese action RPGs.

First impressions are deceiving: it looks like a simple platformer, but it's actually a Ys-style action RPG, where grinding for experience by playing a bit is part of the package.

The pace of the game is "hard as steel." DEVA doesn't cut you any slack, requiring reflexes, pattern memorization, and a minimum of planning on when to push and when to go back to gain experience. It's the classic title that rewards those who stick with it. The least successful aspect is the interface. To see your health and magic, you have to enter the menu, and the same goes for using items, which breaks the flow a bit in the most heated situations. There is also a certain lack of directional clarity at certain points, where it is not immediately clear what







OUR FINAL SCORE

» Gameplay 85%

The somewhat cumbersome interface and a few uncertainties in the direction don't make it perfect, but they don't detract from the substance of a title that raises the bar considerably for what can be expected from the MSX homebrew scene.

» Longevity 75%

Fast, punishing, technically impressive, and backed by a landmark soundtrack.

the next objective is. These are ergonomic flaws rather than structural problems, but in such a fast and difficult game, they can weigh heavily, especially in the early hours.

On the technical front, Angelic Warrior DEVA is a showcase for MSX2! Detailed backgrounds and sprites, enemy and protagonist designs that blend 80s anime and dark fantasy aesthetics, with a very professional feel for a homebrew game.

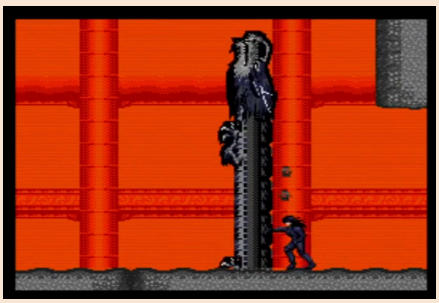
The devastating soundtrack, composed largely by Robert Vroemisse (also the game's graphic designer) with contributions from John Hassink, uses a combination of MSX AUDIO (Y8950) and MSX MUSIC (YM2413/OPLL) for a rich sound. There are many tracks (about 28 recorded in the audio packs) covering a range from heroic pomp rock to darker and more dramatic pieces. In my opinion, it should be considered the "Killer Soundtrack" on MSX.

The game was initially released in physical format for MSX2 (cartridge) and was also used as a prize/sponsor for MSXdev, reflecting its status in the scene. It was later made available as freeware and downloadable from the MSX.org archives, becoming a "must play" accessible to all MSX2 or emulator owners.

Angelic Warrior DEVA is, in essence, the "wet dream" of those who love 16-bit Japanese action RPGs but want to play them on an MSX2. If you like Psycho World, Valis II, and action RPGs in general that aren't afraid to make you sweat over every boss, Angelic Warrior DEVA is practically a must-have for your collection, or at least something to finish once in an emulator, cursing but smiling.

by **Carlo Nithaiah Del Mar Pirazzini**



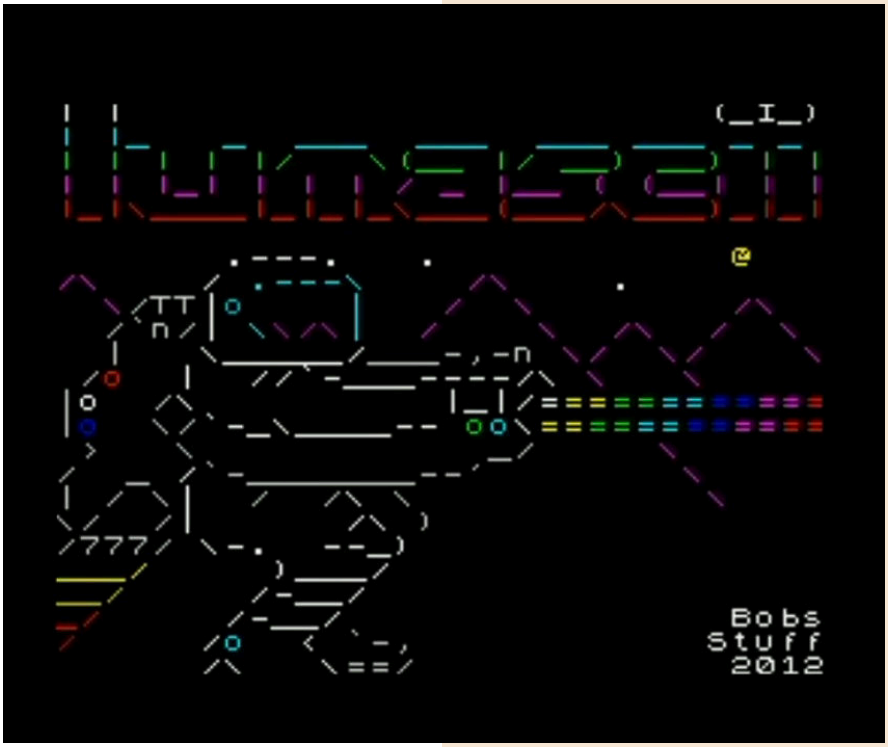




NEW GAME

LUMASCII

Year: 2012
Editor/Developer: Bob's Stuff
Genre: Shoot'em up
Platform: ZX Spectrum 48k
Website: https://cronosoft.fwscart.com/product/lumascii---zx-spectrum-48k
Website: https://bobs-stuff.itch.io/lumascii



LumASCII is a side-scrolling shooter for the ZX Spectrum 48K that turns an extreme constraint (the exclusive use of ASCII characters) into its most recognizable weapon, giving the feeling of a launch title for a ZX82 that never existed, halfway between the ZX81 and the ZX Spectrum.

In the role of Chi-Chi Skyrocket, we defend the multiverse from an invasion that takes us into space, underwater, and even "inside the machine," with a progression that visually justifies the continuous change of palettes and symbols on the screen.

The narrative framework is stripped down to the bare bones, but it's enough to stitch together the different biomes and give a modicum of identity to the protagonist, who emerges more from the ASCII silhouette and continuous action than from any explanatory text. It's a game that speaks primarily through rhythm and readability. No long introductions, just a quick "hook" into the game world and then off you go, into the flow of scrolling.

The most distinctive aspect of the title is, of course, the graphics. Everything, from the player to the enemy waves, from the background structures to the bullets, is constructed with colored text characters. In a still image, the result looks like a creative debugging screen, but once the action starts, the screen comes to life in a surprisingly legible way, with shapes and patterns that quickly become recognizable despite the "low resolution."

Bob Smith says he had to code levels

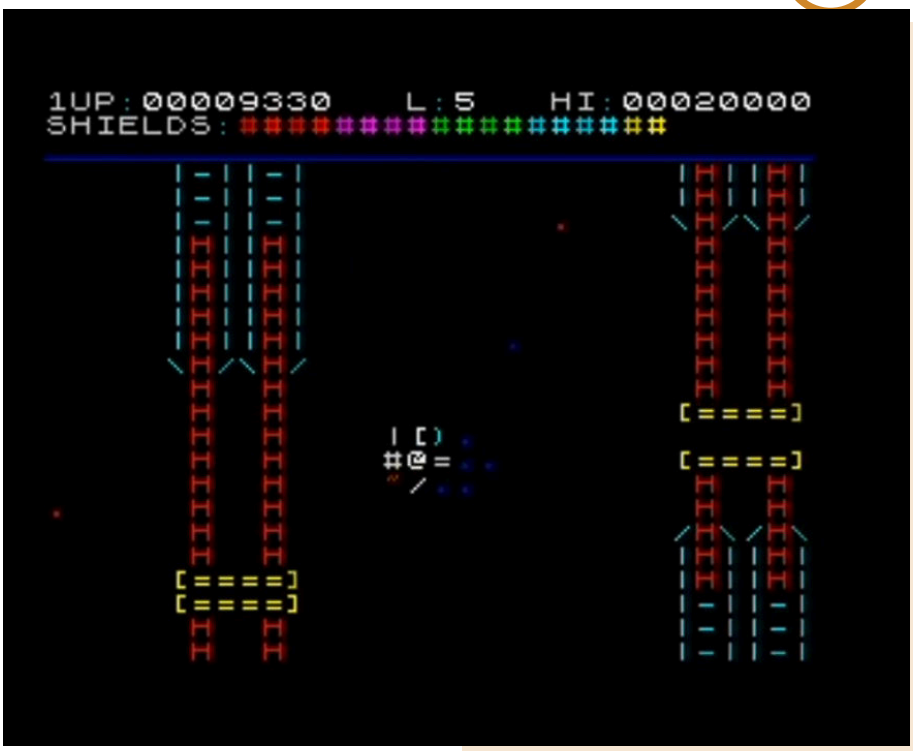


and objects by hand, in the absence of ASCII editors suitable for the coarse grain of the layout, and how difficult the final look was. This effort can be seen in the way each character seems to be placed with care: the ships are not clusters of random symbols, but small studies in silhouette, and the backgrounds alternate between denser sections and areas of respite so as not to oversaturate the frame.

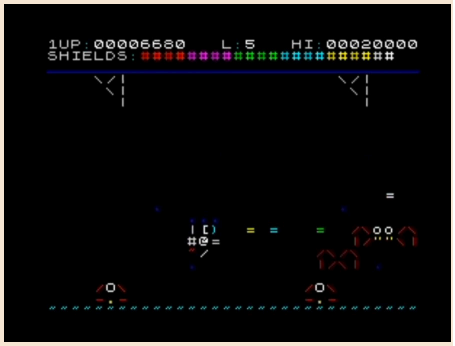
In terms of game design, LumASCII is deliberately minimalist. There is a single type of fire, no "smart bombs" or secondary weapons (the author admits that he didn't even consider the idea because he doesn't come from a "hardcore shooter fan" background). This leads to a curious balance: the absence of bombs forces you to play 'clean', relying on positioning and timing rather than the management of special resources, but at the same time makes the game more immediate to read and master in the short term.

The pace is reminiscent of certain Sinclair classics rather than the great arcade games. Attacks are punctuated, patterns become increasingly aggressive, but always filtered through the need to maintain a clear distinction between scenario characters and real threats. The structure encourages progressive learning, with the first screens serving as a training ground for understanding "what's what" in the sea of symbols, while as you advance, you'll find yourself navigating increasingly narrow corridors of characters that move, shoot, or simply block your path.

From a technical point of view, the nine months of development speak of a much more complex project than its minimalist aesthetics suggest: the



absence of ad hoc tools, the use of only the character map, the management of color and movement on a Spectrum 48K are not compromises but conscious choices that define the identity of the game. The author himself claims that the result "doesn't even look like a Spectrum game," evoking that "other" machine effect (the famous "ZX82") that has always been one of the charms of the most radical homebrew projects. Critical reception confirms the success





of the experiment. MicroMart named it "Game of the Week," calling it a shoot 'em up that almost defines its own subgenre; RetroGamer gives it a 90% rating and the "Sizzler" label, highlighting its ability to find unusual ways to exploit the hardware; RGCD gives it a 4/5 and talks about it as a striking example of how a retro video game can be made "special" by working on aesthetics and concept. We at Retromagazine World rediscover it, and you can read what we think about it below.

Net LumASCII is a straightforward shooter but dense with ideas, which foregoes the frills of the genre to focus on a single grand experiment. Can a pure character display, on a 48K, deliver the same adrenaline rush as a "classic" graphic shooter? The answer, despite all the physiological limitations of the solution, is YES, thanks to meticulous work on readability, rhythm, and screen composition.

For those familiar with 8-bit homebrew, it is one of those titles that is as worth studying as it is worth playing. As a case of counterintuitive design (a shooter made by someone who doesn't like shooters), as a technical exercise, and as an aesthetic statement about what a "Spectrum game" can be in the modern era. If you're looking for something that gives you both familiar feelings and the distinct perception of looking at a parallel universe of the Sinclair catalog, LumASCII hits the mark almost perfectly.

A masterpiece!

by **Carlo Nithaiah Del Mar Pirazzini**

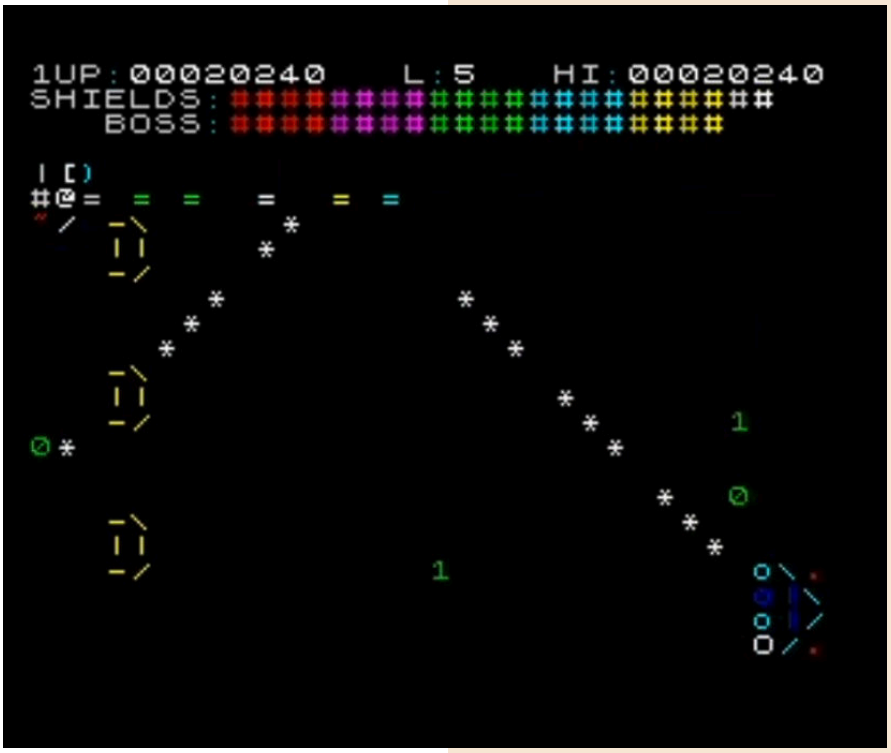
OUR FINAL SCORE

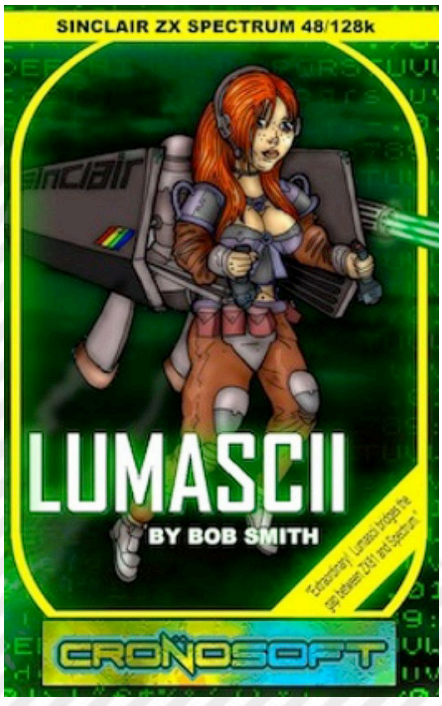
» Gameplay 95%

Everything is perfect and just right. Interesting dynamics and incredible level design. This project was designed to be a unique experience on the 48k.

» Longevity 93%

It's a difficult game to master, requiring time and learning. But it's hugely satisfying to play and replay.







NEW GAME

RENEGADE AGA

Year: 2025
Editor/Developer: Dave18
Genre: Beat'em up
Platform: Amiga AGA
Website: https://dave18.itch.io/renegade-amiga-aga

Renegade AGA is a modern and faithful port of Taito's 1986 arcade beat'em up, rewritten for Amiga AGA by Dave Douglas and released for free on itch.io with several updates (currently at release 1.5). It clearly surpasses the old original Amiga conversion from the 1980s, considered disappointing, thanks to gameplay logic disassembled from the original 6502 code and adapted to the 68000. The game retains its classic essence.



You play as a street fighter who takes on gangs and bosses to rescue his girlfriend, who has been kidnapped by a mobster, through side-scrolling levels with punches, kicks, knees, and grabs. It supports classic joystick controls and the CD32 pad, with options for difficulty (Easy is more accessible than the "coin-guzzling" arcade version) and 50/60Hz modes; it does not include simultaneous two-player mode, but faithfully captures the arcade feel without improvements to the core gameplay.

The AGA chipset is handled quite well for large sprites, vivid colors, and rewritten graphics routines, with rather remarkable music and sound effects via Frank Willes' Protracker. Requires 4MB of Fast RAM (tested on A1200), and several updates fix bugs such as glitchy graphics, open doors, and some errors that crashed the system. It works on real hardware (A1200 AGA), emulators (WinUAE, FS-UAE), FPGA (MiSTer, Vampire with fix), and WHDLoad; if you have an ECS system, the author mentions a specific version coming in a few months.

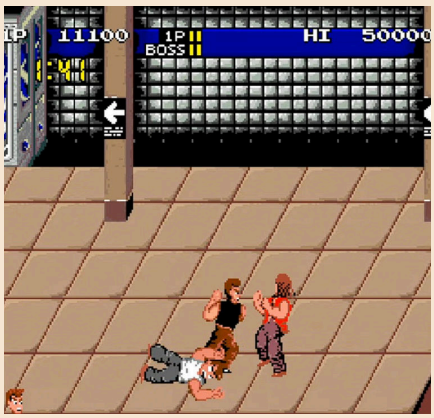
What can we say, the game is suitable for lovers of the arcade title and fans of the Kunio-kun saga (from which the original game is taken). The gameplay shows its age and is rather wooden. If you liked the arcade version and want to forget the first Amiga "conversion" forever, head over to the developer's page.

by **Giampaolo Moraschi**









OUR FINAL SCORE

» Gameplay 80%
The gameplay shows its age, but the control system has been well ported and, all in all, the two elements balance each other out.

» Longevity 80%
The presence of difficulty levels is a plus.

NEW GAME

PLANET X9

Year: 2025
Editor/Developer: Robosoft
Genre: RTS
Platform: MSX, 16Kb, V9990, OPL4
Website: https://www.msxdev.org/2025/10/03/msxdev25-10-planet-x9/

Planet X9 represents an impressive milestone for homebrew development on MSX, an entry in the MSXdev25 #10 contest that brings a complex and layered RTS from the world of DOS to the retro hardware of 1983, masterfully adapted for MSX1/2+ and V9990/OPL4 enhancements. Developed by David Murray of RoboSoft as an evolution of Planet X3, the game immerses players in a dystopian future of 2197 on an alien planet rich in rare resources. The player is in command of a faction and must build bases, manage resources (food, metals, food), develop technical research, and, of course, fight for territory.



Humanity lands on Planet X9, an unexplored world teeming with precious minerals and dormant alien technologies that can be activated to gain strategic advantages but with the risk of destabilizing the local ecosystem. Set in a dark and realistic sci-fi universe, the game evolves the Planet X3 formula by adding tons of missions (from ocean atolls to dense jungles and arid deserts), each with unique challenges that require constant adaptation, such as defending against enemy waves or aggressive expansion to monopolize resources. This narrative depth makes the title an ambitious real-time strategy (RTS) game presented at the MSXdev25 competition.

At its core, it is a pure, hard-core strategy game. You gather resources (energy, metals, food) through extraction buildings and worker units, research new technologies in central hubs, and launch offensives with tanks, missiles, and infantry against







OUR FINAL SCORE

» Gameplay 90%

For fans of the genre, it has everything: balanced difficulty, an excellent in-game progression system, and great in-game physics.

» Longevity 95%

Difficult but rewarding, with all kinds of missions.





your (rather tough!) opponents. The menus are instant and intuitive, with hotkeys for quick builds and micro-management; auto-pause facilitates planning during frenetic combat, while the confirm-exit button prevents accidental losses. Missions can last from a few minutes to several hours, with realistic physics on vehicles and their behavior on uneven terrain. Also noteworthy is the system that rewards aggressive expansion but punishes "classic" defensive negligence. Here, waiting and trying to barricade yourself is lethal... for the player.

The graphics engine, rewritten from scratch for V9990, shines with multidirectional scrolling, transparent sprites animated in 8 directions for dozens of simultaneous units, and dynamic layering for overlapping bases on vast maps. Vivid colors and smooth animations evoke classic 90s RTS games. OPL4 audio gives us epic soundtracks and a series of immersive sound effects perfect for the chaos of war. All this goodness is also playable on a browser, but Planet X9 is at its best on real hardware.

Deep and highly strategic, its gameplay style is not accessible to everyone, but is more suited to lovers of the genre. If you are an RTS fanatic and have an MSX, don't miss it.

by **Giampaolo Moraschi**



NEW GAME

THE NYANJA

Year: 2025/2026
Editor/Developer: SaruPro
Genre: Platform
Platform: Pc Engine
Website: https://sarupro.itch.io/thenyanja

I had been dreaming of trying out new games for the legendary Japanese PC Engine console for some time, and finally I got my hands on this little game to test, which really excited me.



I'm talking about Nyanja, a game in pure "Snow Bros" style in which we play as two ninja cats, Nyanmaru and Nekomi, who must shoot ninja stars (shuriken) at full throttle to eliminate the enemies present in the various levels.

It is also possible to hit stunned





OUR FINAL SCORE

» Gameplay 90%

Despite being a sort of clone, it's really interesting to play, reminiscent of the good old days when this kind of highly entertaining game was all the rage in arcades (and squandered our already meager teenage savings).

» Longevity 90%

Even though the product I tested is not yet complete, I can say with certainty that it is one of those games that keeps you glued to the screen for hours!



enemies to make them collide with others, creating combos that dramatically increase the score.

The game also supports 2-player mode, making the games even more fun.

The game I'm testing is still in development, but I must say that the work done so far is truly incredible: the music is wonderful, in pure Japanese style, and the graphics are exceptional.

Once again, the PC Engine stands out for all the features I've always loved: beautiful colors, wonderful music, and amazing gameplay.

You may rightly ask yourselves if there was a need for another Snow Bros. clone.

My answer is absolutely yes! When you try Nyanja, you will immediately realize that it is a very well-developed product with great attention to detail.
So my verdict is... positive! A solid 9! I will eagerly await the final version.

by **"Kika" Carrara**



NEW GAME

OUTRUN

Year: 2025
Editor/Developer: Rocketship Park
Genre: Driving
Platform: Game Boy Color
Website: https://itch.io/queue/c/577395/game-boy-homebrew-games?game_id=3557310&password=

OutRun for Game Boy Color is a recent, unofficial homebrew conversion of Sega's original 1986 arcade game. The conversion was created by developer Shane McCafferty and released in late 2025 as a complete project called "What If OutRun." This version faithfully captures the essence of the classic racing game, with all the branching routes, content, and iconic music, all impressively transferred to the limited hardware of the GBC.

The game strives to maintain the pure arcade formula. You drive the classic Ferrari Testarossa on scenic roads, choosing routes after the first stage to increase replayability, with precise controls and a well-calibrated difficulty that rewards drifting and acceleration.



On the GBC, the controls respond well despite hardware limitations, offering a smooth and enjoyable experience, albeit with simplified pixel art graphics that adapt sprites and scrolling without sacrificing the original spirit. The soundtrack, including "Splash Wave,"



is a highlight faithful to the arcade. The graphics are remarkable for a GBC demake. There is speed, and the different landscapes (beaches, deserts, mills) flow with smooth animations, spectacular crashes, and meticulous details that evoke the golden age of this game. Due to technical limitations, the gameplay is divided into routes and does not flow as smoothly as in the arcade. If we exclude some choices dictated by hardware limitations (such as the choice of routes not in succession but with different starts), the game is an excellent homebrew ideal for fans of the saga. A really nice little game!

by **Barbara "Morgana" Murgida**









OUR FINAL SCORE

» Gameplay 85%
Everything is packed into the smallest possible space, with limitations that have no impact on the final gameplay.

» Longevity 85%
It's not the arcade, but it's still Out Run.

NEW GAME

MUSKETEER

Year: 2025
Editor/Developer: Psytronik
Genre: Platform
Platform: Commodore 64
Website: https://psytronik.itch.io/musketeer

All for one, one for all! We are familiar with this exclamation from The Three Musketeers, and we will get to know them even better thanks to this "Bruce Lee"-style game, recently released along with other latest masterpieces for the C64.

As mentioned, this platform game is based on the progenitor we all love: Bruce Lee. Next, we should also mention "Zorro," which follows the same pattern.

Platforms with different screens, enemies to defeat, and puzzles to solve. Right from the first screen, we are involved in a fight between our D'Artagnan and another swordsman. In order to defeat him, we must immediately start practicing different thrusts and parries without losing our timing. The combat phase may seem the most complicated at first, but with a little practice, we will be unstoppable.

Scattered throughout the rooms are several diamonds, and our goal will be to collect them all and then deliver them to our beloved, but not before overcoming a thousand pitfalls above and below the city, facing enemies, and solving puzzles to unlock passages and useful items to open a passage.

The screens also feature non-player characters such as farmers and citizens, who are completely harmless and, above all, innocent. In any case, they cannot be hit.
Once we reach the last room, we will come face to face with Milady herself, and we will have to send her flying I don't know how many meters, after which we will deliver the coveted jewels to our beloved and... Vive la France!

I found this game fun right from the start, not only because it reminded me of the titles mentioned at the beginning, but also because it is smooth, fairly simple, playable, and never heavy in many respects.

It's also the right length. There are lots of rooms to tackle, enough to keep you entertained on an evening when there's nothing but trash on TV. So you can go to bed feeling satisfied.

Oh, I almost forgot... The title is really accessible to everyone, even those who haven't read the book or seen the various films inspired by the story of France's famous musketeer.

by **Daniele Brahimi**









OUR FINAL SCORE

» Gameplay 80%
Simple controls and moves, smooth gameplay.

» Longevity 80%
Perfect for an evening and a strong desire to finish it right away.

NEW GAME

PHAZER 64

Year: 2026
Editor/Developer: Coreproduction
Genre: platform/rpg
Platform: Nintendo 64
Website: https://coreproduction.de/phazer64



The game opens with this premise: "Press the forbidden button, blow up the main satellite of planet Earth with a laser, and you literally have zero time before Mom comes home."

The tone is light and self-deprecating, but underneath it all is that vibe of childish mischief taken to the extreme, and it's a narrative device that works because it immediately puts you in "okay, I have to fix this, but in a fun way" mode. Phazer 64 is one of those games that seems to have come straight out of a childhood dream. A small 2D space adventure on Nintendo 64, carefully crafted with a strong personal identity. It puts you in the shoes of a kid who causes a disaster with the "forbidden button" and immediately catapults us into a race against time to fix Earth's satellite before your parents come home. We even have our own homemade UFO, weird aliens, and environments that alternate between surface and underground. The style is openly a love letter to one of my favorite childhood titles... Commander Keen. The atmosphere is colorful, familiar, and suitable for everyone without ever becoming childish.

There's a nice mix in the game structure, which I'd say is pretty balanced. It's somewhere between a platformer and a Japanese-style action RPG. We have exploration flights, asteroid fields to control, and several high-speed "racing" sessions mixed with exploration sessions complete with secret areas and classic platforming action.



It is very important to collect Star Nuggets, which we will use as currency to upgrade our vehicle and unlock weapon systems, so that asteroids will no longer be just obstacles but will become an excuse to enjoy some shooting. There is also a very clear "main mission" component: use the space map to find the pieces of the satellite, win a high-speed race to get an important upgrade, and finally rebuild the satellite with a tractor beam designed by the best mechanic in the galaxy, Crankhorn.



The game design has the simplicity of a jam game, but it is supported by a strong idea. Each system (flight, platform, upgrade, main objective) is not thrown in at random. Everything pushes towards the same goal: to





remedy the disaster and return home 'clean'. It's not a complex RPG, but it has that minimum of progression and 'character growth' through the ship that makes you want to complete the game, not just try it out of curiosity.

On the technical side, Phazer 64 is a gem that exudes pixel love for its hardware. It runs on real Nintendo 64, both PAL and NTSC, maintains a stable 60 FPS even in PAL60, and supports EEPROM, stick calibration, and overscan options. It is compatible with the Ares emulator, and the author recommends SummerCart64 for playing it on a real console, which speaks volumes about how much he cares about the physical feel of the pad in his hands. Truly enjoyable!

The game was developed with libdragon (they also talked about it in this magazine, remember? NDM) and was created within N64BrewJam, so it is truly a child of the modern homebrew scene. There is an almost 'artisan' care in making everything work well in the reference hardware without losing fluidity. The audio is stereo and is described as immersive; it's not a pumped-up AAA soundtrack, but an accompaniment designed to enhance that feeling of traveling through space in a light and dreamy way.

What struck me most, however, is the motivation behind the project. The author recounts that as a child he was frustrated that in Commander Keen he couldn't really use the spaceship to go where he wanted; years later, his son, looking at the Phazer 64 prototype, asked the same questions: "Why can't I land? Why can't I get out?" And instead of ignoring that voice, he decided to build the game he would have liked to have had as a child. It's a very genuine, almost tender creative gesture, and you can sense that Phazer 64 is more than just a tech demo. It's a personal project, but one that speaks to anyone who still has that little bit of childlike wonder when they see a spaceship on the screen. The fact that the game is described as "Commander Keen meets No Man's Sky" is not just marketing: it's a perfect summary of its DNA.

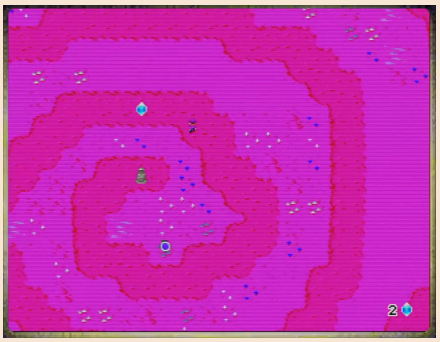
by **Marta Rossmann**

OUR FINAL SCORE

» Gameplay 85%
Perfect for lovers of "old school" platformers with an exploratory twist and for avid fans of the N64 homebrew scene.

» Longevity 80%
The story is simple but told with heart and a strong authorial identity.









NEW GAME

ROGUECRAFT GB

Year: 2026
Editor/Developer: Thalamus Digital Publishing, BadgerPunch Games
Genre: Roguelike
Platform: Game Boy, Game Boy Color
Website: https://thalamusdigital.itch.io/roguecraft-gb-game-boy-color

The formula remains the same on GB and GBC. A turn-based roguelike with procedurally generated dungeons, where each game offers a different combination of rooms, enemies, and items. You have only one life to descend into the depths of the dungeon and face the tentacled boss of the last level, so every step must be carefully considered. The philosophy is that of a "fast but meaningful run." Each game lasts just the right amount of time for a portable session, but the random generation and variety of items mean that no two games are the same. It's one of those games that easily pushes you to play one game after another, perfect for the Game Boy format.





Compared to the Amiga, MEGA65, and Evercade versions, the Game Boy Color version's aesthetics have been redesigned for the hardware. There is no isometry, but rather simpler and more readable pixel art, which focuses on clarity and the construction of intuitive mazes that are easy to read even on a small screen. The result is a compact but polished look, with essential animations and a use of color that enhances the GBC without seeking effects that are out of reach. The soundtrack is by Sloopygoop, accompanied by sound effects by h0ffman, and together they create a surprisingly atmospheric audio



OUR FINAL SCORE

» Gameplay 90%

The adventure is perfect for the GB's mini-screen and also very enjoyable on the Game Boy Color. The gameplay is immediate and accessible to everyone.

» Longevity 95%

Procedural dungeons and that insane desire to keep playing even after an "inglorious death."







experience for a spartan portable dungeon crawler. The overall feeling is that of a high-level homebrew, designed from the outset to make good use of the limitations and strengths of the Game Boy Color.

Despite its small size, Roguecraft GB doesn't skimp on features. Procedurally generated levels, for a new configuration with each run, lots of potions and pickups with different effects, which change your approach and strategy, and lots of chickens (no Easter eggs, just lots of menacing hens), which are now the game's trademark.

The design remains accessible to everyone: you play with the directional pad and a few commands, but beneath the simple appearance lies a roguelike capable of being punishing to just the right degree, especially in the most unfortunate runs.

Roguecraft GB is distributed as a GBC ROM designed for emulation (mGBA on PC) or to be loaded onto flashcarts such as EverDrive and played on real hardware. It is specifically designed for Game Boy Color, so it takes advantage of the extended palette and is not intended as a monochrome "backward compatible" title at all costs. Knowing that the developers have stated their intention to make "tailor-made" ports for each platform, it is clear that the GB version aims to offer the same basic experience as its larger counterparts, but rebuilt from scratch for 8-bit, not simply reduced.

If you like dungeons, you should know that Roguecraft GB is a perfectly balanced portable roguelike: simple rules, emerging depth, lots of replayability, and a presentation that enhances the Game Boy Color aesthetic. For those who love turn-based dungeon crawlers and the Nintendo handheld, it's exactly the kind of "one more run and that's it" cartridge that's likely to stay in the slot for quite some time.

by **Ingrid Poggiali**

NEW GAME

ROGUECRAFT DX

Year: 2026
Editor/Developer: Thalamus Digital Publishing, BadgerPunch Games
Genre: Roguelike
Platform: Amiga, Mega 65



Roguecraft DX on Amiga is presented as a classic example of how a modern idea, born on PC and Evercade, can find a perfectly natural second life on classic hardware, without losing an ounce of atmosphere or personality. In this version, the roguelike dungeon crawler adapts to the Amiga and Mega65 with a targeted expansion: more content, more depth, but still with the same philosophy of simplicity and quick fun that has made it popular since its debut.

At its core is a turn-based roguelike that focuses on immediate playability. The dungeons are procedurally generated, room by room, with only one life available and a clear goal: reach the final level and defeat the tentacled boss. The structure is designed for 'just one more run', and each game is different, with secret rooms, mysterious potions, menacing chickens, and loot that can turn the tables or quickly lead to defeat.

The player chooses their alter ego (warrior, wizard, or thief) and is catapulted into an ironic opening. Before tackling the dungeon, they have to deal with something very down-to-earth, an element that immediately sets the lighthearted and self-deprecating tone of the adventure. The balance between risk and reward is constant: a single life, interesting rewards at the bottom of the dungeon, and the feeling that every move must be carefully considered, without turning the game into a punishing experience reserved for the few.



Roguecraft DX focuses on isometric pixel art graphics, which find their ideal home on Amiga and MEGA65. The dungeons take on a dark, Lovecraftian look, but retain



caricatured characters and funny enemies (such as the infamous chickens) that lighten the tension. The art direction works hard on the atmosphere: lights, shadows, and details make the rooms recognizable and readable even in the chaos of enemies and objects, which is essential for a top-down roguelike.
The sound is another strong point. The soundtrack is by Jogeir Liljedahl, accompanied by effects by h0ffman, with an audio result that effectively exploits the potential of the Amiga, alternating atmospheric tracks with more aggressive effects.
The DX is not presented as a simple re-release, but as an expanded edition of the original Roguecraft, with more levels, new layouts, new monsters, more potion effects, an integrated achievement system, and additional music tracks. The porting of this expanded version therefore allows us to offer the "best cut" of the game directly, avoiding the effect of a stripped-down conversion.
From a technical point of view, the Amiga edition comes in WHDLoad format, ready for installation on a virtual or real hard disk and usable both in emulation (WinUAE) and on physical hardware, provided you have at least 2 MB of Chip RAM and 2 MB of other memory. The support covers the entire classic Amiga range, from the A500 to the A4000 and CD32, with a dedicated PAL version, a choice that highlights how the target audience explicitly includes fans of "real" hardware as well as emulator users.

MEGA65 is available in PAL format and can be installed on an SD card or floppy disk. It requires Core 0.97 and Rom v920413.
Roguecraft DX is the evolution of an already successful project, and its migration to Amiga, Mega65, and Game Boy Color is part of a strategy announced by Badger Punch and Thalamus Digital, aimed at bringing a modern roguelike to multiple retro platforms, enhancing its strengths. On the Commodore machine, this translates into larger dungeons, more room variations, and an experience that stands up well alongside the classics, while maintaining a contemporary game design framework.





Website version Amiga:
- https://thalamusdigital.itch.io/roguecraft-dx-amiga

A production capable of bridging the gap between old school and new, a modern roguelike in structure, with



polished presentation, digital distribution via itch.io and physical distribution via Thalamus, with version 1.8 already available at the time of announcement. The game doesn't just "run on Amiga," it truly uses the hardware as the natural home for a turn-based dungeon crawler, helping to expand not only the dungeon, but also the catalog of contemporary titles that the platform can be proud of.

OUR FINAL SCORE

» Gameplay 95%

New dungeons, new potions, new monsters, and a great technical aspect. Commendable for both versions.

» Longevity 95%

One game leads to another.

by **Carlo Nithaiah Del Mar Pirazzini** (Amiga) and **Giampaolo Moraschi** (MEGA65)

Website version Mega 65:
- https://thalamusdigital.itch.io/roguecraft-dx-mega





The new direction of RetroMagazine World

We would like to inform our readers that this issue of RetroMagazine World is perhaps one of the most comprehensive ever.

It includes several hardware tests, with the Commodore 64 Ultimate taking center stage, and in-depth software reviews: how can we not mention the rediscovery of Microtext for Commodore 64, a program we thought was lost forever, along with reviews of PTSource MiniVMDOS and PTS MiniVMDOS Suite.

There is also an exclusive interview with Domenico Marsico (EMD69, an excellent Commodore technician), the history of Codemasters, and an in-depth look at gaming legend Rebecca Heineman.

We have also included an incredible number of games, including brand new releases such as Floppyverse and Asymmetry for ZX Spectrum, ColocoDX for Sega Master System, and improved versions of great classics from the past, such as Another World for MSX, Bubble Bobble Remastered for Commodore 64, and Ghosts'n Goblins Arcade Version for Plus/4.

But that's not all: our website has been enriched with a new section dedicated to scanning books and magazines that have made the history of Italian and international retrocomputing, called RetroBooks. We invite you to visit it often: we will be uploading new material regularly.

In short, we never stop improving our magazine and our website, with the aim of always offering the best to our loyal readers, who are actively contributing to the growth of our Facebook page.

Oh, we almost forgot: starting with this issue, the numbering of the English edition will follow that of the Italian version. This will make it easier for both us and you to consult and find articles, and we will ensure that the English version, now aligned with the Italian one, is published a few days after the Italian issue comes out.

What more can I say? Happy reading to all of you.Keep following us and enjoy your copy of RMW!

Francesco Fiorentini

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